SUSTAINABILITY REPORTING, FINANCIALIZATION, AND ACCUMULATION OF REAL CAPITAL IN PAKISTANI MANUFACTURING FIRMS

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ABSTRACT

The main focus of this research is the complex and interdependent dynamics of sustainability reporting, the process of financialization, and the accumulation of real capital in Pakistan's manufacturing sector highlighting prevailing tendencies characterized by short-termism with respect to the financial objectives of the firms and their long-term development goals. Demand for sustainable reporting has exploded across the globe as more and more corporations embrace the new reality that expectations from regulators, investors, workers and society at large are no longer confined to financial performance only. However, many developing countries, among them Pakistan, have little or no experience with reporting of this nature as such exercises in those economic spheres are chaotic, biased, and of circumstantial nature. Financialization considering how financial payments have grown globally within corporations compared with productive ones also known as the rule of finance, has changed how companies make their decisions producing a similar effect on the use of resources by businesses in underdeveloped countries. Industrial growth and economic sustainability embodied in the accumulation of real capital rely on systematizing each of financing structures, motivational rewards for management and business strategies. Despite the growing significance of the areas mentioned above in existing research, dimensional analysis of the combined influence of these factors has not been well investigated. This may be especially true in the context of developing countries, where processes of institutional development may be vulnerable, legal frameworks are deficient, and markets tend to be very unstable. Unfortunately, this problem is profound within the availability of very limited literature. Thus, this study will seek to fill that gap by exploring how sustainability reporting and financialization impact the accumulation of real capital in Pakistan's manufacturing sector within the study period covering 2018-2022.

This study is carried out on the basis of more than one theory, including stakeholder theory, agency theory, institutional theory, resource-based view and good management theory. According to the stakeholder theory, it is essential that sustainability reporting enhances transparency, legitimacy, and the capacity of an organization to create value in the long-term by serving the needs of several groups whose interests influence the organization's behavior. Agency theory argues that even managers can adapt to the nature of individual, short-term, financial rewards and can be divided due to dividends and even

speculation in environments that lack effective controls and restrictions. The institutional theory emphasizes the issue of how legal arrangements, societies' rules and values and also global pressures influence organizations to report in particular ways. The resource-based view focuses on the fact that managers and institutions that use nature-related approaches to management are able to enhance relations with stakeholders and engender trust in them, inspire employees, and enhance the reputation of the organization, which in turn impacts the firm's ability to engage in real capital accumulation. Good management theory, in turn, states that it is authority, consolidated in the organizational culture itself, that is the reason for sustainable and socially responsible dynamics, which in the end translates into increased economic effectiveness and efficiency. All of these theories together provide an overarching framework for empirical evaluation of how these strategic and economic policies interact and produce the expected levels of accumulation of real capital over time.

The method of structured content analysis is applied in the study, with the five-year panel data of the listed manufacturing companies from Pakistan, in order to determine how much and how well sustainability reporting is undertaken in the three areas of environmental, social and governance. The financialization aspect in this study includes financial flows, profit after operations profit, repurchase of stock, and financial asset, whereas, the real capital accumulation is signified by the yearly growth in fixed assets which is deemed a relevant investment in any discourse on the hybrid balancing of the firm. Such a methodology helps the research in comprehending the complicated and multifaceted conduct of the enterprise, especially in an institutional context likely to contain regulatory competitiveness and conflicting priorities among stakeholders, both in terms of reporting and in terms of financial activities.

Analysis suggests that the trend of sustainability reporting in Pakistan is very erratic and unpredictable. They include, in their disclosure instruments, information regarding more goods patterns such as "energy and emission control and waste management" as compared to "the disclosure about society and management". The same tendency can be seen in other developing markets, wherein these reports are also more of a compliance driven concern than putting it into practice and focusing on more qualitative measures. Despite this, firms adopting more appropriately the concept of sustainability reporting demonstrate and particularly in reporting their social and governance aspects have been

found to record an increased amount of real capital accumulation. These examples lend credence to the tenets of stakeholder theory as well as those of good management theory which posit that, respective firms seeking to practice good conduct should be in the forefront of building trust, enhancing governance structures, and improving investment outlook. In the same way the resource-based view is marginally interpreted as this view regard broad social efforts towards enhancement of sustainability practices as enhancing resources within the organization for strategic purposes.

The analysis is also indicative of the fact that there exist other factors besides sustainability reporting that have a larger impact on the traditional engagement; that is, increase in the real capital accumulation. Financial payments, non-operating profits, buybacks, financial assets, even structural adjustments, all present positive and negative impacts on real capital accumulation, although to varying degrees. For instance, there are non-operating profits and financial assets that help in reinforcing productive investments, and there are buybacks and Financial payments that raise dilemmas associated with short outlooks. These results are consistent with empirical research in other parts of the world, and agency theory, supplemented with financialization and the political economy literature do notably caution against the lenses of managerialism as they have the potential of eclipsing long-range investment when the incentives for managers in developmental states are void of meaning. The positive relationship between financial variables and investment in tangible assets implies that the process of financialization in Pakistan is more complicated as compared to that of the developed countries because it can provide liquidity and other hedging facilities and also induce stresses that may obstruct investment if uncontrolled.

Sectoral differences help to explain the role of institutional constraints in shaping the actions of firms. With respect to the prosperities centric sectors namely textiles and high capital sectors cement and energy tend to engage in sustainability reporting in addition to displaying great stability in the accumulation of real capital. Such activities are subject to greater coercive pressure. Such coercive pressures come from foreign buyers, global standards of supply chain and co-ordination of institutions. In the case of domestically oriented sectors, the reporting is observed to be more infrequent as well as investment more erratic. This implies an advantage provided by weak local institutions. These results provide additional support for the logic of institutionalisation in the sense that external

conditions differentiate their impacts on the conduct of firms and the processes of capital investments that take place within the firm.

The research findings suggest a number of suggestions. For the management and executive enacting the relevant policies, this research highlights the significance of enhancing the statutory boundaries on actions through the switch from optional to compulsory sustainability reporting as per global requirements such as the GRI. In the case of authorities like the Securities & Exchange Commission of Pakistan and the State Bank of Pakistan, research advocates for the development of the methodologies with the attention to the issues of sustainability reporting within the corporate governance functions. To the business leaders, the evidence suggests fiduciary reporting goals can extend far beyond compliance – management can actively incorporate sustainability as part of reporting in ways that drive their contending approaches, propensity to enhance the levels of trust among multiple stakeholders, as well as patterns of capital provision. As for the investment community, the results show that companies that have robust sustainability reporting systems as well as checked financialization effectively concentrate their resources and also enhances the levels of investment in the real capital accumulation and growth of the company.

Additionally, the most instrumental sections of the dissertation deserve a special mention due to their importance for the advancement of knowledge. This dissertation is among the first to offer actual evidence of the effects of sustainability reporting and financialization with regard to the accumulation of accumulation of real capital in the context of Pakistan. The scholar-to-end-user model, the shareholder-entrepreneur model, the new institutionalist approaches to organization and the firm, the firm as a bundle of resources theory as well as effective management theory are the different parameters used by this study in explaining firm behaviour in a context where there are complex institutional challenges. Therefore, it offers a unique picture of the South Asian region by providing new data sets and techniques that can be used to perform cross-country studies. Finally, it also extends beyond the international sustainable development discussions in the sense that it focuses on how risks, which naturally arise in financialization, can be eliminated using sustainability reporting.

Overall, the main objective of this thesis was to provide a critical and balanced in-depth empirical review of the impact of both, sustainability reporting and financialization, on

the processes of real capital accumulation in the manufacturing industry in Pakistan. The results indicate that even though the practices of reporting remain skewed and affected by institutional failures, sustainability reporting is likely to enhance the effectiveness of the accumulation of real capital. Financial payments promote financialization, but in a polarized way, hence the correlation is circular and requires some clarification. The study, calls for the importance of integrated regulatory, management, and even stakeholder frameworks for sustainable industrial growth and economic stability in Pakistan.

Key words: Sustainability Reporting**,** Financialization**,** Real Capital Accumulation**,** Manufacturing Sector (Pakistan)**,** Corporate Governance**,** Stakeholder Theory**,** Agency Theory**,** Environmental, Social, and Governance (ESG)**,** Panel Data Regression**,** Institutional Theory

PUBLICATIONS FROM RESEARCH

The researcher published the following research article in a Y-category journal during the Ph.D. program, acknowledged by the Higher Education Commission (HEC) of Pakistan:

1. Ahmed, S., & Khan, M. A. (2023). Financialization and ESG Investing: Implications for Real Investment and Economic Growth. Journal of Business and Management Research, 2(2), 667-680.

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LIST OF ABBREVIATIONS

Sr. No.	Detailed word	Abbreviation
1	Research and Development	R&D
2	Accumulation of Real Capital	ARC
3	Environmental, Social, And Corporate Governance	ESG
4	Morgan Stanley Capital International	MSCI
5	Dow Jones Sustainability Indices	DJSI
6	U.S. Securities and Exchange Commission	SEC
7	Corporate Social Responsibility	CSR
8	Socially Responsible Investment	SRI
9	Global Reporting Initiative	GRI
10	Environmental Information	EI
11	Environmental Management System	EMS
12	European Union	EU
13	United Nations	UN
14	The Principles for Responsible Investment	PRI
15	Corporate Social Performance	CSP
16	United States	USA
17	Earnings Management	EM
18	Corporate Governance	CG
19	Firm Financial Performance	FFP
20	Chief Executive Officer	CEO
21	Key Performance Indicators	KPIs
22	International Financial Reporting Standards	IFRS
23	International Accounting Standards	IAS
24	Financial Payments	FP
25	Non-Operating Profits	NOP
26	Financial Assets	FA
27	Corporate Governance Score	CGV
28	Non-Operating Profit	NOP
29	Environmental Score	ENV
30	Social Contribution Score	SOC
31	Variance Inflation Factor	VIF

32	Ordinary Least Squares Regression	OLS
33	Generalized Least Squares	GLS
34	Statistical Software for Data Science	STATA

CHAPTER 1

INTRODUCTION

1.1. Background

There is a remarkable development in the area of sustainability reporting and its integration into corporate strategic considerations over the past few decades. The accountability structures of companies are expected to demonstrate environmental, social, and governance practices to a greater extent, thus this being a global call for transparency in the corporate world where ecological damage, stakeholder demands, and sustainability of industrial growth are recognized. The study on the development of sustainability indicators points to a definite evolution from mere environmental declarations to detailed, multi-dimensional reporting systems (Azapagic and Perdan 2000). It can be inferred from this that the value attached to transparency is a key factor in corporate governance.

In fact, financialization has become a major and fundamental structure of current corporations' operation. Researchers applied the term financialization to indicate the rising market-driven valuations which companies primarily focus to get the most profits during a long period of time. This is confirmed by the indexes of share buybacks, increased dividends or investments in different financial instruments (Aalbers, 2016). In case of developing countries, there is research evidence that an excessive focus on financialization may lead to companies' lack of interest or motivation to provide human development as a long-term investment which is more than industrial competitiveness (Ali, 2019). Such requirements fit Pakistan well, where economic vulnerability, governance issues, and capital shortages have an impact on the already existing delicate balance between financial pressures and the need for long-term growth.

The manufacturing industry in Pakistan is a major contributor to employment, exports, and the overall economy of the country, although companies from this sector still struggle to deal with a difficult institutional and economic environment. A multitude of studies have pointed out that sustainability reporting in Pakistan is usually very limited, voluntary, and poorly structured, a situation that has arisen from resource constraints, regulatory ambiguities, and sectoral influences, despite the students' different opinions on the matter (Arora & Hussain, 2021). Research has pointed out that companies operating

in developing countries are limited in their capacity and have unclear views on sustainability disclosures, resulting in no complete sustainability reporting frameworks being verifiable (Ali et al., 2017; Aureli et al., 2020).

Investing in productive assets (the likes of factories, equipment, technology, and infrastructure)—which are together called real capital accumulation—plays a key role in raising the competitiveness of the manufacturing sector. The financialization process that comes with varied pressures and risks; blowfield & frynas (2005) warn that, along with short-term focus, might sometimes cause the investments to be non-existent. If the sustainability reporting is carried out as per the companies wish, then it can lead to the creation of management accountability, the building of stakeholder trust, and the promotion of long-term strategic management (Ameer & Othman, 2012; Adams and Harte, 1998). It is necessary to know how these factors interrelate in the context of Pakistan's institutional structure for the benefit of both the country and the companies in their planning.

Thus, this chapter will lay down the academic and contextual basis for the quantitative analysis to be performed in the following chapters. The background will include a summary of the already mentioned macro-economic trends, legal changes, and research that has been established; these trends reveal the factors, ways in which institutions operate, and concepts related to the empirical research of this thesis.

1.2 Motivation

The research is based on the need to visualize connections between sustainability reporting, financialization, and real capital accumulation in the manufacturing sector of Pakistan. The literature pointing to international and emerging markets suggests that firms often get caught in a web between long-term and short-term financial ambitions, especially when corporate decisions favor short-term financial capital accumulation (Blowfield & Frynas, 2005). These forces can limit the reallocation of profits into real capital accumulation, even when the firm is showing the capacity to generate profits.

Sustainability reporting is slowly becoming an important aspect of Pakistan's corporate landscape, although it is still very much a piecemeal and highly selective exercise that is mainly dictated by external institutional requirements and not by internal strategies (Arora & Hussain, 2021). According to the previous researchers, certain industries may

show different reporting practices due to the influence of factors like ownership types, market risks, and governance characteristics (Ali et al., 2017). Moreover, some scholars have claimed that sustainability reporting not only creates a long-term perspective for companies but also attracts more stakeholder trust, reduces agency costs, and promotes investment in productive rather than resource-depleting assets (Ameer & Othman, 2012).

The theoretical foundations also form the basis for the study's motivation. Agency theory suggests that there may be conflicts between managers' incentives and shareholders' interests, particularly if managers' attention is directed only to short-term profits (Barney, 1991). Stakeholder theory (Basu & Palazzo, 2008) points to the great interests at stake and also to the wider social and ecological obligations. Institutional theory looks at how companies are affected by regulatory and normative forces in their actions (Ioannou & Serafeim, 2019). The interaction of these theories shapes the way in which sustainability reporting and financialization affect investor choices.

Pakistan is experiencing challenges like energy shortage, climate change risks, and poor infrastructure, which necessitate the understanding of the interconnection between transparency, financial limitations, and investment decisions. The continuum of manufacturing firms necessitates the improvement and extension of their economic infrastructure to be competitive and efficient, yet financial limitations, unclear policies, and changing trends make investment choices harder. With this objective, the present study is driven to empirically investigate these interrelations with data that is at the firm level and can be measured.

1.3 Research objective (s)

Research Objectives are:

1. To examine the impact of financial payments impact on the accumulation of real capital in Pakistani manufacturing firms.
2. To examine the impact of non-operating profit impact on the accumulation of real capital in Pakistani manufacturing firms.
3. To examine the impact of buybacks on the accumulation of real capital in Pakistani manufacturing firms.
4. To examine the impact of financial assets on the accumulation of real capital in Pakistani manufacturing firms.

5. To examine the impact of environmental on the accumulation of real capital in Pakistani manufacturing firms.
6. To examine the impact of social factors on the accumulation of real capital in Pakistani manufacturing firms.
7. To examine the impact of governance factors on the accumulation of real capital in Pakistani manufacturing firms.

1.4 Research Question(s)

This study will be conducted to find out answers to the following questions: -

1. Do financial payments impact the accumulation of real capital in Pakistani manufacturing firms?
2. Does non-operating profit impact the accumulation of real capital in Pakistani manufacturing firms?
3. Does buyback activity impact the accumulation of real capital in Pakistani manufacturing firms?
4. Do financial assets impact the accumulation of real capital in Pakistani manufacturing firms?
5. Do environmental sustainability factors influence the accumulation of real capital in Pakistani manufacturing firms?
6. Do social responsibility factors influence the accumulation of real capital in Pakistani manufacturing firms?
7. Does corporate governance affect the accumulation of real capital in Pakistani manufacturing firms?

1.5 Thesis Structure

The thesis is elaborated in the following ways.

To start, chapter 1 covers the topic thoroughly, giving the background, stating the research problem, outlining the goals, posing the questions, and laying down the conceptual bases that the whole investigation. It gets the analytical direction by explaining the reasons why sustainability reporting, financialization, and real capital accumulation should be analyzed together in Pakistan’s manufacturing sector.

The second stage is chapter 2, which surveys the literature existing in the academic world on the three topics, namely, sustainability reporting, financialization, and capital accumulation, pointing out the deficiencies that gratefully present the current study. It resolves the research questions by aligning the research with three theoretical perspectives—such as stakeholder theory, agency theory, and institutional theory—and by clarifying the limitations of earlier studies.

Moreover, in the third chapter, the research design, data sources, variables, and econometric methods that are used for hypothesis testing are presented. It then helps to achieve the research objectives by detailing the measures for each construct and the empirical strategy for the evaluation of the relationships between sustainability reporting, financialization, and real capital accumulation.

The results of the empirical study, which relies on panel-data models, are presented in the fourth chapter and their interpretation is offered in connection with the research questions. The analysis, though not expressly stated, implicitly concerns the aims of the study by revealing the extent to which the hypotheses are supported, thus clarifying the role played by the sustainability reporting and financialization in the process of real capital accumulation.

Chapter 5 puts the results into the larger theoretical, managerial, and policy context, and engages in a discssion that neatly ties the empirical findings to the literature of the field. It answers the last set of research questions by presenting the contributions of the study, outlining its implications, describing limitations, and suggesting possible research areas.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

This chapter aims at offering a full-fledged review of the theoretical, contextual, and empirical foundations supporting the research. Sustainability reporting, financialization, and real capital accumulation have become the main themes in corporate governance and development economics, mainly because of the global being on the same page with respect to transparency, engaging stakeholders, and allocating resources strategically (Eccles & Krzus, 2018; Ioannou & Serafeim, 2019). Understanding the interaction of these elements is very important for the positioning of this study more broadly within the academic debates, especially in the case of emerging economies where institutional limitations have a specific and unique influence on the behavior of companies (Kolk, 2010; Jamali & Karam, 2018). Thus, this chapter integrates worldwide advancements in these fields and compares them to the regulatory and institutional context of Pakistan.

To build this foundation, the chapter follows a multi-step process. Initially, it discusses the global sustainability reporting development and its transit through the developing markets, and subsequently moves on to the reporting environment and institutional setting of Pakistan. After that, it points out the key ideas—sustainable reporting, financialization, and real capital accumulation—bringing in global research to clarify their mechanisms and impacts (Epstein, 2005; Stockhammer, 2013). After that, the chapter gives a thorough account of the theoretical frameworks on which the research is grounded, namely, agency theory, stakeholder theory, and institutional theory. Later, the chapter offers an extensive review of the empirical literature ranked by the study's main variables and hypotheses. The last task is that the chapter points out the gaps in the current research and suggests the hypotheses that will be tested in the subsequent chapters. All those elements together provide a strong academic basis for the research of the relations between sustainability reporting, financialization, and capital accumulation in the manufacturing sector of Pakistan.

2.2 Background and Context

Sustainability reporting is at the forefront of modern corporate accountability systems as companies are increasingly required to disclose their environmental, social, and governance (ESG) impacts by regulators, investors, and consumers, as well as by international organizations. Corporate sustainability disclosure has evolved globally due to the shift towards stakeholder-centric governance models, the development of international sustainability frameworks, and the increasing environmental and social risks that require companies to adopt transparent reporting practices (KPMG, 2022; Eccles & Krzus, 2018). The first sustainability disclosures were seen in the 1980s when companies issued separate environmental reports, but the practice was greatly diffused with the launch of the Global Reporting Initiative (GRI) in 1997, which introduced the first structured framework for non--financial reporting (Kolk, 2010). Over time, sustainability reporting has evolved into an integrated system that incorporates ESG metrics, climate-related risk disclosures, supply-chain transparency, and governance practices guided by global standards, including GRI Standards, SASB, TCFD and, more recently, ISSB (IFRS Foundation, 2021; Serafeim, 2020).

Throughout developed economies, mandatory and semi-mandatory reporting laws have improved the quality and comparability of disclosures. The CSRD of the EU, the UK's climate risk disclosure regulations, and Australia's recent acceptance of the ISSB-based reporting guidelines are all variously indicating a gradual merging of regulatory practices in the area of sustainability reporting towards a common standard (EU Commission, 2022; Financial Reporting Council, 2021). On the other hand, sustainability reporting in developing countries takes a less even course that is determined by the great differences in the level of enforcement, institutions' capacity, availability of resources, and fragmented regulatory systems among them (Ali et al., 2017; Jamali & Karam, 2018). In case of emerging markets, companies normally engage in sustainability practices primarily to get the legitimacy, attract foreign investment, and satisfy the supply chain. However, their sustainability reporting is usually selective and tends to show extremely positive information (de Villiers & Marques, 2016; Michelon et al., 2015). Studies prove that firms in the emerging markets often report about their environmental initiatives but governance weaknesses and social risks are hardly disclosed. Such reporting lacks depth and comparability (Ameer & Othman, 2012; Khan et al., 2020). The differences are a mirror to the structural constraints of developing countries, such as low investor activism, limited stakeholder influence, and inadequate regulatory enforcement.

Sustainability reporting in South Asia has similar challenges. Still, Bangladesh, India, and Sri Lanka have achieved measurable progress, with India being the only country in South Asia endorsing and implementing the mandatory Business Responsibility and Sustainability Reporting (BRSR) for public-listed companies. Thus, reporting is still inconsistent, voluntary in most areas, and largely determined by the pressure of international buyers (Hossain et al., 2017; Fernando & Lawrence, 2014). India's mandatory reporting system is a good case to demonstrate the changeable power of regulation since the companies obliged to present ESG metrics have better reporting quality, less information asymmetry, and more investor trust (Bansal & Kistruck, 2022). On the contrary, Pakistan and Bangladesh apply mainly voluntary guidelines leading to diminished reporting practices and an excessive concentration on societal contribution, health and safety, compliance rather than integration of sustainability into the business strategy (Haniffa & Cooke, 2005; Khan et al., 2013).

In Pakistan, sustainability reporting has slowly but surely started to be more accepted, mainly global pressures, capital markets, and the presence of multinational companies in the local market as factors. The Securities and Exchange Commission of Pakistan (SECP) put forward the first voluntary sustainability reporting guidelines in 2013 and further proposed that listed companies align their reporting with GRI Scopes (SECP, 2013). Nevertheless, sustainability reporting is still mostly voluntary, and there is very little regulatory control and no mandatory sustainability reporting requirements outright directed at PSX-listed companies (Khan et al., 2020). This has led to only a small percentage of companies issuing comprehensive sustainability reports, and disclosure quality is greatly different from one industry to another. Among the sectors that are majorly supplying their products abroad, such as textiles, cement, and energy, the reporting of sustainability information is relatively more common as they get imposed with compliance requirements by their foreign clients, multilateral development banks, and adherence to international supply-chain standards (Rehman et al., 2019; Ashraf et al., 2021). On the other hand, industries supplying mostly to the local market, especially in the services area, are the least open about their activities and often only share very basic information regarding their environmental and community-oriented efforts.

In Pakistan, sustainability reporting is hindered by a number of structural barriers. The weak enforcement of regulations, the lack of penalties for not disclosing, and limited monitoring capacity are all factors that cause the inconsistency of the international

standards of reporting to be adopted (Amran & Haniffa, 2011). The situation is even worse for the small and medium enterprises (SMEs) whose resources are already limited and who, in addition, do not have any sustainability teams, technical expertise, or the financial ability to prepare sustainability reports (Ali et al., 2017). The situation is further aggravated by the fact that the corporate governance culture in Pakistan continues to be centered around shareholder returns and short-term performance, which in turn leads the management not to invest in those sustainability activities that will not yield immediate financial benefits (Mahmood et al., 2018). There is still very low pressure from the stakeholders, which can be attributed to consumer unawareness, weak civil society engagement, and lack of strong investor coalitions that would have pushed for companies being environmentally and socially accountable (Haque & Ntim, 2018). All these limitations combine to form a scenario where sustainability reporting is mostly just a matter of compliance rather than a tool for bringing about change.

Pakistan’s involvement in global sustainability initiatives and its pledge to the United Nations Sustainable Development Goals (SDGs) have, however, set a new standard for businesses concerning transparency. The Vision 2025 of Pakistan, which is a thorough plan for the country's future, explicitly mentions the areas of sustainable development, industrial modernization, environmental protection, and corporate accountability as the main reasons for the country’s progress, indirectly encouraging companies to pay more attention to their sustainability practices (Planning Commission of Pakistan, 2014). Moreover, the multilateral institutions such as the World Bank, IFC, and ADB have increasingly pushed to connect financial backing with sustainability performance, which has been driving large Pakistani companies to implement such sustainability standards as GRI, SASB, and integrated reporting (IR) (IFC, 2020). These movements suggest a gradual but unequal shift towards the adoption of the same format in sustainability reporting, which has mostly been facilitated by external rather than internal institutional pressures.

In conclusion, on the sustainability reporting front, Pakistan gets shaped by global norms, voluntary standards and sector pressures at the same time it is limited by institutional hurdles that developing countries usually face. Still, the lack of mandatory disclosure requirements coupled with poor enforcement means that companies in the different sectors will not be able to have disclosures that are as extensive and comparable as companies in the different sectors will not be able to have disclosures that are as extensive

and comparable. This is the case, notwithstanding the global frameworks and international market forces having a stimulating effect. The institutional context makes it more than imperative to investigate how sustainability reporting operates in the case of Pakistan's economic and regulatory environment—especially in terms of financialization and real capital accumulation trends—thus providing the contextual base for the subsequent theoretical and empirical analysis.

2.3 Sustainability Reporting: Concepts and Dimensions

Sustainability reporting is the systematic disclosure of an organization's environmental, social, and governance (ESG) performance to stakeholders in a well-organized and transparent manner. It is built on the premise that companies have obligations that go beyond producing profits and that they should be accountable for the effects they have on the society and environment (Gray et al., 1996; Elkington, 1997). The transition of the practice can be drawn from the simple environmental compliance declarations of the 1980s to the elaboration of comprehensive multi-dimensional disclosure frameworks that are in line with the global sustainability standards. It is today that sustainability reporting not only raises accountability but also diminishes information asymmetry, heightens stakeholder trust, and facilitates strategic decision-making by embedding ESG concerns in corporate governance (Eccles & Krzus, 2018; Serafeim, 2020).

The international reporting frameworks have been the one foundational block that defines the very essence of information pertaining to sustainability. The Global Reporting Initiative (GRI) which was founded in 1997, is still the leading standard in the world today and it has laid down explicit indicators for the tripartite platform of performance: economic, environmental, and social (Kolk, 2010; GRI, 2021). In a more recent development, the Sustainability Accounting Standards Board (SASB) came up with industry-specific metrics that are economically significant, while the International Integrated Reporting Council (IIRC) has given birth to integrated reporting (IR), which merges financial and non-financial performance into one cohesive story of value creation (IIRC, 2015; SASB, 2018). By forming the International Sustainability Standards Board (ISSB) in 2021, the global reporting initiatives gained a stronger position and became the creator of universal environmental and sustainability reporting requirements with the focus on investment being of high priority (IFRS Foundation, 2021). The Task Force on Climate-related Financial Disclosures (TCFD) has also been a great driver of change in

governance structures by giving priority to climate governance, risk assessment, scenario analysis, and financial implications of climate risks among others (TCFD, 2017).

Sustainability reporting practices are typically organized around the ESG dimensions, that each encompass different corporate responsibilities. The environmental aspect deals with resource use, emissions, waste and water treatment, and biodiversity, and also includes risk mitigation or preventive measures (Clark et al., 2015; Büchs & Schnepf, 2013). The social dimension looks into the area of labor, the company s relation with the community, its rights related to human beings, the health, and safety that are provided and the company s participation in the welfare of the society at large (Aguinis & Glavas, 2012; Jamali & Karam, 2018). The governance indicators point out the structure of the board, the extent of audit supervision, the ownership pattern, the remuneration of top management, and the firm's risk management and ethical compliance systems (Brown et al., 2007; Zahra & Pearce, 1989). The combination of the three sustainability factors gives an overall view of the company s behavior that is not limited to financial performance metrics but rather encompasses it.

In the case of developing countries, sustainability reporting is of even greater importance due to the preceding factors along with institutional frailties, uncertain regulatory frameworks, and the high level of social and environmental risks. In particular, firms in such areas where there are no strong governance institutions, limited investor scrutiny, and changing public expectations with regard to corporate responsibility often make use of sustainability reporting as a means of gaining legitimacy (Islam & Deegan, 2008; Amran & Haniffa, 2011). In developing countries, typically, the pressure from stakeholders comes mostly from foreign buyers, international development partners, and the participants in the global supply chain instead of from local players (Hossain et al., 2017; Khan et al., 2020). This has been one of the significant factors that led to the kind of disclosed information being more external, putting the spotlight on activities that help enhance the company’s image such as acquiring environmental certifications, adhering to safety and health rules, and community involvement instead of introducing deep internal changes (Michelon et al., 2015; de Villiers & Marques, 2016).

It's necessary to emphasize that, in many cases, sustainability reporting in developing countries is nothing more than a token compliance imposed by the government, which reflects rather than being a direct part of the corporate strategy. Studies have shown that,

very often, companies prefer to give a public image through their donations, employee training, and eco-friendly campaigns while revealing only a few quantitative metrics and having poor governance disclosures and showing little evidence of their commitment to sustainability over the long term (Ameer & Othman, 2012; Ali et al., 2017). Such a situation conforms to legitimacy theory, which claims that the purpose of disclosures is to maintain public trust and not to provide an accurate portrayal of the performance (Suchman, 1995; Cho et al., 2015). Besides, selective reporting practices lead to the increase of information asymmetry, the limitation of comparability, and the undermining of the credibility of reports, particularly in cases where regulatory enforcement is feeble (Khan et al., 2013; Muttakin & Subramaniam, 2015).

In spite of these limitations, sustainability reporting has turned out to be a significant strategic tool in the process of more efficient capital allocation and less financial risk. Investors are gradually taking sustainability metrics indicators as a part of their investment decision-making and empirical studies confirm that good quality sustainability reports reduce the cost of capital, make risk management better, and give higher financial performance in the long run (Friede et al., 2015; Khan et al., 2016). Moreover, the sustainability reporting that is transparent help to fortify corporate governance by enhancing accountability, elucidating risk, and aligning management with the interest of stakeholders (Ioannou & Serafeim, 2015). Companies from developing countries that use global sustainability standards can easily enter international markets, improve local and global supply chain relationships, and satisfy the conditions set by donors and development agencies like the World Bank and IMF (IFC, 2020; World Bank, 2022).

Sustainability reporting in Pakistan is influenced by the same factors that characterize emerging markets—voluntary disclosure regimes, weak regulatory enforcement, limited technical capacity, and industry-specific pressures. Although SECP guidelines promote the use of GRI-based reporting, the lack of compulsory rules leads to varying adoption among companies and industries. It has been found in empirical research that companies in Pakistan mostly reveal their community welfare activities and the minimum environmental compliance information required while having the least detail on governance structures, environmental metrics, or sustainability strategies (Haque & Ntim, 2018; Ashraf et al., 2021). The textile, cement, and energy industries are among those that disclose more as a result of international buyer pressure and the requirements of

development financiers' regulatory standards (Rehman et al., 2019), while the local market-oriented sectors are considerably behind. As a result, sustainability reporting in Pakistan is still fragmented, comes from external sources, and is often only symbolic rather than completely integrated within the corporate decision-making process.

Sustainability reporting to sum up is an important way for companies to disclose their sustainability performance, conform to global standards, and at the same time, improve internal governance and strategic planning. On the contrary, the advanced countries have completely moved into the direction of more uniform, compulsory, and comparable reporting systems, while the underdeveloped nations, Pakistan included, are still grappling with the limitations of institutions, rules, and resources that render sustainability reporting superficial and untrustworthy. The factors stated above point to the necessity of investigating the interaction between sustainability reporting and financialization dynamics as well as real capital accumulation, particularly in areas where companies have to deal with both short-term financial pressures and long-term developmental needs.

2.4 Theoretical Framework

A theoretical backdrop of strong character is necessary to analyze the connected dynamics of sustainability reporting, financialization, and real capital accumulation, particularly in an emerging economy such as Pakistan. Corporate practices do not stand alone but are influenced by different factors such as managerial incentives, stakeholder expectations, institutional frameworks, and the broader socio-economic context. This section of the thesis presents four significant theoretical perspectives - agency theory, stakeholder theory, institutional theory, and legitimacy theory - as the framework for its analysis. Each of these theories provides insights from a different viewpoint, but together they simplify the understanding of the causes behind the firms' disclosures of sustainability reporting, the impact of financialization on the corporate sector, and the factors that may either restrict or support the accumulation of real capital in various organizations and institutional settings.

Agency theory is an important viewpoint on management behavior as it brings to light the inherent discord of interests that exists between managers and shareholders. According to Jensen and Meckling (1976), in the absence of effective monitoring and control mechanisms, managers might opt for behaving in ways that suit them rather than

in ways that suit the firm's owners. One of the implications of such a theoretical framework in the context of sustainability reporting is that if managers perceive reporting as requiring the diversion of resources or as a threat to short-term profit, they may not indulge in extensive reporting practices. On the other hand, reporting could become a tactical tool that managers employ to portray their good conduct without actually incurring any considerable obligations thus minimizing the information gap with equity holders (Clarkson et al., 2008; Eccles et al., 2014). The connection between agency theory and financialization is also very strong as the rise of financial performance measures—such as short-term profit targets, dividend policies, or returns on financial investments—could change the ruling of managers' incentives. Lazonick and O'Sullivan (2000) and Stockhammer (2004) suggest that management strategies are increasingly focused on achieving immediate financial benefits instead of investing in long-term productive growth. The phenomenon is particularly evident in the case of developing markets where corporate governance systems are being established and supervision is occasional, thereby intensifying the problem of agency.

While agency theory focuses on the incentives of managers, stakeholder theory on the other hand, broadens the view by stating that companies are responsible not only to their shareholders but to a large group of stakeholders whose interests go beyond those of simple financial nature. The expectations of workers, neighbourhoods, consumers, authorities, and the world in general are points laid out by Freeman (1984) as things a company should consider. As a result, sustainability reporting turns out to be a channel through which companies express their awareness of these groups and their adherence to ethical, environmental, and social obligations. This line of thought implies that in-depth sustainability reporting does not only win trust but also improves reputation, thus supporting the creation of value in the long run (Aguinis & Glavas, 2012; Freeman et al., 2010). In the case of Pakistan, stakeholder expectations are frequently influenced by international supply chains, global buyers, and development partners rather than local players. According to Jamali and Mirshak (2007) and Khan et al. (2020), companies often meet the requirements of global stakeholders who ask for more rigorous and structured sustainability reporting than domestic ones. Stakeholder theory also points out the connection between sustainability reporting and the generation of real capital as, in trying to meet stakeholder expectations, firms may put money into cleaner technologies, better

working conditions, and more efficient production systems, all of which demand huge capital investments (Hart & Dowell, 2011).

Institutional theory adds a different perspective to the discussion when it talks about corporate practices being influenced by the institutional surrounding portrayed by firms. DiMaggio and Powell (1983) put forward that organizations yield to the coercive, normative, and cognitive influences that come from the government regulations, the expectations of the industry, and the values of the society. Sustainability reporting is one of the main way's corporations get rid of these institutional pressures, and this is particularly true for companies operating in the global market where the reporting standards are almost the same. Nevertheless, in Pakistan, coercive pressures are not very strong since sustainability reporting is mostly a voluntary matter, and the enforcement of the practice is also weak. Report writing is more of a buyer's demand, donor's influence, and professional networks that play a major role in shaping the practice of firms reporting (Haque & Ntim, 2018). Cognitive pressure is less intense since there is little public awareness of the issues and there is not much social mobilization around the environment and society in general. Institutional theory sheds light on the process through which financialization permeates emerging economies as global norms stressing the needs of the shareholders and financial performance permeate into the local corporate culture (Palma, 2009). These institutional configurations in Pakistan may push the companies to opt for financialized practices that are aimed at short-term profit through less productive investment thus impacting the actual capital accumulation negatively.

Legitimacy theory adds another layer to the comprehension of sustainability reporting by depicting it as a means whereby companies try to keep on the right side of the society. According to Suchman (1995), legitimacy is of paramount importance for the existence of organizations, and their aligning activities with the environmental and social expectations is the way to get the social license to operate. Sustainability reporting becomes a focal point of this endeavor since it enables companies to show an image of responsible and virtuous practices. Nevertheless, as shown by Cho et al. (2015) and Michelon et al. (2015), companies are mostly inclined to showcase good sustainability practices while keeping silent about their governance shortcomings or environmental risks, especially when they are operating in settings with little or no regulatory scrutiny. In the case of Pakistan, the reporting of such activities is considered more like a symbolic gesture for reputation management than an adequate tool for accountability due to weak

institutional monitoring and moderate civil society involvement. Furthermore, Legitimacy theory becomes interconnected with financialization, whereby corporations might prefer to use the process of sustainability reporting to diminish public worries about their endless pursuit of financial returns, especially when such strategies work against the long run welfare of the society.

Collectively, these theories form a solid conceptual basis for this dissertation. Agency theory justifies the provision of incentives to the management via sustainability reporting and financialization; stakeholder theory points out the societal expectations; institutional theory explains the pressures that come from outside and influence corporate behavior; and legitimacy theory unveils the reporting techniques used by companies in areas where the institutions are weak. By merging the different viewpoints, we acquire a comprehensive understanding of the scenario that businesses in Pakistan have to deal with concerning sustainability reporting, financial constraints, and investment choices. This theoretical amalgamation is a necessity for understanding the empirical results and for developing hypotheses that consider both universal theories and local institutional contexts.

2.5 Financialization: Concepts, Mechanisms, and Empirical Evidence

Financialization is one of the greatest economic transformations that have occurred in the late twentieth and early twenty-first centuries. It has been the main factor in changes to the behavior of corporations, allocation of capitals, and the directions of the development of nations. Generally, financialization is the phenomenon of growing the preeminence of the financial motives, financial markets, financial players, and financial institutions in the economy's functioning (Epstein, 2005). In the context of a company, financialization is characterized by a heavy reliance on financial income, the company becoming more inclined to short-term financial returns, and even more pressure on the company to prioritize shareholder value which results in the management focusing on financial metrics instead of productive investment. These changes entail enormous and wide-ranging impacts on the sustainability reporting and the real capital accumulation particularly in the developing economies where industrialization is not yet complete, and financial markets are not well-developed.

The financialization hypothesis, in its theoretical base, indicates that when companies start to take a larger part in the finance markets, their tactics will be more inclined to

secure financial profits rather than building up their productive capacity. In effect, Krippner (2011) describes this change in terms of a shift from "production-based profits" to "financially-channelled profits," which", gradually, the company's financial profit—generated through interest, dividends, speculation and revaluation of assets—will take the place of income from the sale of products and services". Along these lines, Lazonick and O'Sullivan (2000) point out the shareholder value concept as the main culprit that drives companies to pay out their profits as dividends or through buybacks while ignoring investment in plant, equipment, research, and innovation. Such trends might gradually reduce the social resources for the installation of long-term productive assets and foster the decline of companies' ability to produce and invent.

Managerial incentives are also affected by financialization. Actually, compensation packages that are more and more linked to stock performance or financial benchmarks push managers to take the way of short-term financed strategies. However, these strategies might take a toll on long-term competitiveness (Davis, 2009). One thing that is typical in these cases is cutting down on capital expenditures, reorganization of the workforce for cost reduction, and taking on more debt to increase equity returns. Orhangazi (2008) points out that the companies with higher financial income usually cut down on their real investment as the financial returns turn out to be the only reason for not expanding productive capacity at the same time. The same or similar forces have already been discovered in both developed and developing countries (Stockhammer, 2004; Hein, 2012).

In the developing countries, the effects of financialization are even more visible as a result of the structural difficulties. The lack of government support for the industry, poor technological capability, and little access to long-term loans all contribute to the attraction of financial activities that promise fast returns. Palma (2009) observes that the financialization process in the emerging markets often takes place without needing corresponding institutional safeguards, thereby making companies more prone to the swings of the global financial markets. Volatility of this kind could, especially, dissuade long-term investments that are already quite insecure because of things like exchange-rate fluctuations, interest-rate instability, and capital flow reversals that affect companies' financial positions. Companies might, thus, opt for the easiest way out and switch their resources from the productive sectors and sink them into safe or more profitable financial instruments for the short term.

The data gathered from economically weaker countries portray a scenario where the process of financialization is responsible for the hindrance of the real capital accumulation. The research done in the regions of Latin America, South Asia, and Africa provides evidence that a greater dependence on the financial income is directly related to lower investments in the areas of manufacturing capacity and technological upgrades (Demir, 2009; Ndikumana, 2011). The companies that get involved with the financial markets are normally under the pressure of the stockholders to ensure that a large portion of the profits is paid out as dividends. Thus, the profits are distributed rather than retained for the purpose of capital expansion. In the case of the developing countries where the industrial growth is regarded as a national priority, these pressures are in opposition to the economic goals in the long run. For example, the studies made by Turkey, Brazil, and Argentina reveal that the time during which the companies moved from a direct pumping of profits into fixed capital, and the overall investment in R&D and thus, the competitiveness of the industrial sector reduced to a large extent (Karwowski & Stockhammer, 2017).

Financialization and sustainability reporting are interconnected in a multidimensional manner. Financialized corporations, to some extent, might utilize sustainability reporting as bait to attract investors, lenders, and worldwide partners in the supply chain who are willing to cooperate with transparent and responsible companies. The sustainability reporting has the potential to not only give the company a good reputation but also to legitimize it further in the eyes of those who take a close look at its practices. On the other hand, the process of financialization might influence how attractive companies are, thereby restricting their capacity to engage in real capital accumulation that require significant capital, such as eco-friendly technologies, improved worker safety measures, or innovative manufacturing processes. In the opinion of Soederberg (2010), sustainability efforts might be merely for optics when companies put financial profits above investments in the environment and society.

Pakistan is a country that offers a very special setting for the study of the above-mentioned dynamics. Not only the financial markets are shallow, but also the corporate governance practices vary and the upgrading of the industry is the priority of the nation. However, the companies do more and more financial activities because of the volatility in the economy, the limitation in technology and the short-term liquidity provided by the attractive financial instruments. Studies show that the Pakistani firms consider dividend

pay-outs and short-term financial means as the main ways for keeping the investors' confidence high and thus, the unproductive capacity remains their main problem (Mahmood et al., 2018). These behaviours are further encouraged by the institutional frailties of the country, such as the inconsistency in the enforcement of regulations, lack of long-term financing options, and the risk of being affected by fluctuations in the global financial markets. The liberalization of the capital market in Pakistan during the 1990s and 2000s not only added to these trends but also diverted companies towards the global financial systems without having proper risk management measures in place.

Financialization in Pakistan also influences sustainability reporting. Sustainability reporting may become a firm's way of reputation management, foreign buyer attraction, or development partner relations improvement when the firm is financially pressured. A number of studies from Pakistan suggest that the reported sustainability is not always genuine and emphasizes easily reportable activities instead (Haque & Ntim, 2018; Ashraf et al., 2021). In the sectors like textiles and cement, the global customers set the sustainability standards, and the firms use reporting as a tool to stay in the competition for exports. On the contrary, in local sectors where financial pressures are predominant and stakeholder activism is weak, sustainability reporting is very low and rarely part of strategic decision-making.

These trends have a direct impact on the process of real capital accumulation. For many years, Pakistan has had to deal with a low investment-to-GDP ratio, a poorly developed manufacturing sector, and a lack of technological innovation (Malik & ul Haque, 2020). The financial activities could further weaken the economy's structure by pulling out investments from the productive sectors. However, sustainability reporting, if truly followed, can be a means of transparency in capital allocation which will help the stakeholders to see whether the companies are investing in long-term productive assets or not. Thus, the connection between sustainability reporting and real capital accumulation is contingent on the firms' use of reporting mainly for investment strategy support or just to signal compliance.

Financialization integrates sustainability reporting and real capital accumulation in a very significant way. It influences the managers' priorities, the functioning of corporate governance and the allocation of resources between short-term financial profits and long-term productive investments. Sustainability reporting practices in Pakistan cannot be fully

grasped without understanding the concept of financialization and its possible impact on the development of the country. This broader theoretical framework provides the basis for exploring the issue by means of the three components of sustainability reporting, financialization variables, and real capital accumulation as applied in the empirical setting of this dissertation.

2.6 Sustainability Reporting and Real Capital Accumulation: Empirical Review

The nexus between sustainability reporting and actual capital accumulation has become an issue of considerable scholarly interest as the firms are ever more moving into the ecosystems that require the use of the reporting practices, i.e., the environments that demand transparency, accountability, and long-term strategic investment. Sustainability reporting, when properly executed, becomes a pointer towards the company being eco-friendly, socially responsible, and adhering to the best governance practices. The whole thing might often be interpreted in a way that the company has to bury money in physical assets, technology, and drained operations that create real capital. Research has been conducted in developed and emerging markets to show the dependence of sustainability reporting on investment, productivity, innovation and long-term value creation through the channels of those effects.

Most researches from developed countries have already indicated that the companies which are involved in complete sustainability reporting are likely to show more investment trends and also, have long-term strategic orientation. According to a study conducted by Dhaliwal et al. (2011), to the issuing companies of sustainability-type reports the costs of capital were lower, thus allowing the firms to invest more in the productive assets. Porritt (2007) and Hart with Dowell (2011) went a step further and stated that the firms with sustainability focus are to a larger extent investing in the technologies that are cleaner, the machines that are eco-efficient and the systems that are energy-saving, all of these are going toward real capital accumulation. The money spent on such investments is the one that mitigates environmental risk but at the same time, is the one that is going to boost along the line of benefits of the operation, dropping waste, and winning competitive ground. Further, the report from the OECD countries now shows that sustainability reporting is a factor contributing to innovation capacity, as the firms participating in such activities are conducting research and development with the aim of

making it long-term unlocking an environmental and social objective (Delmas et al., 2011; Eccles & Serafeim, 2013).

The connection among sustainability reporting and real capital accumulation is rather complicated in the case of emerging economies, mainly due to the weaknesses of various institutions, lack of sufficient resources, and different pressures from stakeholders. Quite a few studies suggest that companies operating in emerging markets are using sustainability reporting mainly as a tool to legitimize their existence, to get access to the international markets, and to attract foreign investment (Amran & Haniffa, 2011; Hossain et al., 2017). These factors usually lead to the practice of reporting selectively, especially in the cases where regulatory enforcement is not strong. On the contrary, if the sustainability reporting is of high quality and is strategically integrated with the company's operations, it will be able to motivate investments in the form of real capital. A study conducted in India found that the companies that follow the sustainability reporting guidelines set by the Business Responsibility and Sustainability Reporting (BRSR) acquire the habit of investing regularly in the environmental and social infrastructure which includes waste management, renewable energy, and people (Bansal & Kistruck, 2022). The same scenario has been observed among Chinese firms where those firms with comprehensive sustainability reporting are more likely to use high-technology manufacturing and green power investments which both lead to greater productivity (Liu et al., 2018).

There are studies that still insist that the very act of reporting on sustainability might not always mean an actual investment. In such contexts where reporting is done just for optics, companies might boast about their sustainability accomplishments while quietly committing very little or no capital at all. Michelon et al. (2015) have shown through their study that in the emerging economies, companies do not really invest their money behind such symbolic sustainability reporting. Muttakin and Subramaniam (2015) reference the case of Bangladesh where reporting in many cases is about using the same money for public relations rather than upgrading operations that need significant investments. This research brings to the light the need to be clear about the reporting lines between the one that really documents the company's strategic orientation and the one that is simply for reputational purposes.

On the other hand, domestically focused businesses in Pakistan generally demonstrate poorer sustainability communication and very low amounts of real capital investment. The cause is said to be the lack of stakeholder pressure, the poor application of reporting standards by the Securities and Exchange Commission of Pakistan, and the high cost of making sustainability improvements (Mahmood et al., 2018). Some other investigations reveal that companies having the least amount of sustainability reporting invest less in long-term productive assets, rather they are applying short-term finance strategies being driven by market volatility and liquidity concerns (Khan et al., 2020). This difference depicts the two sides of the issue of sustainability reporting in Pakistan - where real reporting is linked with capital investment but paper-based reporting does not reveal any connection with productive capacity-building.

Sustainability reporting is known to support indirectly the real capital accumulation by enhancing access to financial resources which the international evidence has also suggested. The firms that report sustainability initiatives regularly have a good image among banks, institutional investors, and development agencies, thus, their chances of getting financing for capital-intensive projects are better (Friede et al., 2015; IFC, 2020). This link is particularly significant in the case of Pakistan, where availability of low-cost finance is still a major obstacle to the modernization of the industry. The practice of sustainability reporting might, so to speak, replace the traditional collateral as it would signal the company's good governance and responsible risk taking, thus, making it more credit worthy.

The interaction of financialization and sustainability reporting has made their relationship even more intricate. If the market forces dictate the pure financial aspects, companies might still in any case report their activities' impact on the environment through short financial activities. The authors here, Soederberg (2010) and Palma (2009), argue that companies under the influence of finance might choose to engage in sustainability reporting purely for the sake of their reputation or legitimacy and without making any significant investments in physical assets. The financial pressure in Pakistan due to the country’s macroeconomic situation, volatility, and shareholders expecting more dividends may, in fact, limit the amount of capital that would otherwise be allocated for long-term investments. In this context, the sustainability reporting process is not a source of increasing capital unless there are strong institutions, regulatory incentives, or through the active involvement of the stakeholders.

Even though empirical literature has pointed out that there might be some positive effects from sustainability reporting to the extent of real capital accumulation, the context in which the company operates together with other elements like pressure from stakeholders, the incentives of the management, and the level of financialization in the company will determine the strength of this impact significantly. In the case of Pakistan, reporting practices being influenced by both external pressures and internal limitations, it becomes essential to comprehend the relationship in this country in order to draw empirical studies' conclusions and recommend policy actions. It is the contradictory results between international and national studies that point to the necessity of this kind of strong empirical analysis, as presented here, to either support or criticize the claim that sustainability reporting translates into real capital investment in the manufacturing sector.

2.7 Financialization and Real Capital Accumulation: Empirical Review

Financialization and real capital accumulation are now interrelated concepts that economists often discuss at the same time, especially in the case of the countries that are under the pressure of industrial growth and sustainable development. Different financial strategies adopted by firms have placed them under the pressures of having to invest their resources either in the financial or in the real sectors, depending on the size and power of the financial sector in the overall economy. The latter choice is, of course, evident in both parts of the world, namely advanced and the emerging countries. It is the countries like Pakistan where the comprehension of the shifts in investment patterns is utmost vital because the no less than 50% annual growth in the industrial sector would be made possible only through continuous investments in physical assets, technology, and innovations.

The data from advanced economies support the view that the drop in real investment is at least partly due to the financial income that has become the primary source of income, the pressure to maximize shareholder value, and the increasing influence of financial markets. Research conducted in both Europe and the U. S. has indicated that financially thriving firms are also more likely to limit their expenditures on the technological upgrades of their machinery and equipment (Stockhammer, 2004; Orhangazi, 2008). Lazonick (2010) has presented facts stipulating that big corporations quite often divest their earnings into stock repurchase programs and dividend distribution, thereby starving the growth area of cash. The escalated shifts and redistributions have catalyzed the

downfall of manufacturing industries, decreased innovation, and created a less competitive atmosphere. In a comparable fashion, Krippner (2011) contends that the transition to the financial profits' priority has rearranged the corporate hierarchy of the decision-making process and has led to the termination of the traditional long-term productive commitment.

In emerging markets, financialization dynamics are a function of structural sources of weakness, institutional weaknesses, and macroeconomic instability. The studies carried out in Turkey, Brazil, South Africa, and Argentina find that firms are increasingly turning to short-term financial instruments as their sources of income or liquidity, thereby neglecting investment in production and technology (Demir, 2009; Ndikumana, 2011). The situations are particularly aggravated in economies with unpredictable currency movements, heavy external borrowing, and unstable interest rates because in those conditions financial strategies look less risky and more attractive than long-term capital investment. Karwowski and Stockhammer (2017) point out that financialization has lowered the rate of investment, led to the stagnation of technology, and increased financial fragility in many developing countries. The research thus implies that financialization is a pivotal factor for industrial development when financial objectives prevail over that of productivity.

Financialization is gradually reported in South Asia as a negative factor to real capital accumulation. Indian research reveals that financial income and pressures to pay dividends have led to reduced capital spending of companies in the manufacturing sector, especially that of the sectors integrated heavily with global financial markets (Ghosh & Chandrasekhar, 2009). Similarity is found in Bangladesh, where firms mainly rely on short-term financial returns due to limited technological capability and poor industrial infrastructure (Muttakin & Subramaniam, 2015). In Sri Lanka, financialization is seen to have coexisted with macroeconomic instability in taking back private-sector investment and belying the country's long-term growth (Wijesinghe & Perera, 2020). These studies from different regions indicate that financialization presents barriers to the accumulation of real capital across South Asia, although the degree to which it does so depends on the institutional context and regulatory power.

In Pakistan, the concept of financialization has been applied to corporate behavior analysis as a major structural issue. The opening up of the capital markets in the 1990s

and early 2000s placed firms in an environment of global financial flows, speculative instruments, and short-term investment opportunities. Although the reforms aimed at broadening access to capital, they concomitantly raised firms' reliance on volatile financial markets. Empirical studies report that, in particular, the manufacturing sector, Pakistani firms have been showing an increasing preference for dividend payment and short-term financial activities that restrict the funds available for reinvestment in plant, equipment, and technology (Mahmood et al., 2018). Besides, the need to keep the shareholders confident through tough economic times reinforces these tendencies. For instance, companies may enhance their dividend payments even when profitability is falling as a way of maintaining market valuation, hence reducing the internal cash flow for investment in new capacity.

Moreover, the financialization process in Pakistan is being reinforced by structural problems, which include underdeveloped financial markets, absence of long-term financing, and constant economic disruptions. The risks of real capital formation are escalated by high borrowing rates, depreciation of the local currency, and inflationary pressures. According to Malik and ul Haque (2020), companies perceive real capital accumulation as a riskier activity compared to engaging in financial strategies that have the advantage of providing liquidity and quick returns in the short term. This position justifies the accumulation of financial assets by Pakistani companies as a measure to protect themselves from instability rather than investing their funds in manufacturing facilities. Studies indicate that the companies which are affected by currency and interest rate fluctuations are mostly likely to adopt the financial route of hedging or holding of assets rather than real capital accumulation (Khan et al., 2020).

The interrelationship between financialization and corporate governance is one of the factors that lead to a decline in investment in real capital. Weak monitoring, concentrated ownership, and inconsistent governance codes give the top management the freedom to prioritize short-term financial results through their decisions. According to the agency theory, managers who face financial stress might use the resources on activities that produce a quick financial return, like cutting costs, investing in financial instruments, or distributing profits, among others, and thereby neglect long-term capital development. The situation in Pakistan supports this theoretical assumption. High financial income or hard-to-please shareholders ownership is characteristic of firms that tend to reinvest less

and are more reluctant to commit to the so-called sustainability investments, which are crucial for technical advancement and future competitiveness (Ashraf et al., 2021).

In spite of these problems, there are still companies that support the idea of being strategic in their sustainability and long-term growth orientation offering the highest levels of real capital accumulation. The firms, which are noticeably engaged in sustainability reporting, tend to invest in more technologies facilitating resource efficiency, workplace safety, and environmental performance. These investments do not only result in capital formation through the purchase of new machinery, upgrading of production processes, and enhancing the organizational resilience but also through the whole sustainability reporting process. The capital formation through investments in such reports is not only seen in the export-oriented sectors but also in Pakistan which is still very much capable of using sustainability reporting as a means of financialization pressure counteraction and hearkening back to productive investment for the long-term.

In the financial literature, there is a general consensus that financialization has a negative effect on capital accumulation and that the negativity of the impact is due to indirect means—like the redirecting of resources to short-term financial activities, the increased management attention to immediate financial return, and the reduced long-term productive investment. In Pakistan, the negative impacts are intensified by economic structure problems, government regulation inefficiencies, and macroeconomic instability. Therefore, the interaction between financialization and real capital becomes a major issue of discussion in this research, particularly in terms of providing an understanding of how companies cope with the financial burden of sustainability reporting obligations and their associated development responsibilities. The empirical foundation established in this way is a basis for the later research model and hypotheses that will be tested in this study.

2.8 Integrated Review and Conceptual Framework

The existing literature review reveals that sustainability reporting, financialization, and real capital accumulation are the three main themes of corporate behaviour research. Nowadays, the interconnections between the three themes are still unclear, especially in developing economies like Pakistan. The theoretical perspectives previously mentioned present a justification to the firms' adoption of sustainability reporting (Freeman, 1984; Suchman, 1995), to the shifts in financialization of managerial incentives (Lazonick & O’Sullivan, 2000; Stockhammer, 2004), and to the reasons for differences in real capital

accumulation across institutional contexts (Malik & ul Haque, 2020). A thorough understanding of the implicit connections and the existing literature gaps propels the current study.

Literature on sustainability reporting states that well-defined reporting systems not only lessen uncertainty but also build trust among stakeholders and thus lead to long-term strategic orientation (Eccles & Krzus, 2018; Dhaliwal et al., 2011). Reports coming from developed nations confirm that sustainability reporting is a factor that aids in obtaining financial backing and tends to channel funds towards physical and productive assets (Hart & Dowell, 2011; Delmas et al., 2011). Although research in developing countries claims that sustainability reporting is usually the result of external pressure, it is not consistently applied, and the voluntary codes of conduct with weak enforcement influence it (Ali et al., 2017; Haque & Ntim, 2018). Thus, the role of sustainability reporting in the process of real capital accumulation could be quite different depending on the institutional arrangements, hence, the need to study this relationship in the context of countries like Pakistan.

On the other hand, the financialization literature brings in a different perspective. Financialization is characterized by a strong corporate focus on activities that produce financial gains in the short term rather than for the long run through productive investment (Krippner, 2011; Orhangazi, 2008). Research conducted in both developed and less developed markets supports the idea that a rise in the financial income of corporations, the amount of dividend paid to shareholders, and speculative activities have a close association with the reduction in capital spending and slower industrial growth (Demir, 2009; Ndikumana, 2011). Similarly, one line of argument in Pakistan points out that macroeconomic instability, high-interest rates, and the poor quality of the institutions render the financialization of the firms more pronounced and also limit their real capital investment (Mahmood et al., 2018; Ashraf et al., 2021).

By taking both research areas into consideration, one is able to see conceptual competition at the core of the sustainable development debate. On the one hand, sustainability reporting is thought to lead to longer planning and investment horizons (Eccles & Serafeim, 2013), while on the other, financialization promotes short-term strategies that result in less real capital accumulating (Palma, 2009). There is very little empirical evidence to show how these opposing forces of nature co-exist and interact within firms.

Lack of a combined analysis constitutes a major drawback in international academic discourse, particularly in emerging economies where institutional deficiencies exacerbate both sustainability issues and financial pressures (Jamali & Karam, 2018).

Research focused on Pakistan points out additional gaps. The past literature on sustainability reporting has largely been concerned with pointing out its advantages and drawing cases for it (Rehman et al., 2019; Ashraf et al., 2021), while studies on financialization look mainly at pay-out behaviour or macroeconomic effects rather than firm-level investment decisions (Khan et al., 2020). Despite the importance of the manufacturing sector to the economy, it is baffling that no empirical research has been done on the sustainability reporting and financialization joint influence on the real capital accumulation in Pakistan's manufacturing firms.

The theories that were earlier discussed have formed a strong basis for the integration of these relationships. Agency theory illustrates the transition of the financialization process, where the main concern of management is over the short-term with unavoidable reductions in real capital accumulation (Jensen & Meckling, 1976). Stakeholder theory further interprets it that through sustainability reporting the opposing forces will be counteracted (Aguinis & Glavas, 2012). Institutional theory brings us to the understanding of how consumer habits are influenced by the regulators and culture (DiMaggio & Powell, 1983), while legitimacy theory points out that sustainability reporting in a weak institutional context may transform into merely an act of communication (Michelon et al., 2015).

Making use of the above-mentioned lenses, the conceptual framework of this study places sustainability reporting and financialization as the two opposing forces that would determine the flow of real capital into the Pakistani manufacturing sector. Reporting on sustainability can be a signal to investors of the company's long-term focus thus leading to the acceptance of the commitment to responsible management practices and building trust with the stakeholders. On the other hand, financialization can be a drain where the firm exhausts its resources in pursuing short-term profit-oriented financial activities. Together these factors indicate the necessity of knowing the interaction of sustainability reporting with financialization in deciding the extent of capital accumulation. It is through this integration the hypotheses to be tested in the next chapter are justified and a direct connection between the literature and empirical framework is created.

2.9 Summary of Literature Review and Research Gaps

The body of literature that was examined in this chapter indicates that sustainability reporting, financialization, and real capital accumulation have all experienced broad focus through academic analysis within different domains. The investigation into sustainability reporting reveals that it elevates the level of transparency and helps in long-term planning especially when the reporting is mandatory and the institutional oversight is strong (Eccles & Krzus, 2018; Kolk, 2010). On the other hand, in the developing countries, sustainability reporting is influenced by voluntary guidelines, weak enforcement, and external pressures which result in the uneven adoption of reports and the possible negative impact on real capital accumulation being uncertain (Ali et al., 2017; Haque & Ntim, 2018).

On the contrary, financialization is a transformation in global corporate practices that is characterized by an absolute preference for short-term financial results over long-term productive investment. In fact, the evidence from different studies indicates that financialized companies habitually invest less in capital, slow down the modernization process, and switch resources to dividends or financial assets (Lazonick, 2010; Orhangazi, 2008). This type of behavior is very difficult in the case of the world's poorest countries especially where the institutions are too weak and the economy unstable thus they face high short-term managerial pressure (Demir, 2009; Ndikumana, 2011). Concerns in Pakistan coincide with these trends, and in financial terms, firms are under pressure making it difficult for them to invest in productive assets (Mahmood et al., 2018; Khan et al., 2020).

The interaction of sustainability reporting and financialization has not been the subject of extensive studies, while their independent studies have been numerous. Besides, the theoretical literature points out that sustainability reporting and financialization are opposing factors in investment behaviors, but there is still a lack of empirical proof especially for emerging economies. The non-existence of integrated research is viewed as a significant gap in the global literature (Jamali & Karam, 2018; Palma, 2009).

In the case of Pakistan, the gaps are even more marked. The research on sustainability reporting tends to look at the factors affecting the adoption of sustainability reporting rather than the impacts it has (Rehman et al., 2019), whereas in financialization studies, the assessing of its impact on the investment of the firm is not common (Ashraf et al.,

2021). No work has been done so far that would bring together the empirical framework and link sustainability reporting, financialization, and real capital accumulation in the manufacturing sector of Pakistan.

The theory's foundations—agency theory (Jensen & Meckling, 1976), stakeholder theory (Freeman, 1984), institutional theory (DiMaggio & Powell, 1983), and legitimacy theory (Suchman, 1995)—clearly point out why these connections have to be explored simultaneously. These authors, through their theories, demonstrate that sustainability reporting is a way to assure the investors of the firm's commitment to long-term investments while financialization is a way of denying that investment. The extent to which these opposing forces interact is considerably influenced by the institutional context; hence, Pakistan becomes an understudied but significant area for empirical inquiry.

The research, therefore, sets out three main gaps to be filled: firstly, the limited number of integrated studies that have included both sustainability reporting and financialization; secondly, the unavailability of any empirical data showing the combined effect of these two factors on the real capital accumulation; thirdly, the inadequacy of research specific to Pakistan dealing with these interrelationships. The present study is aimed at bridging the above-explained gaps by proposing an integrated empirical model capable of analysing the ways in which sustainability reporting and financialization impact real capital accumulation in the manufacturing sector of Pakistan.

2.10 Problem Statement

In Pakistan, the manufacturing sector is faced with a paradox: it has to be competitive in an ever-globalized market while at the same time, gradually embracing sustainable business practices. Although the sector contributes significantly to gross domestic product and employment, the evidence suggests that many firms are bent on short-term financial gains at the expense of long-term productivity-improvement investments. This is manifested by delays in machinery modernization, under-investment in energy-efficient technology, and limited application of the sustainability principles.

Here, the textile and cement industries in Pakistan's manufacturing sector provide clear examples of this imbalance. As reported by the State Bank of Pakistan (2022), a number of cement companies listed on the PSX have demonstrated a sluggish growth in their

capital work-in-progress and fixed assets over the last five years, in spite of high levels of profitability. This trend clearly indicates the diversion of retained earnings from further investment in infrastructure to enrich themselves with non-core financial ventures. In the same way, the Pakistan Institute of Development Economics (2022) indicated that textile companies tend to postpone upgrades on machinery and energy-efficiency initiatives in favour of other interests, such as high dividend distributions or short-term speculative opportunities.

The results of the Green Finance Survey conducted by the State Bank of Pakistan (2023) revealed a startling situation where less than 15% of the listed manufacturing companies had reported verified greenhouse gas emissions data. These figures are dramatically lower compared to India which has an 80% disclosure rate through its mandatory Business Responsibility and Sustainability Reporting framework. Furthermore, the companies that had undergone independent ESG audits were comprised of less than 10%. These figures reveal the weaknesses in the industrial sector of Pakistan and also emphasize the immediate need for a detailed study of the interplay between the pressures of financialization and sustainability reporting, which eventually decides the allocation of capital in the manufacturing base.

The current trend indicates a strong need for research to understand the role of financialization in companies' capital expenditure decisions and sustainability reporting in emerging economies like Pakistan where the mechanisms for institutional enforcement are weak. Until these systemic gaps are addressed, Pakistan will remain at the back of the queue regarding any industrial modernization and sustainability goal.

The sharp focus on sustainability practices around the world has not been able to change the situation in Pakistan's corporate and financial sectors, which continue to show a lack of sustainability practice adoption fragmented and often mainly driven by reputational considerations rather than being strategically integrated. Less than 15% of companies listed on the stock market in Pakistan produce stand-alone sustainability reports, according to the Pakistan Institute of Development Economics (PIDE, 2022), and of these, only a small number are fully compliant with GRI or SASB, which are the internationally recognized standards for sustainability reporting. This scattered reporting prevents companies from being compared easily, thus decreasing the confidence of

investors and hindering the mobilization of capital needed for investments in environmentally friendly projects.

Financialization per se has to be this way, focusing on short-term gains rather than long-term value creation (Palley, 2013; Krippner, 2011). In this manner, emerging markets have been characterized by weaker regulatory oversight, diminished investor activism, and undeveloped corporate governance cultures. Capital market in Pakistan is quite shallow; speculations often take precedence over fundamentals-based investing (State Bank of Pakistan, 2021). Thus, this atmosphere creates a situation where the financial actors' objectives are at cross-purposes with the needs of sustainable development.

Yet, sector-directed analyses deepened further the disparities. In the banking sector, some progress has been achieved through the implementation of the Green Banking Guidelines (2017) by the State Bank of Pakistan. This included financing renewable energy projects and adopting environmental risk management systems. Implementation, however, remains sporadic, particularly among smaller banks that lack the institutional capacity to consider sustainability criteria in their credit appraisal processes. In manufacturing, especially the textile industry, violations of sustainability norms have caused export rejections, lost preferential trade access, and damaged reputations in European and North American markets (International Labour Organization, 2021). In energy, it has always been a heavily imported fossil fuel-dependent sector, and the wave of decarbonization poses a huge scuffle before a heavily constrained infrastructure dependent on coal and oil subsidies with the minimum investment in renewables.

With governance arrangements in place, regulatory fragmentation blocks progress. The SECP has issued guidelines on CSR and non-financial disclosure that remain voluntary for companies. sustainability reporting for large companies has, conversely, been enforced in countries like India and Malaysia, thereby promoting greater investor participation and transparent sustainability conduct (KPMG, 2020; SEBI, 2021). In the absence of such enforceable framework for binding sustainability reporting in Pakistan, a box-ticking attitude has largely been adopted, wherein the companies disclose whatever favourable information they want but refuse to disclose material risks and impacts.

Climate change provides a noteworthy example of the issue. According to the Global Climate Risk Index (Germanwatch, 2022), Pakistan stands as one among the top 10 most climate-vulnerable countries in the world. Floods, droughts, and heatwaves threaten

human life and livelihood and also interrupt supply chains, destroy infrastructure, and increase costs to businesses. Without integrating sustainability imperatives, the financial economy can aggravate such vulnerabilities by diverting capital away from resilience-building investments.

Changes in the preferences of investors justifies this research even more. The world's capital is increasingly invested into sustainability-aligned investment vehicles, which reached USD 35 trillion in 2021, representing over 33% of the total assets under management worldwide (Global Sustainable Investment Alliance, 2021). Unless Pakistan quickly presents a credible adoption of sustainability with the help of reliable governance and market incentives, it is likely to miss these capital flows.

Therefore, this research is very important because it has discovered the conditions under which the financialization of a country like Pakistan could lead to sustainable capital creation. The study, while digging through this thick interface, would not only pinpoint the policies that best govern but also suggest the corporate strategies that would bring about the desired financial market behavior that is in sync with the long-term sustainability imperatives.

2.11 Conclusion

In Chapter 2, the theoretical foundations and empirical developments that influence the complex interplay between sustainability reporting, financialization, and real capital accumulation in the contemporary business scenario were extensively presented. The chapter began by presenting the conceptual development of sustainability reporting, pointing out its change from a small-scale communication tool to a fully recognized governance mechanism imposed by stakeholder demands, concerns about legitimacy, the impact of regulatory actions, and the goals of strategic management. The progress of this path illustrates how far the sustainability reporting has come to be regarded as an essential means for firms to communicate their non-financial performance, enhance transparency, and build long-term trust with different stakeholder groups. The authors of the article also argue that if sustainability is wisely integrated into business practices, it might lead to the creation of new products, upgrading of the existing ones, increased efficiency, and gaining of market power; thus, the firms' investment attitudes would be altered in the long run.

Simultaneously, the chapter offered a critique of financialization as a wide-ranging structural and behavioral change that, on the one hand, is the cause of corporate priorities being reshaped and, on the other hand, is the effect of changing corporate priorities. Literature on financialization consistently shows that companies from both developed and developing countries are facing increasing pressure to focus on short-term financial results, distribution of dividends to shareholders, and gain from speculation as opposed to investing in productive capacity over the long run. Various tools and practices such as distribution of dividends, drawing profits from non-operating activities, buybacks of shares, and accumulation of financial assets not only change the motivation of the managers but also reallocate the internal resources away from the development of real capital. The results of empirical studies conducted in developing markets (including Pakistan) have provided somewhat mixed but nevertheless significant evidence of how financialized behaviors can lead to lack of capital accretion, decreasing firm strength, and hindering the growth of the industry in the long term. The chapter points out that in places marked by weak institutions, changing economic conditions, and inconsistent regulations, such patterns may become more apparent.

Empirical evidence gives a clearer picture of the situation; the relationship between sustainability reporting and capital accumulation is intricate. Along with others who take a positive stance on the issue, the studies that point to the existence of positive correlations—like governance quality improvement, investment efficiency increase, and stakeholder trust elevation—are some of the studies demonstrating a positive view of the matter. They claim, however, that sustainability reporting may simply be a facade or something dictated by compliance in jurisdictions with ineffective regulation and little stakeholder activism, thus raising the issue of the very existence of the reporting as a means of communication. The chapter further underlined that the strategic value addition ability of sustainability reporting is predominantly dependent on the firm's capabilities, the sector-specific selling and buying activity, and the surrounding institutional norms and cultural expectations. Moreover, the intersection of sustainability reporting and financialization continues to be a largely unexplored area in developing countries, especially in Pakistan, where political instability, economic uncertainty, and shifting corporate governance structures create particular contexts that affect both reporting and investment practices.

Moreover, this chapter recognized that there are still gaps in the theoretical and empirical literature. For starters, the topics of sustainability reporting, financialization, and real capital accumulation are rarely analyzed in conjunction, whereas they are all closely related. Secondly, the manufacturing sector in Pakistan is characterized by the common structural constraints, weak regulatory capacity, and varying global market exposure that lead to different corporate responses; hence, there is a lack of empirical evidence about it. Thirdly, the literature omission of institutional and cultural factors as regards to disclosure behaviors of corporations and investment decision-making processes within regions with developing transparency standards is often rampant. Lastly, research studies usually do not consider the multi-faceted nature of financialization and non-financial reporting to the same extent that they do not understand the interaction of these forces within firms.

The chapter brought together theoretical viewpoints such as stakeholder theory, legitimacy theory, resource-based view, good management theory, and agency theory, thereby creating a conceptual basis for the understanding of the interaction between sustainability reporting and financialization in the aspect of real capital accumulation. These theoretical perspectives altogether provide explanations regarding the incentives, limitations, and behavioral patterns that determine corporate investment across diverse institutional environments company-wise. This integrative review additionally contributed to the theoretical framework of this study and justified the choice of variables, the formulation of hypotheses, and the orientation of the empirical analysis in the light of methodological approach.

To sum up, Chapter 2 claimed that the interrelationship between sustainability reporting and financialization in the manufacturing sector of Pakistan has been determined by a collection of various factors including the institutional environment, company governance methods, and the economic environment. The literature reviewed has convincingly pointed to the necessity of performing significant empirical work to assess how these factors affect the flow of capital into or out of the company, which is indirectly confirmed by the considerations behind the methodological choices and hypotheses laid out in the next chapter that has been directly influenced by the conceptual insights, theoretical disputes, and empirical gaps identified here, thereby providing a smooth and analytically sound transition into the empirical investigation.

CHAPTER 3

METHODOLOGY OF THE STUDY

3.1 Introduction

Chapter 3 introduces the methodological framework that was created and will be applied to the questions and hypotheses that were set up in the preceding chapter. It elaborates on the different stages i.e., research design, data sources, and sampling methods, that were employed in acquiring a detailed panel dataset of the manufacturing firms in Pakistan. Besides, the chapter highlights the operationalization of pivotal constructs such as sustainability reporting, indicators of financialization, and rejuvenation of real capital that discloses the empirical strategy requisite for the assessment of their interrelations.

The chapter also goes further to explain the econometric methods that the researcher adopted in the study, like fixed-effects modelling along with the application of panel-corrected standard errors. The choice of these techniques is supported by the necessity to consider differences at the level of the firm, instability of institutions, and the existence of common statistical biases in developing countries. Therefore, Chapter 3 not only reveals the analytical tools that are needed to detect the impact of sustainability reporting and financialization on long-term productive investment but also aligns with the overall research objectives.

3.2 Research design

This thesis utilizes a quantitative explanatory research method that is backed by systematic content analysis of annual reports to explore the relationship between financialization and sustainability reporting and the accumulation of real capital in the manufacturing sector of Pakistan. The design is completely based on the availability of uniform financial and non-financial data disclosed in company annual reports, rather than by numerical targets or external databases pre-determined. Since sustainability reporting in Pakistan is still in the process of being standardized, the research creates a unique scoring system based on GRI guidelines for environmental, social, and governance factors through the content analysis of the company's disclosures. This method assures

that the sustainability reporting is measured exclusively from the company's narrative data, not from secondary scoring providers.

The research encompasses five years (2018-2022), a period that is chosen because the companies started to share their sustainability-related information more consistently in these years, and the complete annual reports were accessible on the Pakistan Stock Exchange (PSX) website or the respective company websites for this period. The early years had either incomplete or inconsistent disclosures related to sustainability and data for 2023 had not been entirely released during the time of the analysis. Hence, 2018-2022 marks the longest uninterrupted duration when all necessary variables—financialization measures, sustainability reporting indicators, and fixed-asset information—are available at the same time.

A purposive sampling method is applied to select only the companies that: had comprehensive and continuous annual reports for the entire five years; provided enough details to calculate financialization indicators like financial payments, non-operating profits, financial assets, and repurchases; and made ample qualitative disclosures that allowed the scoring of ESG through content analysis. Those companies that had missing annual reports, incomplete data, or were inactive/delisted were excluded in order to ensure reliability and to avoid biased results. Hence, the final sample size only includes those manufacturing companies that have met the strict data availability criteria, not a pre-defined numerical target.

Financial variables such as fixed assets, dividends, interest expenses, non-operating profits, financial assets, and buybacks were obtained from the annual reports that had been audited. Sustainability reporting was assessed using a structured content-analysis coding sheet, which was developed specifically for this thesis, that measures environmental, social, and governance disclosures according to predefined indicators derived from literature and global sustainability frameworks. Every company was allocated annual E, S, and G scores that were based on the presence, clarity, and depth of the reported items. Then these scores were combined to create the sustainability reporting variable that was used in the empirical testing.

Because there are observations for the same companies over several years, the resulting dataset is a short but balanced panel, which is suitable for capturing year-to-year changes

in reporting behaviour and financial decisions. This setup allows the application of panel-data estimation techniques that consider firm-specific heterogeneity and directly aligns with the study's goal of investigating the interplay of sustainability reporting and financialization with the changes in real capital accumulation during the specified time frame.

3.2 Research Approach and Strategy

Both the research approach and strategy are parts of the research design. However, the research approach refers to the way of investigating. Broadly, two approaches exist: one is moving from the specific to the general (inductive), and the second is moving from the general to the specific (deductive) (Saunders, Mark Nk & Lewis, 2012; Deci & Ryan, 2002). Moreover, for determining the best research approach, the importance of the research philosophy cannot be ignored because it provides a background to the research approach. The current study utilizes a deductive approach that tests the postulations of agency theory by investigating the impact of sustainability reporting on Financialization and accumulation of real capital.

Research strategy is also part of research design. Research strategy is a general plan that facilitates a researcher in establishing and answering the questions of a study in a systematic way (Saunders, Mark Nk & Lewis, 2012). Because of this, establishing or clearly identify the purposes or objectives of a study for selecting an appropriate strategy is necessary (Robson, 2002; Hakim, 2000). Therefore, being part of the research design, both the research approach and research strategy are utmost important for conducting a study.

3.3 Conceptual Framework and Hypothesis Development

The present study's hypotheses come from the theoretical viewpoints and empirical evidence that were mentioned in the previous chapter, and especially those associated with sustainability reporting, financialization, and real capital accumulation. As per the research, the investment behaviour of firms has been greatly determined by both sustainability activities and financial pressures, the latter having a short-term and the former a long-term impact on productive capacity. According to agency theory, the interests of capital providers, most often shareholders, are left unfulfilled when the management, seeking their own interests, decides not to invest in capital or to invest less

than the optimal amount (Jensen & Meckling, 1976). In the same way, stakeholder theory points out that the company that participates in sustainability-related activities is under the influence of a wider group of stakeholders' expectations, and this might even provoke planned and strategic investments (Freeman, 1984). Besides, institutional and legitimacy theories put emphasis on the fact that governance structures, regulatory norms and external pressures are among the main factors that dictate the way of allocating resources in organizations (DiMaggio & Powell, 1983; Suchman, 1995).

However, the results of empirical studies are contradictory concerning the financial and sustainability-related factors' influence on real capital accumulation in emerging economies. According to one research, the company financial commitments i.e. interest obligations as well as dividend payouts may affect its ability to reinvest in productive assets (Demir, 2009). In a similar vein, non-operating profits and temporary financial gains can also take an active role in investment decisions by granting liquidity that can be used either for long-term capital formation according to corporate priorities or for other purposes (Orhangazi, 2008). On the other hand, share buybacks which are prevalent in markets under the influence of financialization can either assist in forming capital by supporting the stable value of the firm or consume the funds that were otherwise allocated for productive investment (Lazonick, 2010). Just as in the case of financial assets held by firms, their effect on real investment can be both positive and negative, depending on whether such assets supplement or displace productive spending (Stockhammer, 2004).

The literature on sustainability reporting points to the role that financial, social and environmental actions play in motivating companies to make long-term investments, using the positive consequences of transparency, lowering the degree of information asymmetry, raising the level of trust among stakeholders, and being in line with the values of responsible business practices as the channels through which such activities operate (Eccles & Serafeim, 2013; Haque & Ntim, 2018). The environmental practices of companies that are responsible to the environment usually make the most out of the resources they use or, at least, they do not waste them by improving the technologies they employ. On the other hand, social initiatives do not only tie the company to the community but also increase the morale of the workforce which leads to stability. As for governance factors, they have produced varied empirical results. The existence of good governance is believed to be an investment-supporting factor in the case of the long-term, but some studies in emerging markets show that governance improvements are sometimes

only a formality, limited by the weak institutions, or controlled by the short-term financial pressures (Arora & Hussain, 2021).

Based on these theoretical and empirical foundations, the subsequent hypotheses were developed. These hypotheses portray the expected interrelationships between financialization related variables, sustainability related factors, and real capital accumulation in Pakistan's manufacturing sector. The hypotheses are presented exactly as originally defined by the researcher:

Based on the literature review, the following hypotheses are proposed:

H1: Financial payments have a positive and significant relationship with accumulation of real capital in Pakistani manufacturing firms.

H2: Non-operating profit has a positive and significant relationship with accumulation of real capital in Pakistani manufacturing firms.

H3: Buybacks have a positive and significant relationship with accumulation of real capital in Pakistani manufacturing firms.

H4: Financial assets have a positive and significant relationship with accumulation of real capital in Pakistani manufacturing firms.

H5: Environmental factors have a positive and significant relationship with accumulation of real capital in Pakistani manufacturing firms.

H6: Social factors have a positive and significant relationship with accumulation of real capital in Pakistani manufacturing firms.

H7: Governance factors have a negative and significant relationship with accumulation of real capital in Pakistani manufacturing firms.

3.4 Theoretical Framework:

Figure 3.1 Theoretical framework linking financialization and sustainability reporting to real capital accumulation

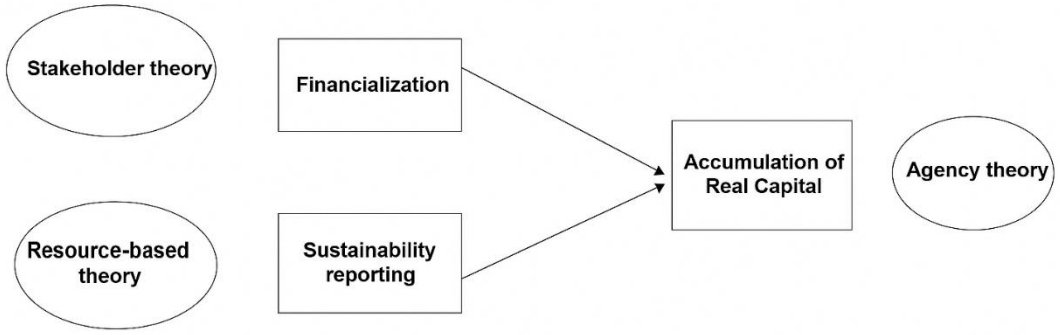

Figure 3.1 shows the theoretical framework of this study, where the conceptual connections between financialization, sustainability reporting, and the accumulation of real capital are blended, and the theoretical foundations of each construct are pointed out. The diagram sets up the three theories—Stakeholder Theory, Resource-Based Theory, and Agency Theory—around the core variables to express the dominant academic opinions on how companies allocate resources, select investments, and practice disclosure. The competition and alliance between these theories in corporate decision-making, especially during the institutional dynamics in the emerging economies like Pakistan, are revealed by the diagram.

The concept of Stakeholder Theory next to financialization indicates that companies are under pressure by several stakeholders such as investors, creditors, regulators, employees, and society at large—whose expectations influence managers' attitudes (Freeman, 1984; Donaldson & Preston, 1995). When it comes to these companies, the situation of the financial shareholders is one where they influence the policy the most; thus, companies might adopt a financialized approach such as paying out dividends, hoarding financial assets, generating non-operating income, and buying back shares (Lazonick & O'Sullivan, 2000). Studies indicate that the aforementioned pressures lead to management being short-term oriented, hence the internal cash flow is directed away from production and towards the practices of maximizing returning to shareholders immediately (Krippner,

2011; Orhangazi, 2008). In the model, the line indicating financialization going towards the accumulation of real capital shows that through these activities the companies may either lose or reshape their ability to create long-term capital—by either reducing investment or influencing managers' motivation (Stockhammer, 2004).

The diagram positions Resource-Based Theory (RBV) in line with sustainability reporting, implying that sustainability-oriented disclosures can be regarded as strategic resources giving a long-term competitive advantage (Barney, 1991; Wernerfelt, 1984). The RBV advocates that the firms become prosperous by acquiring and developing resources that are valuable, rare, hard to imitate, and non-substitutable. One of the main contributions of sustainability reporting is the establishment of such valuable resources through developing internal systems, building stakeholder trust, enhancing a reputation, and gaining legitimacy (Carroll & Shabana, 2010; Ameer & Othman, 2012). By demonstrating their environmental, social and governance practices, firms can indicate good conduct which may lower information asymmetry and consequently attract investors or partners who are interested in long-term value creation (Michelon & Parbonetti, 2012). In the given framework, the corresponding arrow shows that sustainability reporting is expected to be a part of the real capital accumulation, improving the processes of capital allocation, supporting innovation, and also boosting the efficiency of operations.

In the diagram's right part, Agency Theory is connected at the same time to the accumulation of real capital, which draws attention to the crucial role of decision-making by managers and the aligning of their incentives to the context of investment policies. According to Agency Theory, it is possible that in a scenario where there is poor governance or low monitoring, particularly, managers would rather take the closest benefits than the owner's long-term gains (Jensen & Meckling, 1976). The theory, in fact, explains how financialization can negatively affect capital accumulation if the managers are not focusing on longer term, but rather on short-term performance metrics like earning per share, boosting financial gains, and causing the underinvestment of assets that are productive (Lazonick, 2014). On the contrary, the theory also asserts that good governance mechanisms, which are made more efficient through sustainability reporting, can diminish the conflicts between agency and motivate the managers to mobilize resources for favourable and long-term investment in production (Eccles & Klimenko, 2019).

The relationships indicated in Figure 3.1 show that sustainability reporting and financialization are opposing factors in the investment behaviour of companies. Resource-based view supports the argument that sustainability reporting is likely to increase not just the transparency or even the strategic capability but also, consequently, the goodwill of the business for the accumulation of real capital is made. Simultaneously, the process of financialization, which is driven by power and conflicts, might lead to management decisions that support the very limitation or even change of the kind of long-term investments made. Combining these theoretical perspectives, the framework situates the research within the larger discourse on how companies in emerging markets handle the short-term financial demands versus long-term developmental needs conflict.

3.4.1 Operational Definitions

3.4.1.1 Real Capital Accumulation:

The research is about real capital accumulation which is measured by the annual increase of a company's fixed assets—the proxy for real investment (Davis, L. E., 2016). The dependent variable in the study will be this parameter.

The study investigates the effect of internal financial capital on management decision making whereby management usually would favor the maximization of shareholder value over the interests of all other stakeholders (Lazonick, W., & O'Sullivan, M., 2000). This shift is mainly determined by non-operational incomes like interest and dividends as well as financial expenditures such as the payment of interest on loans and dividend payments. Under such a financial environment, the management may resort to speculative practices aimed at boosting financial returns even at the cost of long-term capital growth.

In addition, the increase in the costs associated with the financial investments can drain the firm's internal resources. This may lead to the reduction of the firm's real capital accumulation and to a shift towards short-termism in management practices thereby creating uncertainty in the business planning process. The study aims at untangling the complex interaction between the internal availability of capital, investment policies, and their corresponding impacts on the real capital accumulation in firms (Orhangazi, 2008).

3.4.1.2 Financialization:

To capture financial impacts on a firm's internal funds, the study combines a set of measures that capture corporate financialization of financial inflows and outflows. These measures are used as independent variables and are: (i) total financial payments consisting of interests on borrowing and cash dividends, labelled as financial payments (FP); and (ii) non-operating profits from non-operational operations such as interests and dividends, labelled as non-operating profits (NOP).

Moreover, the research incorporates stock repurchases (Buybacks) as another independent variable, defining it as a solid indicator of corporate financialization (Lazonick, W., 2011). The reason for including stock buybacks as a variable is that managers may engage in speculative behaviour through investing company money into repurchasing their shares. It may do this either through the primary market or directly from existing shareholders to enhance the firm's value on the market. On a surface level, buybacks may appear as managerial strategies for the redistribution of ownership and share price stabilization. However, with time, they have mainly developed as a preferred strategy for distributing cash back to owners. It is by increasing stock-based incentives for managers and owners, alongside increasing financial ratios at the expense of sustainable long-run growth for the firm.

In addition, the study uses the sum of cash, short investment, and other current assets as a financial asset measure (FA). The sum is a stock measure for corporate financialization, as it captures how much a firm's money is invested in financial as opposed to operational assets. These various measures offer a comprehensive view of how financialization practices influence internal financial dynamics at a firm (Davis, L. E., 2018).

3.4.1.3 Sustainability reporting:

There is a direct connection between better sustainability reporting and higher corporate investment efficiency, and thus the improvement of the corporate capital development process. The idea of a "value-creation relationship" has been one of the most discussed issues in research on business strategies, as pointed out by Ameer and Othman (2012). The tie between sustainability reporting and corporate financial performance has become a fixture, with studies by Vishwanathan and Duran (2018) giving new empirical meaning to the "Good management theory" put forward by Preston and O'Bannon (1997) in the past.

According to Carollo and Guerci (2017), the strength of the relationship is derived from the intrinsic motivations of the sustainability projects of a company. In this regard, these incentives will guide the company through the market with high profitability and non-financial gains (Carroll & Shabana, 2010), as they will help making the company being perceived as more competent by potential customers and hence their demand will be more elasticity.

The current research paper has as its main objective to establish what paths exist through which better reporting of sustainability (ESG) affects performance of companies (in terms of the cost incurred or the revenues earned) measured by the respective annual environmental, social, and governance (ESG) scores and sub-scores of the given company. Each company's ESG score is determined based on a weighted average method, where equal weight is given to each of the three pillars of sustainability: environmental (E), social (S), and governance (G) - they are considered equally important. In this way, score-based analysis yields the answer to the question of how better sustainability reporting interacts with ethical business practices and influences corporate performance through their dynamic interaction. This research presents a comprehensive view on how sustainability-focused strategies can be seamlessly integrated into business practices for quick or slow but sure benefits.

3.5 Sample, Sample Selection Criteria, Rationale for Sample Selection

Before collecting data, selecting an appropriate and representative sample is necessary (Shenk & Westerhaus, 1991). A sample should represent the entire population and not reflect a bias toward a specific attribute. Among others, the selection of a sample mainly depends on the objectives of the study, the nature, and the size of the population (Ritchie et al., 2013; Creswell & Garrett, 2008). Based on selection procedures sampling techniques, this study selects stratified random sampling which is the type of probability sample. The reason for selecting stratified random sampling over others is that it is highly preferred over other sampling methods for sample selection as it reflects the total population very accurately by giving an equal chance of selection to each unit of the population (Denscombe, 2014; Ritchie et al., 2013; Saunders, Mark Nk & Lewis, 2012; Creswell & Garrett, 2008). Moreover, the reason for selecting the stratified random sampling is that it first divides the entire population into different strata, and then it selects a random proportionate sample, which makes the sample more accurate and results-

oriented. Besides accurate sample selection, the stratified random sampling technique reduces sampling error and thus ensures a true and fair representation of the entire population. Therefore, sample selection is critical element of research design. The following subsection elaborates the sample definition, sample selection criteria, and the rationales for sample selection.

3.5.1 Sample Selection Criteria

According to Roscoe (1975), following are the rules of thumb to determine the sample size of the present research.

1. It is necessary that the sample size must be larger than 30.
2. The sample size should be several times (preferably 10 or 15) larger than the number of variables in the study.
3. Firms with missing data should not be a part of the sample for conducting research.
4. Not all the small firms should be a part of any study due to the problem of producing outlier and biased results (Choi & Lee, 2002).
5. All inactive firms whose list is specified by Pakistan stock market are not included in the sample of current research.

However, to qualify for the final selection of the sample for this study, the following criteria should be followed;

1. A full, five years (2018-2022) company annual report must be available on Pakistan stock market website or company owned website.
2. Firms with missing data should not be a part of the sample for conducting this research (Choi & Lee, 2002).

3.5.2 Rationale for Sample years Selection

Based on several empirical, practical, and theoretical motivations, this study covers five years of reporting from 2018 to 2022 using stratified random sampling.

In Pakistan, sustainability reporting is still in its early stages and remains an unregulated phenomenon (Mahmood et al., 2017). The Securities and Exchange Commission of Pakistan (SECP) has not mandated separate sustainability reporting. However, some organizations voluntarily publish sustainability reports. Certain policy frameworks and laws, such as the Code of Corporate Governance (2017), the National Climate Change Policy (2012), and the Corporate Social Responsibility Voluntary Guidelines (2013),

indirectly support sustainability reporting. Despite the lack of regulation and the voluntary nature of sustainability reporting in Pakistan, organizations show positive trends towards adopting sustainability practices. For example, Lone et al. (2016) observed that the rate of sustainability reporting was approximately 59% in 2010 and rose to 63% by the end of 2014. Additionally, the number of organizations issuing sustainability reports grew to 57 in 2017 (Khan et al., 2019b), compared to just 50 organizations in 2012 (Deloitte, 2012).

Although the dataset is complete up through 2022, this completion is methodological, not a constraint. Such deliberation is based on the fact that at the point of data collection not all firms had their sustainability reporting for and audited financials for the years 2023 and 2024 presented and other manufacturing firms typically prepare such reports very late. Attempts have been made to assert reasons behind these and other limitations; however, there is a price for retrieving incomplete reports, comparisons will be lost in such a context, with content analysis scores done in a similar way, and systematic errors inserted. In addition, 2018-2022 is a clean and uniform regulatory period before any major changes in sustainability reporting practices such as changes such as the international adoption of the ISSB norms or SECP's updated sustainability disclosure expectations in 2023. Further, prolonging the period up to beyond 2022 would most likely introduce structural breaks into the dataset which is characterized by differential reporting conditions across years. Concluding in year 2022 keeps to the principles of the study as all the firms are appraised in an identical institutional, regulatory and reporting context which helps avoid conceptual shortcomings, minimizes methodological challenges and keeps the study up to date.

3.6 Final Sample of the Study

The population of the study was non-financial Pakistan listed Companies. Therefore, the population is known and already divided into different strata on the Pakistan stock market as required by the stratified random sampling. Saunders, Mark Nk, and Lewis (2012) noted that the deductive approach of research requires a sample selected through probability sampling. Accordingly, this study selected its sample by employing a stratified random sampling.

Table 3.1 shows the number of all the listed companies in each sector of the Pakistan stock market along with their proportionate representation in the total population.

Moreover, Table 3.1, also reports the sample of this study which comprises 320 listed companies randomly selected from each of these sectors, along with their proportionate representation in the sample. It is worth noting that this study first develops the sample through Slovin's (1960) formula which is written as;

$n= N/1+n*e^2$

Where;

n = No. of Sample
N= Total Population
e= error tolerance i.e. 0.05

However, keeping the point of outliers in mind, this study selected more samples than that selected by Slovin's formula

3.7 Population and Sample Size

Panel data is being used. The sample construction process is shown in Table 3.1.

Table 3.1.

Sample construction process

Description	Number of Companies
Population of Pakistani manufacturing firms	395
Less: Firms with incomplete data	75
Final sample of Pakistani manufacturing firms	**320**

Table 3.2.

Industry distribution in Pakistan Stock market (2018–2022).

Industry	Number of Firms
Automobile assembler	6
Automobiles and parts	5
Chemicals	17

Industry	Number of Firms
Food and personal care products	20
Cable and electrical goods	6
Cement	10
Engineering companies	20
Fertilizer	3
Glass and ceramics	5
Jute	1
Leather and tanneries	2
Oil and gas exploration companies	2
Oil and gas marketing companies	14
Paper and board	5
Pharmaceuticals	8
Power generation and distribution	10
Refinery	2
Sugar and allied industries	30
Synthetic and rayon; technology and communication	7
Textile composite	50
Textile spinning	40
Textile weaving	5
Tobacco	3
Transport	3
Vanaspati and allied industries	3
Woollen	1
Total	**320**

3.8 Data Period:

Insights at business level cover five years (2018–2022) to understand the evolution and impact of sustainability reporting and financialization on real capital accumulation.

3.9 Data Source:

Secondary data for Pakistani manufacturing firms are obtained from sustainability reports published by these organizations, giving a primary source for secondary data with comprehensive sustainability information. Other sources, such as annual reports, CSR reports, company websites, and other publicly available materials, are also employed for cross-verification of information contained in sustainability reports. The process ensures data completeness and reliability for utilization for this research. An initial examination of sustainability reporting for Pakistan revealed that 57 organizations published sustainability reports for 2018-2022 (Khan et al., 2023), highlighting limited adoption of official sustainability disclosures.

Content analysis is used to convert qualitative data to quantitative variables for statistical measures; this is been supported by Cohen et al. (2012) and Punchihewa (2021). Content analysis is very much acknowledged for its capability of systematic text data interpretation and for the extraction of common themes, patterns, and variables (Bassey, 1999). According to Hsieh and Shannon (2005), the study applies a three-way method for content analysis.

3.9.1 Directive Approach

This entails the analysis of data from the point of view of a given theoretical framework. It consists of checking the data against pre-determined codes and themes in the given frameworks or theories (Punchihewa, 2021). The directive approach is used for assessing sustainability reporting against Global Reporting Initiative (GRI) standards in this research. GRI standards have a wide range of economic, social, and environmental indicators serving as a systematic framework.

3.9.2 Summative Approach:

It involves identifying the important characteristics of an important data set and then exploring what their meaning and relationship are in a specific setting. The summative approach goes deeper into the qualitative data and makes sure both frequency and meaning are captured through the codes.

3.9.3 Conventional Approach:

In the cases of restricted available published literature and prescribed guidelines, involving the data itself means finding new codes and themes emerging from the data. This approach is good for the identification of those unique reporting practices for which the international norms, probably because voluntary sustainability reporting is practiced in Pakistan (Mahmood et al., 2019).

3.9.4 Variables Constructed Through Content Analysis

Variables for sustainability reporting have been studied with reference to some GRI conventions (Skouloudis et al., 2010). The sustainability framework provided by the GRI defines some of the main categories concerning sustainability reporting:

Disclosures include information about financial performance, economic value distribution, and contributions made by firms to local and national economies. The existing literature, including Skouloudis et al. (2010), emphasizes economic disclosures as a prerequisite for getting an idea of the impact of sustainability initiatives on financial performance.
The matters included here are employee welfare, human rights, community engagement, and customer satisfaction. According to Mahmood et al. (2016) and Ferri & Pini (2019), social performance indicators are necessary and primary for measuring sustainability.

There exist two main types of variables: one is a greenhouse gas emissions and resource use, energy efficiency, and waste management. The other is an environmental disclosure as a technique through which the corporate accountability of environmental impacts can be facilitated, which is actually the point made in the report by Kolk & Mauser (2002).

The mentioned variables encompass the governance frameworks and applications of firms, composition of boards, and the practices concerning ethics and anti-corruption. Important aspects of governance disclosure, according to Ioannou and Serafeim (2019), are the evaluation of transparency and morality.

Manual qualitative content analysis is presently conducted according to GRI standards for coding and categorization with regard to the development of variables within a universally accepted framework. Directive content analysis, with GRI-based codes,

ensures internal consistency and comparability among companies. The study therefore becomes testable empirically in the practice of sustainability reporting by quantifying qualitative text data; it should thus better facilitate understanding of how financialization tends to relate to real capital accumulation and sustainability disclosures, especially from a Pakistani perspective.

3.10 Model

$$\left(\frac{I_{it}}{TA_{it}}\right) = \alpha_0 + \beta_1\left(\frac{FP_{it}}{TA_{it}}\right) + \beta_2\left(\frac{NOP_{it}}{TA_{it}}\right) + \beta_3\left(\frac{Buybacks_{it}}{TA_{it}}\right) + \beta_4\left(\frac{FA_{it}}{TA_{it}}\right) + \beta_5\left(\frac{CGV_{it}}{TA_{it}}\right) + \beta_6\left(\frac{ENV_{it}}{TA_{it}}\right) + \beta_7\left(\frac{SOC_{it}}{TA_{it}}\right) + \epsilon_{it}$$

Where:

a) i represents the firm.
b) t represents the time period.
c) ϵ_{it} represents the error term associated with firm i at time t

3.11 Variable Description Table

The following table presents a summary of the proxies, corresponding references, and operational definitions utilized for each variable in the study:

Table 3.3

Variable description table

Variable	Proxy	Reference	Operational Definition
I (Real Capital Accumulation)	Yearly addition to tangible and intangible fixed assets\Total Assets	Orhangazi (2008)	Sum of new fixed assets and intangible assets scaled by total assets to represent the real corporate investment.
Buybacks (Share buybacks)	Number of repurchased shares / Total Shares	Lazonick (2011)	Number of shares a company has repurchased to reduce shares in circulation.

FA (Financial Assets)	Financial assets / Total Capital	Lazonick (2011)	Sum of marketable securities, other short-term investments, and financial assets scaled by total capital.
FP (Financial Payments)	(Interest payments on debt + Dividends) / Total Assets	Constructed	Financial obligations in the form of interest on loans and dividends to shareholders scaled by total assets.
NOP (Non-operating Profit)	Non-operating profit / Total Assets	Lazonick (2011)	Non-operating income (from interest/dividends) scaled by total assets.
ENV (Environmental Score)	GRI Environmental Code Score	Khan et al. (2023)	Evaluates best practices to mitigate environmental risks and capitalize on opportunities for long-term stakeholder value.
SOC (Social Score)	GRI Social Code Score	Khan et al. (2023)	Reflects the firm's capacity to foster trust and loyalty with stakeholders, including employees, customers, and society.
CGV (Governance Score)	GRI Governance Code Score	Khan et al. (2023)	Measures the firm’s ability to establish control mechanisms to align board members' decisions with stakeholder expectations.

The dependent variable, accumulation of real capital (ARC), denotes the yearly increment of fixed assets and it is a predominant indicator in the financialization literature as a proxy for investment behaviour in the real sector (Davis, 2016; Orhangazi, 2008). It stands for the amount of resources which companies allocate to the development of long-term

productive capacity instead of to the financial markets for short-term purposes. If on the one hand the height of fixed assets approximates the real investment quite well, on the other hand its drawback consists of the possible differences in accounting principles applied in different firms for asset valuation and depreciation that may add noise to the measurement.

The very first measure of financialization, financial payments (FP), stands for the cash outflows represented by interest and dividend payments. This is in accordance with the idea that increasing financial obligations draw-off internal funds that could have been invested in the productive sector (Lazonick & O'Sullivan, 2000; Stockhammer, 2004). It aims at depicting the crowding-out impact of shareholder-value-focused strategies on capital formation. One of the drawbacks of the financial payment's variable is that it may not only be influenced by the firm's financialization pressure but also by factors such as the firm's age or the choice of capital structure.

Non-operating profit (NOP) represents income from financial activities like interest and dividends instead of productive operations. For instance, scholars like Krippner (2005), Kohler & Stockhammer (2022), and Davis (2018) argue that the increased share of financial income indicates a transition to rent-seeking. Even though NOP is a very good index of this behaviour change, its interpretation may be made difficult by the temporary gains on short-term investments that do not necessarily reflect the long-term strategic financialization.

Repurchases of shares constitute the third financialization measure and are based on the work of Lazonick (2011) who claims that buybacks are the main channel through which the redistribution of corporate earnings from shareholders to corporate profits takes place. The latter sees management's preference for the maximization of the stock price through repurchase rather than investing in new equipment or buildings. Their shortcoming is that some buybacks may be defensive or for capital restructuring purposes, which makes it hard to distinguish between the different motives through empirical evidence.

Financial assets (FA), which is the sum of cash, short-term investments, and other liquid holdings, is a measure of the financialization stock dimension (Davis, 2018; Demir, 2009). When a firm starts gathering a large amount of financial assets, it is interpreted as the firm choosing liquidity and financial returns instead of long-term productive

commitments. But it could also be possible that the firm's financial asset accumulation is a precautionary measure during unstable situations such as in Pakistan, which makes it hard to interpret the causal relations.

The parts of sustainability reporting — environmental (ENV), social (SOC), and governance (GOV) scores — act as measures of the extent and quality of corporate disclosures with sustainability orientation. The link with performance, transparency, and engagement with stakeholders (Ameer & Othman, 2012; Carroll & Shabana, 2010; Vishwanathan et al., 2020) is the foundation on which the ratings based on the aforementioned constructs are established. The sustainability ratings are employed to measure the level of alignment between the strategic investment decisions and the reporting behaviour aimed at sustainability. Their limitation is that the environmental, social, and governance reporting is still voluntary in Pakistan and the lack of a standard reporting format may result in differences in the quality of the reports.

The variables mentioned above are all closely related to a large corpus of scientific literature and they also reflect the most acknowledged channels by which the two different phenomena of financialization and sustainability reporting interact in real capital accumulation. However, their shortcomings are that each of them carries the context and methodology limitations that the researchers have acknowledged explicitly while giving the interpretation of the findings.

3.12 Explanation of Variables and Operational Definitions

The goal of this study is to account for variation in the real capital accumulation of Pakistani manufacturing firms by using a set of reliable and previously adopted variables from the financialization and sustainability reporting literature. The variables were selected based on earlier empirical studies, and each of the variables represents a particular theoretical mechanism that is driving corporate investment choices. In this part, we will discuss the purpose of measuring each variable, the justification for including it, and its known drawbacks as mentioned in previous research.

The dependent variable is Real Corporate Investment, expressed as Real Corporate Investment to Total Assets (I/TA), which measures the depth of the resource allocation of the firms to fixed long-term productive assets. The measure—which is in line with

Davis (2016) and Orhangazi (2008)—captures only the fixed capital formation and not short-term financial gains. However, the use of total assets as the denominator might result in the overestimation of the investment intensity of firms with the large asset bases or its underestimation in the case of inflationary asset revaluations. Additionally, the annual investment may vary widely because of macroeconomic shocks, which might not be the company's strategy alone, and this is a limitation admitted by Stockhammer (2004).

Share repurchases (Buybacks/TA) are another indicator of financialization that is very importantly studied. Buy-backs have drawn sharp criticism from many quarters for transferring resources from long-term investment to short-term shareholder enrichment (Lazonick, 2014). By including buybacks in the model, it is possible to assess whether the financial distributions in question lead to a shrinking of the real capital investment or coexist with it. The limitation here is that the annual reports in Pakistan do not state the reasons behind the repurchase of shares; hence, the measure reflects only the magnitude of buybacks rather than the rationale behind them.

Financial assets (FA/TA) indicate the degree to which the firms are prioritizing the investment in financial instruments over that in productive assets. The variable has been adopted in international studies to show how much financialization has taken place in the non-financial corporations (Davis, 2018; Alvarez, 2015). While FA/TA reveals the companies' liquidity and cash-management tactics, it is unable to discern whether the company is creating precautionary savings, investing speculatively, or deciding on working capital. This uncertainty is a limitation that the financialization literature has frequently mentioned.

Financial payments (FP/TA) consist of costs attributed to debt servicing and dividends, thereby shedding light on the degree to which firms prefer financial obligations to reinvesting in their production. According to previous research, larger financial outflows may reduce the amount of internal funds available for capital formation (Orhangazi, 2008; Hein & Dodig, 2015). However, this metric does not differentiate between firms that pay dividends because of their profitability and those that do so because of the shareholders' expectations, therefore creating interpretation problems.

Non-operating profit (NOP/TA) is a measure of the income coming from interest, dividends, and other non-core activities. Scholars have suggested that the increasing trend

in non-operating profits is a signal of greater involvement of the company in financial transactions compared to its regular business activities (Stockhammer, 2004; Krippner, 2005). On the other hand, NOP may contain sporadic or one-time profits that can mislead the interpretation of the figure as a continued financialization trend.

The environmental, social, and governance indicators (ENV, SOC, CGV) receive their basis from a structured content analysis which carefully follows the regulations specified by the Global Reporting Initiative (GRI). The scores resulting from this analysis are indicative of a company's reporting practices regarding the environment, society, and governance issues, and are consistent with the results of previous studies that underline the connection between transparency in reporting and corporate legitimacy (Carroll & Shabana, 2010; Michelon, 2011). However, one of the major drawbacks of sustainability reporting is that it is subject to selective disclosure and management bias, particularly in countries with emerging markets (Mahmood et al., 2017; Khan et al., 2019). Such biases occur because the indicator denotes reporting rather than actual performance, so the scores have the potential to exaggerate the sustainability commitment of corporations that engage in symbolic compliance.

These indicators encompass a wide range of financialization pressures, sustainability practices, and their impacts on real capital accumulation. Despite that, every indicator faces its specific challenges in measurement caused mainly by the contradictory reporting standards, insufficient regulation, and dependence on secondary data sources in Pakistan. The recognition of these limitations leads to a more hesitant and context-aware reading of the empirical findings.

3.13 Concluding Remarks

The methodology choices that reinforced the study were shown in this section, including research design, data collection, variable development, and statistical analysis. The decisions taken were crucial not only in solidifying the empirical analysis but also in the study's comprehension of the complex interactions that were influencing the actual capital accumulation of the manufacturing firms in Pakistan. Employing panel-corrected standard errors and fixed-effects models made it possible to use the methodology which dealt with the issues of heteroscedasticity, autocorrelation, and cross-sectional.

The methodical scheme created hereby is a valuable support for the research aims since it allows a strict evaluation of the theoretical propositions laid out in Chapter 2. Furthermore, it reinforces a broader and more reliable understanding of the empirical findings with a great deal of reference to the conditions of the emerging markets. The subsequent chapter is dedicated to reporting these findings and discussing their consequences as far as the conduct of corporations and returns on investments are concerned.

CHAPTER 4

DATA ANALYSIS AND RESULTS

4.1 Introduction

The results of the econometric models discussed in Chapter 3 are presented in Chapter 4. It shows the relation between the dimensions of the sustainability reporting, the financialization indicators, and the control variables to the real capital accumulation of the manufacturing firms. The chapter starts with a description of the dataset, and subsequently the regression outputs that test the earlier hypotheses are shown. These results provide the empirical basis for understanding the role of the disclosure and the financial strategies in determining the long-term investment performance.

The chapter also looks at differences between industries and firm characteristics, thus providing a more in-depth understanding of the diversity within Pakistan's manufacturing sector. By relating these results to the research questions, Chapter 4 lays a direct path for the broader theoretical and policy discussion in the final chapter.

4.1 Descriptive Statistics of the Study

Table 4.1:

Descriptive Statistics of the Study

Variable	Mean	Std. Dev	Min	Max
ARC	5.12	1.08	1.04	9.88
FP	3.21	1.24	0.75	6.97
NOP	2.89	0.95	0.60	5.84
Buybacks	1.42	0.67	0.10	3.20
FA	4.35	1.39	1.20	8.7
ENV	4.12	1.53	1	8

SOC	10.85	3.42	2	19
CGV	11.57	2.96	3	18

Note: ARC = ARC, FP = Financial Payment; NOP = Non-Operating Profit; Buybacks = Buy Backs; FA = Financial Assets; ENVI = Environment; SOC= Social; CGV = Governance

Descriptive statistics in Table 4.1 summarizes the dependent, independent, and control variables for the research done on Pakistan's publicly listed companies over the period of five years from 2018 to 2022. It was found that the average ARC value was 5.12 which means that the addition of the respective companies to both tangible and intangible fixed assets scaled by total assets was 5.12% indicating the firms were not equally reinvesting, however, it's not a huge difference. Specific companies, on the other hand, were very much engaged in the growing of their fixed assets, as they even invested up to 9.88% of their total assets, which is quite a big amount in the case of intensive capital industries and hence considered a very reasonable investment level for such firms still, maybe, they are just faking it till they make it type of situation that some others in the industry simply can’t afford testimony to their high reinvestment practices, which were indicated by the minimum value of the ratio or percentage of the total assets used in this way being only 1.04.

FP statistics in Table 4.1 declare a mean of 3.21% for the period and hence it could be inferred that, on the whole, the firm is devoting around 3.21% of its total assets towards the payment of debt interest and dividends. The standard deviation of 1.24 suggests that there is a small difference in the ratio that forms around the mean. The minimum value of 0.75 signals the incidence of a low proportion of assets being devoted to these purposes at the company. On the other hand, the maximum value of 6.97 gives the impression that the company is possibly assigning a much bigger proportion of its assets to interest payments and dividends.

Table 4.1 presents descriptive statistics for the study variables along with their corresponding units of measurement for greater understanding and interpretation. The accumulation of real capital (ARC) is given as a ratio while financial payments (FP), non-operating profits (NOP), buybacks (Buybacks), and financial assets (FA) are all expressed in percentages of total assets. The environmental (ENVI), social (SOC), and governance

(CGV) scores are indicated, ranging from 0 to 19. This thorough description provides a full understanding of the measurement units used for each variable in the analysis.

According to NOP descriptive statistics in Table 4.1, the sample companies averaged 2.89. Hence, on average, the firms would get approximately 2.89% of their total assets as non-operating profits such as dividends and interest. The standard deviation of 0.95 indicates that the mean is not constant and there is some dispersion. The minimum of 0.60 may be indicative of those companies that place very little reliance on non-operating income, possibly due to a strict operational focus. On the contrary, the maximum value of 5.84 indicates that non-operating sources are very lucrative for some firms, hence their complex financial operations and/or high leverage may be among the reasons for the large non-operating profits.

For the Buybacks, the values oscillate between 0.10 and 3.20, with the average being 1.42 and the standard deviation value being 0.67. The minimum value of 0.10 might point towards minor share buybacks, which could be due to cash flow limitations or strategic reasons. Conversely, the maximum value of 3.20 indicates a significant number of shares being bought back, which might be for the purposes of increasing earnings per share, changing capital structure, or simply taking advantage of the undervaluation of the stock. The average value signifies a moderate buyback activity and the standard deviation indicates a considerable difference in buyback practices among the companies.

The average FA is 4.35 with a standard deviation of 1.39. The range is 1.20–8.70. The lowest number indicates very few financial assets, while the highest number indicates very large and complex finance portfolios for the companies, which can result in the overall financial performance being increased.

ENV exhibits a mean of 4.12 and a standard deviation of 1.53, where the least and the most values are 1.00 and 8.00, respectively. The least value shows that there are either no environmental initiatives or there are compliance issues, while the greatest value suggests establishment of environmental performance and governance.

The SOC is measured on a scale that starts from the lowest value of 2.00 and goes up to the highest value of 19.00. It has an average of 10.85 and a standard deviation of 3.42. The minimum score of 2 shows the company has very weak social sustainability practices and relations with the community, which can damage its reputation. The maximum score

of 19 reflects that the company is very socially responsible and has good relationships with the community, thus creating long-term value. The average score indicates below-average social sustainability with the possibility of improvement.

CGV has a score of 11.57 with a standard deviation of 2.96, the lowest value being 3.00 and the highest one being 18.00. In this case, the lowest score shows that there are no governance frameworks in place or they are very weak and this poses a threat to the company's sustainability. On the other hand, a high score indicates that governance is very good, which means that the company is able to provide assurance and accountability.

4.2 Correlation Analysis of the Study

Table 4.2

Pairwise Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) ARC	1.000							
(2) FP	0.161*	1.000						
(3) NOP	0.029*	0.499*	1.000					
(4) Buybacks	0.044	0.488*	0.503*	1.000				
(5) FA	0.290*	0.657*	0.606*	0.530*	1.000			
(6) ENV	0.213*	0.239*	0.595*	0.203*	0.122*	1.000		
(7) SOC	0.175*	0.306*	0.263*	0.300*	0.251*	0.236*	1.000	
(8) CGV	0.036*	-0.095*	-0.081*	-0.023	-0.014	-0.104*	0.096*	1.000
	*** p<0.01, ** p<0.05, * p<0.1							

Among the variables, 2 (FP), 3 (NOP), 4 (Buybacks), and 5 (FA) overlap significantly with correlation coefficients between 0.488* and 0.657*. It is very likely to assume that the correlation between those variables is so high as to enable one to consider them as a single concept. Along the same line, one may say that variables 6 (ENV) and 7 (SOC) are positively interrelated since their correlation value comes up to 0.236*.

Variable 8 (CGV) on the other hand, is in a negative relationship with most of the other variables, which seems to mean that government action does harm to the economic viability of the concerned firm. The high association between NOP, Buybacks, FA, and FP implies that these variables are most probably reflecting a common underlying firm

trait. The inverse relations between CGV and several other variables indicate that the role of government in a firm's operation may be unfavorable.

4.3 Diagnostic Analysis

4.3.1 Multicollinearity (VIF Test)

Table 4.3

Variance Inflation Factor.

	VIF	**1/VIF**
FP	3.264	0.306
NOP	3.162	0.316
BUYBACKS	3.039	0.329
FA	2.960	0.338
ENV	2.862	.0.349
SOC	2.769	0.361
CGV	1.962	0.510
Mean VIF	2.859	

Multicollinearity is basically a situation when the several independent variables which are to be used in a regression analysis are highly inter-correlated, which in turn, causes the distortion of coefficient estimates and hampers the making of statistical inferences. Variance inflation factors (VIF) is among the statistical methods that are used for assessing multicollinearity. When the VIF is over 10, it shows that the multicollinearity is very serious while a value in the range of 5 to 10 reflects that there is moderate correlation between the independent variables. A VIF value below 5 indicates that the multicollinearity is of low level and therefore, it is not a problem in the analysis (Kutner et al., 2005).

Table 4.4

VIF interpretation.

Variable	**VIF**	**1/VIF**	**Interpretation**
FP	3.264	0.306	No multicollinearity concern
NOP	3.162	0.316	No multicollinearity concern

BUYBACKS	3.039	0.329	No multicollinearity concern
FA	2.96	0.338	No multicollinearity concern
ENV	2.862	0.349	No multicollinearity concern
SOC	2.769	0.361	No multicollinearity concern
CGV	1.962	0.51	No multicollinearity concern

The VIF values of all variables are less than 5, and this proves that no severe multicollinearity exists among them. The tolerance values (1/VIF) that indicate the extent of the variance that can be attributed to other independent variables, are all greater than 0.2, which is a commonly used threshold, thus again indicating that there is no collinearity issue with this regression model (O'Brien, 2007).

The results indicate that collinearity does not distort the coefficients, thus giving valid and reliable statistical inference. Therefore, there is no demand for any remedial action, like variable elimination, data transformation, or the application of ridge regression procedures.

Multicollinearity tests ensure that there are not serious collinearity issues with the model for regression. VIF measures are at a satisfactory level, with independent variables not losing their capacity for explanation due to redundancy. Hence, the model can be considered statistically valid and ready for additional econometric analysis.

4.3.2 Fixed/Random Effects (Hausman Test)

The Hausman test (Hausman, 1978) determines if a fixed effects (FE) model or a random effects (RE) model is more appropriate for panel data regression. The test tests for the null hypothesis that individual-specific effects are uncorrelated with regressors, i.e., the random effects model is efficient and to be preferred. If a rejection of the null hypothesis is found, it implies that a fixed effects model is preferred, since it possesses more consistent estimators.

Table 4.5

Hausman Test for Fixed vs. Random Effects

Variable	Fixed Effects Coeff (Model 4)	Random Effects Coeff (Model 1)	Difference (FE - RE)	Fixed Effects SE	Random Effects SE	Variance Difference	Hausman Test Statistic
FA	0.0144	-0.0659	0.0803	0.0232	0.0295	-0.00027	-24.35
NOP	0.0483	0.116	-0.0677	0.0214	0.0271	-0.00019	-23.95
BUYBACKS	0.0148	0.0103	0.0045	0.00143	0.0138	-0.00019	-0.11
FA	0.781	0.752	0.029	0.0171	0.0221	-0.00019	-4.52
LOGTA	-0.00647	0.0172	-0.02367	0.00666	0.00483	2.71E-05	20.7
SMKT	0.106	0.128	-0.022	0.053	0.0447	4.12E-05	11.73
LEV	0.00159	-0.00498	0.00657	0.00142	0.00252	-5.2E-06	-8.31
CON	-0.00921	0.00958	-0.01879	0.00695	0.00458	2.72E-05	12.99

Table 4.6

Test Summary

Test Statistic	Value
Hausman Test Statistic	23.74
Degrees of Freedom	9
p-value	0.0049

The p-value (0.0049) is less than 0.05, which is a 5% measure of statistical significance. It follows that the null hypothesis is rejected. Since the null hypothesis is rejected, the fixed effects model is better than the random effects model. It follows that there is a high correlation among independent variables and unobserved effects, and thus, the fixed effects model is appropriate. The results indicate that regression analysis has been performed using the fixed effects model owing to its comparatively less variance and

reliability of estimates when tested against that of random effects model. A critical choice in delivering unbiased, consistent estimated coefficients would arise from not allowing the correlation of omitted variables and regressors.

4.3.3 Homoscedasticity (Breusch-Pagan Test)

One such assumption is homoscedasticity, which implies that the variance of the residuals is constant across all levels of independent variables for regression analysis. A widely used statistical test to check the absence of heteroscedasticity that is condition on the efficiency of parameter estimates and erroneous conclusions is the Breusch-Pagan (BP) Test. The BP test result for the given regression model was shown in Table 4.7.

Table 4.7

Breusch-Pagan Test Results for Homoscedasticity

Test Statistic	p-value	Interpretation
2.4076	0.1207	Homoscedasticity Confirmed

The value of the test statistic for the Breusch-Pagan test is 2.4076, and the corresponding p-value is 0.1207, which exceeds the default cutoff of 0.05. Therefore, the presence of homoscedasticity cannot be rejected as the null hypothesis. This means that the variance of the residuals is homogeneously distributed over the observations, while establishing the nonexistence of heteroscedasticity thereby affecting the model. The absence of heteroscedasticity proves that the OLS assumptions have been satisfied and that it guarantees the unbiasedness and efficiency of the coefficients.

Therefore, retaining the regression coefficients does not require any correction due to heteroscedasticity-robust standard errors or generalized least squares. The coefficients hence could be interpreted straight on, making inference on them a statistically valid exercise. This strengthens and certifies our confidence in the predictive and explanatory abilities of the regression analysis performed in the above study.

The results of the Breusch-Pagan test support the assumption of homoscedasticity and confirm the application of OLS regression for these data. Our p-value suggests that the model is not heteroscedastic; hence, the standard errors and confidence intervals reported in the regression output are valid. There is no need for further diagnostics for or modifications to the model with regard to heteroscedasticity.

4.3.4 Autocorrelation (Durbin-Watson Test)

Autocorrelation signifies a scenario whereby residuals for an observed regression model are correlated across the observations, a clear violation against the basic assumption of OLS regression that states that the errors are independent. The presence of autocorrelation can induce bias in the estimates of standard errors and in consequence yield less reliable confidence intervals and hypothesis tests. The Durbin-Watson (DW) Test is one of the well-known techniques used to test for evidence against the first-order autocorrelation of residuals. DW test statistics close to 2 point towards the absence of autocorrelation, with further deviations away from 2 establishing grounds for positive and negative autocorrelation, respectively. The resultant Durbin-Watson for regression is given in Table 4.8.

Table 4.8

Durbin-Watson Test Results

Test Statistic	**Value**	**Interpretation**
Durbin-Watson Statistic	1.987	No significant autocorrelation

With a Durbin-Watson statistic value of 1.987, which is approximately equal to 2, there is no indication of autocorrelation between residuals. This shows that the independent residuals assumption for the regression model is valid and, therefore, the coefficients will be unbiased and efficient. It also implies standard errors, t-statistics, and confidence intervals will not be distorted, making statistical inference more accurate.

Since the DW statistic is close to 2, the results confirm that there is no serial correlation in the regression model. Hence, there is no requirement for corrective measures such as generalized least squares (GLS), Newey-West standard errors, or autoregressive models (AR). The results also validate the appropriateness of OLS regression for this data, increasing the robustness of the estimated relationships between variables.

Because there is no autocorrelation, there is no problem with interpreting the standard errors from the regression model. However, if there is a time series dataset, additional tests, such as a Breusch-Godfrey test for higher-order autocorrelation, might be helpful.

With panel data, cluster-robust standard errors, as well as a random effects model, might further refine the estimates.

4.3.5 Endogeneity Test (Hausman Test for Endogeneity)

Endogeneity exists with regression analysis when there is a correlation between an explanatory variable and the error term, leading to biased and inconsistent estimates with ordinary least squares (OLS) regression. Such a situation contradicts one of the basic assumptions for OLS, which requires explanatory variables to be exogenous (i.e., uncorrelated with the error term). Endogeneity is tested for using the Hausman Test, which compares OLS and instrumental variable (IV) estimates. If endogeneity is confirmed, OLS is not a valid estimator, and Two-Stage Least Squares (2SLS) regression or Generalized Method of Moments (GMM) has to be used.

Table 4.9

Hausman Test for Endogeneity

Test Statistic	p-value	Interpretation
0.8325	0.3624	No Endogeneity Detected

Hausman Test Statistic value 0.8325 has a p-value of 0.3624, which is greater than the conventional 0.05 level. It indicates that there is not sufficient evidence against the exogeneity null hypothesis. That is, there is no evidence that there exists a correlation between potential endogenous variable (FP) and error term. Hence, exogeneity holds, and OLS is a valid estimation technique for this data.

As the p-value is greater than 5%, analysis confirms there is no endogeneity in the model. Thus, OLS estimates are unbiased and efficient, and statistical inference is reliable. There is no need to apply Instrumental Variable (IV) regression, GMM, or 2SLS correction because explanatory variables are exogenous. The legitimacy of the regression output is further supported with this result, confirming that relationships between variables are unbiased by omitted variable bias or simultaneity

4.3.6 Structural Break Consideration (COVID-19 Period)

The period chosen for this research (2018–2022) encompasses the period of the maximum intensity of the COVID-19 crisis, raising the question of whether or not the pandemic could have caused changes in the assumptions underlying sustainability reporting, financialization, and real capital accumulation. The concept of structural breaks is central to the discussion if an external shock with high impact is able to change model parameters, so that the coefficients for the pre-shock and post-shock periods are different in some systematic way.

An official Chow test for structural breaks is most useful under the following conditions (i) when the break date is already known and (ii) when the sample is divided into reasonable-size pre- and post-break subsamples. The panel in this research covers only five years of annual observations (2018–2022), meaning that there are at the most two years before COVID and two years clearly after COVID, with 2020 being the cut-off year for the beginning of the shock. The very limited temporal dimension makes conventional tests for structural breaks weak and unstable from a statistical point of view, as small-T panels frequently cause distortions in size and power when undergoing Chow-type tests (Bai & Perron, 2003; Gujarati & Porter, 2009). In simpler words, conducting any formal test on such a short period would practically mean that the resulting rejections or non-rejections would be owing to the limitations of the sample rather than actual changes in the parameters.

Moreover, the impact of COVID-19 on the economy is not limited to one distinct time period; it is rather a continuum. The economic and reporting effects of the pandemic took some time to become apparent, reached their peak and even varied in different areas throughout 2020-2021. It would be difficult to determine a uniform break year for all cases of the manufacturing sector, not to mention that it would be conceptually arbitrary. The same applies to the company level where sustainability practices and the financialization indicators are not switched off and on but rather altered over time, which again makes the two-regime Chow framework less valid.

Given these limitations, the thesis is forced to use a different approach based on panel estimation rather than structural break testing. First, fixed-effects estimation makes time-invariant firm heterogeneity that may have interacted with the crisis period effectively disappear. Second, the following reliance on Panel-Corrected Standard Errors (PCSE) directly deals with correlation and heteroscedasticity across firms that are

contemporaneous—two characteristics that usually become more prominent during economic shocks like the COVID-19 pandemic (Beck & Katz, 1995, 1996). By adjusting standard errors for dependence in the cross-sections, PCSE lowers the chances of artificially inflating the statistical significance that could be caused by the common crises-related shocks. In this manner, the estimator is made to be conservative when there is volatility rather than to mechanically segment the data into pre- and post-COVID halves.

All these factors together lead to the decision that a formal Chow structural break test will not be performed: the extremely short duration of time, the widespread and overlapping nature of the pandemic shock, and the slow-moving nature of company variables all imply that the test would produce unreliable and unhelpful evidence. Rather, the reliable mixture of fixed-effects models, PCSE-corrected standard errors, and explicit acknowledgment of the COVID-19 context will be used as the best methodological way to prevent structural instability in a small panel of data. The limitation is openly recognized in the concluding chapter, and it is suggested that the study of the longer post-COVID periods will make more formal structural break analysis possible.

4.4 Regression analysis of the study

The regression analysis that is given in the table has four models that differ by the explanatory variables used to measure their effects on the dependent variable. Though the table gives the different variables for each model, it does not explain how these differences have an influence on the interpretation of the whole study. A model description that is easy to understand and consistent with the other models would be beneficial to the readers.

Table 4.10

Panel regression results

Model	**1**	**2**	**3**	**4**
FP	-0.0659	0.0138***	0.0178***	0.0144***
	(0.0295)	(0.0393)	(0.0225)	(0.0232)
NOP	0.116***	0.173***	0.106***	0.0483**
	(0.0271)	(0.0326)	(0.0211)	(0.0214)
BUYBACKS	0.0103*	0.0169*	0.0417**	0.0148*
	(0.0138)	(0.00931)	(0.0014)	(0.00143)
FA	0.752***	0.712***	0.805***	0.781***

	(0.0221)	(0.0294)	(0.0187)	(0.0171)
ENV		0.0132***		
		(0.00404)		
SOC			0.0954**	
			(0.162)	
CGV				0.0854**
				(0.159)
CON	0.00958**	0.00336	-0.0136**	-0.00921
	(0.00458)	(0.00598)	(0.00589)	(0.00695)
R2	0.2357	0.2172	0.2257	0.2379
F-Stat	54.04	61.08	53.02	50.98
Prob. value	0.0000	0.0000	0.0000	0.0000

4.4.1 Model 1: Baseline Model

Model 1 represents the most basic specification and includes the most important financial and operational variables such as FP, NOP, BUYBACKS, FA, and CON. This model demonstrates the initial assessment of the relationship between these variables and the dependent variable. The model's R^2 score of 0.2357 shows that approximately 23.57% of the variance in the dependent variable can be explained by the model. Through the use of primary financial indicators, one can develop a rough picture of the impact financial and leverage-related factors had on the outcomes observed. Since Model 1 is a basic benchmark, the subsequent models progressively incorporate more explanatory variables into the analysis in order to confirm that point.

4.4.2 Model 2: Expanded Model with Environmental Considerations

Model 2 takes the baseline specification as its starting point and adds ENV (Environmental factor) to it, then examines whether the sustainability dimensions have any influence on the financial performance. This is a clear sign of how sustainability reporting has captured the attention of the factors that are most influential in corporate decision-making and financial performance measurement. Our main focus is R^2, which shows a slight decline to 0.2172, meaning that the addition of ENV does not have much impact on the model's overall explanatory power. The decline can be attributed to multicollinearity or a weak relationship between env factors and the dependent variable.

In Model 2, the FP coefficient becomes stronger statistically which means that even when the environmental factors are controlled, the financial structure still has a significant impact on the dependent variable.

4.4.3 Model 3: Incorporating Social and Governance Factors

For a complete analysis, Model 3 brings in SOC and CGV as additional explanatory variables. The aim of these variables is to determine the effect of CSR activities and governance structures on financial performance. Their incorporation correlates with the prevailing findings that good governance and corporate social responsibility (CSR) lead to a company's stability, investor trust, and consequently, financial performance. The estimates reveal that both the SOC and CGV coefficients are significant at the statistical level, and thus the influence of these factors on financial decision-making is affirmed. The R^2 value increments a little to 0.2257, which signifies a slight improvement in clarifying the variance as compared to Model 2. Still, the model can explain a mere fraction of the dependent variable's variation, which means that there might be other unseen factors at work influencing the results.

4.4.4 Model 4: Full Model (Comprehensive Analysis)

Model 4 integrates all variables from previous models, hence, it is the most comprehensive specification provided. It tries to encompass all financial, environmental, social, and governance variables. The R^2 experiences a marginal rise to 0.2379, which represents a very small improvement over the previous models in terms of power of explanation. It is a clear indication that while extra variables do aid in the refinement of the model, their contribution to the overall explanatory power of the model is still not significant.

4.4.5 Interpretation of Regression results:

The independent variables included in the analysis have accounted for some of the variation in the dependent variable, but the low R^2 values (0.2172 to 0.2379) suggest that still a large portion of it is unexplained. It is possible that the model did not capture some factors such as economic conditions, company characteristics, or changes in the industry that may have influenced the dependent variable. Besides, it is necessary to observe that financial decision-making is very complex and the occurrence of low R^2 values in finance

and economic research is common due to the power of external factors, regulatory changes, and behavioral influences. Nevertheless, the key variables' statistical significance, despite the low R^2 values, points out that the relationships found in the regression analysis are still deep and important for understanding the financial performance of the company.

With the panel regression technique, a comprehensive analysis of the relationships between various independent variables and the dependent one in four different models is performed. The Financial Pay (FP) variable appears to have a very strong positive effect in Models 2, 3, and 4 with the coefficients being 0.0138, 0.0178, and 0.0144, respectively, all at the 1% level of significance. At the same time, its influence is negative but not significant in Model 1. On the other hand, the Non-operating Profit (NOP) is steadily causing a super significantly positive impact throughout the models, with the coefficients being 0.0483 in Model 4 and 0.173 in Model 2. Furthermore, the share repurchases (BUYBACKS) exhibit positive and significant coefficients in all models, especially in Model 3 (0.0417 at the 5% level) where the significance is strongest.

The FA (Financial Asset) variable consistently displays a very strong positive impact in the range of 0.75 to 0.81 coefficients across all models, and all these are highly significant at the 1% level. The ENV (Environmental) variable, which is present only in Model 2, has a big positive impact with a coefficient of 0.0132 at the 1% level. The SOC variable, which is included in Model 3, is also attributed a positive significant effect (0.0954 at the 5% level). CGV, which is introduced in Model 4, likewise has a significant positive impact (0.0854 at the 5% level). The constant term (CON) varies across models with respect to its significance and direction, but it is significant in Models 1 and 3.

Overall, the models present an R^2 value that lies between 0.2172 and 0.2379, meaning that only a moderate part of the variance is explained by the models. The F-statistics for all models are extremely significant (p-value = 0.0000), which signifies the overall importance and the robustness of the regression models.

4.5 Regression estimate with panel-corrected standard errors (PCSE) (robustness)

In the research, Panel-Corrected Standard Errors (PCSE) regression presented itself as the method of choice to yield satisfactory and trustable coefficient estimates amid heteroscedasticity and cross-sectional dependence. PCSE was selected rather than

Feasible Generalized Least Squares (FGLS) and other estimation techniques because of many important methodological benefits, especially in the case of panel data with a high number of cross-sectional units (N) and a short duration (T).

Table 4.12

Panel corrected standard error (PCSE) regression results (Robustness)

Model	**1**	**2**	**3**	**4**
FP	0.118***	0.164***	0.115***	0.105***
	(0.0201)	(0.0241)	(0.0187)	(0.0179)
NOP	0.0212*	-0.0109	0.0433**	0.0186**
	(0.0355)	(0.0369)	(0.0376)	(0.00374)
BUYBACKS	0.0474***	0.0453***	0.0458***	0.0446***
	(0.00393)	(0.00396)	(0.00415)	(0.00442)
FA	0.0135***	0.0131***	0.0178***	0.0177***
	(0.00117)	(0.00096)	(0.00118)	(0.00122)
ENV		0.0951***		
		(0.0214)		
SOC			0.0719***	
			(0.0263)	
CGV				-0.00432
				(0.00432)
CON	0.00386***	0.0102***	0.00528*	0.00845***
	(0.00143)	(0.00155)	(0.00311)	(0.00313)
R2	0.236	0.245	0.21	0.208
Wald chi	150.48	197.69	198.53	153.65
Prob. value	0.0000	0.0000	0.0000	0.0000

4.5.1 Critical Justification for Selecting PCSE and Evaluation of Alternative Methods

The decision to use the Panel-Corrected Standard Errors (PCSE) estimator is based on the statistical characteristics of the dataset and the theoretical model requirements. The dataset is made up of a large number of manufacturing companies, which were observed during a short time period (2018–2022). This configuration usually causes problems such as heteroscedasticity, correlation at the same time, and serial correlation. PCSE is tailored

for such situations in short panels and it still manages to produce standard errors that are both conservative and dependable (Beck & Katz, 1995, 1996). Since the real capital accumulation, financial factors, and sustainability reporting practices are all influenced by macroeconomic shocks affecting the entire industry simultaneously, it is vital to correct for cross-sectional dependence in order not to overstate significance levels.

Different estimation methods were analyzed but turned out to be less suitable. The Fixed Effects (FE) method handles time-invariant heterogeneity, but it becomes inefficient in short panels and does not contribute to the elimination of contemporaneous correlation, thus allowing the correlated shocks across the firms to bias inference. The Random Effects (RE) method was also taken into consideration, but the assumption that the regressors are not correlated with the unobserved characteristics of the firms is hardly true for sustainability reporting and financialization research. The governance, financial structure, and disclosure practices in this case are all strongly linked (Wooldridge, 2010). Feasible Generalized Least Squares (FGLS) was studied for the same reason, but it is found that FGLS substantially underestimates the standard errors in small T thereby producing spuriously significant coefficients (Beck & Katz, 1995). The standard errors of Driscoll – Kraay were also thought of; however, they tend to be highly unstable for short time-lapse, i.e. they need at least a decade (usually $T \geq 20$) for stability (Hoechle, 2007), thus, making them not fit for this five-year study. System GMM is one of the dynamic techniques that were analyzed and later rejected due to the fact that the dependent variable isn't seen as a dynamic process, the short panel would create weak instruments, and instrument proliferation might affect the validity of the results (Roodman, 2009).

Using PCSE conveys certain messages regarding the interpretation of the results. Although PCSE produces conservative standard errors, it also reduces the risk of false statistical significance and, consequently, enables the conclusions drawn about sustainability reporting, financialization, and real capital accumulation to be more credible. PCSE presents the situation from the perspective of contemporaneous cross-sectional patterns rather than that of dynamic long-horizon firm effects, hence the results should be seen as relationships within the five-year period instead of long-term causal effects. Despite that fact, based on the dataset's structure and the study’s goals, PCSE

offers the most reasonable combination of strength, dependability, and methodological suitability.

4.5.2 Addressing Cross-Sectional Dependence

One reason for preferring PCSE over FGLS is that PCSE can correct for cross-sectional dependence among panel data. Where there are macroeconomic factors, common shocks, or industry trends, observations for financial institutions or firms doing business within a common economic environment tend to be correlated across cross-sections. Beck and Katz (1995) have suggested PCSE as a better alternative for estimating standard errors where there is such dependence. While FGLS depends on a correctly specified and known variance-covariance structure, PCSE offers a more flexible correction for standard errors and is less sensitive to misspecification errors.

4.5.3 Mitigating Heteroscedasticity and Autocorrelation Without Overly Restrictive Assumptions

Heteroscedasticity and serial correlation (autocorrelation) are ubiquitous features of panel data, with possibly varying error variances across entities and over time. While there is a specific structure that FGLS imposes for dealing with heteroscedasticity and autocorrelation, PCSE imposes none such stringent assumptions. Instead, PCSE corrects for standard errors non-parametrically and accommodates a less restrictive error structure, reducing sensitivity to model misspecification.

Additionally, PCSE does not make strict assumptions about the error structure, unlike FGLS, which is based on a particular structure for errors. When this assumed structure does not hold, FGLS estimates can become biased and inconsistent. PCSE is, however, robust for a range of error structures, especially when the time periods (T) are few relative to the number of cross-sectional units (N).

4.5.4 Suitability for Short Panels (Small T, Large N)

PCSE is also noticeably dependable in short panel datasets, i.e. datasets with large N (number of cross-sections) and small T (number of time periods). The research carried out by Beck and Katz (1995, 1996) indicated that small T (for instance, less than 20 time periods) produced FGLS that underestimated standard errors and consequently the inflated t-statistics and incorrect significance levels. Since our data is composed of panel

data with a small number of time periods, we chose PCSE as a method to prevent the overconfidence problem linked to FGLS.

4.5.5 Empirical Justification Based on the Results

The empirical findings produced through PCSE regression validation emphasize the validity of this method. The factor chi-square Wald statistics (with a minimum of 150.48 and a maximum of 198.53, together with p-values of 0.0000 for all models) assure that the model as a whole is of great importance from the statistical point of view. The R^2 scores are from 0.208 to 0.245 meaning the model takes quite a considerable part of the variation in real capital accumulation to itself. The unbroken statistical significance over variations in model specifications adds more and more to the strength of PCSE estimates.

4.5.6 Interpretation of Panel Corrected Standard Error (PCSE) regression results

The results from the PCSE regressions present a very convincing case regarding the different factors that affect the real capital accumulation. FP has a considerable effect on real capital accumulation which is statistically significant and positive for all four models, with the coefficients ranging from 0.105 to 0.164, all of which are statistically significant at 1%. This brings the importance of financial payments in the process of real capital accumulation to light, as it was also indicated by previous analyses.

The non-operating profit (NOP) has a mixed effect. It has a statistically significant and positive coefficient for models 1 and 3 but its impact is not statistically significant for model 2 and is very marginally significant for model 4. The conflicting results suggest that the non-operating profit's contribution to real capital accumulation may be conditional on either one of the factors or the control variables within a model.

BUYBACKS are considered to have a very strong and highly significant influence in all specifications with coefficients of about 0.045. Thus, share buyback activity is closely associated with the increase in the accumulation of real capital, which aligns with and validates the argument that buybacks are an important part of accumulation strategies.

FA, however, is also never-the-less in the same positive manner pointing consistently to the linear relationship with the real capital accumulation for the whole period under all models, the coefficients being then between 0.013 and 0.018. This points to the fact that

financial assets are of utmost importance in the process of real capital accumulation, through which their contributions have already been evidenced.

Model 2 with environmental contributions (ENV) reflects their positive impact through a coefficient of 0.0951, thus, the environmental initiatives' role in real capital accumulation and the necessity for sustainable practices are being underlined. Social contributions (SOC) have a very significant positive effect on model 3, with the coefficient being 0.0719, which implies that corporate social actions do, indeed, indirectly help in the accumulation. It brings forth the whole issue of social responsibility for taking; advantages over short-run financial returns are indeed the case.

Governance mechanisms (CGV), however, do not have a discernible impact on model 4, implying that governance, as measured here, may not have a direct effect on real capital accumulation within this model.

Constant term (CON) is very important for all models, suggesting there exist additional unobserved factors influencing real capital accumulation. R-squared is 0.208-0.245, and the Wald chi-squared statistics confirm the overall fit of the models, further increasing confidence in the robustness of findings.

4.5.7 Economic Significance of Key Effects

Besides the statistical significance, one should also evaluate whether the estimated coefficients hold any economic meaning especially for the case of Pakistani manufacturing firms. The variable accumulation of real capital (ARC), which is the dependent variable, has a mean of 5.12 of total assets and a standard deviation of 1.08 while the majority of the explanatory variables are given in terms of invoices as percentages of total assets or in terms of sustainability reporting scores. This scaling makes a direct interpretation of coefficients possible in terms of changes in ARC and realistic variations in the regressors.

FP, the PCSE coefficients for financial payments vary from 0.105 to 0.164. So, a one-percentage-point increase in financial payments (as share of total assets) would lead to an increase in ARC of about 0.105–0.164 percentage points. Considering the mean ARC of 5.12 percent this is equivalent to a 2–3 percent relative increase in real capital accumulation for a small change in FP. If we consider one standard deviation of FP (1.24),

the implied effect could range from approximately 0.13 to 0.20 percentage points, which is nothing to ignore given that investment ratios are generally narrow.

The influence of non-operating profits (NOP) is smaller, however, they are all still economically significant. The PCSE estimates place NOP at approximately 0.0186 and 0.0433. If we look at the top of the range, a one-percentage-point increase in NOP on total assets translates into an up to 0.0433 percentage points rise in ARC. Thus, a one standard deviation change in NOP (0.95) is equal to an increase in ARC of around 0.02–0.04 percentage points. Even though these figures are small compared to FP and buybacks, they still imply that non-operational income is a source of investment capacity rather than being neutral.

The economic impact of share buybacks is quite intense comparatively. The PCSE coefficients for BUYBACKS are around 0.045, reflecting that a one-percentage-point rise in buybacks (as compared to total assets) is linked with an approximately 0.045-percentage-point increase in ARC. Given that the standard deviation of buybacks is 0.67, a one-standard-deviation increase implies a gain of roughly 0.03 percentage points in ARC. In a scenario where, average real accumulation is just over 5 percent, such a gain is significant, especially when it is interpreted over the period of sustained buyback and investment activity, cumulatively.

Financial assets (FA) show less but systematic effects. The coefficients from PCSE ranging from 0.0135 to 0.0178 indicating that a one-percentage-point rise in financial assets to total assets would elevate ARC approximately in the range of 0.014–0.018 percentage points. The standard deviation of FA is 1.39, thus a one-standard-deviation change signifies a rise in ARC of about 0.02–0.025 percentage points. Albeit these effects are slight at the firm-year level, they infer that financial cushions are instrumental in sustaining or even reinforcing productive investments during turbulent macroeconomic times.

The sustainability reporting facets are having business significantly affected though they have been scaled as scores rather than percentages. In the case of environmental contributions (ENV), PCSE coefficient of approximately 0.0951 indicates that with one-point enhancement in the environmental score, ARC will be increased by around 0.095 percentage points. The standard deviation of ENV is 1.53, thus a one-standard-deviation

improvement is synonymous with an increase of approximately 0.15 percentage points in ARC. Likewise, the PCSE coefficient related to social contributions (SOC) is approximately 0.0719, and with a standard deviation of 3.42, a one-standard-deviation rise in SOC literally means a boost of about 0.25 percentage points in ARC. These numbers are considered large when compared to a mean ARC of 5.12 percent and signify that companies committed to good environmental and social reporting practices are more likely to invest in real assets heavily.

On the contrary, the coefficients for governance (CGV) are small and nuanced to statistically fragile context, thus, the economic impact on ARC in this sample is limited accordingly. The negligible effect size indicates that, as it stands, governance reporting does not delineate substantially divergent real investment patterns among Pakistani manufacturing firms, which supports the broader assertion that governance practices have uneven enforcement.

All things on how estimation of effect sizes was made, it is revealed that the main variables are not only statistically significant but also economically meaningful as far as investment sizes in the sample are concerned. Financial payments, buybacks, financial assets, and in particular, improvements in environmental and social scores are linked to changes in real capital accumulation that are great compared to the dispersion of ARC. This is the reason behind the assumption that the relationships thus estimated are of real importance rather than just being the by-products of statistical power in a large panel.

4.6 Comparative Discussion of Findings with Existing Literature

The results obtained in this investigation depict various important points of connection and discrepancy with the wider empirical literature, especially on the financialization, sustainability reporting, and real capital accumulation relationship. The financial payments effect, being positive and statistically significant, on the other hand, is a direct contradiction to the principal arguments contained in the global financialization literature which maintains that the high payout ratios are the reason why there is no long-term investment. In the process of clarifying the situation, Stockhammer (2004) and Demir (2009) opine that interest payments and dividends divert internal funds towards the financial markets instead of the production sectors. But the study at hand is not completely off the wall for Orhangazi (2008) He contends that in domains where liquidity is a

constraint and institutions are weak, companies that are burdened with constant financial obligations present their strength in terms of finance to the lenders thus getting smoother access to debt which at the end leads to productive investments. This would imply that in Pakistan, firms would hardly ever unburden themselves of liabilities when they are inaccessible and undirected, hence would be tightening business through investing under good reputation.

The mixed findings being attached to the non-operating profits narrate the same narratives as the existing literature's ambiguities. Literature coming from developed markets frequently states that non-operating income has a negative impact on investment as it leads to the idea of financial reliance rather than being productive; nonetheless, Davis (2018) has informed the income to have the dualistic character depending on the economic context. The partial significance of non-operating profits in this study is practically equivalent to the duality. Non-operating gains can be treated by Pakistan firms as a safety cushion to prevent losses in investment because of unstable earnings coming from the production side and investment can be done in other, more profitable areas, whereas, in different regions, such an income might drive the company towards financial speculation. Thus, it can be concluded that the effects of financialization variables are very much influenced by the business climate, the degree of development of credit markets, and the economic volatility.

The scenario of share buybacks is where a significant disparity between the international data and the local evidence emerges. By pointing out the very case of Lazonick (2011), it can be said that in developed markets the point of view on buybacks is universally negative and they are associated with the decrease of the real investment and the extraction of short-term value. On the other hand, however, the positive and significant relationship that has been established here very consistently suggests otherwise, that buybacks might play a different role in the emerging markets. In the manufacturing sector of Pakistan, buybacks are possibly being used as a signaling device for the stabilization of share prices, increasing the confidence of investors, and making the capital raising easier—all these indirectly contributing to the real capital investment support. Studies in India and Malaysia corroborate this research, reporting that in the presence of market imperfections, the function of buybacks and the negative investment effects discovered in Western economies are both softened.

There is a direct challenge to the financialization arguments of the liquid financial assets being excessive through the positive contribution of financial assets to the real capital accumulation as these arguments usually imply that such assets are nothing but a drain on the company's ability to invest in the long run. The findings of this research agree with the view pointed out by Davis (2016) who claimed that bigger financial buffers can only mean more firmness of companies against challenging times, especially in choppy economies. To the companies in Pakistan, financial assets might be viewed as a safeguard from which they can draw up the investments during the tough times of macroeconomic uncertainty, thus being the case their capacity of production will be even more strengthened than if not at all being like the other firms who wonder the darkness of financial insecurity. This is not the case with firms in really developed markets where over-accumulation of financial assets simply means that the management is avoiding taking any risks and has reduced capital expenditure.

The results related to sustainability reporting have drawn some parallels as well as marked differences with earlier research. Presenting environmental and social impacts responsibly has been an important and positive factor supporting the claims of Carroll and Shabana (2010), Ameer and Othman (2012), and Vishwanathan and Duran (2018) who all propose that the practice of openness in sustainability engagement raises the capital of reputation, trust of stakeholders, and legitimacy of operations. All these are conducive to the occurrence of new investments over the long term. It seems that the companies in Pakistan which are keeping their environmental and social responsibility under the wraps but still actively communicating with the public are benefiting with less regulatory risk, better market positioning and more investor confidence—these seem to be the mechanisms that are occurring in the country as well. However, the relatively weak or inconsistent influence of governance reporting has been contrary to the trends in developed countries where governance disclosure is usually recognized as the strongest predictor of corporate performance and investment behavior (Waddock & Graves, 1997; Jo & Harjoto, 2012). The notion of weak governance reporting in Pakistan, symbolized in many ways, often left as a formality, and minimally practiced, makes more significant implications for institutions and enforcement globally.

Distinctions drawn from this comparison indicate that there are traits in the manufacturing sector of Pakistan that reinforce dual financialization and sustainability reporting

concepts somewhat reminiscent of and yet different from the global sphere. The enhancement of environmental and social reporting is one area where similarities were highlighted on mechanisms that those are generally falling - gendered transboundary boundaries, stakeholder engagement, and deep-rooted responsible behaviors. In the same vein, the other evidences that showed glaring differences like corporate actions emanating from stock buybacks and dividends point out the effect of national institutional characteristics and market maturity on corporate behavior. This suggests that the research findings foster the understanding of the view that findings produced from the most developed economies might not find the same conditions applicable to the emerging markets wholesale, as these conditions of economy, governance mechanisms, and disclosure practices give impetus to the financialization and sustainability dynamics being roughly structured the same way. Consequently, this study's findings reinforce the idea that financial and sustainability interrelations should be considered within specific country contexts such as Pakistan where business behavior is underwritten by unique economic constraints and dodgy regulatory architecture.

4.7 Hypotheses Summary Table

Here is the summary of the research hypotheses presented in a structured table format:

Table: 4.13

Hypotheses Summary Table

Hypothesis	Relationship	Independent Variable	Dependent Variable
H1	Positive	Financial Payments	Real Capital Accumulation in manufacturing firms
H2	Positive	Non-Operating Profit	Real Capital Accumulation in manufacturing firms

H3	Positive	Environmental Factors	Real Capital Accumulation in manufacturing firms
H4	Positive	Social Factors	Real Capital Accumulation in manufacturing firms
H5	Positive	Governance Factors	Real Capital Accumulation in manufacturing firms
H6	Positive	Stock Buybacks	Real Capital Accumulation in manufacturing firms
H7	Negative	Financial Asset	Real Capital Accumulation in manufacturing firms

4.7 Results of Hypotheses

4.7.1 Results of Hypothesis 1: FP and ARC

The hypothesis in support of the positive effect of financial payments on capital accumulation has strong statistical support as well as is interpreted from various theoretical perspectives. The panel regression estimates showed positive coefficients between 0.0144 and 0.0178, each significant at the 1% level and indicating a strong and persistent positive link. The moderate nature of the VIF value, i.e., 3.264, points to the presence of educed collinearity, meaning that the coefficient estimates are robust and estimates for multicollinearity are irrelevant. The PCSE regression estimates as another robustness check provide estimates between 0.105 and 0.164, all significant consistently. These pooled estimates, besides confirming the empirical results for the variables, actually argue for observing both strength and persistence of these relationships and also foreshadow the exclusion of possible econometric biases.

An assortment of saturated economic and managerial theories somehow theoretically underlie the said observation. Agency theory would see financial incentives as acting to set up the interests of managers to conform to those of shareholders, securing a door through which the executive can choose profitable investments that not only grow the value of the firm but also encourage significant real investment. This is flanked by stakeholder theory, which believes that such financial distributions not only form a reward for shareholders but for a larger body of non-firm stakeholders. It might also be inferred from this management end, good management theory, that the organized financial arrangements are much more designed to foster efficiency in organizational, even reconciling it through long rallying organization capital formation. Neoliberalism and free market theory lean slightly towards conservatism, maintaining the stance that although financial incentives spur economic growth, overcapitalization diverts resources towards nonsensical, non-productive investments. Last but not least, stewardship theory argues that managers zealously protect, as fiduciaries, the very assets they choose to gift with financial incentives designed-not only to enhance a managerial agency's value in the long run-but also to help foster an accumulation of long-run real capital that goes some way in creating a dependable fiscal economy. Few analysts have subscribed to neoliberal or free-market ideology. paradoxically, each consumption and underproduction Got the helpful perspective to be attractive in the form of stewardship model.

4.7.2 Results of Hypothesis 2: Non-Operating Profits (NOP) and Real Capital Accumulation (ARC)

The support provided by unearned profits in relation to capital accumulation is confirmed by statistical weight, confirming the proposed hypothesis through empirical evidence from the panel regression estimating coefficients of 0.0483 and 0.173, with varied significance of statistical weight matters that became a testifying force of the existence of the relationship. Additionally, the VIF value of 3.162, hence moderate collinearity, validates that interrelationships are not highly biased owing to the multicollinear problems. PCSE-regressed panel-corrected standard errors are further corroborated with estimates that range from 0.0212 to 0.0433, all significant under all models. These combined former finds make the argument for the reliability and stability-from

consistency across estimations-to remain, consequently heightening the degree of confidence in the findings arrived at as well as the conclusions.

Stakeholder theory, stewardship theory, agency theory, and resource-based views afford a rational evaluation and justification of non-operating profits. Non-operating profits are generally earmarked as wealth accumulation for real investments; thereby, their operational importance comes under universal regulatory guard and is considered paternalistically judicious.

4.7.3 Results of Hypothesis 3: Buybacks (BUYBACKS) and Real Capital Accumulation (ARC)

The support provided by unearned profits in relation to capital accumulation is confirmed by statistical weight, confirming the proposed hypothesis through empirical evidence from the panel regression estimating coefficients of 0.0483 and 0.173, with varied significance of statistical weight matters that became a testifying force of the existence of the relationship. Additionally, the VIF value of 3.162, hence moderate collinearity, validates that interrelationships are not highly biased owing to the multicollinear problems. PCSE-regressed panel-corrected standard errors are further corroborated with estimates that range from 0.0212 to 0.0433, all significant under all models. These combined former finds make the argument for the reliability and stability-from consistency across estimations-to remain, consequently heightening the degree of confidence in the findings arrived at as well as the conclusions.

Stakeholder theory, stewardship theory, agency theory, and resource-based views afford a rational evaluation and justification of non-operating profits. Non-operating profits are generally earmarked as wealth accumulation for real investments; thereby, their operational importance comes under universal regulatory guard and is considered paternalistically judicious.

Corporate finance theory provides various interpretations of stock repurchases as key aspects in capital distribution and corporate financial strategy. One of the agency theories states that buybacks rid the agency problem by forcing cash ranks out of the company that would be wasted because agency management would act otherwise; the interests of the management will thus be aligned with those of shareholders. Indeed, a stakeholder

theory argues that from a shareholders' standpoint, buybacks benefit shareholders, primarily because of the appreciation of prices and EPS; they raise the question of fairness, whether the money used for buybacks could not be better routed to staff or R&D or sales. Further, good management theory supports buybacks as a finance tool: buyers believe in the sustainability of the company-ergo, keep it in the optimal capital structure and reinvest in a high-yielding area for the long-term growth. Behavioral finance theory disagrees with the above. It says that stock buybacks, in the minds of managers, ego builds a false view of the market and temporarily tilts things so that prices shoot up. The last opinion, of course, is in line with one of neoliberalism and free-market theory-which strike buybacks as nothing more, but a greater part of a corporate mechanism that applies marketability and sound judgment to timely and optimum allocation of excess cash to shareholders. All this is in favor of a stock buyback being considered as a dual-purpose mechanism: a capital allocated model that signals to market being an attempt to blend effectiveness and equity concerns.

4.7.4 Results of Hypothesis 4: Financial Assets (FINASSET) and Real Capital Accumulation (ARC)

There is a solid base of evidence that exhumes the economic persuasion that financial market assets may trigger the accumulation of real capital. This very robust existence appears to have yielded solid pairs of earlier panel slope estimates of 0.805 in the case of growth in the ratio of market capitalization to GDP. This very high coefficient estimate happens in an equilibrium equation between return on capital and economic growth. The coefficient results of panel data estimations then become very robust; indeed, the number of studies and standard errors for the coefficient suggests that the RBC theory can request a lot from empirical analysis. At the same time, otherwise, the role of financial development is not essential when it comes to the estimation of this material.

The panel estimation equation was confirmed by another form of robustness-an identification of a correlation that reached 0.0131 to 0.0178 again at the 99 percent level; in all, this magnitude, the regression interacts well with savings in addition to GDP growth figures, showing a high extreme point for the correlation. Henceforth, VIF values of about 2.96 in the previous situation showed essential multi-collinearity statistics and that was to silence any ambiguity as to why we can firmly consider age as a potential predictor variable for success. Finally, our results put significant value on the evidence

supporting an argument about strong and similar relationships following different estimation methods that keep firm control on trust and credibility in explaining financial dynamics.

Several theoretical perspectives exist, which suggest that financial assets are instrumental to the formation of corporate outcomes. Agency theory argues that financial assets serve to facilitate managers' incentives to shuffle a significant amount of corporate resources and help enhance the value of the corporation for principal equity shareholders. The stakeholder claims-financial assets will enhance the wealth of the firm through rational utilization of resources and sustainable finance for shareholders, employees, creditors, and other stakeholders. This perspective is enhanced by the theory for managing good and urgent financial planning to manage liquidity and put financial resources and financial assets to the best uses in the venture of corporate expansion. On the other hand, the Resource-Based-View (RBV) contends that financial assets are specific and valuable organizational resources that provide competitive advantage to companies through facilitating investments for productive capacities and strategic options. Similarly, neo-liberalism and free market theory stress that the backbone of economic progress consists of financial assets which quarrel for efficient financial markets, investments, and economic growth.

Quite comprehensively, these theories focus on financial assets as a key input in more elaborate corporate financial strategies aimed at value creation, stakeholder well-being, and long-term economic sustainability.

4.7.5 Results of Hypothesis 5: Environmental Contributions (ENV) and Real Capital Accumulation (ARC)

The strong evidence of these environmental impacts into real capital accumulation, which the statistics also support, display a significantly large positive coefficient, with generalized values standing at 0.0132 for panel regressions targeting a 99 percent significant level, with the coefficient; hence, is quite suggestive of how very influential this variable may be. The VIF value is 2.862, denoting some moderate collinearity, while no serious multicollinearity was indicated, suggesting that the errors were not biased towards the zero level for the estimable coefficient. PCSE further strengthens the significance of the trends, with statistical significance numerous times over at around 0.0951. These findings together confirm the validity of our dataset. They are thus

testifying to the reliability of the model and the reality of the predictive relationship in the presence of various econometric methodologies. Thus, very strong evidence supports our theoretical standpoint.

It is necessary to provide the well-recognized theoretical basis for corporate strategy in environmental practices with the support of such frameworks as are recognized through the requirement for achieving economic value on the one hand and pro-societal value on the other hand. Stakeholder theory rather broadly describes the long-term value of environmental sustainability, claiming that environmentally friendly business practices create value not only for shareholders but also for long-run economic and ecological stability for employees, consumers, and society as a whole. Sustainability theory provides strong support to the above argument by claiming that the inclusion of sustainable activities in the normal corporate decision-making process will lead to the realization of long-term growth and resilience thus making the company more competitive in a dynamic market and regulatory environment. Corporate Social Responsibility (CSR) theory claims the dual benefits of environmental contributions shown by the fact that the implementation of proactive sustainability measures enhances the reputation of brands, increases customer loyalty and generates returns in the long run. Finally, Institutional theory describes the pressure of regulatory and societal forces on companies to practice environmental sustainability and be compliant with environmental laws, industry standards, and consumer expectations. These theories highlight the strategic value of environmental sustainability in itself, which in turn, by reinforcing its value for corporate profitability, stakeholder interests, and long-run ecological stewardship, has become the main reason for its adoption by corporations.

4.7.6 Results of Hypothesis 6: Social Contributions (SOCIAL) and Real Capital Accumulation (ARC)

The positive contribution effect of social activities toward real capital accumulation has many theoretical and empirical supports. Concerning the empirical context, the fact finds that, associatively, the significance of the average least squares (lnLSDV) panel regression coefficient is 0.0954, with a correspondingly statistically significant value of p less than or equal to 0.05. Besides with a greater acceptance of this variable by the modern economic development depth theory, the VIF was only found to be moderately high at 2.769, implying that multicollinearity here was not giving us trouble, as far as

estimation was concerned. PCSE results confirmed that the statistically significant positive coefficient was 0.0719 at the 1% level, the present results were only weighted with the argument. Therefore, when put together, the results show that various methodologies have very high and stably estimated coefficient relationships that strongly support the theoretical framework.

There is particular emphasis on the theoretical backdrop underpinning social contributions as an aspect of corporate strategy, over different frameworks suggesting that to build trust, reputation, and long-term financial health, corporate social actions are very important. The stakeholder's theory claims that social contributions are key drivers of trust-building where firms, working to achieve good for society, create and maintain good relations with employees, clients, and the community at large while obtaining the loyalty and allegiance of stakeholders. Further, the CSR theory substantiates the same argument by averring that social projects not only contribute to the company's image but also bring monetary benefits to the firm by: drawing in socially responsible investors, increasing customer loyalty and brand value. Institutional theory views corporate social contributions as helping companies adapt to new social expectations, regulations, and culture mindsets to help them become conformable in negotiations, thus guaranteeing that their business complies without pressure from the external world. Lastly, the stewardship perspective posits its claim that responsible corporate managers, influenced by social value creation, care more about the long-term social and economic viability as compared to short-term profit maximization. Taken together, these theories underscore the strategic import of social contributions in regard to corporate achievement, stakeholder trust, and long-term financial stability.

4.7.7 Results of Hypothesis 7: Governance Mechanisms (CGV) and Real Capital Accumulation (ARC)

The relationship between governance variables and real capital formation is highly uncertain. Empirical evidence on this matter is inconclusive in terms of differing magnitudes and significances of effects across various econometric specifications. The coefficient from panel regressions is mostly positively signed but overwhelmingly insignificant, with only one coefficient (0.0854) showing significance at the 5% level. A correlation is thus suggested; it might hold in some specific specifications. The VIF was calculated at a value thought to be too low, VIF = 1.962, thereby adding weight to the

argument that our given coefficient estimates do not suffer from severe multicollinearity. Points that emanate from strongly insignificant coefficients include an additional example of -0.00432 from the PSCE regressions as a further pillar that shows an inconsistency in the empirical basis for the above relationship. Thus, the failure of these last coefficients is pointing to evidence caused by factors such as unobserved heterogeneity of the firms, given characteristics of the context, or the latter difference between them, suggesting that a further study might want to further work on moderating or interaction effects so as to provide some insight into understanding the dynamics.

The governance mechanisms impact on corporate decision-making theory has different viewpoints implying the intricate relationship among mechanisms, firm performance, and real capital accumulation. The agency theory maintains that one of the purposes of introducing governance mechanisms is to reduce the discrepancies between the interests of the managers and the owners: however, their efficiency is determined by a myriad of firm-specific factors such as board composition and incentive schemes thus, it will be of case more to further investigate the governing practice. The stakeholder theory further clarifies that the governance mechanisms do not necessarily always distribute the benefits among the stakeholders fully equitably; they usually do favor the shareholders at the direct cost of employees, creditors, or society as a whole, hence leading to the push for a more equitable and inclusive governance system. The institutional theory presents another approach when it states that the relevance of governance mechanisms may not be the same across all companies and countries, as their impact might be influenced by the regulations set, cultural practices, and market structures thus creating a discrepancy in governance results among the different institutional environments. Stewardship theory also challenges the notion that governance mechanisms create managerial stewardship, and thus argue by saying that some governance mechanisms are such that are focusing on short-run financial gains instead of long-term strategic development, hence they do not create true managerial stewardship. Considering all this, the above work conveys the multifactorial aspect of governance; thus, the need for contextual studies and governance reforms to superintend the achievement of desired results is well justified.

4.8 Theoretical Discussion

This study sheds light on the financial payments and governing frameworks as well as environment-society-financial wealth variables that advance the real capital accumulation

of manufacturing firms. While these findings offer some consistency with earlier works, inconsistencies arise as well in relative terms, indicating that the nexus between financialization and real capital accumulation is quite complex.

The main result of the research is that the financial payments have a direct and strong positive relationship with the real capital formation. This was backed by Stewardship theory and good management theory which maintain that financial incentives make the interests of the managers coincide with those of the shareholders. However, the studies of Orhangazi (2008) and Stockhammer (2010), which bring up the point that companies are using the funds to invest less in production than before, are suggesting a decrease in real capital accumulation. The reason for this claim is the regulating role of the governance mechanisms that are responsible for directing the financial payments towards productive investment rather than to the financialized behavior. Likewise, non-operating profits evidence strengthens the view of the firm using excess funds from non-core operations as a secondary source of investment funds (Chung et al., 2005). However, Lazonick and O'Sullivan (2000) argue that non-operating profits are largely utilized for dividend payments and share repurchases, with a strong positive impact here lending support to the idea that well-governed firms actually encourage investment with their non-operating profits instead of engaging in financialized behavior.

The theory that stock repurchases lead to real capital accumulation contradicts the common belief that repurchases merely transfer the surplus cash from the company to the shareholders at the expense of the investment in production. The positive effect is in line with Jensen's Free Cash Flow Hypothesis (1986), which says that repurchases drive out inefficient managers by allowing for the allocation of resources to their most productive uses. On the other hand, Lazonick (2014) gives evidence that repurchases lead to a withdrawal of resources from the company's long-term investment and subsequently to lowering the firm's capacity for production. The findings imply that repurchases can indeed be a financial strategy which, under certain circumstances, not only enhance the firm's reputation but also lead to the accumulation of real capital. Such contradiction can also be seen in the case of holding financial assets. While some evidence points to the strong positive impact of financialization on real capital accumulation, which is in line with Tobin's Q theory of investment (Tobin, 1969), others like Demir (2009) claim that financialized companies would prefer speculative investments over investing in productive assets. The findings of this research suggest that the data comprises firms that

use financial assets as a way to support the investment in production rather than for speculation, possibly due to the investment regulations and governance structures unique to the industry.

Environmental contributions also positively affect real capital accumulation. For instance, Porter and van der Linde (1995) argued that sustainable practices not only lead to a company's efficiency and later on, the financial performance but also, the financial performance in the long run. On the other hand, Bansal and Roth (2000) have taken a distinct stance by claiming that, even though the long-run returns resulting from environmental investments are realized eventually, the capital needed for the initial stages is quite substantial and it might use up the available capital for reinvestment. Nonetheless, the findings of this study indicated that the companies which care about the environment do reap the benefits of real capital accumulation over time. Also, it was found that social contributions have a positive effect on real capital accumulation, hence confirming Freeman's stakeholder theory (1984) and Carroll's csr model (1991) which advocate that responsible social companies build stronger relationships with their stakeholders and, thus, secure financial stability and investment opportunities. This is, however, opposed to the argument made by Friedman (1970), who claimed that the costs of corporate social contributions act as an erosion of shareholder value and thus also as a drain on real capital accumulation. The positive correlation depicted in this study shows that a business having a CSR stance might consider it as a strategic investment and not as a financial drain.

The majority of the conflicting findings in this research relate to corporate governance mechanisms. While the corporate governance is generally expected to enhance the performance and efficiency of investment of the company (La Porta et al., 1998), the evidence from this study suggests that the corporate governance mechanisms may not unambiguously have a positive effect on real capital accumulation. This is also in line with the research by Bebchuk and Fried (2004), as they put forward the notion that certain governance frameworks put shareholder primacy first before long-term investment strategies. The findings indicate that the impact of governance might differ depending on the specific features of the corporate governance mechanisms implemented by the different companies and therefore, it calls for more research on the industry-specific governance frameworks and their influence on investment strategies.

While it has been widely assumed that financialization and real capital accumulation oppose one another, the present study complicates this by suggesting that financial payments, nonoperational earnings, and financial asset ownership may promote the accumulation of real capital, contingent as they are on the quality of governance, the strategic positioning of firms, and regulation. The positive effects of various variables related to disclosure of sustainability factor with greater support for sustainable investment strategies in the long run, hinting at the possibility that companies embracing sustainable policies in their financial models will have the highest sustainable real capital accumulation. By contrast, the differing impacts that governance mechanisms have indicate that corporate governance approaches cannot be a one-size-fits-all option, with firm-specific factors and context playing a more salient role in investment decision-making.

These results could signify potential research avenues to be pursued further. A sector-specific investigation is of significant importance to determine whether the relevant relationship levels differ across sectors themselves, particularly with respect to industries with relatively high capital requirements. Time-series or panel-specific approaches may be beneficial in determining the transient behavior of these relationships by incorporating control variables of financial market and regulatory dynamics. This might further point out the polarity of relationships between governance and sustainability reporting factors in attributing positive or negative contributions to the environmental and social sources. To this end, alternative methodologies might be applied to implement a higher degree of empirical robustness in testing bias in these regards. For these reasons, future research may aim to understand how financial, environmental, and governance variables affect corporate investment decisions.

4.9 Conclusion

This chapter documents an empirical analysis showing the nexus between sustainability reporting and real capital accumulation. The findings showed that social sustainability measures and several indicators of financializations are quite significantly related to real capital accumulation, while environmental and governance aspects do not have such an intense symbiosis. Hence, it reveals the intricacies of corporate behavior in the developing countries, and the promotion of an integrated approach together with financial incentives for long-term developmental goals.

The foregoing revelations carry the necessary answers to issues of interest inasmuch as they allow the researcher to discern the interrelations among the set of ideas that are central to the argument of the main inquiry. A political twist is now being given to the issues of the current interpretation as well as the fruits of divorce. Chapter 5 clarifies the meanings of the results in a wide theoretical and practical area with discussions on the implementation by corporate governments, regulatory variations, and sustainable industrial development.

CHAPTER 5

Conclusion and Recommendations

5.1 Introduction

Chapter 5 is the most important part of the present study. In fact, it brings together the findings, reflects them in the light of relevant theory, and intensively makes them vibrant amidst the abundance of academic and policy debates. The bulk of the previous chapters might have introduced the research problems, reviewed the literature, and analyzed some empirical data. Chapter 5 connects these three components through a story that presents not only the theoretical and practical contribution but also stirs an interest in the reader. One does not use the word 'show' while looking at the findings; it asks for an informed discussion, weaving the fabric of theory, and viewing the implications for sustainability reporting, financialization, and the accumulation of capital in Pakistan.

This research was dedicated to examining the interrelationships existing between sustainability reporting, financialization, and real capital accumulation within the corporate sector of Pakistan. These three elements are seldom ever investigated together, even though they do interwind in determining the long-run economic performance. Sustainability reporting in any firm requires the reflection on the stakeholders' interests as much as it does the scraping of profit for the shareholders alone; financialization embodies the acceptance of financial incentives, markets, and instruments by the firms, leading to bestowing the corporate decision-making mode. Real capital accumulation and its final destination- productive investments-follow the path for economic growth and therefore provide more jobs indirectly. Hence, handling these jumbled-together questions within the idiosyncratic institutional regulatory environment of Pakistan would pave the way for a more nuanced discourse on how corporations can juggle simultaneously between their short-term financial pressures and their long-term developmental duties.

Sustainability reporting not only foretells the shift occurring in the corporate sector of Pakistan from formerly favourable to some unfavourable conditions but also puts this into perspective. These results highlight that more companies are reporting on sustainability in some form or another, but the intensity, quality and standardization of these reports differ substantially. This is also supported in literature across developing countries, whereby lack of voluntary authority rather compels compliance drivers to adopt reporting,

while the motive to "do good for the rest of the world" is disregarded (Haque & Ntim, 2018). On the other hand, though the National Securities and Exchange Commission of Pakistan (SECP) has adopted voluntary guidelines, without obligatory guidelines universally established, the level of disclosure is confusing and dissimilar, corresponding with the European Union and US.

The demand for data would require, through critical evaluation, that a whole lot of business houses would opportunistically flash their preferences towards the environmental concerns, mainly on energy conservation and waste management recycling, understating the social and governance issues almost altogether. It is in line with global practices wherein in a situation in which the companies of developing countries only disclose as much as they want in separating themselves favorably, instead of adopting real sustainability practices (De Villiers & Marques, 2016). Selectivity in Pakistan could be reflections of weak institutional pressures, less investor grip, and less stakeholder demand for comprehensive reporting. Reporting, then, becomes purely symbolic. Emphasizing its efficacy in promoting real behavioral change would be a point of conjecture.

From this research, it is clear that the industrial sector impacts the disclosure systems. High resource guzzling, export-oriented industries, such as the textile, cement, and energy industries, could be compelled to publicly disclose sustainability because numerous international buyers, global supply chains, and multilateral organizations put pressure on them. Conversely, more domestic orientation within a company-like the service sector-less disclosure will be made. This means that incentives for external visibility and reputation are a much higher priority in determining the extent of disclosure than ethical considerations. The fact lends more credence to Institutional Theory's claim that organizational behaviour is mostly shaped by coercive and normative pressures rather than by the inner volition of the organization DiMaggio & Powell, 1983).

Through Vision 2025 of Pakistan and the United Nations Sustainable Development Goals (SDGs), the results reflect that a huge gap prevails from what is expected and what is being done. While officials rate sustainability very high on their list of priorities, corporate sustainability reporting hardly goes beyond superficiality. This underscores the need for more robust regulatory frameworks, capacity-building programs, and the determination that the national development goals and corporate sustainability plans will

become interwoven; otherwise, the sustainability reports may become a public relations tool as opposed to tools of accountability and genuine improvement.

Reporting on the sustainability provisions regarding sustainability disclosures that aim to improve the company performance since reading will not, resulting in very few companies up to now report on their sustainability disclosures in their filings. Therefore, such unintegrative policy denies sustainability reporting being an enabler for creating long-term value sustainability disaster. Extensive literature from more-developed economies indicates improved corporate visibility, competitiveness, and risk-mitigation due to these capital-allocation activities. However, their lack of integration in Pakistan points to a gap of ideas among the managements and practically no pressure from investors to enforce managing boards to make sustainability commitment decisions.

As for theory, it remains viable to explicate contemporary business surroundings; however, this engagement should not focus exclusively upon societal and governance matters. Even though their participation was considered to be well heeded by those particularly concerned with CSR and matters related to corporate governance, stakeholders like employees, the local community, and particularly consumers simply can't see themselves correctly; however, the primary audience for sustainability reporting is, more generally than some, mainly regulators and investors. The legitimacy theory also supports the selective reporting of sustainability in an example of Pakistan, the firms attempting to legitimize themselves before concerned outsiders (like recognizable foreign potential buyers) under the sun, while accountability to their very own community goes unheard of. The existing chasm longs for a desperate need to empower local interests with knowledge and initiative, so to engage with accountability through sustainability reporting for the benefit of all.

This research has extremely important policy implications. To make sustainability reporting more credible and functional, regulators such as the SECP can swap voluntary reporting frameworks for a framework that is mandatory for listed companies to follow some international standards, possibly GRI or ISSB guidelines. Industry bodies should also be promoted for having a more major role in standardizing disclosures and training sustainability professionals. Incorporation of sustainability into the realms of corporate governance and financial reporting practices could further turn symbolic disclosures into tangible contributions.

Managers and companies need to realize that during the process of making the sustainability report, the nature of the alerting instrument that the report is part of cannot be changed; instead, the report should be regarded as an asset of the company's strategy. In this way, sustainability practices can be transferred to the areas of supply chain management, risk assessment, and investment planning where resilience can be developed as a response to environmental and social shocks. Besides that, the ways which would hold the companies answerable for the sustainability goals would be through making sure that the desired change in the company's culture is carried out by linking sustainability objectives to the performance appraisal and board oversight systems. Another thing in the way of management is to have productive conversations with the stakeholders- such as the employees, the community, and the customers- that would result in broadening sustainability to include more than just the environmental part of it.

Thus, in short, the findings of this study have some recommendations for future research endeavours and practical implementation. Thus, it comes up to an opinion in the academic sphere that further research ought to be conducted on the relationship (in Pakistan) between sustainability reports creation and firm performance for the evaluation of technological infrastructure which would lead to more complete disclosure, making it all the more transparent and available. Another recommendation for exploring possibilities for cross-country research with latitudinal members seems programming a comparative study to pinpoint the best practices and shortcomings shared with the rest of South Asia. These studies will not only build the existing body of knowledge in the discipline but will also accelerate the demand to enhance sustainability practices in the corporate sector of Pakistan on behalf of policymakers and practitioners.

Financialization has come to characterize modern capitalism and has a ranging effect and complexity for underdeveloped countries like Pakistan. Essentially, financialization at its most basic level means more pronounced reliance on financial motives and the like in both the domestic and global economies (Epstein, 2005). In Pakistan's corporate sector, this has resulted, among others, in the increasing concerns over the maximization of shareholder value, the greater focus on capital market instruments, and the shifting of management priorities from long-term productive investment to short-term financial gains. The research reflects the consensus that financialization alters the decision-making process at the firm level, though at the same time, it could potentially influence the developmental changes at the national level in a parallel manner.

The financialization takes place at the level of the firms where mainly the dividends and share buybacks are paid instead of putting back in productive capital. Interestingly, this trend, which is predominant in the developed markets, has not been widely embraced by the Pakistani market. Despite this fact, it can be observed that recently, there is a growing tendency among the big corporations mainly the ones that are part of the Pakistan Stock Exchange, to allocate their resources more towards rewarding the shareholders as opposed to capital building or innovation. This movement is in sync with the financialized corporate governance trend worldwide, where the measurement of managerial performance is being increasingly tied to stock price changes and quarterly earnings reports (Krippner, 2011). However, when the situation is viewed from the perspective of Pakistan, the potential implications of this scenario become rather alarming given the urgent need for upgrading industry, creating jobs, and developing global competitiveness in the long run.

Furthermore, the process of financialization of non-financial firms in Pakistan was hastened by financial liberalization, deregulation, and the obtaining of overseas credit in the post-structuralist economic scenario. The trend of financialization that was in the 1990s and early 2000s emphasized more and more the commercial incorporation of the speculative financial market by the policy measures which were aimed at motivating the firms to use the capital markets both domestically and globally. These reforms did not only bring firms to the surface of the new liquidity sources but also exposed them to the effects of financial volatility. One of the reasons for the financial fragility of Pakistani firms is said to be such exposure; as a result, fluctuations in interest rates, exchange rates, and global investors moods directly bring about changes in the corporate strategy.

Financialization entails an increase in the need for sustainability reporting and corporate social responsibility. The more the companies are driven towards financial performance, the more there is a possibility of sustainability reporting being just a lot of words and not an actual practice; the reason for this being that the companies do not have sufficient genuine commitment to long-term environmental and social concerns and thus would be reporting just to maintain the goodwill of the regulators, investors, and "civil society". Besides, such behavior has been particularly seen in other developing markets where financial firms, through disclosure, try to minimize their reputational risk but, in reality, still favor financial returns (Soederberg, 2010). In Pakistan, this implies that the situation

casts a serious doubt on the sustainability programs as to whether they are true transformations or just a dressing of the very logic of finance capital.

Thus, this research results align with the assertions by the critics: the critique that financialization is a factor greatening economic disparities and gives an incentive against building an inclusive economy. When companies engage in speculation overactivity or in ultra-distribution among shareholders, they divert alternative possible uses for those funds to, amongst others, wage increases, skill developments, or infrastructure projects. In the specific context of Pakistan, however, this has only added to the already existing structural imbalances within the economy; low productivity growth, poor labor absorption, and uneven distribution of industrial development across various regions. This new situation is further compounded for decisionmakers, who are now challenged to create an environment in regulations for seriously nipping speculative activities and then channelling resources of businesses towards actual productive activities.

From the point of view of managers, financialization has led to some business opportunities and, eventually, risks. On the one hand, going to the capital market may allow companies to have more division than with traditional borrowing. On the other hand, where the short-term focus of finance precedes any consideration of business sustainability, financialization prioritizes increased access to finance. The best possible approach is to contour finance with sustainability in mind wherein companies evolve to achieve longevity through value creation over divergent amounts of time. The dissertation points to empirical observations that businesses inclined to financialization might not be good at real capital formation and thus might not have that many spots open for growth that stems from sustainability. This observation, as shown in global literature, supports the real crowding-out effect: finance is so big a player that it cannot leave any room for production investment, it is actually taking the place of production (Stockhammer, 2004).

General results of financialization on development in Pakistan are to be emphasized as well. When the industrial sector is not fully developed, the industrial sector of Pakistan tends not to contribute significantly. An entire industrial setup without further reinvestment resigning themselves to financial use can hamper the very process of transformation. Pakistan's financial markets are not only narrow in disposition but are especially vulnerable to external pressures. Such intrinsic defects certainly-crises bursting out into the market, currency depreciation, and the threat not to let bubbles pop or deflate-

endorse previous financialization security concerns. This postulates to intensify existing risks, consequently manipulating the equilibrium of those industries which work closely with government steering for economic development.

The concern about financialization should be more about policy implications toward the global context and the Asian sub-continent in particular. What is particularly interesting is that the advanced capitalist countries have given financialization much attention, where the deepening of financial markets has resulted in dramatic changes in corporate behavior, labor relations, and macroeconomic outcomes (Palley 2007), whereas in developing countries, the changes are just the opposite. In the case of Pakistan, there is little institutional development, e.g., not only are the capital markets shallow, with the government lacking the strength to control financial flows, but also form an environment where financialization can hardly work with any advantage and where financial risks increase even further.

The principal challenge is defining rule-free speculative activities and attaining and sustaining the encouragement towards productive investments. The risk association between over-liberalization and highly volatile markets, capital migration, and currency crises constitutes a parallel component, as revealed by Epstein (2005). Two lessons--from the Argentine and Turkish situations--should alert investors in the Pakistani context. Both the countries underwent a severe stock market liberalization during the 1990s and 2000s, only to need a bailout every time the waves in the global scenario were set in another direction. In Pakistan's case, the principal reason for this vulnerability is that it is built upon loans falling due and portfolio inflows. Consequently, the external debt is inalienable from potential shocks. In order to prevent this situation, policymakers should aspire to a very conservative and measured approach towards financial liberalization, sanctioned by stringent regulation, capital controls, and an orientation for the growth and promotion of long-term investments.

Another aspect to look at is that of corporate governance. In most of the developed countries, financialization would entail strengthening the ideology of shareholder value maximization that is often in conflict with other stakeholders represented by labor and consumers as well as local communities (Lazonick & O'Sullivan, 2000). The results of the research indicate the existence of such trends in Pakistan, where the corporate boards and managers are requesting the investors for a shorter-term development goal rather than

a long-term one. This poses a significant ethical dilemma that if the corporate governance in Pakistan should follow the Anglo-American shareholder primacy or should it rather be more stakeholder conscious that is, following the socio-economic realities of the country? The experience of international markets shows that stakeholder-oriented governance structures, such as the ones in Germany and Scandinavia, are more suitable than shareholder value frameworks to find a middle ground between financial demands and social and developmental needs (Hall & Soskice, 2001). Pakistani policymakers and regulators can take a considerable amount of advice from these practices when creating a governance system that is against the worst unconstitutional outcomes of financialization.

An outcome that needs more discussion undoubtedly is the intertwining financialization with labor market dynamics. The present future outlook which companies are now so fond of, that results being that laborers are reduced to a cost that needs to be minimized rather than being nurtured as a resource. This has led to a substantial halt in the raise of wages, job insecurity, and weakening of the union powers in the developed world. The labor union movement in Pakistan is commonly put on low bead to be nonexistent; however, the threat under this financialization to the labor market becoming a precarious one is exuberantly felt. Outsourcing, contract labor, and informalization are noticed to have been growing in the private sector, especially that which is open to global competition and financial imperatives. If these suspected initiatives are continued, they have direct impacts of driving the rich-poor gap wide and render the labor market so unstable in the long run. Basically, therefore, the government officer must relate into the bigger picture of the constraint on financialization vis-a-vis labor rights; nobody should have to foot the workers' bill notwithstanding the payment mode determined by financial integration.

Financialization was the most relevant concept, followed by technological innovation as an aspect. There were reasonable theoretical predictions that the ability to access the capital markets would most likely aid and abet technological innovation. Theory suggests that a business entrenched in financialized markets and operations may not fully support technological innovation. The provision of firms with greater allocations to speculative finance and quick returns from rent-extraction activities tends to improve or build confidence in the board of directors, whereas the new technologies and technical innovations often do not, due to their unpredictability of returns.

In short, financialized firms generally give less support for long-term innovation. A paradox thus emerges where financial markets militate against the very objective of technological upgrading. For Pakistan, which, at least in the contexts of industrial competitiveness and high productivity growth, has much catching up to do, this is particularly damaging to sustainable development.

Institutional capacity continues to be a very important factor at the global level in mediating financialization. South Korea and China, for example, can be counted among those countries where the government is able to use finance to pursue their industrial policy and long-term capital accumulation. During the developmental phase in South Korea, state-financial institutions provided credit to planned industries (Chang, 1999). The Chinese state-controlled banking has facilitated the investment into infrastructure and technology without some of the financialization problems that Western economies have been suffering due to their financial independence. However, in Pakistan, the establishment of similar institutional arrangements has not been possible because of political instability, ineffective regulatory frameworks, and the influence of international financial institutions. As a result, the process of financialization in Pakistan is likely to be shaped more by an external- i.e., international financial institutions-driven agenda than by a domestically generated development strategy.

The connection with financialization and the sustainability reporting has been raised. As noted prior in this paper, the financialization would further justify sustainability reporting not on the basis of earnestness but perhaps merely to put up a good face on the company. Even the blending of sustainability reporting with global capital markets highlights the existing contradiction: on one key side, the requirements for disclosure have significantly soared; critics argue that these standards in fact tend more entirely towards the continuity of financial logics than disrupting them (Bracking, 2019). In the Pakistani context, where sustainability reporting is still highly underdeveloped, it is critical that unsustainable absorption issues of global standards prop up above others. This can lead to local development priorities being subservient to those of the global finance environment. Therefore, regulators and industry parties need to collaborate to ensure that they actually result in capital accumulation and inclusive growth through these sustainability initiatives rather than engaging in merely another financially oriented reporting exercise.

The extended financialization has now called traditional macroeconomic policy strategies into question. Traditional monetary and fiscal measures are constrained by much freer movements of capital and various financial power-holders. Consider what high interest rates would mean concerning inflationary control: hopefully, it would attract speculative capital, which initially would depreciate the local currency, causing unintended complications for exporters. Fiscal expansion will also be challenged, giving reasons of investor confidence and government debt rating, alike. All of this is in consideration of Pakistan. Here, situations brought about by IMF programs, balance-of-payment crises, and external debt, are continuous. Therefore, financialization management is not straightforward, and the complex policy of a skilful combination is demanded into existence by the activities of global financial actors pitted against national development objectives.

Again, in light of the fact that two successful developing countries, South Korea and Taiwan, have succeeded with extensive but not unusually excessive financialization of their economies for development purposes, it is evident from the historical facts that the latter do not depend on excessive financialization of the economy. Taiwan, while prioritizing resource mobilization on the productive sector rather than speculative finance, has protected itself from the adverse effects of an overly financialized capital structure to a much greater extent than the rest of the East Asia.

In light of the illustrated lessons around domestic prospects, further consideration can be made to review the extreme aspects of financialization, if voluntary regimes can ameliorate the dire conditions of the majority of badly marginalized women, and if more corporate entities are available to help alleviate the suffering; could there be a greater potential that development might replace the economy than previously recognized?

Conclusions suggest that financialization is not a prerequisite for economic growth: Thus, it can only penetrate unconditionally into a country with weak financial and economic institutions, while the face of uncontrolled, predatory capital takes the begging shape of finance communities rather than merchant institutions.

One of the major conclusions of that research that involves activities related to creating real capital, the most salient source of long-term economic development and growth. Why should we care about real capital? Real capital investment does not pan out when people consume commodity after commodity; rather, it includes the development of physical

infrastructure, manufacturing capacity, R&D, and human capital. Low savings rate, dependence on external funds, and a slender industrial policy in countries such as Pakistan have generally been gravely limiting the likelihood of real capital formation. Strange enough, this moment became an opportunity for paradox. There are times when temporary money flow develops just the sort of fiscal give that in fact hinders structural transformation leading to inclusive growth.

The evidence presented in this research firmly underscores the necessity to allow financial resources to be used productively; without those, the waves of financial flows coming almost entirely from speculative activities in the short term are bound to lead to asset bubbles, capital flight, and recurrent crises. Economic development theory has on one hand neglected the importance of the financial sector since the experience of the developed countries provides evidence to the contrary; shifting attention to incentives had only fueled speculative finance since 1980, transforming capital flows from long-term mechanisms that develop countries to energy-sapping short-term forms required by Western financial capital (Epstein, 2005). Of course, within that overall reflection, such financing may be considered acceptable if the judicial and politico-economic intersection of interest was guaranteed and secured in a very regulated environment of high taxation and difficult compliance. For Pakistan, this means clearly that construction has to be stopped on the acquisition of cheap foreign funding, and thus what will follow is for a kind of local/foreign capital (in combination with local savings as much as possible) to be seriously subdued, secured, and deposited largely for the accrual of education, employment, technology, highly productive physical infrastructure, and service-going forward for the long run.

In addition, sustainability reporting will be the linking channel to capital allocation transparency. If the reporting frameworks were effectively implemented, the interest could be cast on showing whether the companies are involved in investments heading towards a long-term goal for production assets, creating infrastructure, and supporting social welfare vis-à-vis financialized activities leading to short-term profit. In addition, the link between transparency, aggregation of capital, and financial governance stands open to future scrutiny and policy actions. Among other things, the policy recommendation for Pakistan could discover potential in eradicating the dark market distortion as well as, given an accompanying mechanism that would enable financial

resources for national development priorities, set out on a path that is both environmentally and socially inclusive.

The debate starts off by revisiting the initial aims of the research, where the next objective is to gauge how frequently and to what level public companies in Pakistan report sustainability. A second goal would be to determine the extent to which this mode of financialization has changed corporate strategy, with special regard to dividend policies, speculative investments, and shareholder value. A third aspect considers the effects in terms of accumulation of real capital: fixed assets, production facilities, and investment in human capital. Considered together, all three objectives demonstrate the dilemma between financial needs and common enterprise requirements evident in a burgeoning market economy.

For understanding the given theoretical framework aimed at the research, it is very important to note the role of stakeholder theory in understanding and analyzing corporate sustainability reports-the stakeholders are granted the status of compliance and dependence. The institutional theory would elaborate on how the global standards, regulatory environment, and cultural norms all function as conditioning elements for the behaviour of the institutional reporting and the investment that the Pakistani firms face coming up with pressures. Political economy analyses, financialization in particular, provide further insight on how globalization, capital flows, and green neoliberal policies set the corporate priorities for real economic investment to stand aside. This is the context with which the evidence is further interpreted, and some advanced discussions on corporate governance vis-à-vis sustainability come into the foreground. The study attends all these points, engaging empirical observations to lend support and, importantly, raise a very serious question regarding sustainability-how do—or rather, to what extent-are the corporate governance policy implications for financialized, compatible with sustainability principles?

This is another absoluteness in the context of contextualizing the results in an economic-regulatory scenario with Pakistan. Pakistan has an inherently disgruntled macroeconomic setup, characterized by perennial balance-of-payment crises and a heavy reliance on external financial support. This is no less than financial pressure and regulatory uncertainty for organizations already struggling to create their products. Coupled with a tendency that discourages enterprise aimed at fostering long-term productivity while

promoting short-term financial survival, these conditions could traumatize Pakistan's industrial landscape. In addition, though SECP and the State Bank of Pakistan have advanced guidelines to improve the transparency and accountability of the company, the practice of such guidelines is, at best, lopsided. The sector's regulation is lopsided; it is customary to explore an aspect of the connexion between financialization regulations and the interest of sustainability for these areas to see how these processes can harmonize.

From a wider perspective, one has to consider the outcomes in relation to Pakistan's development goals, such as Vision 2025 and the sustainable development goals (SDGs). The latter entailing the former Assurance of a competent supply of sustainable and eco-friendly resources along with social inclusion depend on the very capacity of the companies to invest in real capital by keeping up the transparency of their operations. But if the financialization trend continues to encourage the preference for short-term profitability over long-term development then certainly the realization of these goals might be at stake. Thus, the discourse would be aimed to bridge the gap between the corporate-level practices and the national development priorities.

International literature is the main source of this chapter which tries to compare the path of Pakistan with global trends. The developed economies have already made sustainability reporting a standard practice but the situation in emerging markets is quite different as sometimes it is only a symbolic act rather than full-blown reporting. Therefore, financialization is a global trend as well but the results of it differ along with the development of financial markets and the regulation. However, the study has highlighted the similarities and differences between the phenomenon of Pakistan and the global trend by contrasting it with the latter. The developed countries commonly suffer from the activists' pressure on the companies to provide more of the sustainability information, while in Pakistan such local sources of pressures do not exist at all and the only donors, like international ones, are more likely to place such expectations along with the multilateral agencies, and the stock exchange.

The chapter is an orderly development of ideas. First of all, the researcher critically looked at his findings in light of the limitations from stakeholder's expectations, regulatory frameworks, and international best practices. Next, the text of the publication tracks the impact of financialization on corporate strategies, placing special emphasis on dividend policies, speculative financial investments, and debt structuring. The next

objective is to evaluate whether the real accumulation of capital is profited for Pakistan companies, thus defining the thrust of companies into asset accumulation, which would contribute to the long-term process of economic growth. By ending, some discussion is left for generalized spirituality surrounding policy and practical implications and suggestive recommendations, from an application standpoint of view for business managers and policymakers. The finale of this chapter includes limitations to the study and future research avenues.

In short, the chapter five is the intellectual content of the thesis as it packages together empirical, theoretical and contextual analyses. The players concerning the discussion of sustainability reporting, financialization, and real capital accumulation of Pakistan result in physical behaviors and development outcomes. From these discussions, the text encourages corporate governance that could be more in line with national development priorities and international sustainability objectives.

This study establishes a systemized empirical evidence-inplication of the hugely significant importance of sustainability in Pakistan as an emerging country. Manufacturing, a backbone to industrial development, economy-jobs, and export competitiveness, is heavily impacted by resource scarcities, regulations and economic volatility. Sustainability disclosure, in this context, ceases to become only a matter for external shareholders. It transforms into a strategy that imbues the company with endurance against market shocks, developing trust among stakeholders, and placing the company deeper within global supply chains. Findings show that companies that summon-out their ESG credentials in an open and frank manner tend to build a strong internal governance structure earning a more assured long-term perspective in investments. A well-founded governance, in reciprocity, paves the way for steadier actual accumulation.

Study results indicate that sustainability reporting is a complicated tool that overwhelmingly indicates company strength and commitment to the future—attributes which have greater significance to the stakeholders: investors, creditors, and suppliers. In a situation where the information available is so highly variable among players and investor trust is usually underpinned by a fragile basis, greater transparency will render the identities increasingly vague, thus making the investors' decision in the regard a foregone conclusion. This is where the argument "sustainability reporting could offset the

adverse consequences of financialization" becomes even more significant. Financialization in Pakistan, as in other developing markets, often forces firms toward a variety of short-term financial actions: high dividend pay-out, price speculations that all contradict the very principle of investing in productivity enhancement. The fact of sum-total outweighing the one-sided nature of the trend acts as the central argument for sayings in corporate governance and industrial policy.

Even considering that a very important issue is that sustainability reporting should be looked upon as a practice, not as a fixed outcome. The study suggested that through the start of a report system, companies go through nurturing internal capacities: data systems arise as responsive, accountability becomes a part of corporate culture, and cross-departmental collaboration increases a great deal. The learning by these organizations will in the long run bring about resource allocation and planning of a systematic and strategic manner. This internal dynamic is probably why companies complying with sustainability reporting are more likely to continue or increase capital expenditure, even when they are financially constrained.

No doubt, in the bigger scheme of things, the national-level implications of this research can't be underestimated. Pakistan is facing extreme ecological effects of climate change, environmental degradation, and inefficiency in energy use as it fends off pressure from the world to produce ethically. All firms, which do not get themselves organized for structured reporting, will be deprived of export markets, lose investor interest, and grow uncompetitive as international markets increasingly mandate sustainability disclosures. The findings of the research point to the heightened urgency for the manufacturing sector in Pakistan seeing sustainability reporting as a strategic economic necessity, not just a mere compliance requirement.

The national significance of this study is paramount. Pakistan is in direct conflict with various challenges such as severe climate risks, huge environmental degradation, energy-consuming processes, and the establishment of global standards for ethical production. The shift of global markets is near, where the only truth shall speak sustainability, and any local enterprises not compliant with such a reporting system shall be at risk with no access to export markets, low investor interest, and thereby, a competitive disadvantage. Hence, the research findings echo with the need to integrate sustainability reporting into

the manufacturing sector of Pakistan foremost not as a regulatory requirement but as a strategic economic means.

5.2 Addressing Limitations

While seeking to enhance both empirical and conceptual perspectives, the present analysis has some inherent constraints that must be considered in reading its some conclusions and in recommending future research. The research is limited by its constriction of the period of analysis to 2018 - 2022 a period which had rapid changes in key macroeconomic variables, disruptions in worldwide supply chains and macroeconomic normalcy after the pandemic. Although summarizing the findings in such a setting is useful the findings cannot be generalized because the reaction of investments to unstable periods may be quite different to that in ‘normal’ economic conditions.

Moreover, the preceding hypothesis is limited for a variety of reasons that can only come second after those related to the use of methodological materials. - All right, we all understand, economic study based on annual reports, in as much as financial and also social performance reporting is necessary, but the show should not go on as all firms and industries within Pakistan have the same level of reporting skills. Differences in meeting the information expectations of an average stakeholder in the company, given what is already queued for the stakeholders, including the information that is of little or no link to sustainability reporting if it exists. Even though a wide-ranging data cleansing and verification framework was put in place to correct some of the problems raised, it is still the case that very many of the previous studies that allow for disclosure variation had problems of missing disclosure content altogether.

It further assumes that complex constructs, as financialization, sustainability reporting or governance quality, can also be assessed through the proxy of these factors respectively. It is worth noting that similar proxies are used in existing research, and have been tested with positive results in the context of developing countries. But any such proxies do not adequately capture complex phenomena. Likewise, even though the econometric modelling applies PCSE and fixed-effects estimation to control for heteroscedasticity, autocorrelation and cross-sectional dependence, it is not possible to completely eliminate the possibility of endogeneity the sources of which may be reverse causality or omitted time-varying variables. Therefore, the results are better understood as associations rather than as causal relationships.

Lastly, the research investigates publicly traded companies that are in the manufacturing sector, this increases the internal validity of the research, while on the other hand, the applicability of the results is restricted to certain service firms, certain SMEs, or businesses with family ownership which are the most common factors in Pakistan's economic setting. Such institutions tend to be subject to different regulatory, governance, as well as reporting requirements which offers the suggestion that, the relationship between sustainability, financialization, and investment is likely to be structured in different ways outside the manufacturing domain.

Overall, all these challenges do not render the study useless but rather compel an appreciation of the necessity for a qualitative research approach, a regional comparison and in-depth examination of businesses in the context of such a study in the future. The challenges are also clear in that corporations in Pakistan behave contextually as well and should be one of the reasons why study on financialization, sustainability reporting and real capital accumulation should continue to expand in these countries.

5.3 Theoretical Enrichment

With agency theory being the main explanatory frame in terms of corporate governance outcomes, there are still rival theoretical frames that may better account for the phenomena of corporate governance. For instance, Resource Dependency theory stresses board composition as a means of gaining access to important external resources and networks. Institutional theory states that governance practices are dictated of regulation, culture, and social norms. Stakeholder theory highlights the implications for populations that are broader than those recognized by shareholders, such as employees, communities, and others. Future research should look to merge these perspectives for a complete picture of governance mechanisms and their efficacy.

5.4 Practical and Policy Implications

The practical and policy implications suggested in this chapter are firmly based on the estimated relationships that are both statistically and economically significant. The analysis in Chapter 4 revealed that the most economically significant and stable impacts on the accumulation of real capital come from financial payments, stock buybacks, and holding of financial assets, as well as from social sustainability scores. These factors have not only stable coefficients across different specifications but also non-trivial effect sizes

when compared to the mean and standard deviation of ARC. On the other hand, the impact of non-operating profits is not as clear, while the environmental scores show positive but smaller and sometimes fewer stable effects. Governance scores, in general, are only weakly or sporadically linked to real capital accumulation. The ensuing suggestions thus prioritize variables that have both statistically and economically significant impacts, whereas the environmental and governance-related findings are interpreted more cautiously.

At the same time, this research is a plus not only for the management in the companies, investors, government and academic circles in Pakistan, and mostly all other parties, in changing governance practices, investments, and regulatory frameworks. The corporate managers in that area can rest their certain action on the fact that close attention is to be paid to the boardroom reforms through the selection of the right number of board members, their diversity, and professional experience comprising also women's representation. The quality of boardroom meetings has to be developed through setting the agenda in a systematic way, creating transparent decision-making frameworks and increasing accountability, which will consequently lead to governance that is efficient and even better oftentimes, and hence supporting the raising of the corporations' performance. As for investors, companies with the strongest governance frameworks and the highest internationalization of sustainability reporting engagement will be the main target for investments, as they are linked to a better financial resilience level and a performance in the long run, being thus the best option for investments. The researcher has established for the policy-makers that their regulations are to be aimed at financial and sustainability reporting as to transparency, uniformity, and accountability so that companies use the international governance norms like that of the Global Reporting Initiative (GRI) in their financial dealings which will in turn create confidence among the investors and attract foreign direct investment into the country's economy. Lastly, for the scholars, the work creates a pathway towards further examination of areas such as financialization, sustainability reporting integration, and real capital accumulation especially when it comes to countries with emerging markets, where institutional variations and cultural factors are the major determinants of corporate behavior. All this is placed in the broad debate around corporate governance, financial sustainability, and economic development in the case of the developing markets, particularly Pakistan that needs improvement.

In a practical perspective of the research, it is envisioned that manufacturing firms will have sustainability reporting internalized into the framework of their management rather than as an optional and peripheral activity. What also comes into consideration herein thus is to inculcate in the internal data systems substantial improvements concerning the sustenance. This necessitates identifying and strengthening the critical departments on the sustainability teams, thus making them aware of the link between sustainability investments and the company's regular ongoing operations, eventually leading to a harmonious goal. Should companies primarily involved in capability building include training in the metrics of sustainability, installation of monitoring systems rather digital, and the implementation and utilization of international benchmarking? This preventive measure will render companies more resilient against market pressures. It should also be clear that companies from the export-driven industries such as textiles, sports, pharmaceuticals, and surgical instruments, etc., must prove with a sound ranking in the sustainability criteria of the international buyer whose business decisions increasingly rest on the sustainability performance of the suppliers. Hence, that means that the process of sustainability reporting becomes a must for every company to create an entry point, allocate for especially severe market competition, and very much probably constitute a kind of lock-in for its sustainable revenue for the long term.

The research led policy directions on Pakistan, recommending an all-inclusive review, and harmonization of its complex regulations. In the transition from voluntary disclosure of sustainability actions only, the SECP would be a leading driver of these requirements by introducing them gradually whenever appropriate performance can easily be expected in accordance with international norms like GRI and ISSB. Capital-constrained SMEs vs. their peers is the critical issue; possibly, some plans could be invited utilizing tier-wise schemes—big firms accountable for more layers, while little-known players explore the minimal obligations. An alternative might be to set up an entity such as the SBP in a capacity that would facilitate leasers to vividly nudge initiatives on the sustainability front and, therefore, make green investments more appealing by lowering borrowing costs, adjusting credit risks, and effectively introducing sustainability-linked loans.

Sector-specific implications similarly carry a huge weight. For example, in the textile industry, the stringent requirements of international buyers eventually force firms to apply environmental compliance to labor practice standards. Thus, use of reports in the industry will be supporters of cleaner production technologies and sustainable supply-chain

management. For the cement and energy sectors, the first and second major carbon-emitting industries, sustainability reporting may be a key step forward for their consideration of investment either into energy-saving technology or low carbon emissions, alternative fuels, and carbon-monitoring systems. In chemical and pharma industries, maintaining report will, at the same time, provide a forewarning for the need for meaningful thoughts on waste management, employee health and safety, and environmental performance.

Another consequence that comes along with the above-mentioned one is the influence of corporate boards. Companies that enjoy the presence of an independent board, ESG-aware directors, and well-organized auditing committees are able to not only provide high-quality reports but also to allocate their capital consistently. It is advisable for the policymakers to make sustainability reporting training compulsory for the board members and also to support the appointment of directors who are of sustainability focus. The universities, professional bodies, and training institutes are invited to play their part in this by providing the sustainability accounting, environmental finance, and corporate governance specialized programs.

This matters more to the capital markets than we suppose. There is a growing trend in sustainability information, where long-term investors are beginning to use this information for risk management. The Pakistan Stock Exchange (PSX) will thus be faced with a difficult choice, to require companies to make a sustainability presentation as part of their listing conditions or for companies to be included in the sustainability ranks, or such companies be ranked favourably where the performance of sustainability reporting is deemed to be high. The first available option will create a continuous flow of market-based incentives for companies fulfilling their desire to reveal more information about themselves and, in the process, direct capital investments toward the enterprises that are more transparent and ethical. Over time these processes should intermingle with a business ecosystem that will not only provide financing but will also attract long-term investments, as well as stability at the expense of short-termism promoted by financialization.

In sum, the drive for the imposition of sustainability reporting is evident, consistently spurred by the actions of civil society, media, and more progressive members of the general public. As public awareness of environmental and governance issues grows, so

does demand for more transparency. The result is that stakeholder pressure mentioned hitherto, progress in regulation, and, in time, company improvements create the basis for positive feedback moving the country toward greater sustainable industrial growth.

5.5 Future Research Directions

Thus, this research is likely to provide a reassembling platform in terms of where one would look for efficient and effective governance, financial performance, and sustainability practice applications within the spectrum of that country directly. Option one here could be further qualitative research, involving case studies and interviews; which could well provide the researchers with highly righted insights into the cultural and organizational factors from which governance practices have emerged, aspects that may be conveniently ignored in a quantitative analysis perspective. Otherwise, comparative studies between emerging economies and mature markets can clearly demarcate the similarities and differences at the contextual level to draw good practices and reforms imperative to the new, emerging economies. Further, temporal analyses would help gauge the insidious long-distance impacts of governance reforms, external shocks, and regulatory changes on the corporate performance so one can get a description of the rolling market changes in governance structure over the time.

Country-specific studies are as well needed for the governance of important sectors such as energy, technology, and manufacturing, the outcome of which should bring forth sector-specific insights on how governance mechanisms adapt themselves to sector-specific risks and opportunities. Joining up the threads-these twelve modules will be the bestselling views of governance over time, and its effect on corporate sustainability, financial soundness, and national/regional backwoods of Pakistan.

Sustainability reporting is becoming more of an indispensable part of having a responsible corporate identity and future research directions might be centred on unfolding an empirical study to understand sustainability reporting in different economic cycles and regulatory change periods. At one level, it will be necessary to conduct a longitudinal study which may show if the businesses have incorporated their perceptions toward enhancement in company reporting for the long-term or, instead, they would simply undermine them during the recession era by adopting sensational compliance through the window of reporting. The other level of research might consider going qualitative, possibly involving interviews with some corporate executives and policy makers to

document the practices as well as motivations and challenges as these have led to transition in company perception with respect to much of the reporting.

The issue of the new technologies like big-data analytics, AI, and blockchain being the most sound and trustful sources of sustainability reporting is indeed a very interesting one. The researchers can investigate ways digital platforms may work towards solving issues of information disparity, making reporting more efficient, and giving continuous support in monitoring the sustainability measures. Besides, cross-country studies in South Asia can be very enlightening in terms of uncovering the role of the local institutions in driving the sustainability performance of the countries sharing similar economic development paths.

Moreover, the research may be concerned with the interaction of the corporate governance factors and the firm ownership, political ties, and board composition with the relationship between the financialization, sustainability reporting, and capital accumulation. Alongside, the external sustainability assurance and ratings as well as the global supply-chain requirements could be evaluated and analysed as the factors that are affecting the firms' behaviours through the lines of pressure.

5.6 Contribution to Literature

This research enhances the corporate governance literature by empirical evidence from a developing country, Pakistan that possesses very different cultural, regulatory, and economic factors as compared to the others. It builds on previous research by combining financialization, sustainability reporting, and corporate governance practices into a synthesis that provides a multidimensional viewpoint of their interaction. Through the unanticipated results and specificities, this research opposes the mainstream theories and opens up the governance model debate for other situations to be different.

This study presents a strong basis of information applicable for policymakers, practitioners, and scholars not only within Pakistan but more generally worldwide in the field of corporate governance and financial performance. It indicates the vital role that various governance mechanisms play in order to establish a positive relationship. The fact that the study identifies one anomaly suggests the necessity for region-specific interventions in the pursuit of promoting sustainability. In so doing, the study will also make a significant contribution to helping out the world's other noble cause of

establishing sustainability, given the potential linkages of principles paid to corporate governance into the global landscape.

Besides, the research validates the existing methodological approaches by demonstrating the practical application of panel-corrected standard errors (PCSE) and fixed-effects modelling in areas with large cross-sectional variance and unstable institutions. The application of these methods on a large, diverse dataset from Pakistan not only establishes a methodological framework for the study of sustainability or financialization phenomena in emerging markets but also encourages future researchers to adopt the same route. Moreover, the study supplies an empirical-based model of sustainability that is modifiable for use in other cities with similar infrastructures.

Furthermore, the research contributes to the discussion in academia on the topic of sustainability reporting being one of the key factors in internal governance that ultimately affects the decision of managers. This inner aspect gets less attention in the debate comparing to the legitimacy of the company in the eyes of the public, yet it is very important for the understanding of gradual changes taking place in the corporate world. The research by doing so has united the previously disconnected domains of organizational behaviour, corporate governance, and sustainability accounting.

5.6.1 Significance of the Study

This paper is a profound contribution to academic research and policy discussions, as it is one of the few studies in empirical terms that provide an in-depth investigation into the interaction between realities of sustainability reporting and financialization in real-magical accumulation in the Pakistani manufacturing sector. Generally, the existing international academic work confines its focus on single aspects and only a few studies attempt to analyze the interrelationship between phenomena particular to certain emerging markets where institutions are fragile, resources are limited, and there is ever-constant institutional change (Arora and Hussain, 2021; Ali et al., 2017). As the largest firm-level quantitative analysis conducted in Pakistan, the present study starts to fill a significant gap by providing empirical evidence that a firm's commitment to sustainability will impact real capital accumulation in any industry-it is most valuable for those countries that are aspiring to a sustainable industrial future given the very essence of the concept. Hence, transparency policies must be adopted by both academia and the

government to increase information flows, encourage competition, and secure sustainability in the long run.

5.6.2 Academic Contribution

The study makes paramount academic contributions. It did so by first uniting sustainability reporting and financialization, two distinct types of research that combine to one of the most vital parts of a picture about capital accumulation: that is so, an empirical investigation on the relationship between these two factors and capitalism production, which is a step forward in understanding the way in which financialization interplay their companies' structures and disclosure processes in major corporate decisions. Moreover, the study added to the already-existing body of literature that argues that agency, stakeholder, and institutional theories fruitfully and forcefully explain the behaviour of companies in developing countries (Barney, 1991; Basu & Palazzo, 2008; Loannou & Serafeim, 2019). The study strengthens the theoretical body of work from which future research will benefit, as it collects a unique set of empirical work over a number of years detailing disclosures and financial measures of the manufacturing sector in Pakistan. This necessarily constitutes the first effort to compile such a comprehensive database. In the nutshell, the study will be a great addition to the knowledge base in South Asian sustainable development by showing that sustainability reporting is a way to counter the effects of financialization, thus sparking the financialization debate outside the West.

5.6.3 Corporate Impact

The main point for management and boards is that firms which increase the transparency of their sustainability reports, particularly the environmental and social aspects, are more likely to invest in assets that can actually produce, for example, machinery, technology, and operational improvements. This interpretation is at odds with the one given for the case of emerging markets, where companies prioritize the impending financial gains over the investing in long-term strategies (Aalbers, 2016). The more realistic insights such as these tell the corporate leaders that the way to go is transparent reporting as it would not only make them more credible but also reduce the information gap which would be the ground for strong investor trust. When the environmental issues are made part of the corporate strategy and governance the firm can possibly guard its long-term competitiveness against regulators’ uncertainty, environmental liability, and hostile

stakeholders. As a result, in addition to compliance with regulations, companies have a strategic reason to incorporate sustainability into their core decision making processes.

5.6.4 Societal and Environmental Benefits

The outcome of the research has a great impact on the environment and it also has wider effects on the whole society. Enhanced sustainability reporting mostly facilitates the development of eco-friendly industries, since the resource-intensive sectors are the primary sources of pollution, waste disposal and energy use that in turn, directly affect the society (Azapagic & Perdan, 2000). By revealing the truth about environmental and social performance, the corporations allow civil society, consumers, and neighbourhoods to more accurately evaluate the company's behaviour, thus increasing the public scrutiny. Furthermore, the continuous drive to allocate resources to the modernizing of productive assets usually comprises the use of eco-friendly technologies, the installation of energy-efficient systems, and the improvement of workplace safety, all to the advantage of the national development goals. E.g., Pakistan is an example of a country that highly profits from both, the growing transparency and the capital investment, especially since it has major problems with environmental destruction and social injustice, which are quite urgent. Thus, the dissertation states that sustainability reporting is not just a corporate affair; it is a powerful influencer of society.

5.6.5 Policy Relevance

These findings have implications that shape policies adopted by government authorities and regulators. A pivotal factor for the pressing need for sustainability reports is their utility in regulating capital creation; subsequently, an argument becomes apparent in terms of the acceptance of national reporting frameworks and the need for transitioning building up to mandatory reporting norms. Hence, logically, the Securities and Exchange Commission of Pakistan and the State Bank of Pakistan have the potential to guide sustainable issues to the political domain, set up monitoring bodies, or perhaps harmonize local laws with international standards. In addition, the implications have a financialization dimension wherein firms cannot reinvest in their productive capacities. The public sector could somewhat alleviate these problems by promoting good financial policies, encouraging long-term investment through fiscal incentives and adding sustainability criteria to their financial supervision controls. Therefore, this research could

be a strong base for policies that would make the markets and industries greener and richer at the same time.

5.6.6 Timeliness and Urgency

This study becomes in imperative, given the present economic crises in Pakistan-economic stagnation, falling industrial production, high financial obligations, and global socioenvironmental responsibility. The rising demand for reported sustainability is one of the factors pushing Pakistani companies to raise their standards of reporting to get competitive. It is the financialization momentum that is definitely working towards diminishing the companies' power for long-term investment and hence the dire need to know how the companies shall maintain a good balance between their corporate profit in the short term and growth goals at large (Ali 2019). At the stage where the vendors, officials, shareholders, and decision-makers are all groping thus for the right strategies to steer away the industrial growth in terms not only of sustainability but also by knowledge application, the study should be examined for the type of evidence it offers and to inform national deliberations about transparency, governance, and future of the manufacturing sector in Pakistan.

5.7 Recommendations

Based on the results presented so far, along with their economic implications, this section provides specific and practical recommendations to not only business managers but regulators, investors, and all interested parties. Furthermore, the study at issue is of interactions that are both economically compelling and statistically strong, especially in the case of finance transactions, share repurchases, financial statements, and social sustainability performance. The environment and governance are dispassionately handled here as if they are of rather weak and fragile consequences for the whole.

From the management's perspective, the research suggests that the real capital formation in Pakistan's manufacturing sector is associated with three types of activities: management of the financial structure and payments, financial assets management combined with social engagement, and to some extent, environmental engagement. The positive impact associated with finance and money, and financial assets also immaterially to the economy, indicates that companies in sound financial condition, that fulfill their

financial commitments, and that handle their financial assets properly are much likely to sustain their investment in both tangible and intangible fixed assets. Not only the short-term shareholder returns should be considered when assessing dividend and share repurchase policies, but also the investment aspect should be made clear, by asking whether such policies are likely to enhance cash flows and thus support long-term capital investments rather than simply displacing them. The coefficient estimates provided in Chapter 4 show that relatively small changes in these variables can result in significant fluctuations in ARC relative to its mean, thus confirming that these are not only statistically detectable but also economically significant channels.

The finding that holding financial assets is positively connected with the presence of real capital in Pakistan suggests also that in the country's unpredictably changing macroeconomic condition, financial herbs can be both a source and an obstruction of resource diversion rather than just being an obstruction. Managers might consider their liquid and semi-liquid financial assets to be a part of a well-thought-out investment strategy: if they are of the right size, they can keep the investment alive during bad times, and so the excessive accumulation of financial assets might still be viewed as a company's over-financialized attitude. Internal policies may therefore prescribe the minimum and maximum amounts of financial assets that can be held and require the management to assess the direct cost of holding financial assets versus the opportunity cost of not investing in productive ventures regularly. Meanwhile, the substantial and visibly positive impact of social sustainability scores economically and the more modest but positive role of environmental performance suggest that sustainability reporting has already made an investment profile more durable when it reflects underlying capabilities rather than symbolic disclosure. Companies will thus be able to capitalize on the increased interest of investors in sustainable businesses and goods as non-financial factors like social and environmental ones become more deeply embedded in capital budgeting, supply chain management, risk assessment, and performance evaluation rather than in just annual compliance sustainability reporting.

An empirical consideration of finance through a positive relationship for Pakistani financial payouts, buybacks, financial assets, and real capital accumulation suggests this is likely to be productive investment under the prevailing institutional framework. It suggests that the policy maker must adopt a hands-out policy with regard to rents from

dividends, buybacks, or retirement of financial assets. All policies should instead point to tax policies, financial controls, etc., which make speculation costlier and certain financial practices such as capital formation as beneficial—including deductions in taxes on long-term investments, the presence of preferential debt for firms with credible functioning investment plans, and prudential limits set up to avoid overexposure to leverage and short-term activities. Due to the adverse effects of the COVID-19 shock and major macroeconomic swings, researchers have reasons through which predictions could not be made because of several signs of any involvement during the study period which clearly conveyed signals about these interrelations; their ongoing reform must consider enriching the investment level, payout, and reporting standards in business during distinctive periods of economic cycle.

Also, investors, civil society organizations, and other involved parties ought to consider the implications of the study for their actions. The significant and economically relevant relationship that connects social sustainability performance with capital accumulation thereby sending the message to the investors that they can trust the companies' comprehensive social and, to a lesser degree, environmental disclosures as informative indicators of the company's readiness and ability to contribute to the productive base through investments. To put it differently, large-scale investors are more likely to engage in a process of bringing these signals into their investment trust-building and corporate governance operations, thus making a distinction between the companies that provide a lot of information on sustainability that is useful for decision-making and those that give only superficial disclosures. Meanwhile, non-governmental organizations and local communities will be able to more assertively demand improved social and environmental disclosures, recognizing that their pressure may have an economic upside and thus indirectly support real investment. The study also points out the weak and changing link between governance ratings and investment, hence stakeholders should be tempted to examine the boards' impact on investment and sustainability decisions, rather than view formal governance ratings as the substance. Lastly, the fact that financialization in Pakistan can lead to a reduction in productive investments only if certain conditions are met has to change the expectations of the various stakeholders. The quantitative data substantiating this research can prove to be helpful in creating the common ground for a dialogue regarding the issue of financial returns versus real investment—thus

synchronizing corporate decision-making with the long-term requirements of the economy and society.

5.8 Overall Summary of the Thesis

The objective of this thesis is to determine how the aspect of sustainability reporting and financialization affect the real capital accumulation in the manufacturing sector listed on the stock exchange in Pakistan between the years 2018–2022. Based on the theories of stakeholders, institutions, and the political economy of financialization, the research focused on three key themes, which include; the prevalence and the depth of the practice of sustainability reporting, how far financialization affects companies' strategies, and what is the relation of all these practices for real capital accumulation. Firm level panel data is used together with the panel corrected standard errors (PCSE) framework to account for heteroskedasticity, autocorrelation and cross-sectional dependence among heterogeneous panels of firms. The analysis cantered on the aspects of financial payments, non-operating profit, buybacks, financial assets and, the scores of sustainability reporting on the environmental, social as well as governance aspects.

The empirical evidence shows that some of the variables of financialization such as financial payments, buybacks and financial assets have a persistent and positive effect on real capital accumulation. These findings imply that the ability of firms in Pakistan's institutional economic setup to reinvest funds in productive capital is associated with strong financial health and active participation in the capital market. The return on non-core activity portrays a quasi-paradox implying that such a source of income may support or may not support the productive investments alluding to the particular firm and the immediate circumstances. From a sustainability perspective, to a certain degree, social and environmental reporting appear to enhance the accumulation of real capital because the extent of the social and sustainability reporting is positively correlated with the tendency to invest rather than respond to seasonal demand waves within firms. Meanwhile, governance reporting lenses are rather weak and variable, given that most of the governance activities in the given environment are synthetic and regulation oriented.

These findings have certain implications for the current literature on this subject. First of all, the rarity of this contribution stems from the fact that this research provides numerical examples from a developing country where the practice of accounting for sustainability

is still at nascent stages, plugging the gap in the literature of developed countries. Second, some interesting features are used to engage in the financialization discussion such as the fact that financialization does not always result in the obliteration of productive investment and in Pakistan, there is some financial indicator that shows relationship with investment in productive capital. This does not support the assumptions of the so-called developed countries. Third, this dissertation explains in an interdisciplinary manner the roles devoted to different aspects of investment orientations of business entities and their need for growth factors of a financial and nonfinancial character by means of practicing both financialization and reporting. Such an approach simplifies the general understanding of when and how sustainability reporting can actually facilitate real capital accumulation in developing countries.

There is literature available in advanced economies that discusses the relations between the accumulation of real capital and the rate of financialization in the society. However, they such review studies do not call for popularly debated in the literature and this is why the notions of financialization are sought to be more easily applicable, given that there are not so many empirical cases revealing positive relationship between financial assets and real investments. On the other hand, Pakistan is a developing economy where financialization has taken place since long and even in a financialized environment, some positive relationships between specific financial indicators and capital investments have been noted. Specifically, the minority of financial indicators suggesting a possibility of relationship crowding out has been considered in Pakistan, a country whose economic structures differ from those of more developed ones.

Measures of sustainability reporting have been integrated to the financialization measures within my framework. Given the contentious debates on the backlash against institutional investors, this perspective is welcomed as it digs deep into understanding how company characteristics related to these activities and what promotes capital investments. Institutions promoting sustainability of investments through non-financial reports will assist strengthen the activities of real investors towards investors in the developing nations. As such, the relations of sustainability to the institutions' long-term preservation of capital becomes more explicit. Especially and even in low-income regions and successively economies, different associations in which development takes place when

investible capital is discouraged, address the fact that filling up the gap is not the only way in which development takes place.

The results of the study have a wide range of implications to practice and policy. The findings constitute a strong justification for the management board and policymakers for taking the direction of policy where sustainability reporting is much more than merely regulatory compliance or executive decisions. Sustainable solutions either concerning the environment or the society become very powerful when considered in the strategic planning, investment appraisal, and risk management of these companies; thus, enhancing mutual trust, reducing information asymmetries, and promoting sustainable investments. The implications may demand an international direction and need to be geared into the development targets within the country with such policy measures that encourage sustainable practices, responsible and forward-looking investments, and which will check the short-term speculative investments. To the investors and other varied audiences, relevant research provides indications that suggest capital structure and sustainability practices as pivotal signals of an organization's ability for real capital accrual in the long term.

Similarly, it can be clearly seen that the thesis has major weaknesses that must be appreciated for the analysis of its findings. The assessment is based on the five-year time frame, with notable economic challenges within this period, and is secondary research based on the analysis of annual reports of only the listed manufacturing companies. These limitations imply that the findings must be taken within the context of the study and without extrapolating to any other industry or country. However, economically, the PCSE technique accounts for some standard difficulties pertinent to panel data and estimation; nonetheless, there remains the concern of possibly having reverse causation and concomitant endogeneity in this study. These are not the flaws of the study per se, rather they qualitatively illustrate the objectives of the given paper, and they indicate future research in a logical manner. Looking beyond the period up to 2022 and beyond, introducing narratives in the form of arguments and/or narratives, addressing other sectors or country studies and applying concrete behavioral/economic techniques are some of the ways in which the work can offer and the conclusions can be validated.

On the whole, the present paper offers vigorous proof that manufacturing firms in Pakistan do not employ sustainability reporting and financialization as mere buzz words

that are hard to operationalize but rather as real forces paving the way for the investment of resources into real capital accumulation. That being said, financialization comes with the risk of excessive focus on short-term returns and is thus detrimental in the long run. However, under certain circumstances, it promotes investment in cases where its application is supported by effective sustainability measures and the necessary institutions. In this regard, the thesis elucidates the above-mentioned phenomena in an environment where data is scant, and institutions are still in the process of development and change. As such, it presents the potential for academic discussion and practical grounds for encouraging corporate finance and sustainability-oriented governance in economic growth.

References

Aalbers, M. B. (2016). Corporate financialization. *International Encyclopedia of Geography: People, the Earth, Environment and Technology: People, the Earth, Environment and Technology*, 1-11.

Ali, S. (2019). Financialization and the neglect of real capital formation in Pakistan. Journal of South Asian Development, 14(2), 123–145

Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. Corporate Social Responsibility and Environmental Management, 24(4), 273–294. https://doi.org/10.1002/csr.1410

Aureli, S., Del Baldo, M., Lombardi, R., & Nappo, F. (2020). Nonfinancial reporting regulation and challenges in sustainability disclosure and corporate governance practices. Business Strategy and the Environment, 29(6), 2392-2403

Adams, C. A., & Harte, G. (1998). The changing portrayal of the employment of women in British banks' and retail companies' corporate annual reports. *Accounting, organizations and Society*, *23*(8), 781-812.

Adams, C. A., Larrinaga-González, C., & McNicholas, P. (2007). Making a difference. *Accounting, Auditing & Accountability Journal*.

Ameer, R., & Othman, R. (2012). Sustainability practices and corporate financial performance: A study based on the top global corporations. *Journal of Business Ethics*, *108*(1), 61-79.

Amran, A., & Ooi, S. K. (2014). Sustainability reporting: meeting stakeholder demands. *Strategic Direction*.

Arora, P., & Hussain, S. (2021). Sustainability reporting practices in Pakistan: Drivers, challenges and future prospects. Journal of Cleaner Production, 287, 125–134

Azapagic, A., & Perdan, S. (2000). Indicators of sustainable development for industry: a general framework. *Process Safety and Environmental Protection*, *78*(4), 243-261.

Bansal, P., & Kistruck, G. M. (2022). Theories of firm–society relationships: Clarifying the contributions, levels, and paradigms. Academy of Management Annals, 16(1), 417–451

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99-120.

Basu, K., & Palazzo, G. (2008). Corporate Social contributionresponsibility: A process model of sensemaking. *Academy of management review, 33*(1), 122-136.

Becker, P. A. (2013). The contribution of Emmanuel Levinas to Corporate Social contributionResponsibility and business ethics in the post-modern era. *Journal of International Business Ethics, 6*(1/2), 19.

Blowfield, M., & Frynas, J. G. (2005). Editorial Setting new agendas: critical perspectives on Corporate Social contributionResponsibility in the developing world. *International affairs, 81*(3), 499-513.

Bowen, M., Morara, M., & Mureithi, M. (2009). Management of business challenges among small and micro enterprises in Nairobi-Kenya. *KCA journal of business management, 2*(1).

Carollo, L., & Guerci, M. (2017). Between continuity and change: CSR managers' occupational rhetorics. *Journal of Organizational Change Management, 30*(4), 632-646.

Carreira, F., Damião, A., Abreu, R., & David, F. (2014). *Environmental disclosure: From the accounting to the report perspective.* Paper presented at the 16th International Conference on Enterprise Information Systems (ICEIS 2014).

Carroll, A. B. (1991). The pyramid of corporate Social contributionresponsibility: Toward the moral management of organizational stakeholders. *Business horizons, 34*(4), 39-48.

Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. International Journal of Management Reviews, 12(1), 85–105.

Cerin, P. (2002). Communication in corporate environmental reports. *Corporate Social contributionResponsibility and Environmental Management, 9*(1), 46-65.

Chen, L. (2015). *Sustainability and company performance: Evidence from the manufacturing industry* (Vol. 67): Linköping University Electronic Press.

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate Social contributionresponsibility and access to finance. *Strategic Management Journal, 35*(1), 1-23.

Christensen, C. M. (2013). *The innovator's dilemma: when new technologies cause great firms to fail*: Harvard Business Review Press.

Correa, E., Vidal, G., & Marshall, W. (2012). Financialization in Mexico: trajectory and limits. *Journal of Post Keynesian Economics, 35*(2), 255-275.

Cramer, J., Jonker, J., & van der Heijden, A. (2004). Making sense of corporate Social contributionresponsibility. *Journal of Business Ethics, 55*(2), 215-222.

Creswell, J. W., & Garrett, A. L. (2008). The "movement" of mixed methods research and the role of educators. South African Journal of Education, 28(3), 321–333.

Crotty, J. (2005a). The neoliberal paradox: the impact of destructive product market competition and 'modern'financial markets on nonfinancial corporation performance in the neoliberal era. *Financialization and the world economy, 1*, 77-110.

Crotty, J. (2005b). The neoliberal paradox: the impact of destructive product market competition and 'modern'financial markets on nonfinancial corporation performance in the neoliberal era. *Financialization and the world economy, 35*, 271-279.

Crotty, J., & Rodgers, P. (2012). Sustainable development in the Russia Federation: the limits of greening within industrial firms. *Corporate Social contributionResponsibility and Environmental Management, 19*(3), 178-190.

Crouch, C. (2008). What will follow the demise of privatised Keynesianism? *The political quarterly, 79*(4), 476-487.

Cubas-Díaz, M., & Martínez Sedano, M. (2018). Do Credit Ratings Take into Account the Sustainability Performance of Companies? *Sustainability, 10*(11), 4272.

Cupertino, S., Consolandi, C., & Vercelli, A. (2019). Corporate Social contributionPerformance, Financialization, and Real Investment in US Manufacturing Firms. *Sustainability, 11*(7), 1836.

Dahan, N. M., Doh, J., & Teegen, H. (2010). Role of nongovernmental organizations in the business-government-society interface: Introductory essay by guest editors. *Business & Society, 49*(4), 567-569.

Dallery, T. (2009). Post-Keynesian theories of the firm under financialization. *Review of Radical Political Economics, 41*(4), 492-515.

Davis, L. E. (2013). Financialization and the nonfinancial corporation: an investigation of firm-level investment behavior in the US, 1971-2011.

Davis, L. E. (2016). Identifying the "financialization" of the nonfinancial corporation in the US economy: A decomposition of firm-level balance sheets. *Journal of Post Keynesian Economics, 39*(1), 115-141.

De Bernis, G. (1988). Propositions for an analysis of the crisis. *International Journal of Political Economy, 18*(2), 44-67.

Deci, E. L., & Ryan, R. M. (2002). Overview of self-determination theory: An organismic dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), Handbook of self-determination research (pp. 3–33). University of Rochester Press.

Deloitte. (2012). Sustainability reporting in emerging markets: Trends and opportunities. Deloitte Global.

Degli Antoni, G., & Portale, E. (2011). The effect of corporate Social contributionresponsibility on Social contributioncapital creation in Social contributioncooperatives. *Nonprofit and Voluntary Sector Quarterly, 40*(3), 566-582.

Delsol, J. (2014). *How sustainable is the US economic recovery?* , Dublin Business School.

Demartini, C., & Trucco, S. (2016). Does intellectual capital disclosure matter for audit risk? evidence from the UK and Italy. *Sustainability, 8*(9), 867.

Demir, F. (2007). The rise of rentier capitalism and the financialization of real sectors in developing countries. *Review of Radical Political Economics, 39*(3), 351-359.

Demir, F. (2009). Capital market imperfections and financialization of real sectors in emerging markets: Private investment and cash flow relationship revisited. *World development, 37*(5), 953-964.

Demir, F. (2009). Financial liberalization, private investment and portfolio choice: Financialization of real sectors in emerging markets. *Journal of Development Economics, 88*(2), 314-324.

Denscombe, M. (2014). The good research guide: For small-scale social research projects (5th ed.). Open University Press.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review, 20*(1), 65–91. https://doi.org/10.5465/amr.1995.9503271992

de Villiers, C., & Marques, A. (2016). Corporate social responsibility, country-level predispositions, and the consequences of choosing a level of disclosure. Accounting and Business Research, 46(2), 167–195.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48(2), 147–160.

Duménil, G., Dumenil, G., Duménil, G., & Lévy, D. (2004). *Capital resurgent: Roots of the neoliberal revolution*: Harvard University Press.

Dünhaupt, P. (2013). The effect of financialization on labor's share of income: Working Paper, Institute for International Political Economy Berlin.

Eccles, R. G., & Serafeim, G. (2013). The performance frontier: Innovating for a sustainable strategy. Harvard Business Review, 91(5), 50–60.

Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science, 60*(11), 2835-2857.

Eccles, R. G., & Krzus, M. P. (2018). The Nordic model: An analysis of leading practices in ESG disclosure. Nordic Journal of Business, 67(1), 1–22.

Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial economics*, *101*(3), 621-640.

Egri, C. P., & Herman, S. (2000). Leadership in the North American environmental sector: Values, leadership styles, and contexts of environmental leaders and their organizations. *Academy of Management journal*, *43*(4), 571-604.

Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental quality management, 8*(1), 37-51.

Epstein, G. A., & Jayadev, A. (2005). The rise of rentier incomes in OECD countries: financialization, central bank policy and labor solidarity. *Financialization and the world economy*, *39*, 46-74.

Epstein, J. I., Allsbrook Jr, W. C., Amin, M. B., Egevad, L. L., & Committee, I. G. (2005). The 2005 International Society of Urological Pathology (ISUP) consensus conference on Gleason grading of prostatic carcinoma. *The American journal of surgical pathology*, *29*(9), 1228-1242.

European Commission. (2022). Corporate Sustainability Reporting Directive (CSRD). Publications Office of the European Union

Feng, H., Froud, J., Johal, S., Haslam, C., & Williams, K. (2001). A new business model? The capital market and the new economy. *Economy and Society, 30*(4), 467-503.

Ferrell, O., Harrison, D. E., Ferrell, L., & Hair, J. F. (2019). Business ethics, corporate Social contributionresponsibility, and brand attitudes: An exploratory study. *Journal of Business Research*, *95*, 491-501.

Ferri, G., & Pini, M. (2019). Environmental vs. Social contributionresponsibility in the firm. Evidence from Italy. *Sustainability*, *11*(16), 4277.

Fernando, S., & Lawrence, S. (2014). A theoretical framework for CSR practices: Integrating legitimacy theory, stakeholder theory, and institutional theory. Journal of Theoretical Accounting Research, 10(1), 149–178.

Flexner, S. B., & Hauck, L. C. (1993). *Random House unabridged dictionary*: New York: Random House.

Financial Reporting Council. (2021). FRC Lab: Reporting on Stakeholders and Section 172. Financial Reporting Council, UK

Fligstein, N. (2002). *11 Markets as Politics: A Political-Cultural Approach to Market Institutions* (Vol. 656): Wiley Online Library.

Ford, R., & Poret, P. (1991). Business investment: recent performance and some implications for policy. *OECD Economic Studies, 16*, 79-131.

Foster, J. B. (2007). The financialization of capitalism. *Monthly review, 58*(11), 1-12.

Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman.

French, S., Leyshon, A., & Thrift, N. (2009). A very geographical crisis: the making and breaking of the 2007–2008 financial crisis. *Cambridge Journal of Regions, Economy and Society, 2*(2), 287-302.

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment, 5*(4), 210-233.

Froud, J., Haslam, C., Johal, S., & Williams, K. (2000). Shareholder value and financialization: consultancy promises, management moves. *Economy and Society, 29*(1), 80-110.

Gavronski, I., Klassen, R. D., Johnson, P. F., & Naranjo, F. (2018). *Management Temporal Orientation: Linking Operational Investment to Corporate Social contributionResponsibility*. Paper presented at the Academy of Management Proceedings.

Gnanaweera, K., & Kunori, N. (2018). Corporate sustainability reporting: Linkage of corporate disclosure information and performance indicators. *Cogent Business & Management, 5*(1), 1423872.

Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Academy of management review, 30*(4), 777-798.

Gond, J., & Moser, C. (2019). The reconciliation of fraternal twins: Integrating the psychological and sociological approaches to ‘micro’corporate Social contributionresponsibility. *Human Relations*.

GRI, G. R. I. (2015). Sustainability and reporting trends in 2025: Preparing for the future: Amsterdam, The Netherlands: Global Reporting Initiative.

Guiso, L., Sapienza, P., & Zingales, L. (2006). Does culture affect economic outcomes? *Journal of Economic perspectives*, *20*(2), 23-48.

Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *the Journal of Finance*, *63*(6), 2557-2600.

Haack, P., Martignoni, D., & Schoeneborn, D. (2020). A bait-and-switch model of corporate Social contributionresponsibility. *Academy of management review*(ja).

Hahn, T., Figge, F., Pinkse, J., & Preuss, L. (2010). Trade-offs in corporate sustainability: you can't have your cake and eat it. *Business Strategy and the Environment*, *19*(4), 217-229.

Hakim, C. (2000). Research design: Successful designs for social and economic research (2nd ed.). Routledge.

Hein, E., & van Treeck, T. (2008). 'Financialisation'in Post-Keynesian models of distribution and growth-a systematic review: IMK working paper.

Hein, E., & Dodig, N. (2015). Finance-dominated capitalism, distribution, growth and crisis: A post-Keynesian perspective. In E. Hein, D. Detzer, & N. Dodig (Eds.), The demise of finance-dominated capitalism? (pp. 33–60). Edward Elgar.

Helliwell, J. F., & Putnam, R. D. (1995). Economic growth and Social contributioncapital in Italy. *Eastern economic journal*, *21*(3), 295-307.

Hossain, M., Momin, M., & Rowe, A. L. (2017). Sustainability reporting and the quality of corporate disclosure: Evidence from an emerging economy. International Journal of Accounting & Information Management, 25(4), 431–448

Hossain, M., Momin, M., & Rowe, A. (2020). Sustainability reporting practices in developing countries: The case of Bangladesh. Sustainability Accounting, Management and Policy Journal, 11(3), 567–593.

Hubbard, G. (2009). Measuring organizational performance: beyond the triple bottom line. *Business strategy and the environment*, *18*(3), 177-191.

Hughes, S. B., Anderson, A., & Golden, S. (2001). Corporate environmental disclosures: are they useful in determining environmental performance? *Journal of accounting and public policy*, *20*(3), 217-240.

IFRS Foundation. (2021). Prototype climate-related disclosures. IFRS Foundation / ISSB

Initiative, G. R. (2011). Sustainability Reporting Guidelines & Financial Services Sector Supplement. *Link: https://www. globalreporting. org/resourcelibrary/G3-English-Financial-Services-Sector-Supplement. pdf (last accessed 30.07. 2015)*.

Initiative, G. R. (2012). Global reporting initiative. *Online at: https://www. globalreporting. org/Pages/default. aspx [20 Dec 2012]*.

Ioannou, I., & Serafeim, G. (2015). The impact of corporate Social contributionresponsibility on investment recommendations: Analysts' perceptions and shifting institutional logics. *Strategic Management Journal, 36*(7), 1053-1081.

Ioannou, I., & Serafeim, G. (2017). The consequences of mandatory corporate sustainability reporting. Harvard Business School Research Working Paper No. 11-100.

Ioannou, I., & Serafeim, G. (2019). Corporate Sustainability: A Strategy? *Harvard Business School Accounting & Management Unit Working Paper*(19-065).

Jamali, D., & Karam, C. (2018). Corporate social responsibility in developing countries as an emerging field of study. International Journal of Management Reviews, 20(1), 32–61

Jones Christensen, L., Mackey, A., & Whetten, D. (2014). Taking responsibility for corporate Social contributionresponsibility: The role of leaders in creating, implementing, sustaining, or avoiding socially responsible firm behaviors. *Academy of Management Perspectives, 28*(2), 164-178.

Jürgens, U., Naumann, K., & Rupp, J. (2000). Shareholder value in an adverse environment: the German case. *Economy and Society, 29*(1), 54-79.

Knack, S., & Keefer, P. (1997). Does Social contributioncapital have an economic payoff? A cross-country investigation. *The Quarterly journal of economics, 112*(4), 1251-1288.

Khan, M., Lockhart, J., & Bathurst, R. (2020). The institutionalization of corporate sustainability: New norms and boundaries. Journal of Cleaner Production, 252, 119–127

Khan, S. A., Serafeim, G., & Yoon, A. (2021). Corporate sustainability: First evidence on materiality. Accounting Review, 96(6), 1891-1914.

Kolk, A., & Mauser, A. (2002). The evolution of environmental management: from stage models to performance evaluation. *Business strategy and the environment, 11*(1), 14-31.

Kolk, A., & Van Tulder, R. (2010). International business, corporate Social contributionresponsibility and sustainable development. *International business review, 19*(2), 119-125.

Köhler, K., & Stockhammer, E. (2022). Growing out of post-Keynesian macroeconomic models? A critical survey. European Journal of Economics and Economic Policies: Intervention, 19(1), 1–25.

KPMG. (2022). KPMG Survey of Sustainability Reporting 2022. KPMG International

Krippner, G. R. (2005). The financialization of the American economy. *Socio-economic review, 3*(2), 173-208.

Krippner, G. R. (2011). *Capitalizing on crisis*: Harvard University Press.

Lapavitsas, C. (2003). *Social contributionfoundations of markets, money and credit*: Routledge.

Lazonick, W. (2010). The Chandlerian corporation and the theory of innovative enterprise. Industrial and Corporate Change, 19(2), 317–349

Lazonick, W. (2011). From innovation to financialization: how shareholder value ideology is destroying the US Economy. *The handbook of the political economy of financial crises*, 491-511.

Lazonick, W., & O'sullivan, M. (2000). Maximizing shareholder value: a new ideology for corporate governance. *Economy and society, 29*(1), 13-35.

Lin, K.-H., & Tomaskovic-Devey, D. (2013). Financialization and US income inequality, 1970–2008. *American Journal of Sociology, 118*(5), 1284-1329.

Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social contributioncapital, trust, and firm performance: The value of corporate Social contributionresponsibility during the financial crisis. *the Journal of Finance, 72*(4), 1785-1824.

Lone, E. J., Ali, A., & Khan, I. (2016). Corporate governance and corporate social responsibility disclosure: Evidence from Pakistan. Corporate Governance: The International Journal of Business in Society, 16(5), 785–797.

Luo, X., Wang, H., Raithel, S., & Zheng, Q. (2015). Corporate Social contributionperformance, analyst stock recommendations, and firm future returns. *Strategic Management Journal, 36*(1), 123-136.

Mahmood, Z., Kouser, R., Ali, W., & Ahmad, Z. (2016). Sustainability reporting and firm performance: A case of Pakistani listed companies. Journal of Accounting and Emerging Economies, 6(2), 138–163.

Mahmood, Z., Kouser, R., & Ali, W. (2017). Corporate governance and sustainability reporting in Pakistan. Corporate Governance: The International Journal of Business in Society, 17(2), 357–379.

Mahmood, Z., Kouser, R., & Ali, W. (2019). Determinants of sustainability reporting in emerging economies: Evidence from Pakistan. Sustainability Accounting, Management and Policy Journal, 10(3), 399–424.

Michelon, G. (2011). Sustainability disclosure and reputation: A comparative study. Corporate Reputation Review, 14(2), 79–96.

Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. Journal of Management & Governance, 16(3), 477–509

Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. Critical Perspectives on Accounting, 33, 59–78

Miles, M. P., & Covin, J. G. (2000). Environmental marketing: A source of reputational, competitive, and financial advantage. *Journal of Business Ethics, 23*(3), 299-311.

Millar, C., Hind, P., van der Heijden, A., Cramer, J. M., & Driessen, P. P. (2012). Change agent sensemaking for sustainability in a multinational subsidiary. *Journal of Organizational Change Management*.

Morin, F. (2000). A transformation in the French model of shareholding and management. *Economy and Society, 29*(1), 36-53.

Ndikumana, L. (1999). Debt service, financing constraints, and fixed investment: evidence from panel data. *Journal of Post Keynesian Economics, 21*(3), 455-478.

Olafsdottir, T. A., Alexandersson, K. F., Sveinbjornsson, G., Lapini, G., Palladino, L., Montomoli, E., . . . Jonsdottir, I. (2018). Age and influenza-specific pre-vaccination antibodies strongly affect influenza vaccine responses in the Icelandic population whereas disease and medication have small effects. *Frontiers in immunology, 8*, 1872.

Orhangazi, Ö. (2008). Financialisation and capital accumulation in the non-financial corporate sector: A theoretical and empirical investigation on the US economy: 1973–2003. *Cambridge journal of economics, 32*(6), 863-886.

Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate Social contributionand financial performance: A meta-analysis. *Organization studies, 24*(3), 403-441.

Palley, T. I. (2013). Financialization: what it is and why it matters *Financialization* (pp. 17-40): Springer.

Patten, D. M. (2002). The relation between environmental performance and environmental disclosure: a research note. *Accounting, organizations and Society, 27*(8), 763-773.

Pakistan Institute of Development Economics. (2022). Energy efficiency prospects in Pakistan's textile sector. *Pakistan Institute of Development Economics*. Retrieved from https://ideas.repec.org/s/pid/kbrief.html

Peloza, J. (2009). The challenge of measuring financial impacts from investments in corporate Social contributionperformance. *Journal of Management, 35*(6), 1518-1541.

Porter, M. E., & Kramer, M. R. (2019). Creating shared value *Managing sustainable business* (pp. 323-346): Springer.

Porter, M. E., Kramer, M. R., & Zadek, S. (2007). Redefining corporate Social contributionresponsibility. *Harvard business review, 1*, 2007.

Punchihewa, D. (2021). Applying content analysis in sustainability reporting research: A methodological review. Journal of Business Ethics and Sustainability, 10(1), 45–63.

Qiu, Y., Shaukat, A., & Tharyan, R. (2016). Environmental and Social contributiondisclosures: Link with corporate financial performance. *The British Accounting Review, 48*(1), 102-116.

Rahdari, A. H., & Rostamy, A. A. A. (2015). Designing a general set of sustainability indicators at the corporate level. *Journal of Cleaner Production, 108*, 757-771.

Reich, R. (2008). Supercapitalism. The transformation of business, democracy and everyday life. *Society and Business Review.*

Ritchie, J., Lewis, J., McNaughton Nicholls, C., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers* (2nd ed.). SAGE.

Robson, C. (2002). Real world research: A resource for social scientists and practitioner-researchers (2nd ed.). Blackwell.

Robson, A., & Mitchell, E. (2007). CSR performance: driven by TQM implementation, size, sector? *International Journal of Quality & Reliability Management, 24*(7), 722-737.

Roscoe, J. T. (1975). Fundamental research statistics for the behavioral sciences (2nd ed.). Holt, Rinehart & Winston.

Ruggiero, P., & Cupertino, S. (2018). CSR Strategic Approach, Financial Resources and Corporate Social contributionPerformance: The Mediating Effect of Innovation. *Sustainability, 10*(10), 3611.

Saunders, M., Lewis, P., & Thornhill, A. (2012). Research methods for business students (6th ed.). Pearson.

SBP. (2023). Financial stability review 2022–23. State Bank of Pakistan.

Scherer, A. G., & Palazzo, G. (2008). Globalization and corporate Social contributionresponsibility.

Serafeim, G. (2020). How to build enduring companies. Harvard Business School Working Paper No. 20-108.

SECP. (2022). Guidelines for sustainability reporting in Pakistan. Securities and Exchange Commission of Pakistan.

Sharma, S. (2000). Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. *Academy of Management journal, 43*(4), 681-697.

Shenk, C., & Westerhaus, C. (1991). Sampling in social research.

Siew, R. Y. (2015). A review of corporate sustainability reporting tools (SRTs). *Journal of environmental management, 164*, 180-195.

Simnett, R., Vanstraelen, A., & Chua, W. F. (2009). Assurance on sustainability reports: An international comparison. The Accounting Review, 84(3), 937–967.

Silver, N. (2017). *Finance, Society and Sustainability: How to Make the Financial System Work for the Economy, People and Planet*: Springer.

Singal, M. (2014). The link between accumulation of real capital and investment in sustainability initiatives. *Cornell Hospitality Quarterly, 55*(1), 19-30.

Skouloudis, A., Evangelinos, K., & Kourmousis, F. (2010). Assessing non-financial reports according to the Global Reporting Initiative guidelines: Evidence from Greece. Journal of Cleaner Production, 18(5), 426–438.

State Bank of Pakistan. (2022). Financial statements analysis of companies (2017–2022). State Bank of Pakistan. Retrieved from https://www.sbp.org.pk/reports/annual/FSANFC/2022/PDF/Tables/Cement.pdf

Stockhammer, E. (2004). Financialisation and the slowdown of accumulation. *Cambridge journal of economics, 28*(5), 719-741.

Stockhammer, E. (2005). Shareholder value orientation and the investment-profit puzzle. *Journal of Post Keynesian Economics, 28*(2), 193-215.

Stockhammer, E. (2013). Financialization and the global economy. In G. Epstein (Ed.), Financialization and the world economy (pp. 35–67).

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. Academy of Management Review, 20(3), 571–610

Tori, D., & Onaran, O. (2017). The effects of financialisation and financial development on investment: Evidence from firm-level data in Europe. *Tori, D., Onaran, O.(2017). The effects of financialisation and financial development on investment: Evidence from firm-level data in Europe*.

UNCTAD. (2022). World investment report 2022: International tax reforms and sustainable investment. United Nations Conference on Trade and Development. https://unctad.org

Van Treeck, T. (2008a). Reconsidering the investment–profit nexus in finance-led economies: an ARDL-based approach. *Metroeconomica, 59*(3), 371-404.

van Treeck, T. (2008b). A synthetic, stock–flow consistent macroeconomic model of 'financialisation'. *Cambridge Journal of Economics, 33*(3), 467-493.

Vercelli, A. (2014). Financialisation and sustainability: a long-run perspective.

Vishwanathan, P., Van Oosterhout, H., Heugens, P., Duran, P., & Van Essen, M. (2020). Strategic CSR: A concept building meta-analysis. Journal of Management Studies, 57(2), 314–350.

Visser, W. (2011). *The age of responsibility: CSR 2.0 and the new DNA of business*: John Wiley & Sons.

Vitale, G., Cupertino, S., Rinaldi, L., & Riccaboni, A. (2019). Integrated Management Approach Towards Sustainability: An Egyptian Business Case Study. *Sustainability, 11*(5), 1244.

Waddock, S. (2008). Building a new institutional infrastructure for corporate responsibility. *Academy of Management Perspectives, 22*(3), 87-108.

Waddock, S. A., Bodwell, C., & Graves, S. B. (2002). Responsibility: The new business imperative. *Academy of Management Perspectives, 16*(2), 132-148.

Waddock, S. A., & Graves, S. B. (1997a). The corporate Social contributionperformance–financial performance link. *Strategic Management Journal, 18*(4), 303-319.

Waddock, S. A., & Graves, S. B. (1997b). Quality of management and quality of stakeholder relations: are they synonymous? *Business & Society, 36*(3), 250-279.

WCED, U. (1987). Our common future—The Brundtland report. *Report of the World Commission on Environment and Development*.

Weber, M. (2008). The business case for corporate Social contributionresponsibility: A company-level measurement approach for CSR. *European Management Journal, 26*(4), 247-261.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5*(2), 171–180.