



The Role of EU Law in Strengthening Corporate Governance via Institutional Investors: Can Pakistan Follow Suit?

Samza Fatima¹

¹ Associate Professor of Law, University Gillani Law College, Bahauddin Zakariya University, Multan, Pakistan.
Email: samza.fatima@bzu.edu.pk

ARTICLE INFO

Article History:

Received: December 02, 2025

Revised: March 18, 2026

Accepted: March 19, 2026

Available Online: March 20, 2026

Keywords:

Institutional Investors

Corporate Governance

Legal Framework

Financial Crisis

Sustainability

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

This research paper aims to explore the legal frameworks governing corporate governance in Pakistan and the European Union (EU) with particular emphasis on the function of institutional investors. However, Pakistan has yet to recognize the impact and importance of the institutional investors. This paper fill this gaps and explores that how the institutional investors have contributed in the development of the corporate governance in wake of financial crisis. For this research, the qualitative doctrinal research methodology is used that is based on documentary analysis. this paper analyses the existing studies, case laws, regulation texts, working papers and content analysis to formulate how the institutional investors supports the transparency, accountability and sustainability in the growth of the corporate governance. This paper finds that the context is important the economic effects institutional investors on the corporate governance and behavior of enterprises. The EU advancements of the measured aspects are sounder and commendable that what specifically Pakistan lacks presently. The findings of the research propose for improved regulatory and legal harmonization, better stakeholder involvement, and the adoption of responsible investing practices are intended to strengthen corporate governance across both regions. This paper potentially fills the gap in the existing literature related to the development of the corporate governance with the virtue of the institutional investors in legal regimes of Pakistan and EU. There is scarcity of research in Pakistan regarding this issue. Moreover, this paper contributes to the continuing conversation over the expanding global impact of institutional investors on corporate governance.

© 2026 The Authors, Published by iRASD. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License

Corresponding Author's Email: samza.fatima@bzu.edu.pk

1. Introduction

The business world became more aware of the need to assess the efficacy of corporate governance structures within organizations after the 1997 Asian financial crisis that revealed

poor governance in many corporations. Many nations created corporate governance codes to strengthen their corporate governance frameworks as more and more fraud cases were discovered in the financial statements of major companies, including WorldCom, Enron, Ty Co International, Aldelphia, Parmalat, the Taj Company, and, most recently, the Olympus Corporation. Ensuring the transparency of financial reporting methods is a crucial responsibility of a corporate governance's framework (Acemoglu, Johnson, & Robinson, 2001). The significance of institutional investors is increasing at a rapid pace in the global financial markets. Over US\$45 trillion in financial assets, including more than US\$20 trillion in shares, are managed by these seasoned investors (International Monetary Fund, 2019). Since the early 1990s, the amount of assets managed by institutions has increased threefold. Institutional investors are also important actors in developing economies, where their influence is expanding quickly.

The researcher focuses at institutional investors' motivations for investing in companies and their roles in these investments in this work (Davis, 2002). The potential for more oversight of company management exists due to the growing number of qualified financial managers who are major shareholders in firms across the globe. Institutions can get involved in a variety of ways, such as by actively using their corporate voting rights, threatening to sell shares, or attending meetings with management. Investigating the effectiveness of these big investors in persuading company boards and management to maximize shareholder value. However, there are good grounds to assume that not every money manager has the same motivation or resources to serve as active monitors (Roe, 1993). While some foreign and independent institutions are frequently attributed with adopting a more proactive approach, other institutions that do business with local firms could feel obligated to support the management. For instance, Fidelity is said to handle many corporate pension funds in the United States, but it is comparatively complacent in Europe when it comes to governance matters (Bodie & Shoven, 1984). Over the past few decades, institutional investors have experienced significant growth in their percentage of total financial claims, in addition to the general development of the financial sectors compared to GDP.

1.1. Corporate Governance in the European Union

The EU has gone through several crises since its founding. The fallout from the European financial crisis of 2008, the possible unrest brought on by Greece's financial troubles, and the ongoing issues in Ukraine that could affect Europe's energy future and relationships with Russia are among the major concerns currently facing the continent (Ayadi, Ayadi, & Trabelsi, 2019). Because of how complicated these problems have become, some have even questioned the Union's basic sustainability. The EU's member state relationships as well as the theoretical concepts of federalism and confederation to clarify recent EU developments have drawn a lot of attention. The European Union is still unique between political and international organizations, having existed since 1958. In 2012, it was awarded the Nobel Peace Prize in recognition of its ability to maintain peace throughout Europe. On the flip side, it went through the financial and economic crises in 2008, along with additional Eurozone and financial issues. These included serious sovereign debt issues in a number of member states, including Greece, Portugal, Spain, and others (Wouters, Sterkx, & Corthaut, 2010). The reform of corporate governance in Europe is at a turning point. The European Union (EU) has been trying to strengthen corporate boards, improve information flows, and support institutional investor scrutiny for the past fifteen years, with varying degrees of success. Institutional owners possessed the majority of the financial firms that collapsed during the crisis (European Commission, 2010). The European financial crisis, which several attribute to shortcomings in corporate governance, had a significant influence on the continent's financial markets and economic growth, with long-lasting consequences. Systemic safety was given more importance during the financial crisis and its early aftermath than improving corporate competitiveness. Due to this focus, basic ideas and presumptions regarding corporate governance—including the notion of investor primacy were further

examined. Many problems with governance became increasingly politicized, and traditional governance approaches were questioned, especially in light of the financial crisis' severe economic effects. 2010 saw the expression of ethical, or "deontological," concerns about modern corporate governance and management practices, particularly executive remuneration as well as incentive structures, and the short-term opinions regarding both companies and investors by the Parliament of Europe, representing a wider range of interpreters than the European Commission (Jędrzejowska-Schiffauer, Schiffauer, & Thalassinou, 2019).

Despite having a broad membership, the European Parliament has developed a strong stakeholder voice over time that it brings to the discussion of corporate governance in Europe. It has specifically raised general questions about how corporate governance ought to take a company's ethical behavior and its effects on workers, stakeholders, including civil society at large into account. This viewpoint is still present in the European Parliament, which supports more gender diversity and employee rights while also raising public awareness of the social, moral, and environmental concerns that businesses face. This alternative perspective on corporate governance could upend long-held notions that shareholders should come first in the governance discussion. It also varies with the perspective that is prevalent within the Commission. Institutional ownership is a critical component of corporate governance (Bilbao-Ubillos, 2014). The standard of corporate governance is improved by the involvement of institutional investors. This advantage results from their ability to monitor and seek to raise the value of the company. Their ability to monitor also aids in reducing agency issues. One essential element of CG is institutional ownership (Erkens, Hung, & Matos, 2012). Nevertheless, despite their significance, a number of crucial aspects pertaining to the institutional environment are still poorly understood. Studying corporate governance (CG) and the institutional context is crucial because it helps to reduce the agency issues that listed organizations face. Furthermore, because of financial globalization, the number of institutional shareholdings has increased significantly in recent decades, underscoring the need of researching the ownership of institutions.

2. Institutional Investors in EU in early 1990s

2.1. The Origins of Pension Funds

Pension funds were established in the early 20th century, which is when institutional investment first appeared in Europe. These funds were established in response to the shifting socioeconomic conditions and industrialization's growing demand for retirement security. The majority of the early pension schemes were founded by sizable companies in labor-intensive sectors like manufacturing, railroads, and mining (Davis, 2002). These funds were created to give employees financial stability upon retirement, guaranteeing a consistent flow of income for the remainder of their life. Sophisticated investment management techniques were developed as a result of the requirement for cautious investment strategy in managing these funds to strike a balance between the need for growth and capital preservation (Sorsa, 2014).

2.2. The Rise of Insurance Companies and investment strategies

Insurance companies began to feature as institutional investors in the early part of the twentieth century at the same time as pension funds. Initially, the main focus of insurance companies was on a life insurance as it was basically ensuring families and persons in need of certain amounts of funds in case of death. However, as they began to grow more and more, they began offering more coverage insurance options including casualty, property and health insurance. To cater for future losses, large reserves were provided through the money people deposited as premium. Any replenishment of these capital pools necessarily had to be invested wisely. This led to insurance firms constituting themselves as major investors in bonds, stocks, and qualities as well as other securities. Measures aimed at preserving policyholders' interests through the guarantee of solvency together with stability of these organizations acted as a reference point for investing activities (Njegomir & Demko Rihter, 2013).

Another decade was the beginning of the usage of various investing strategies by pension funds as well as insurance firms. These institutions' first capital investments were mostly made in fixed-income securities for example through government securities which are considered safe. However, the nature of the financial markets changed and with the requirement for more yields the institutional investors began putting stocks and other classes of assets to mitigate risks (Kocovic, Rakonjac-Antic, & Jovovic, 2011). This diversification was driven by the desire to earn higher risk adjusted returns to cater for long term liability such as insurance claims and pension. As investment methods are also developed, professional asset management companies appeared to provide these big investors with such investment services (Kozmenko & Roienko, 2016). Over time pension schemes and insurance companies emerged as highly professional players in the field of financial risks and contributed to the formation of modern techniques of investment management as well as to the development of the European financial sector.

2.3. Establishing Regulatory Frameworks

In the 1970s and 80s European nations woke up to the reality that institutional investors had become a significant fixture in the financial markets and that, thus, it was crucial to protect the interests of the people whose monies these organizations held (European Central Bank, 2010). Consequently, rich sets of rules and measures of investment security protection were elaborated. To mitigate risks and safeguard beneficiary's interests' certain regulations were formulated to offer institutional investors sound and transparent environment. At the forefront in this legislative reform were countries such as UK, Germany, as well as, Netherlands, which enacted legislation that spelt out standard in reporting requirements, investment processes and responsibilities (Fichtner, 2020). Originally envisaged in 1992 by the Single Market Program, the EU aimed at creating a single market in financial services. This action actually made institutional investors more competitive and cross-border investing was made easier (de Jongh, 2012). Adopted in 1985 and revised in 1992 initially called the mutual fund directive this permitted the marketing of mutual funds across member states under a single legislation known as undertakings for collective investment in transferable securities (UCITS). This greatly accelerated the European mutual fund industry's growth. The goal of the 1999 launch of the Financial Services Action Plan (FSAP) was to establish a single financial services market within the EU. It contained a number of legislative initiatives to improve the efficiency of the financial markets and harmonize rules.

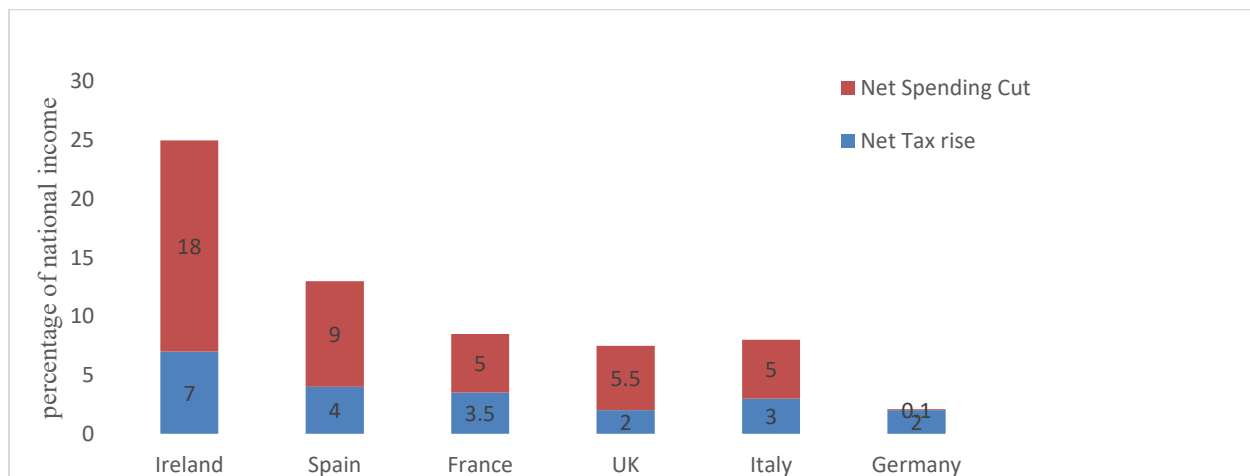
2.4. Strengthening Corporate Governance Post-2008 Financial Crisis

During the 2007–2008 global financial crisis, an unprecedented number of financial firms failed or required government bailouts. Due to these banks' collapse, the world's credit markets were frozen and government actions were necessary everywhere. All businesses were impacted by the macroeconomic variables that led to the financial crisis, such as lax monetary policy, although some businesses were impacted far more than others. According to recent studies, the finance and risk management practices of businesses significantly influenced how much they were affected by the financial meltdown. Corporate boards along with shareholders ultimately decide how much to risk-take and how to finance a company (Wen, 2013). Therefore, a key finding of these researches is that corporate governance had an impact on a company's performance throughout the crisis.

Institutional investors across Europe assumed a significant role in improving corporate governance policies following the 2008 financial crisis. Significant flaws in corporate governance frameworks were made clear by the crisis, mainly in the areas of risk management, compensation for executives, and board supervision. The table above illustrates how the European Union recovered from the financial crisis in 2014 and how institutional investors fulfilled their respective tasks. Because they oversee enormous sums of money and speak for millions of beneficiaries, institutional investors have become more and more vocal about the need for strict governance guidelines (Van Den Berghe, 2009). They demanded

changes, underlining the importance of having long-term perspective or what can be called moral management tools, by using their large shares of votes. With this change what could be seen was a shift to the new form of institutional investors who not only provided for corporate funding but also took an active part in corporate governance.

**Figure 1: Percentage of national income
Composition and size of post crisis fiscal policy response up to 2014**



Note: This figure reports the European Union recovery from the financial crisis of 2008. This figure provides how institutional investors aided in combating the financial crisis of 2008 and that how the states progressively developed after that historical crisis.

2.5. Advocating for Enhanced Transparency and Accountability

There is considerable literature suggesting that the companies having sound governance structures generally have better long-term operating profitability. Thus, institutional investors' encouragement of higher levels of governance practices, for instance, transparency and accountability lead to enhanced decision-making and management (Fatima, Mortimer, & Bilal, 2018). Reduced risks of fraud and other malpractices enhance the performance of business hence increased performance through good corporate governance. After 2008, institutional investors turned attention to the question of corporate governance and transparency, and the organizations they invested in. They urged for expanded and improved reporting of both non-financial and financial information for the better assessment of the effectiveness and risk of firms (Carlitz, 2013). To this, the didactical process involved increasing focus on comprehensive reporting on risk management, remunerations for executives, and ESG factors. These disclosures were demanded by institutional investors as a way of ensuring that managerial decisions are informed by stakeholder and shareholder's long-term interests and to also reduce on information asymmetry (Shirai, 2023). This was achieved through filing shareholders' resolutions; directly approaching business boards; and teaming up with the other shareholders in order to more effectively pressure the targeted corporations. They called for more comprehensive and more frequent reporting so that investors can appraise fully the strategies and workings of these businesses. Shareholders placed more pressures onto business boards and executive teams, thus ensuring they acted in the most shareholders' beneficial way possible, due to institutional investor's institutionalization (Efunniyi et al., 2024).

They supported strong recommendations for reporting on governance structures, executives' pay, managing risks and overall financial standing. Due to these demands, new reporting standards and legal measures were introduced and actually enhanced the companies' reporting and shareholders' engagement with those reports, including the new Shareholder Rights Directive II in the EU. Despite these changes, it is still possible to

coordinate transparency only between the EU member states and businesses (Dumay, La Torre, & Farneti, 2019). Some of the corporations still lag in making comprehensive disclosures because the rules vary as well as the enforcement capabilities across countries. Moreover, even though, increased openness is a good thing it is not always indicative of good governance if investors fail to utilize the information that is provided.

2.6. Active Engagement and Shareholder Activism

The financial crisis has led to institutional investors assuming activism as shareholders. Accepting the fact that they had the potential to influence corporate behaviour, these investors began engaging corporations in corporate governance issues more actively (Barko, Cremers, & Renneboog, 2022). On this reality, they demanded change in the executive remuneration policy, the boards of directors, and other standards of governance through an act fundamental in a company; the vote. They also integrated with several other shareholders in an attempt to influence change for a better posture. This active participation called for enhancements in different governance frameworks and procedures while exercising accountability on corporate boards. The importance of activism of institutional shareholders was highly influential in changes in the corporate governance, which led to firmer European firms in the European Union after the financial crisis of the later part of the first decade of the twenty-first century (Cziraki, Renneboog, & Szilagyi, 2010). Despite the activation's positive impact, there are circumstances that show that activism fosters adversarial relationships between the boards of corporations and investors. Striking the right balance between positive involvement and strong governance supervision is a key consideration when choosing how to arrive at successful risk management (Petrus, 2016). Moreover, the degree and significance of the institutional investors entering can affect how good shareholder activism is, which means the rate could be highly unpredictable and create an unequal field of governance.

2.7. The EU Commission's Draft Shareholder Rights Directive of 2014

Meanwhile, the European Commission has developed several proposed directives, the most notable of which being the proposed Shareholder Rights Directive of April 9, 2014. The Commission's primary concerns are how to increase the availability of long-term funding and how to enhance and diversify Europe's financial intermediation system for long-term investments (Čulinović-Herc & Zubović, 2015). The Commission focused on the following five major issues:

- 1) Insufficient involvement from asset managers and institutional investors;
- 2) Directors remuneration is not well linked to their performance.
- 3) Lack of shareholders' monitoring of related-party transactions;
- 4) Inadequate disclosure from proxy advisors.
- 5) The exercise of the more arduous and costly rights of the investors in securities.

As for the first concern, the Commission would like to enhance the transparency of asset managers and institutional investors. Member states have to ensure that asset managers / institutional investors develop a policy for shareholder engagement and provide a web link to that policy every year along with an option to select between 'explain' and 'comply'. The policy includes things like monitoring of the investee firms, exercising of their votes, use of proxy advisory services, shareholders' engagement, and essential procedures of addressing actual or potential conflict of interest. As such, institutional investors are required to also declare their arrangements with asset managers and the how their equity investment plan impacts on performance; all besides this engagement policy (Johnston & Morrow, 2018). Investor institutions will also have to justify themselves and disclose whether and how they voted at the general meetings of the cheater companies. The asset management themselves are also governed by extra disclosure requirements, the fourth item of concern is the proxy adviser transparency. Besides, the latter are required to inform their clients and the relevant corporation of actual or potential conflict of interest or commercial relationship.

As for corporations, the latter are requested to disclose full information about the preparation of the voting recommendation made by the agent.

2.8. Legal framework for institutional investors in EU

The legal structure of the EU concerns institutional investors in a manner that is regulated by a number of directives and laws geared towards sound capital, investor protection, market stability and transparency. The regulation of institutional investors in the EU is laid down in the directives, regulations and laws that operate in the EU. These laws' main purpose is to provide for adequate corporate management, as well as the disclosure of information and shareholders' participation. The main struts of this framework are the Shareholder Rights Directive II (SRD II) – the directive that enforces shareholder rights and promotes their engagement in the company's management (Petrus, 2016). However, it is specifically to be relevant for institutional investors. Under SRD II, institutional investors such as pension funds, insurance providers, and asset managers are mandated to develop and disclose engagement policies on how integral sustainable, ESG and shareholder activism into their investment decisions.

Table 1: EU directives and its impact on IIs

Legal Framework	Impact on Institutional Investors:
Solvency II Directive (2009/138/EC)	Requires insurers to take a risk-based approach to capital and investment management, with a focus on long-term risk-adjusted returns.
Institutions for Occupational Retirement Provision (IORP) Directive (Directive (EU) 2016/2341)	Pension funds must adopt prudent investment strategies and ensure transparency to plan members.
Alternative Investment Fund Managers Directive (AIFMD) (Directive 2011/61/EU)	AIFs are subject to detailed disclosure and risk management requirements, ensuring a stable environment for institutional investors.
Markets in Financial Instruments Directive II (MiFID II) (Directive 2014/65/EU)	Institutional investors must comply with enhanced transparency, client reporting, and conflict-of-interest rules.
Sustainable Finance Disclosure Regulation (SFDR) (Regulation (EU) 2019/2088)	They are required to report on how they integrate Environmental, Social, and Governance (ESG) factors into investment decisions, aligning with the EU's broader sustainability goals.
European Long-Term Investment Funds (ELTIF) Regulation (Regulation (EU) 2015/760)	Facilitates long-term investments by offering favorable conditions for pension funds, insurance companies, and other institutional investors.

Note: This table depicts the legal framework and its impact upon the Institutional investors in EU

Source: Developed by the author

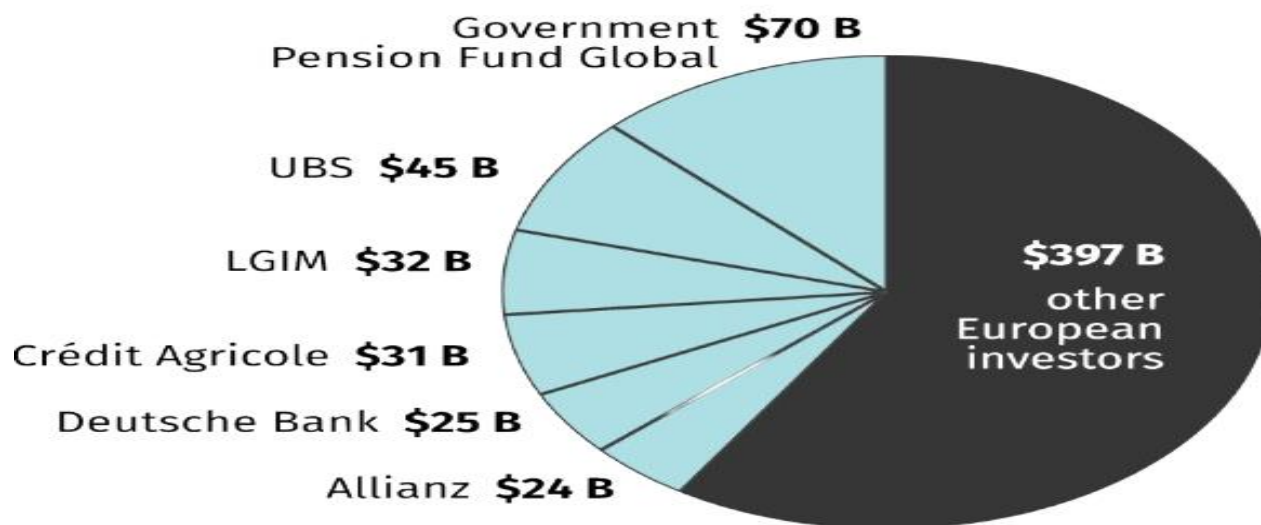
The responsibilities of institutional investors in corporate governance are also affected by further rules of transparency and risk management given by the European Market Infrastructure Regulation (EMIR) as well as Capital Requirements Directive IV (CRD IV). The Markets in Financial Instruments Directive II (MiFID II) which focuses on reporting obligations and investor protection as well as new obligations for reporting on investment decision making including governance issues also applies to institutional investors (Papadima, 2018).

Moreover, The EU has set a greater focus on sustainability in its Corporate Sustainability Reporting Directive (CSRD) which makes the institutional investor to disclose the sustainability impact of investment and aligns its governance duty with the ESG standard accordingly (EU, 2024). Together, these rules constitute a very effective legal basis for the effective operation of institutional investors in the EU that fully engage in modern corporate governance and balance financial results and sustainable development as well as long-term corporate responsibility. To build the business climate where institutional investors might be the key players in establishing the new standards of governance, shareholders' protection, and sustainability across the EU, this framework focuses on the increased transparency, adjoined duties, and long-term involvement.

3. Implications of the institutional investors in EU and US

EU investors collectively own about \$554 billion worth of bonds and stocks in firms in the fossil fuel sector and 13% of institutional investments globally is made by Europe. With more than \$70 billion invested in companies listed on GCEL and GOGEL, the Norwegian Government Pension Fund Global is the largest fossil fuel investor in Europe. The Swiss bank UBS, with \$45 billion in assets, is the second biggest institutional fossil fuel investor in Europe. It is followed by the UK's LGIM, with \$32 billion, France's Crédit Agricole and its asset manager Amundi, with \$31 billion, Germany's Deutsche Bank, with \$25 billion in assets under management, and the German insurer Allianz, with \$24 billion (Drobetz et al., 2024). Allianz has implemented a stringent policy to exclude coal and has initiated measures regarding oil and gas; however, these measures do not extend to PIMCO, the asset manager located in the United States that oversees the majority of Allianz's fossil fuel investments.

Figure 2: European institutional investors investing in the climate chaos

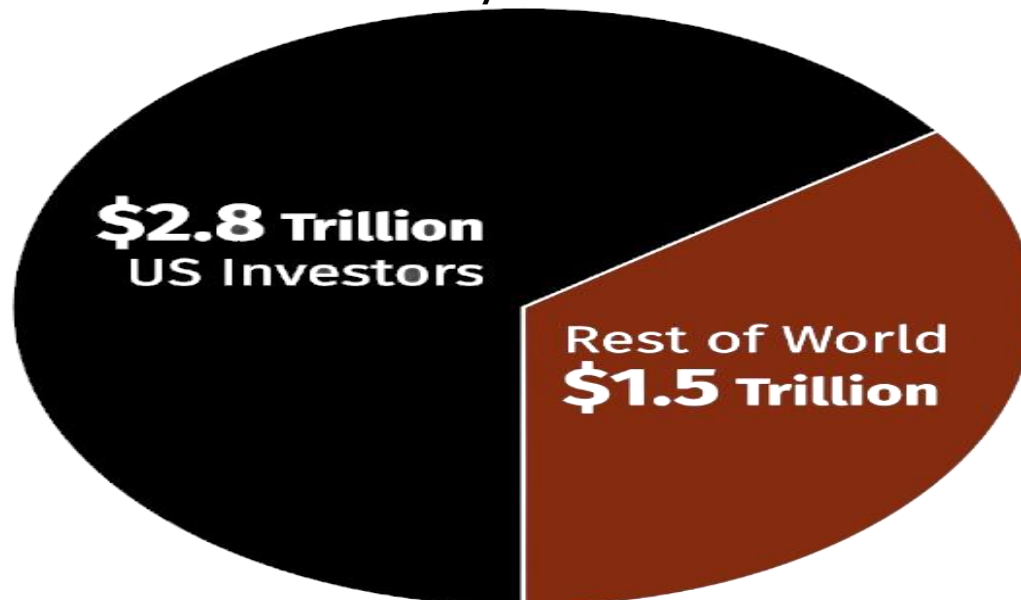


Note: This figure provides the statistical data on the institutional investors in coal, gas and oil companies listed on the Global Coal Exit List (GCEL) and the Global Oil and Gas Exit List (GOGEL) (Investing in Climate Chaos, 2024).

The crucial role performed by institutional investors including the great influence they exercise in financial markets in U.S. Over time, institutional investors have become more significant and influential. For instance, over the previous 60 years, the percentage of institutionally managed U.S. public stocks has increased gradually, rising from roughly 7% or 8% of the market's value in 1950 to over 67% in 2010. The US is undoubtedly the biggest issue in this situation. 65% of all institutional investments in fossil fuel firms are made by US institutional investors, who together own \$2.8 trillion in 62 countries' worth of fossil fuel companies. As stated by Stop the Money Pipeline's Alec Connon (Investing in Climate Chaos, 2024, July 9).

"This mirrors the complete lack of action by US regulators to effectively monitor and address the climate and transition risks of large institutional investors. This inaction lays the ground for the next economic crisis and puts the world on a fast track towards climate chaos," Eighty-nine percent, or \$2.5 trillion, of the fossil fuels held by US institutional investors are owned by oil and gas companies., Chevron, ExxonMobil as well as ConocoPhillips are just a few of the American oil and gas firms that stand to gain the most from these global expenditures. The overall amount of US institutional investments in oil and gas businesses is \$288 billion, or 10% of all US investments in ExxonMobil. As a result, Vanguard (\$53 billion), BlackRock (\$37 billion), State Street (\$26 billion), Fidelity Investments (\$17 billion), and JPMorgan Chase (\$11 billion) are ExxonMobil's top 5 institutional investors.

Figure 3: Fossil fuel investment made by the US institutional investors



Note: This figure provides the data on investment of \$4.3 Trillion made by the institutional investors of the United States regarding the fossil fuel. US institutional investors collectively hold \$3.1 trillion in fossil fuel companies in 62 countries and account for 72% of total institutional investments in fossil fuel companies (Investing in Climate Chaos, 2024).

3.1. Journey of institutional investors in Pakistan

Since the Security Exchange Commission of Pakistan (SECP) adopted the Governance Code 2002 for listed corporations, corporate governance has emerged as one of the major research fields in Pakistan. When the process of operation and regulation first started, there was plenty of criticism and many issues. However, despite these concerns, the corporate governance regulations have played a significant role in the emergence of a new field of study in Pakistan (Mahmood, Blaber, & Khan, 2024). The "Corporate Governance Code" has been successfully applied, notwithstanding these complaints, and this is a primary reason for the commencement of new research in Pakistan. Family-owned businesses are steadily increasing in Pakistan; now, 60% of businesses are family-owned, with the other 40% being non-family enterprises as a result, family-owned businesses were exempt from corporate governance laws and guidelines (Jahangir, 2024).

As a result, the Organization for Economic Co-operation and Development created a set of fundamental standards in 1999 to evaluate the corporate governance performance of a nation. In order to improve corporate governance procedures and lessen mistrust among owners, agents, and the business community, the Securities and Exchange Commission of Pakistan (SECP) released the Pakistani Code of Corporate Governance (PCCG) in March 2002. Each of the 47 provisions and sub clauses in the code addresses a different facet of corporate

governance requirements. It was the same year that the code was put into effect, working with the UNDP and the Economic Affairs Division.

A survey was carried out in 2007 by the SECP with International Financial Corporation to investigate corporate governance standards in Pakistan (Ali et al., 2024). The results showed that boards of directors needed to be made aware of corporate governance. In the face of the nation's economic difficulties, IFC doubled its short- and long-term commitments to Pakistan in the fiscal year 2023, spending almost \$1.5 billion total. Similar to this, the Karachi Stock Exchange (KSE) set up a board to monitor businesses' compliance with the Pakistan Code of Corporate Governance (Bashir, Rashid, & Bashir, 2024). The SECP has been keeping a closer eye on companies over the past two years in an effort to improve the caliber of their disclosures. Even with these efforts, insider-controlled companies are still prevalent in Pakistan due to the country's immature corporate governance environment. When a company has institutional ownership, it can raise long-term capital at a favorable rate. First of all, by lending money to a business whose board they have control over, these financial institutions themselves serve as a provider of long-term debt. Furthermore, these institutional investors act as a useful check on the company's strategic choices. They lower agency expenses for the business and lessen management opportunism. As a result, the corporation is able to borrow money on favorable terms from the public at large and other lenders. As a result, it is assumed that companies with larger institutional shareholdings also have greater debt to equity ratios (Bint Raza, Sheikh, & Rahman, 2024). Institutional shareholding refers to the percentage of total shares floated in the yearly financial statements of the institutions.

3.2. Main Legal Aspects of the Institutional Investors in Pakistan

The authors identified that Pakistan, corporate governance is evolved by institutional investor based on different laws and some court decisions. Among various regulatory bodies involved in the exercise of checking corporate governance practices in organizations, there is the Securities and Exchange Commission of Pakistan – SECP. Amid its many regulations is the Listed Companies (Code of Corporate Governance) Regulations, 2019. These rules require institutional investors to be ethically responsible and accountable to ensuring a business's conform to governance code. For instance, section 14 of the Code enhances, the responsibilities, and visibility of corporate management on decision-making processes by asking institutional investors to declare their voting intentions and procedures.

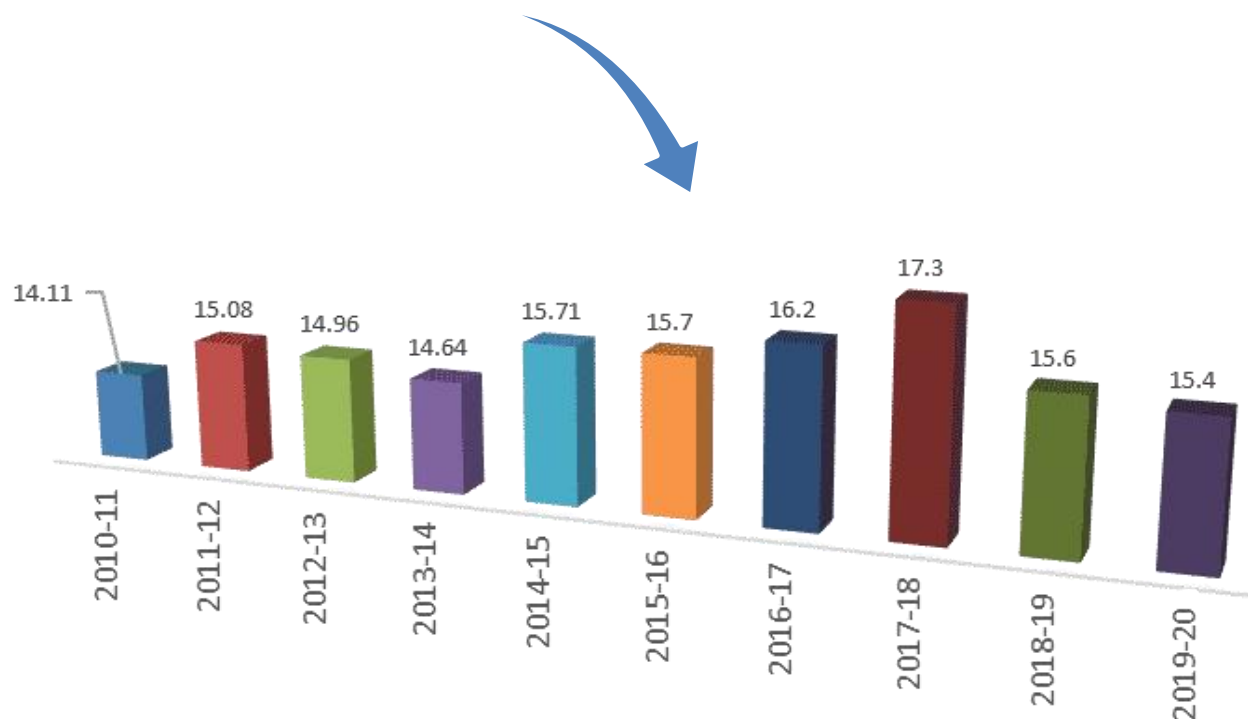
The Pakistani Courts have also elaborated upon the role and liability of the institutional investors in corporate governance. For example, the Supreme Court of Pakistan pointed at the importance of institutional investors for maintaining higher market integrity and protecting investors' right in the landmark case of Securities and Exchange Commission of Pakistan vs. Crescent Standard Investment Bank Limited (2007 SCMR 1220). Here the court pointed the greatest concern for institutional investors, which has to monitor and conduct due diligence in order to prevent fraud and ensure compliance with the regulations. The fact of this particular case that the judiciary of Pakistan also recognizing institutional investors as significant player towards the enhancement of good corporate governance within the country. In addition to following the legislative and also judicial conventions and guidelines, institutional investors in Pakistan have incorporated novel international standards as well as guidelines received from the Organization for Economic Co-operation and Development (OECD) and the International Corporate Governance Network (ICGN). Such recommendations may compel institutional investors to engage in business communications in an effort to foster sustainable business practices, and secondly ensure that they adopt a long-term investment perspective. Thus, it can be seen that institutional investors in Pakistan backing up these international standards also help to have enhanced corporate governance procedures as well as a better sustainable and competitive corporate landscape (Khan et al., 2024). In that aspect and their employment of the legal frameworks, court ruling and international standards, the financial institutions in Pakistan play a pivotal role in the development of strong

corporate governance. Beside legal compliance, their pre-emptive engagement in business affairs not only ensures compliance with legal obligations, but also enhances the overall organizational effectiveness and accountability of enterprises for the growth and sustainability of the economic environment of Pakistan.

4. Why is Pakistan far beyond its goal?

Severe structural and economic hurdles established themselves as barriers to institutionalization of investors in Pakistan. Due to the existing or lack of a full-fledged and robust law it is almost challenging for institutional investors to develop in Pakistan. However, the regulatory framework is still patchy and heterogeneous even at the present, while SECP has been implementing numerous of laws over the years. Since legal guarantees and precautions are not always obvious or efficiently implemented this creates situational ambiguity for investors. Moreover, aspects such as corporate governance particularly concerning issues to do with; transparency, minority shareholders, and institutional investor's fiduciary duty are untouched by current legislation despite the fact that these are crucial workout for confidence building. Insurance firms, mutual funds and pension funds are further hampered in their ability to invest far more in the financial markets by the weak regulation governing them. The second aspect is that institutional investments are also less encouraged due to often unclear and unfavorable tax policies and benefits. The combination of all these legislations' shortcomings creates a dangerous environment for institutional investors, which slows their activity and reduces their ability to help strengthen the general economic growth of Pakistan. Another limitation is the low depth of the mentioned financial markets. Pakistani financial markets are relatively young and relatively narrow in terms of investment choices offered and high illiquidity (Ayaz et al., 2024).

**Figure 4: Total investment (% of GDP) Pakistan
Economic Survey of Pakistan, various issues 2023**



Note: This figure provides the Pakistan Economic survey 2010-2020 which boons overview of the state's economic progress during this mentioned period. It depicts the resilience and robustness of the Pakistan's economy in the face of multifaceted domestic and external challenges.

Pakistan's largest corporations are either global corporations or state-owned enterprises. Why don't Pakistan private sector corporations expand is the question. In South Asia, there are two corporations or businesses valued at over \$100 billion, however there isn't a single company or business valued at over \$5 billion in Pakistan. A general summary clarified the fact that Pakistani businesses are actually expanding more slowly. While some of the top companies have seen a two- to three-fold increase in their combined sales, others are still hoping to grow. At the federal and provincial levels, there are institutional disconnections as well as regulatory, legal, and structural problems. Because there is little opportunity for large-scale, diversified investments, institutional investors like insurance companies, mutual funds, and pension funds are discouraged from actively investing. Additionally, there are fewer prospects for reliable, long-term investments due to the market's volatility and the limited number of large publicly traded enterprises. Another issue that can hardly be contemplated is the regulatory one. Albeit, SECP has been trying in bringing out certain changes in the legislation, nevertheless the investors, under this framework, are still in quandary because of their framework's inconsistency. Such institutional investors are skeptical over the long-term stability of the market because unlike the well-developed nations the regulatory bodies here are not so transparent and powerful (Bashir, Rashid, & Bashir, 2024).

This is a big problem because a significant number of Pakistani companies have low levels of corporate governance. In Pakistan, a high level of secretive family-oriented business enterprises increases the problem of supervising and holding irresponsible companies accountable for methods and manners desirable for investing from institutional investors. This lack of openness is unpalatable to the investors who consider great importance on moral business conduct and good governance. Outside the issue of governance different factors including political and economic instability have also acted as a barrier to the development of institutional investors. Fluctuations in investment climate are influential due to political instabilities in Pakistan government along with some other economic factors such as inflation rates, high rates of interest accompanied by devaluation of Pakistan's currency (Bint Raza, Sheikh, & Rahman, 2024). These macroeconomic risks are rather unappealing to institutional investors who like steady and predictable markets for the long-term gains. Another important barrier is the absence of the systematic culture of saving and investment including the major part of population. This compromises a lot of Pakistanis; people willingly invest in gold, property or cash than mutual fund investment and pension. Hence, institutional investment facilities observe general participation, thereby limiting their expansion and influence over the economy.

Weak institutional investment is also reflected by the nascent insurance and pension industries. These two sectors are relatively new compared to some of the other developed economies and institutional investment is still limited because pension funds, insurance companies who manage sizeable funds are still to emerge in the country. Insufficient financial literacy restricts not only the public's ability to engage with institutional investment opportunities, but also their growth. Pakistan has been, since its creation in 1947, a developing country that has been facing many problems of authoritarianism. Some of the most devastating issues that have acted as a nuisance to the growth of the nation include; Corruption Political Instability; Inefficiency and Irresponsible institutions (Nour et al., 2024). This paper therefore shall justify that corruption is one of the key concerns of governance in Pakistan. Corruption has infested Pakistan from education to political and business domains and has become the norm. This has also affected both the performance of the Government agencies and the private sector especially through a decline in FDI and lack of confidence on institutions. In Pakistan bribery is demanded and offered for the services which the government should provide; corruption is rampant and is in the blood of people there. This man tap has promoted an environment of corrupt practices because, going by the evidence presented, the officials who have been involved in wrong doing have done so with impunity. In order to resolve this issue, Pakistan has to pay special attention to increasing openness

and accountability of its government organizations. This could be done through effective independence of anti-corruption bodies such as National Accountability Bureau (NAB) and eradication of laws that lock up honest people. Another major concern of the country's political realm is political stability. Pakistan is a nation with political instability because of regular military coups, political assassinations, and sectarian conflict. A stable system of political governance in relation to the development of civil-military relations has not yet been created mainly due to the weak element in the establishment of a stable and efficient system of governance (Ferreira, Massa, & Matos, 2010).

One way of handling this is by developing strong democratic institutions if they are going to help in the accountability mandate and if they're going to last. This requires the freedom of press, civil organizations and the judiciary to exercise their work independently. Furthermore, to reduce the share of complaints resulting in instabilities and conflicts, the government must seek to adjust the living conditions of the people. The other issue affecting Pakistan's governance structure is its entrenched institutions (Franks, 2020). The institutions of a nation such as the courts police and bureaucracy have been revealed as often being understaffed underfunded and lacking in resources and training. Therefore, the individuals either fail to respect the rule of law or have the opportunity to do whatever they want. To eliminate this problem, it is necessary to strengthen these institutions.

It can be achieved through offering enough funds and support, technical assistance as well as training, and most importantly, a competitive hiring system. The other area which appears to have a significant issue with Pakistan's governance structure is accountability. The population is lawless since officials are often not made to answer for crime and corruption exist without accountability or surveillance. Indeed, to this society, there are no consequences that the powerful have to face they held people's rights and liberties often trampled on. To overcome this problem, accountability systems have to become more robust. This can be done by passage of laws and regulation empowering independent organizations such as human right commissioners or ombudsmen into powers of prosecution of the persons in authority who have committed the acts. Hence, governance issue in Pakistan are complex and multidimensional and affect almost all aspects of development in the country (Lazonick, 2007). Some of the most critical issues requiring urgent resolution are corruption, political instability, low quality institutions and impunity. Pakistan has to undertake necessary measures to solve these issues, including the build-up of the fragile institutions, development of new impartial supervisory authorities to promote accountability, and increasing governmental agencies' transparency and accountability. Pakistan would be surely on the right way to become richer and more stable if these steps can be implemented.

4.1. Identifying what Pakistan Needs to Learn from the European Union

NUFT may learn a lot about how from the European Union (EU), for which institutional investors are critical to improving corporate governance and long-term investment to address these issues. One of them is the areas of concern, where the company can enhance its performance, for instance the aspects of; Investment houses participate in a clear and stable atmosphere free from lots of regulatory dissimilarities between countries within EU because of the harmonization accredited by regulations such as Solvency II and MiFID (Markets in Financial Instruments Directive) (Bint Raza, Sheikh, & Rahman, 2024). Similarly, Pakistan may enhance investor confidence through government's assuring on the equal application and reduction of risk in the legal frameworks. Another important lesson can be learned from the EU Experiences of Pension Fund changes. The well-devised pension schemes in Europe represent a significant amount of long-term investment funds. Since it ought to improve pension system, and ensure that it only provides pension to pensioners and fertilizing the economy by putting long-term saving into profitable ventures, Pakistan should follow the above examples. Other sectors Pakistan should develop include insurance and pension so as to encourage more stable institutional fund (Parvez et al., 2024).

Improving the corporate governance norms is another important area that can be learnt from EU where Pakistan can take help. Large investors consider buying stocks in European firms due to the strict corporate governance standards that assure company sustainability, accountability and transparency (Sajid et al., 2012). To continue with the effort of creating long-term investors in the country, Pakistan may adopt similar sovereign governance structures which are acceptable globally. Furthermore, the EU has achieved the objectives of building shallow and broad capital markets that meet the needs of institutional investors in terms of available funds. It is imperative that Pakistan should strive to expand the depth of the financial markets by the development of new investment instruments like derivatives, corporate bonds and securitization choices. Thus, the institutional investors would be able to reduce risk and achieve diversification of its portfolio, aspects that would help the markets gain broader appeal (Jahangir, 2024). The need for incentives to spur institutional investment is an additional important use. Thus, the EU offers incentives such as tax exemptions and subsidies to investors willing to fund sectors such as infrastructural development as well as renewable energy sources (Aydin, Sogut, & Erdem, 2024). As will be seen the country can use similar incentives to encourage institutional investors to provide funding on infrastructure, technology and energy – sectors relevant to Pakistan's development. Another example is the formation of sustainable investment products like European Union's European Long-Term Investment Funds (ELTIFs). Same way, Pakistan may also develop similar apparatus to channelize institutional funds towards long term activities such as energy or infrastructure, which require constant and patient money (European External Action Service, 2024). In particular, and even though the EU has focused a lot of effort in promoting not only saving and investing but also financial education. Pakistan may cultivate a more sophisticated investment environment by promoting financial education and expanding the pool of private investors who support institutional vehicles such as insurance, pension plans, and mutual funds. Pakistan can foster long-term (Craswell & Calfee, 1986) sustainable economic growth, strengthen corporate governance, and strengthen the role of institutional investors by putting these EU principles into practice.

5. Conclusion

The power of institutional investors in the stock markets is enormous. And on another April night in Georgia, Franklin Delano Roosevelt penned, "great power involves great responsibility." Institutional investors bear a great deal of responsibility due to their care of another people's money. The most important thing to keep in mind is that millions of American employees, savers, policy owners, pensioners, and other individual investors are behind institutional investors as well as their investment portfolio managers. These individuals rely on the people they entrust with their money to give them a safe and secure retirement, assist them in saving for their own home or college education, and enable them to live the American dream. All too frequently, the regulatory conversation is dominated by the management of public companies and other issuers, who are defended by their attorneys, investment bankers, and trade associations. To enhance the current conversation, institutional investors must use their combined clout. We must know what they think about the advantages of openness through information disclosure, corporate governance, suitable pay scales and arrangements, and other crucial matters. Researchers and academics with important knowledge about institutional investors' roles and the ways in which their decisions affect businesses and the economy are also eligible for this call to action. After the 2008 financial crisis, institutional investors were instrumental in improving corporate governance in Europe. Their focus on accountability, openness, and long-term strategic planning has resulted in notable advancements in governance procedures. Even though there are obstacles and restrictions, overall company performance has been positively impacted, which helps create more robust and long-lasting business models. To sustain and perhaps grow these gains in the future, institutional investor participation and regulatory frameworks must continue to evolve. To achieve excellence in the corporate sector, Pakistan ought to acquire knowledge and enhance its regulatory and legal framework to offer institutional investors a sustainable environment.

References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review*, 91(5), 1369-1401. <https://doi.org/10.1257/aer.91.5.1369>
- Ali, S., Farooq, M., Xiaohong, Z., Hedvicakova, M., & Murtaza, G. (2024). Board characteristics, institutional ownership, and investment efficiency: Evidence from an emerging market. *PLOS ONE*, 19(2), e0291309. <https://doi.org/10.1371/journal.pone.0291309>
- Ayadi, M. A., Ayadi, N., & Trabelsi, S. (2019). Corporate governance, European bank performance and the financial crisis. *Managerial Auditing Journal*, 34(3), 338-371. <https://doi.org/10.1108/MAJ-11-2017-1704>
- Ayaz, F., Mahmood, A., Ullah, U., Usman, M., Khan, A., Jathol, I., & Irfan, S. (2024). Assessing the impact of political instability on sustainable investment: evidence of pakistan's economic landscape. *Kurd Stud*, 12(2), 5663-5674.
- Aydin, M., Sogut, Y., & Erdem, A. (2024). The role of environmental technologies, institutional quality, and globalization on environmental sustainability in European Union countries: new evidence from advanced panel data estimations. *Environmental Science and Pollution Research*, 31(7), 10460-10472. <https://doi.org/10.1007/s11356-024-31860-x>
- Barko, T., Cremers, M., & Renneboog, L. (2022). Shareholder Engagement on Environmental, Social, and Governance Performance. *Journal of Business Ethics*, 180(2), 777-812. <https://doi.org/10.1007/s10551-021-04850-z>
- Bashir, B., Rashid, M., & Bashir, Z. (2024). Impact of Ownership Structure and Corporate Governance on Earning Management: Empirical Findings from Listed Firms on the Pakistan Stock Exchange. *SEISENSE Journal of Management*, 7(1), 1-20. <https://doi.org/10.33215/c1qkdq06>
- Bilbao-Ubillos, J. (2014). The Failure of European Governance of the Crisis. *European Review*, 22(3), 361-381. <https://doi.org/10.1017/S1062798714000210>
- Bint Raza, S., Sheikh, S. M., & Rahman, S. U. (2024). The mediating role of agency cost between corporate governance and financial performance: Evidence from Pakistan Stock Exchange. *iRASD Journal of Economics*, 6(1), 144-163. <https://doi.org/https://doi.org/10.52131/joe.2024.0601.0199>
- Bodie, Z., & Shoven, J. B. (1984). *Financial Aspects of the United States Pension System*. University of Chicago Press.
- Carlitz, R. (2013). Improving Transparency and Accountability in the Budget Process: An Assessment of Recent Initiatives. *Development Policy Review*, 31(s1). <https://doi.org/10.1111/dpr.12019>
- Craswell, R., & Calfee, J. E. (1986). Deterrence and uncertain legal standards. *The Journal of Law, Economics, and Organization*, 2(2), 279-303. <https://doi.org/https://doi.org/10.1093/oxfordjournals.jleo.a036912>
- Čulinović-Herc, E., & Zubović, A. (2015). Tackling Empty Voting in the EU: The Shareholders' Rights Directive and the Revised Transparency Directive. *Croatian Yearbook of European Law and Policy*, 11(11). <https://doi.org/10.3935/cyelp.11.2015.223>
- Cziraki, P., Renneboog, L., & Szilagyi, P. G. (2010). Shareholder Activism through Proxy Proposals: The European Perspective. *European Financial Management*, 16(5), 738-777. <https://doi.org/10.1111/j.1468-036X.2010.00559.x>
- Davis, E. P. (2002). Institutional investors, corporate governance and the performance of the corporate sector. *Economic Systems*, 26(3), 203-229. [https://doi.org/10.1016/S0939-3625\(02\)00044-4](https://doi.org/10.1016/S0939-3625(02)00044-4)
- de Jongh, J. M. (2012). Shareholders' duties to the company and fellow shareholders. *European Company Law*, 9(3).
- Drobetz, W., El Ghoul, S., Fu, Z., & Guedhami, O. (2024). Institutional investors and corporate environmental costs: The roles of investment horizon and investor origin. *European Financial Management*, 30(2), 727-769. <https://doi.org/10.1111/eufm.12444>

- Dumay, J., La Torre, M., & Farneti, F. (2019). Developing trust through stewardship: Implications for intellectual capital, integrated reporting, and the EU Directive 2014/95/EU. *Journal of Intellectual Capital*, 20(1), 11-39. <https://doi.org/https://doi.org/10.1108/JIC-06-2018-0097>
- Efunniyi, C. P., Abhulimen, A. O., Obiki-Osafiele, A. N., Osundare, O. S., Agu, E. E., & Adeniran, I. A. (2024). Strengthening corporate governance and financial compliance: Enhancing accountability and transparency. *Finance & Accounting Research Journal*, 6(8), 1597-1616.
- Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide. *Journal of Corporate Finance*, 18(2), 389-411. <https://doi.org/10.1016/j.jcorpfin.2012.01.005>
- EU, E. U. (2024). Capital markets union and financial markets. European Commission. https://finance.ec.europa.eu/capital-markets-union-and-financial-markets_en
- European Central Bank, t. g. f. c. (2010). <https://www.exploring-economics.org/en/discover/the-european-central-bank-in-a-state-of-crisis/>
- European Commission, E. (2010). Corporate governance in financial institutions and remuneration policies. *Green Paper, COM*, 284.
- Fatima, S., Mortimer, T., & Bilal, M. (2018). Corporate governance failures and the role of institutional investors in Pakistan. *International Journal of Law and Management*, 60(2), 571-585. <https://doi.org/10.1108/IJLMA-10-2016-0096>
- Ferreira, M. A., Massa, M., & Matos, P. (2010). Shareholders at the Gate? Institutional Investors and Cross-Border Mergers and Acquisitions. *Review of Financial Studies*, 23(2), 601-644. <https://doi.org/10.1093/rfs/hhp070>
- Fichtner, J. (2020). The Rise of Institutional Investors. In P. Mader, D. Mertens, & N. Van Der Zwan (Eds.), *The Routledge International Handbook of Financialization* (1 ed., pp. 265-275). Routledge.
- Franks, J. (2020). Institutional ownership and governance. *Oxford Review of Economic Policy*, 36(2), 258-274. <https://doi.org/10.1093/oxrep/graa009>
- International Monetary Fund, S. s. D. (2019). *International Monetary Fund Annual Report 2019*. International Monetary Fund.
- Investing in Climate Chaos, I. (2024, July 9). Fossil fuel investment report. <https://investinginclimatechaos.org/reports>
- Jahangir, A. (2024). Governance Innovation in South Asia. In *Mapping Governance Innovations* (1 ed., pp. 147-166). Routledge India.
- Jędrzejowska-Schiffauer, I., Schiffauer, P., & Thalassinos, E. (2019). EU Regulatory Measures Following the Crises: What Impact on Corporate Governance of Financial Institutions? *EUROPEAN RESEARCH STUDIES JOURNAL*, XXII(Issue 3), 432-456. <https://doi.org/10.35808/ersj/1488>
- Johnston, A., & Morrow, P. (2018). The Revised Shareholder Rights Directive 2017: Policy Implications for Workers. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3179973>
- Khan, N. U., Zhongyi, P., Ullah, A., & Mumtaz, M. (2024). A comprehensive evaluation of sustainable mineral resources governance in Pakistan: An analysis of challenges and reforms. *Resources Policy*, 88, 104383. <https://doi.org/10.1016/j.resourpol.2023.104383>
- Kocovic, J., Rakonjac-Antic, T., & Jovovic, M. (2011). The impact of the global financial crisis on the structure of investment portfolios of insurance companies. *Economic Annals*, 56(191), 143-161. <https://doi.org/10.2298/EKA1191143K>
- Kozmenko, S., & Roienko, V. (2016). Ensuring financial inclusion through insurance companies and credit unions. *Insurance Markets and Companies*, 7(1), 6-10. [https://doi.org/10.21511/imc.7\(1\).2016.01](https://doi.org/10.21511/imc.7(1).2016.01)
- Lazonick, W. (2007). The US stock market and the governance of innovative enterprise. *Industrial and Corporate Change*, 16(6), 983-1035. <https://doi.org/10.1093/icc/dtm030>

- Mahmood, Z., Blaber, Z. N., & Khan, M. (2024). Institutionalisation of sustainability reporting in Pakistan: the role of field-configuring events and situational context. *Qualitative Research in Accounting & Management*, 21(2), 219-251. <https://doi.org/10.1108/QRAM-01-2022-0019>
- Njegomir, V., & Demko Rihter, J. (2013). Innovations of Insurance Companies and Investment Funds. *Management - Journal for theory and practice of management*, 18(68), 59-68. <https://doi.org/10.7595/management.fon.2013.0014>
- Nour, A. I., Najjar, M., Al Koni, S., Abudiak, A., Noor, M. I., & Shahwan, R. (2024). The impact of corporate governance mechanisms on corporate failure: an empirical evidence from Palestine Exchange. *Journal of Accounting in Emerging Economies*, 14(4), 771-790. <https://doi.org/10.1108/JAEE-10-2022-0283>
- Papadima, R. (2018). Adoption of Directive 2017/828/EU: Rights and Obligations of Shareholders and other Partners of Quoted Companies. *RRDE*, 89.
- Parvez, A., Amjad, A., Zubair, A., & Ahmed I, A. (2024). The association between Pakistan and the European Union, with a particular focus on trade. *Zeszyty Naukowe. Organizacja i Zarządzanie/Politechnika Śląska*.
- Petrus, T. (2016). Shareholder Activism in EU-listed Companies. In: LLM Thesis.
- Roe, M. J. (1993). The Modern Corporation and Private Pensions. *UCLA L. Rev.*, 41, 75.
- Sajid, G., Muhammad, S., Nasir, R., & Farman, A. (2012). Agency cost, corporate governance and ownership structure: the case of Pakistan.
- Shirai, S. (2023). *Promoting Sustainable Finance and Financial Stability Through Climate-Related Corporate Disclosure in Asia*.
- Sorsa, V.-P. (2014). Fostering Pension Fund Capitalism Without Financializing Pensions? The Evolution of Policy Ideas in Finnish Pension Fund Investments. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2462113>
- Van Den Berghe, L. A. A. (2009). To What Extent is the Financial Crisis a Governance Crisis? From Diagnosis to Possible Remedies. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1410455>
- Wen, S. (2013). *Shareholder Primacy and Corporate Governance* (0 ed.). Routledge.
- Wouters, J., Sterkx, S., & Corthaut, T. (2010). The International Financial Crisis, Global Financial Governance and the European Union. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1766555>