Accounting Conservatism, Threat of takeover, Corporate Governance and Default risk:

A Comparative Analysis of Developing and Developed Economies (Pakistan & US)

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Abstract

The aim of this paper is to explore the impact of accounting conservatism, takeover threat and corporate governance on the risk of default. The study analyzed data from 400 non-financial companies listed on the Stock Exchanges, including 200 firms from Pakistan and 200 from the United States of America. The data spanned a period of 13 years, from 2009 to 2021, and various statistical analysis methods were used to investigate the connections between the variables. The study employed an agency theory to investigate the relationships. Results of the study showed that both in Pakistan and the USA, accounting conservatism, takeover threat, and corporate governance had a significant negative relationship with default risk. These findings have important implications for stakeholders such as investors, business analysts, managers, and researchers. By considering these factors, stakeholders can better assess firms' default risk and develop investment strategies that align with their objectives.

Keywords: Accounting Conservatism, Takeover Threat, Default Risk

Introduction

Default risk is the possibility that a borrower may be unable to repay their debt as agreed. This risk is significant for both lenders and investors, as it affects interest rates and investment returns. It is important to note that default risk is not restricted to individuals; companies that issue bonds may also find it challenging to meet their financial commitments, such as interest payments. Therefore, assessing a borrower's default risk is essential to a lender's risk management plan. Likewise, evaluating a company's financial health is crucial for investors to determine the level of investment risk involved. Being aware of a company's default risk is vital for stakeholders to make informed decisions and minimize their exposure to potential losses. The risk of default is not fixed but can be influenced by various external and internal factors. Some of these factors include broader economic shifts and changes in a company's financial condition. During periods of economic recession, many businesses may experience a downturn in revenue and

earnings, making it challenging to meet debt and interest obligations. Therefore, it is essential for companies to identify and implement measures that can help mitigate or reduce default risk. While some factors have been identified and tested in various settings, there are still many other factors that can have a significant impact on a firm's default risk. Hence, it's crucial for companies to stay vigilant and take necessary steps to manage their default risk to maintain financial stability and sustainability.

In this particular study, a comprehensive examination was conducted to explore the potential role of accounting conservatism in relation to the likelihood of default risk. The research aimed to explore this aspect deeply and provide a thorough understanding of its impact on the firm's overall financial landscape. According to (Basu, 1997), accounting conservatism has two types: conditional and unconditional. The primary difference between the two forms of conservatism is that the application of conditional conservatism depends on economic news events, while the application of unconditional conservatism does not. The idea of conditional conservatism pertains to the unequal recognition of positive and negative economic news, whereas unconditional conservatism is characterized by consistently undervaluing net accounting assets. Research indicates that these types of conservatism can impact various aspects of business, including contracting, regulation, taxation, valuation, and reducing information asymmetries. Ultimately, they may affect default risk through their cash-enhancing and informational effects, according to Biddle, Ma, and Song (2022). Accounting conservatism also reduces agency problems, which cause deadweight losses, as Watt (2003) suggested.

Another factor that is investigated in this study concerning firm default risk is the threat of takeover, acknowledged as a crucial factor that significantly impacts a company's default risk. When a firm's market value drops due to insufficient profits, it becomes more susceptible to takeover bids. The takeover market is an external governance mechanism that motivates managers to generate value for shareholders to deter takeovers (Jensen and Ruback, 1983; Morck et al., 1988). Firms that are more likely to be taken over have better performance, lower chances of experiencing losses, and higher earnings quality (Balachandran et al.,2020). An increase in the threat of a takeover helps resolve agency problems because managers fear losing their jobs and reputation if a takeover occurs, and hence, they act in the best interests of shareholders. However, managers may engage in earnings distortion because takeover threats increase

performance sensitivity to turnover. Consequently, board members are more likely to monitor management to avoid being replaced due to poor performance or governance.

After the worldwide financial crisis, there were concerns regarding the efficiency of boards and large shareholders in their responsibility to monitor. This is because excellent corporate governance is essential for success and can aid in minimizing financial difficulties. An independent board is anticipated to provide efficient monitoring and supervision of the management team, which can positively impact the firm's performance. Independent directors are presumed to possess the required expertise, experience, and impartiality to assess managerial decisions, question management when required, and make choices that are in the company's best interest. According to resource dependency theory, larger boards with more resources and expertise are better equipped to monitor managers and prevent insider control, thus decreasing the likelihood of default (Switzer and Wang, 2013a, b).

However, according to Jensen (1993), bigger boards may encounter difficulties in communicating and coordinating effectively, leading to conflicts within the company and reducing monitoring efficiency. Research on the effects of board and ownership structures on financial distress has not yielded consistent results. One reason for this is that these studies fail to take into account the crucial role of banks in the life of a business. However, previous literature acknowledges the significance of banks in resolving financial difficulties. Objective of this research is to examine the specific factors and mechanisms that could decrease/increase the chances of a business defaulting. Knowing what caused default risk was crucial for investors, lenders, and policymakers to accurately evaluate a company's financial health and make informed choices. Despite gaps and inconsistencies in past research, this study initially focused on how accounting conservatism related to default risk. This study examined the impact of incorporating banks in corporate governance mechanisms on a firm's default risk in both emerging and developed economies, with a specific focus on Pakistan and the US economy. In these economies, banks provide debt and equity financing to firms, which gives them significant influence over firm decisions, even if they are not the largest shareholder, as (Tribo et al. 2007) noted. Previous research has shown that blockholders and boards tend to take action when a company's survival is at risk.

Block holders with a significant ownership stake are highly motivated to closely

monitor management, resulting in better corporate governance practices. This monitoring improves management accountability, reduces agency problems, and increases operational efficiency. These are critical factors to consider, as financial distress can lead to bankruptcy, which harms stakeholders and has significant consequences for the financial sector and the overall economy. The recent economic crises have made it clear that decision-making bodies in both the public and private sectors need to be balanced and diverse. Suggestions for governance reform have highlighted the importance of having gender diversity on boards, as it is believed that having more women in leadership positions can greatly improve governance, operating performance, and shareholder value. However, despite ongoing discussions, the exact nature of this relationship remains unclear, and further research was required to provide greater clarity. This research examines how these relationships are impacted by varying economic conditions and determines if they hold true in different countries and institutional arrangements. Previous studies have identified the threat of a takeover as an external corporate governance mechanism that can affect a firm's default risk. However, there is disagreement among researchers on the impact that takeover threats have on a company's default risk. Some scholars, such as Jensen and Ruback (1983) and Morck et al. (1988), argue that the takeover threat can discipline managers and incentivize them to create shareholder value, thereby deterring takeovers. On the other hand, Lel and Miller (2015) found that turnover sensitivity to performance increases when a country adopts legislation that increases the threat of a takeover. Despite these differing opinions, there is still a lack of clarity on the exact nature and extent of the relationship between takeover threats and corporate default risk. This study aims to explore and analyze this relationship.

Research Questions of the Study

This research study attempted to answer the following key questions;

1- What is the relationship between accounting conservatism and default risk?

2- What is the relationship between the threat of takeover and default risk?

3- What is the relationship between governance mechanisms and default risk?

Literature Review

Introduction

In this section, the researcher has briefly discussed accounting conservatism, the threat of

takeover, governance mechanisms, and default risk.

2.1. Default Risk (DV)

Default risk, also referred to as the likelihood of default, pertains to the possibility that the borrower will be unable to pay off the principal and interest outlined in the bonds. This constitutes one of two aspects of credit risk and loss severity. The default probability is termed the "probability of default (PD)" and falls between 0 and 1. Default events have varied definitions, with the most common being instances of delayed payments lasting for at least three months. Other definitions may factor in special events. Several factors influence the risk of default, such as poor financial health, high debt, low income, and instability, among others (Crosbie & Bohn, 2019).

2.2. Accounting Conservatism (IV)

An accounting rule that requires auditors to carefully prepare financial statements and conduct an appropriate audit of accounting records (Li, 2015). Conservatism in accounting refers to accounting standards that require auditors to be very real when faced with uncertainty and use solutions that show the least aggressive numbers. It is a long-standing accounting rule designed to protect users of financial information from inflated profits and to ensure that all potential liabilities are recognized as they arise (Zhong & Li, 2017). The guidance requires that losses be recognized as soon as they are estimated (certain or uncertain) but that gains be recognized only when it is determined that they can be recovered.

Accounting conservatism, as defined by Ruch and Taylor (2015), refers to a trend or policy in accounting that reduces the book value of net assets based solely on capital economics. However, the "Financial Accounting Standards Board (FASB)" does not consider conservatism a qualitative characteristic of accounting in its conceptual framework because it is considered biased (Zhong & Li, 2017).

2.2.1. The Cash-Enhancing Role of Accounting Conservatism

Ideas, analytical models, and characterizations suggest that accounting conservatism increases the cash supply by reducing cash outflows and increasing cash inflows. Conservatism reduces cash outflows by limiting cash payments and waste of money and by reducing cash-related agency costs. For example, Watts (2003) found that conservatism reduces or delays cash expenditures for performance-based compensation, taxes, and dividends, delaying the recognition of net income and assets. Researchers argued that conditional conservatism increases management's incentives to avoid unwarranted

investments upfront and to stop losing projects soon after; researchers report that timely recognition of losses prevents overinvestment in cross-border and takeover contexts, respectively. Researchers show that conservatism reduces the cost of capital, facilitates external financing, increases financing cash flow, reduces capital underinvestment, and increases future cash flow from operations. The researcher argues that accounting conservatism partly increases the effectiveness of concession contracts by encouraging the earlier abandonment of unprofitable projects (Biddle et al., 2022).

Companies that implement accounting conservatism tend to avoid overinvestment because promptly acknowledging losses restricts the funding available to management. Furthermore, adopting conservative accounting practices increases the likelihood of shareholders and boards detecting unsuitable investment ventures (such as overinvestment projects or those with negative present value (NPV) and placing pressure on management to make better decisions (Biddle et al., 2022).

2.2.2. The Informational Role of Accounting Conservatism

Previous studies have also shown that accounting conservatism reduces asymmetric information by increasing information accuracy, and researchers showed that conservatism reduces the asymmetric information between companies and investors about the value of assets (Hui et al., 2012). According to Hui et al. (2012), declaring lower asset values through depreciation rules can improve the accuracy of information. Additionally, conservatism in accounting indirectly reduces the risk of bankruptcy by supporting the increase of cash. This helps to reduce information asymmetry and uncertainty, which in turn decreases the cost and risk of adverse choices for investors. When firms are close to default, this can increase the supply of liquidity from outside parties by decreasing the cost of equity and debt. In the case of struggling firms, conservatism can prevent bankruptcy by encouraging creditors and lenders to work together to avoid it.

2.3. Threat of Takeover (IV)

When a company is acquired, it can help to eliminate risk for management and reduce conflicts between them and shareholders. However, it can also make insurance for managers less dependable and disrupt their agreements. Hostile takeovers are an important disciplinary system in liquidity markets. Companies are more vulnerable to takeover bids when stock market prices fall due to insufficient current profits. This threat incentivizes management to create shareholder value to avoid acquisitions (Balachandran et al., 2020). As per the long-run

interest hypothesis, it can be stated that the restrictive takeover threats eliminate the myopia factor from the managers. This means they cannot have a clear vision while making investment decisions. These findings suggest that corporate law that allows managers to insulate the risk of external takeover bids with various hedges can positively affect shareholder wealth (Balachandran et al., 2020).

Finally, because acquisitions can disrupt customer-supplier relationships, acquisition risk can harm suppliers' ability to form long-term customer relationships, leading to lower profitability and productivity and higher default risk. Hence, it can be argued that the pressure of taking over might lead to the failure of the management's plan to eliminate revenue streamlining, which further leads to improving the performance as a whole (Armstrong et al., 2012).

2.4. Corporate Governance Mechanism (IV)

Corporate governance methods are a set of policies, guidelines, and controls that organizations use to reduce inefficiencies and guide their operations. These techniques help managers and employees understand acceptable behavior in business conduct (Lozano et al., 2016). The system of corporate governance comprises rules, practices, and processes that manage and guide businesses. It aims at balancing the interests of various stakeholders, including shareholders, top management, customers, suppliers, financiers, governments, and communities. Governance provides a framework for achieving corporate goals, covering all areas of management, from operational planning and internal control to performance measurement and corporate disclosure (Lozano et al., 2016).

The board plays a primary role in managing the company and is composed of individuals elected by shareholders or other board members. Their main responsibility is to represent the company's shareholders (Naciti, 2019). The presence of independent directors can enhance governance by reducing the concentration of power and promoting alignment between shareholder and insider interests. It is the responsibility of the board to ensure that corporate governance encompasses key areas such as business policies, risk management, accountability, transparency, and ethical business practices (Naciti, 2019).

2.5. Relationship between Accounting Conservatism and Default Risk

Past scholars have defined the concept of accounting conservatism as the corporate governance mechanism that decreases the incentives in order to make inefficient investments

(Watts, 2003a; Ball and Shivakumar, 2005). The studies investigating the relationship between accounting conservatism and default risk have found that conservative accounting enables firms to eliminate the amount attributed to the debt holders and allows the companies to save more cash (Kim et al., 1993). In line with this, another study found a negative relationship between accounting conservatism and default risk by exploring that accounting conservatism helps in preserving cash flows, which, as a result, improves the ability of the firm to repay cash to debt holders (Vassalou and Xing, 2004). The scholar found that it positively affects the reduction of default risk. Zhang (2008), in this context, reported that conservative firms are more likely to violate the covenants. This improves the debt holder's monitoring power and helps eliminate the under-investment and default risk as a whole (Tan, 2013).

The negative price shocks mainly result in conservative borrowers violating agreements (Zhang, 2008). Conservatism transfer encouraged by covenant violations controls rights from borrowers to debt holders, resulting in flourishing their evaluation skills, assuaging under-investment, and enhancing cash flows (Nikolaev, 2010; Tan, 2013). This also improves the firm's renegotiation skills with debt holders and decreases default risk (Uhrig-Homburg, 2005). Conservatism is attributable to creating an imbalance between two negotiation parties, which enhances the frequency and possibility of debt renegotiation (Nikolaev, 2013).

It intensifies the firm's capability to negotiate debt and elude bankruptcy filings (Biddle et al., 2022). With reference to the above information, accounting conservatism is expected to adversely impact default probability. Scholars like Biddle et al. (2022) tested the association between bankruptcy risk and accounting conservation, and the findings demonstrated that an irregularity in the timeliness of information is related to a lesser estimated risk of bankruptcy. The samples have all organizations irrespective of the financial condition of the organizations. The addition of non-distress firms in the sample addresses how conservatism impacts default risk but not recovery risk.

2.6. Relationship between Threat of Takeover and Default Risk

The empirical evidence on corporate control depicted that the takeover threat is an important mechanism for creating the discipline factor among managers (Manne, 1965). It has been argued that a takeover market is likely to enhance the allocation of resources, such as improving efficiency (Subramaniam and Daley, 2000). This increment in the insulation further leads to a rise in discretionary behavior among the managers. It was also reported that the initiation of the takeover law results in raising the possibility of replacing the CEOs who are

not performing well. These findings are consistent with the findings of Morck et al. (1988), where the study found that hostile takeover impacts the performance and replacement of poorly performing managers. Therefore, the findings of these studies support the view that the threat of takeovers enhances the monitoring ability and discipline of managers and also leads to a potential decrease in the default risk. According to Sheikh (2019), when management fails to maximize shareholder value, the company's stock price falls, exposing it to the danger of a takeover bid and opening the door to the potential that ineffective management may be changed (Berger and Roman, 2018).

Luo et al. (2020) examined that the pressure associated with the potential of an acquisition may be detrimental to a firm since it drives management to prioritize short-term earnings above long-term ambitions. If shareholders are not properly informed, temporary poor profitability may decrease the share price (Cremers et al., 2019). As per Desender et al. (2020), takeover protection seems to have two opposing effects on the likelihood of a share price decline. Jiang et al. (2021) found that the poor economic and financial profitability of takeover targets in France is a result of agency difficulties as a risk element. These findings demonstrated the significance of size and capital concentration in the decision-making process of acquirers when choosing which targets to pursue (Cremers et al., 2019).

As per Rogelja and Tsimonis (2020), a business undergoing a takeover may be more susceptible to default if its leverage and debt repayment costs grow. The results of the research indicate that target organizations often see an increase in their debt levels after unsuccessful contract proposals. Bond issues are related to negative average share price reactions in takeover-friendly countries, while restrictive legislation is associated with favorable average share price responses (Baghdadi et al., 2020). In places with lax takeover rules, firms are permitted to wield far more power than in those with tougher legal constraints. The majority of research indicates that unfavorable updates might become regular (Bharath and Hertzel, 2019). Managers who commit to raising the firm's worth via the use of leverage to fight a takeover increase the risk that their shareholders will vote them out of office. Eisdorfer et al. (2022) investigated that firms with good management have nothing to fear from takeovers. With very few circumstances, a raider would never dismiss a company's management if it was running at the maximum degree of efficiency.

2.7. Impact of Governance Mechanism on Default Risk

Studies have focused on different types of governance mechanisms that can promulgate default

risk. The research study has been organized by (Srivastav & Hagendorff, 2016), in which corporate governance was explored against default risk in bank power companies and firms (Srivastav & Hagendorff, 2016). The banking powers of the firms are found when the firms are known to take loans from such banks that hold equity over them. The notion of banking power is known to impact the mechanism of governance, which in turn impacts the default risk as well (Ballester et al., 2020). Therefore, this study suggests that banks must be vigilant in their approaches to define their mechanisms of corporate governance that can aid in reducing default risks and recurrent losses (Srivastav & Hagendorff, 2016). Another study was conducted to investigate the impact of corporate governance mechanisms on default risk in banking-powered European firms (García et al., 2022). The study employed 109 banking firms in Europe to analyze the four core factors affecting the governance mechanism, such as independence of the board, size of the board, female directors, and duality of the CEO. The findings suggest that strengthening and promulgating the firms' core factors can positively impact reducing default risk. Block ownerships in financial and non-financial firms are also significantly affluent on default and credit risks.

Block ownerships are devised based on governance mechanisms and, therefore, provide a lot of importance as a corporate governance mechanism. The employed study was completed using data from non-financial Pakistani firms registered on the Pakistan Stock Exchange (Younas et al., 2021). The study explores the impact of block ownership and subsequently employed mechanisms related to governance on the occurrence of default risks. The study showed that there are contrastingly positive impacts of organizational ownership found on default risks (Younas et al., 2021). The study's results indicated a negative and significant influence of block ownerships on default risks and credit ratings due to the irregulated ways and views. The study also found that the impact was more noticeable in Anglo-American countries than in European countries. The literature of the study recommends amending the ways of corporate governance to regulate the functioning of corporate laws and minimize default risks as well (AlHares et al., 2018). Moreover, research was directed to explore the impacts of various factors such as corporate governance, block ownership, CEO duality, and gender diversity in assessing the functions related to risk-taking behaviors (default risks) in several banks in selected Asian countries (Hunjra et al., 2021).

Board independence is identified as another factor that can initialize and facilitate the findings, which can relate to the governance mechanisms and facilitate the notion of default

risks (Cao et al., 2015). The findings of the study instigated that the factors that can positively and significantly impact the occurrence and mitigation of the default risk in AAER companies are the size of the board, board independence, gender diversity of the board, and institutional ownership, along with the good regulation of corporate governance practices. A study set in the Australian context was conducted to investigate the impacts of governance mechanisms, particularly corporate governance, on default risks through the inclusion of independent boards (Ali et al., 2018). In another study, the facilitation of the co-opted board was discussed in comparison to the independent boards on the default risks and prediction/probability as a mechanism of governance (Baghdadi et al., 2020). However, the study was still skeptical regarding the obtained results of the co-opted boards and delivered the maintenance of the good governance of the mechanism (Baghdadi et al., 2020).

In addition, greater governance and board independence bring greater insight into the decision-making process, which can help challenge parochialism and weak analytical skills and increase participation. In addition to influencing business policy and decision-making, board independence can reduce automated risks and reduce management's risk appetite through effective oversight. A growing body of literature shows that CEO personalities influence corporate performance. An important personal factor related to risk in business automation is the tendency to seek risk management (Cain & McKeon, 2016). Independent management should better prevent this management tendency.

2.1. Hypotheses Development

This research study developed the following hypotheses for testing in light of the above literature review:

H 1: There is a significant relationship between accounting conservatism and default risk.

H 2: There is a significant relationship between the threat of takeover and default risk.

H 3: There is a significant relationship between governance mechanisms and default risk.

Research Methodology

In this chapter, we discuss the various aspects of the research study, including the research, methodology, variables, and econometric model used. The aim of this study was to perform a comprehensive analysis of non-financial firms currently listed on stock exchanges in Pakistan

and the United States. To conduct the research, a sample size of 200 companies was chosen from each of the two countries. The companies were selected based on the availability of the required data. The data collected will cover a thirteen-year period from 2009 to 2021. To ensure that the study was as comprehensive as possible, the analysis focused on non-financial companies with unique profit and capital structures (Shah, 2009). Companies with incomplete data or inadequate corporate governance mechanisms will be excluded from the sample to ensure reliable and accurate results. The selected companies included in the research are from various sectors in both developing and developed economies, providing a well-rounded view of the current business landscape in these two countries. Pakistani firms' data required to measure the variables utilized in this study were obtained from the data stream, eikon, and annual reports published by companies. In contrast, the Wharton Research Data Services (WRDS) database was used to collect the required data for the selected sample of the US. Descriptive, correlation and panel regression models were used to examine the relationship. Stata software was used to perform various tests and investigate the relationships of the study.

Measurement of Variables

Measurement of Default Risk

This study relies on the Z-Score model version to predict bankruptcy. This model has a broad application and can be used for privately held and publicly listed firms and manufacturing and non-manufacturing firms. (Altman, Iwanicz-Drozdowska, Laitinen, and Suvas, A. 2017).

$$Z'' = 3.25 + 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4$$

Whereas;

Z refers to the overall index;

X1 refers to Working Capital divided by Total Assets (WC/TA);

X2 refers to Retained earnings divided by Total Assets (RE/TA);

X3 refers to Earnings before Interest and Taxes divided by Total Assets (EBIT/TA);

X4 refers to the Market Value of Equity divided by the Book Value of Total Liabilities (MC/TL).

Areas of discrimination

Z > 2.60, "Safe" Area, this shows that a company is less likely to go bankrupt.

1.10 < Z < 2.60, "Grey" region, this suggests that the company may be in danger of experiencing

financial difficulties.

$Z < 1.10$, "Distress" region, this suggests that the company is highly likely to face bankruptcy in the near future.

Dependent Variable

The variable Z is used to determine whether a company is financially distressed or healthy based on its value.

Independent Variable

X1 = (WC/TA) Working Capital (WC): The term "working capital" refers to the distinction between current assets and current liabilities. This difference can be either positive or negative.

X2 = (RE/TA) Retained Earnings (RE): When a company reinvests its earnings instead of distributing them to shareholders, it affects its financing and leverage. The RE to TA ratio is used to measure this degree of financing of total assets via surplus profits and also helps gauge a firm's cumulative profitability. This ratio indicates a company's earning power as well as its age (Altman, 2000).

X3 = (EBIT/TA) Earnings Before Interest and Taxes (EBIT): EBIT refers to the earnings generated by a firm's operating activities. The EBIT/TA ratio measures the efficiency of assets in generating profits. A low EBIT/TA ratio suggests that the firm is not utilizing its assets effectively to generate profits. This ratio estimates the cash available for allocation to creditors, government, and shareholders. It's considered an appropriate indicator for investigating firm bankruptcy because a company's long-term survival depends on its earning power (Altman, 1968).

X4 = (MC/TL): Liabilities refer to the measurement of both long-term and current-term obligations, while equity represents the market value of all common, preferred, and stock shares. This measure indicates how much the company's assets could potentially decrease.

Measurement of Independent Variables

In this study researcher employed the CON-MKT accounting conservatism technique as Ahmed and Duellman (2007) devised. This strategy entails multiplying the book-to-market ratio by a negative one, leading to positive figures that reflect greater conservatism. Since conservative accounting practices generally underestimate the book value of equity compared to market value, businesses that implement this method exhibit lower book-to-market ratios. Sinha's 1991 study found that a firm's decision to repurchase its shares can be attributed to a

perceived threat of a takeover. This announcement made by the manager can provide outside investors with a more accurate understanding of the firm's investment value. The uncertainty surrounding the takeover is resolved by repurchasing its share, and investors can make informed decisions. Harris and Raviv's 1988 study and Stulz's 1988 research suggest that capital structure can be used as a defense against takeovers. Their models indicate that increasing leverage can reduce the value of outstanding equity, which allows the manager to control a larger share of equity with the same investment. Such strategies can help firms protect themselves from potential takeovers while also ensuring that they retain control over their equity.

Share repurchase is measured through the proxy used by (Fang and Olteanu-Veerman 2019)

Composite Equity Issuance $(t - \tau, t) = \log(ME_t / ME_{t-\tau}) - r(t - \tau, t)$

Where $(t - \tau, t)$ is the composite equity issuance of a firm distributed between time t-τ and t. ME_t is the market capitalization at time t.

$(t - \tau, t)$ is the stock total return from time t-τ to t.

If the value of $(t - \tau, t)$ is a positive value, it indicates that there has been an issuance. However, if it is negative, it means there has been a share repurchase.

The research study applied Principal Component Analysis (PCA) on the following variables in order to construct the corporate governance index. It is worth noting that even owning just 5% of shares can also give one a stake in the firm's debt claims. When assessing a bank's power, we believe it is unnecessary for them to be the largest block-holder to have significant influence over decision-making (see also Franks and Mayer, 1998, 2001).

This study measured gender diversity, as the proportion of female executives and female board members in board (Mirza and Andalleb, 2012). Board size was measured by taking the natural log of the total number of directors on the board. Likewise, Mangena, M., Priego, A. M., & Manzaneque, M. (2020) have devised a method that utilizes the power of all block-holders, excluding the bank with a dual role, who own at least 5% of the company's shares. Our approach considers the importance of both block ownership and block-holders' dispersion in monitoring, as stated in various literature sources (Tribo et al., 2007; Konijn et al., 2011; Basu et al., 2016). Our block ownership measure incorporates three components: (ii) Total ownership of the top three blocks (Top3 blocks), as well as the proportion of shares held by the first, second, and third largest block-holder (Block 1, Block 2, and Block 3); and (iii) the dispersion of block-holders, measured by the number of blocks and the Herfindahl index of

equity stakes. We calculated the scaled Herfindahl index, as in Konijn et al. (2011), using the total ownership of the top three largest block-holders. The Herfindahl index = [(%Block 1)^2 + (%Block 2)^2 + (%Block 3)^2] / [(%Block 1) + (%Block 2) + (%Block 3)] (see Konijn et al. (2011). A lower Herfindahl index indicates that there is a greater dispersion of block-holders within the company. Different researchers used different proxies in the literature to measure board independence variables. This study followed the proxy of board independence variable used by Alam (2013) and Khan (2014): Board Independence = Number of non-executive directors / total number of board members.

Measurement of Control Variables

Firm size was measured by taking a natural log of the firm's total assets. Firm growth was measured as the previous year's sales subtracted from the current year's sales divided by the previous year's sales. Firm age was measured by taking the log of the firm's establishment years. Leverage is measured by taking a firm's debt-to-total-equity ratio.

Theoretical Framework/Model
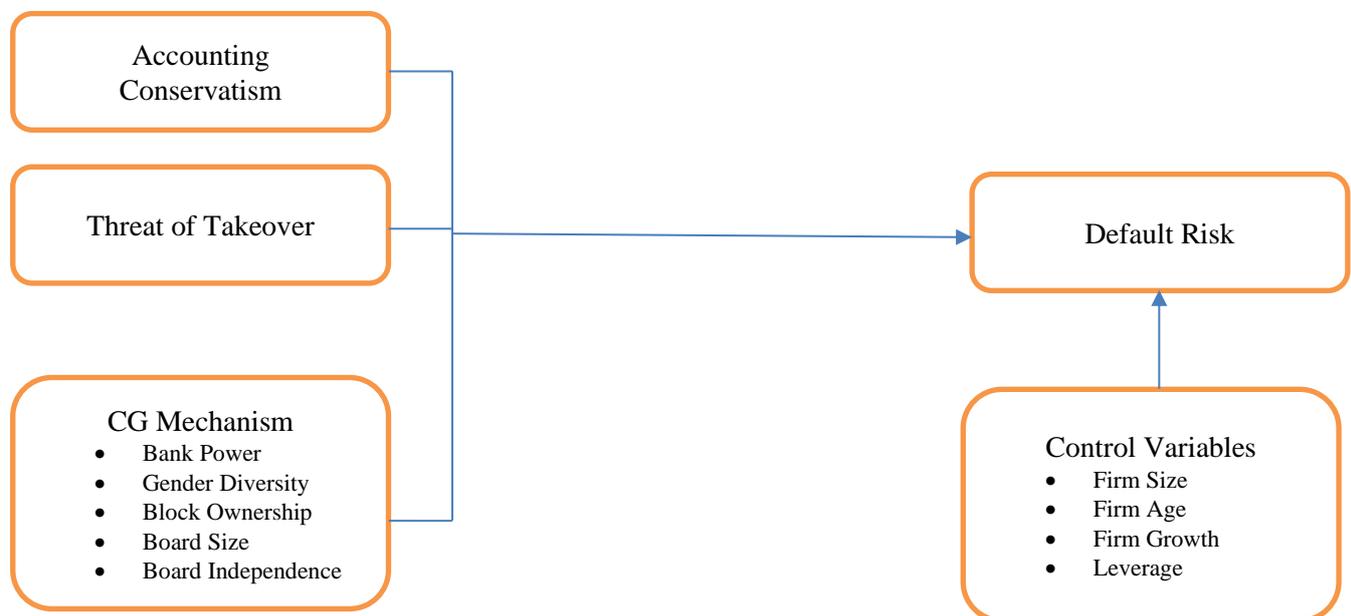
Results and Discussion

In this section, we will be delving into the various statistical tools and techniques utilized in the study. Firstly, the data was thoroughly cleansed and screened for any underlying issues such as stationarity, heteroscedasticity, multicollinearity, and endogeneity. This was essential

for ensuring the accuracy and reliability of the results obtained. Subsequently, we employed the Feasible Generalized Least Square (FGLS) and Generalized Method of Moment (GMM) measurement models, which were expertly executed through the use of STATA software. These techniques were chosen for their effectiveness in dealing with complex datasets and providing robust and unbiased estimates.

Pakistani Data Results

Table: 01 Descriptive Statistics

Variable Name	Mean	Std.Dev.	Min	Max
Dr	8.607035	31.21198	-46.55737	169.073
Accon	-472.8099	2355.085	-24420.16	82844.65
Tot	.4803846	.4997112	0	1
Cgindex	3.7810	1.000001	-1.145234	6.023622
Fz	15.69541	1.657154	10.85594	20.67826
Fml	.5835343	.3119012	.0043327	3.997006
Fmgrot	.3698829	7.667542	-.9830311	323.1718
Fmage	1.525518	.2437202	0	2.206826

Note: This tables report the descriptive statistics of the sample of Pakistani Firms. The number of observations is 2600. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age

The present study involved an analysis of Pakistani data, which was carefully presented in a comprehensive table comprising 2600 observations. The researchers utilized the Altman Z score to calculate the dependent variable, Default Risk (DR), which is the first variable of interest. The mean value of DR is 8.60 (with a Standard Deviation [STD] of 31.21198), suggesting that the average companies in the data set are relatively safe from bankruptcy. Nonetheless, the presence of a minimum value of -46.55 implies that there are some hazardous companies in the dataset. In contrast, the maximum value of DR is 169.073, indicating that some firms in the sample are highly secure in terms of default risk.

The study also investigated accounting conservatism, measured as Accounting Conservatism

(Accon), with a mean value of -472.80 (with a Standard Deviation [STD] of 2355.085). Negative values suggest non-conservativeness, while positive values indicate conservativeness. The dataset comprises both types of companies, as indicated by the minimum and maximum values (-24420.16 & 82844.65). The researchers measured takeover threat through a dummy variable, with a minimum and maximum value of 0 and 1, respectively. The mean value of the Corporate Governance (CG) index was 3.7810 (with a Standard Deviation [STD] of 1.000001). The data set exhibited a negative minimum of -1.145234 and a maximum of 6.023 for the CG index.

The study also included descriptive statistics for control variables. Firm size (Fz) was measured by taking the natural log of Total assets, with a mean value of 156.9% and a standard deviation of 1.65. The minimum value of size was 10.85, and the maximum was 20.67. Firm leverage (Fml) was calculated as a ratio, with a mean value of 58% and a standard deviation of 31%, a minimum value of 0.004, and a maximum value of 3.99. To determine the growth of a firm (Fmgrot), one can compare its current revenue to its lag revenue. The mean value of this calculation is 0.369, with a standard deviation of 7.66. It's worth noting that the data includes both positive and negative growth companies, with the lowest value being -0.983 and the highest being an impressive 323.17. The age of the firm can be calculated by taking the natural log of its operational age. The mean value of this calculation is 1.52, with a standard deviation of 0.24. The minimum value is 0, indicating a newly established firm, while the maximum value is 2.20, signifying a well-established organization. These calculations provide valuable insight into the performance of a firm and its longevity in the market.

Correlation Analysis

Table: 02 Correlation

	Dr	Accon	Tot	Cgindex	Fz	Fml	Fmgrot	Fmage
Dr	1.0000							
Accon	-0.0025*	1.0000						
Tot	-0.0278*	0.0276	1.0000					
Cgindex	-0.1211*	0.0038*	0.0295*	1.0000				
Fz	-0.0422**	0.0452	-0.0159	0.1285*	1.0000			

Fml	0.2159***	-0.1343*	0.0211**	-0.0559**	-0.0737**	1.0000		
Fmgrot	-0.0059**	0.0549	-0.0300	0.0027*	0.0173*	-0.0410*	1.0000	
Fmage	0.0484	0.0209	0.0164	0.0839	0.1420	0.1219	0.0260	1.0000

Note: ***, **, * state 1%, 5% and 10% significance level respectively.

This table reports the value of correlation analysis by using data gather from Pakistani Firms. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age.

Before analyzing further estimation, correlation analysis has to be performed to check whether the data has multicollinearity issues. Correlation analysis is a statistical method for gauging the strength and direction of the link between two variables. It computes a correlation coefficient that measures the level of correlation between the variables, ranging from -1 to +1. A correlation coefficient +1 represents a perfect positive correlation, -1 signifies a perfect negative correlation and 0 means no correlation. (Orth, Robins, & Widaman, 2012).

The correlation between variables was examined in this study using the Pearson correlation matrix. Table No 02 indicates that Default Risk (Dr) has a positive correlation, Firm Leverage (Fml) (r = 0.2159) and Firm Age (Fmage) (r = 0.0484). While Default risk (Dr) has a negative relationship with Accounting Conservatism (Accon) (r = -0.0025), Takeover Threat (Tot) (r = -0.0278), Corporate Governance Index (Cgindex) (r = -0.1211) and Firm Growth (Fmgrot) (r = -0.0059). Similarly, Accounting Conservatism (Accon) has a positive correlation with Takeover Threat (Tot) (r = 0.0276), Corporate Governance Index (Cgindex) (r = 0.0038), Firm Size (Fz) (r = 0.0452), Firm Growth (Fmgrot) (r = 0.0549) and Firm Age (Fmage) (r = 0.0209). On the other hand, Accounting Conservatism (Accon) is negatively correlated with Firm Leverage (Fml) (r = -0.1343)

Furthermore, correlation analysis shows that Takeover Threat has a positive relationship with Corporate Governance Index (Cgindex) (r = 0.0295), Fim Leverage (Fml) (r = 0.0211) and Firm Age (Fmage) (r = 0.0164). While it has a negative correlation with Firm Size (Fz) (r = -0.0159) and Firm Growth (Fmgrot) (r = -0.0300)

The correlation table also confirmed that the Corporate Governance Index (Cgindex) has a positive relationship with Firm Size (Fz) (r = 0.1285), Firm Growth (Fmgrot) (r = 0.0027) and Firm Age (Fmage) (r = 0.0839). In contrast, it has a negative correlation with Firm Leverage (Fml) (r = -0.0559). In the same way Firm Size (Fz) has a positive correlation with Firm Growth (Fmgrot) (r = 0.0173) and Firm Age (Fmage) (r = 0.1420) and has a negative correlation with Firm Leverage (Fml) (r = -0.0737) Firm Leverage has a positive correlation with Firm Age (Fmage) (r = 0.1219) and has a negative correlation with Firm Growth (Fmgrot) (r = -0.0410)

Firm Growth (Fmgrot) has a positive correlation with Firm Age (Fmage) (r = 0.0260) In this research study researcher used the corporate governance index derived from five proxies (Board Size, Board Independence, Gender Diversity, Bank Power, and Block Ownership). Indexes are developed using Stata software's principal component analysis method (PCA). Principal components are extracted based on their coefficient values

CGINDEX=f (BS, GD, BI, BP, BO)

By running Principal component analysis (PCA), we have obtained the following coefficients for the corporate governance index;

CGINDEX= 0.2657(BS)+ 0.2040(GD)+ 0.1962(BI)+ 0.1815(BP)+ 0.1525(BO)

The CGI Index is the function of several factors based on which the Governance Index Is made. The factors included in creating the CGI Index to test the relationship with default risk comprise Board Size, Gender Diversity, Board Independence, Bank Power, and Block Ownership. These factors were used in PCA analysis to create the index, whose results have been depicted in the above equation. According to that equation, Board Size has the highest weight at 26.57%, followed by Gender Diversity at 20.40%. Board Independence contributes 19.62%, Bank Power makes up 18.15%, and Block Ownership accounts for 15.25% of the index. Breusch-Pagan/ Cook-Weisberg Test has been used for Heteroscedasticity and reported the following results;
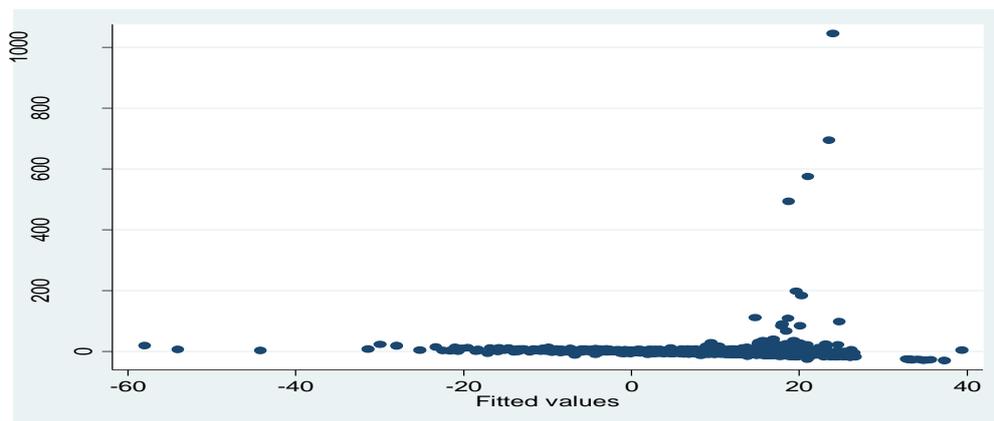
Constant Variance.

Variable	Fitted Values of dr
Chi(2)	4075.41
Prob.chi2	0.000

To ensure accurate regression analysis, it is essential to determine whether heteroscedasticity is present in the dataset. Homoscedastic data is preferable for this analysis. The Breusch-Pagan

test was utilized to detect the presence of heteroscedasticity, and the results indicated a significant chi-square value of 4075.41 with p-value of 0.000, signifying the presence of heteroscedasticity in the data. An alternative method for conducting this analysis involves using the plot diagram described below.

Check through Residual Plot

Based on the above diagram, it appears that there may be a problem with heteroscedasticity in the data. This means that the variance of the errors may not be constant across all levels of the independent variable, which could impact the accuracy and reliability of any statistical analysis performed on the data. It may be necessary to address this issue before drawing any conclusions from the data.

Panel Unit Root Analysis

To determine whether there was a unit root present in each variable series, we employed the Levin-Lin-Chu Test. This test was performed on every individual variable and yielded the following outcomes.

Table: 03 Unit Root Test

Variable Name	p-value at level	p-value at 1st difference	Stationery
Dr	0.0000	～～～	I (0)
Accon	0.0000	～～～	I (0)
Tot	0.0000	～～～	I (0)
Cgindex	0.2500	0.0325	I (1)
Fz	0.0000	～～～	I (0)
Fml	0.0000	～～～	I (0)

Fmgrot	0.0000	˜˜˜˜	I (0)
Fmage	0.0000	˜˜˜˜	I (0)

This table reports Unit Root Analysis by using data gather from Pakistani Firms. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age. It is essential to keep in mind that when conducting regression analysis, it is crucial for the data to be stationary. To verify this, the Levin-Lin-Chu test was performed individually for each of the variables, as indicated in the Table No. 03, above. However, it is significant to note that only the CG Index satisfies the stationarity criteria at the first difference with a p-value of 0.0325, whereas all other variables remain stationary at the level. Therefore, while analyzing the data, all variables can be utilized as they are, except for the CG Index, which requires taking its first difference.

Multicollinearity Analysis

In order to identify any multicollinearity among the independent variables, we conducted a Variance Inflation Factor (VIF) Test. The findings from the test are as follows:

Table: 04 Multicollinearity

Variable Name	VIF	1/VIF
Accon	1.30	0.767165
Tot	1.28	0.778750
Cgindex	1.06	0.945505
Fz	1.03	0.969790
Fml	1.03	0.974004
Fmgrot	1.03	0.974095
Fmage	1.02	0.979526
Mean VIF:	1.10	

This table reports Multicollinearity Analysis by using data gathered from Pakistani Firms. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age

Note: Typically, a reliable way to assess the presence of multicollinearity in a dataset is by examining the Variance Inflation Factor (VIF) values. If the VIF value exceeds 5 and the reciprocal of the VIF value falls below 0.2, then there may be a multicollinearity issue. In light

of these criteria, it can be concluded that the dataset under consideration does not exhibit any signs of multicollinearity. Endogeneity testing involves assessing the presence of endogeneity in regression models and determining the need for addressing this issue. The Durbin-Wu-Hausman (DWH) test is commonly used to test for endogeneity in instrumental variable (IV) estimation. It compares the coefficients estimated by the IV approach with the coefficients estimated by ordinary least squares (OLS) (Hausman,1978). If the difference between the two sets of coefficients is statistically significant, it indicates the presence of endogeneity. The Table No. 05, shows the results of two tests that checked for endogeneity. The χ^2-statistics (1.90022) (0.5280) are statistically insignificant concerning the p-values (0.6616) and (0.6631). These results indicate that there is no endogeneity problem with the data. Therefore, the study will use the Feasible Generalized Least Square (FGLS) model to analyze the relationships among variables. Based on the above diagnostic tests, different researchers (Wooldridge, J. M. 2010 and Green, W.H. 2012) recommended using the FGLS model if autocorrelation and heteroskedasticity issues exist in the data set.

Table: 05 Endogeneity

Variable	Statistics	p-value
Durbin (score) Chi(2) 3	1.90022	0.6616
Wu-Hausman F (3, 2389)	0.5280	0.6631

Regression Analysis via Feasible Generalized Least Square (FGLS)

The Feasible Generalized Least Squares (FGLS) model is used in econometrics when dealing with heteroscedasticity and serial correlation in regression analysis. FGLS is particularly useful when the assumptions of ordinary least squares (OLS) regression, such as homoscedasticity and no serial correlation, are violated.

Table: 06 Regression Analysis

Independent Variables	Dependent Variable= Dr		
	Coefficients	z-value	p-value
Accon	-0.0045	-2.21	0.034
Tot	-1.7610	-3.42	0.001
D.cgindex	-2.3423	-2.47	0.013
Fz	-0.3105	-0.52	0.606
Fml	-23.082	-14.91	0.000
Fmgrot	-0.507	-0.54	0.588

Fmage	0.9500	0.20	0.841
Constant	29.9124	3.77	0.000
Wald Chi 2 ()	282.59		
Prob›Chi2	0.0000		

This table reports Regression Analysis by using data gather from Pakistani Firms. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age.

Based on the diagnostic tests, FGLS has been performed, whose results are presented in Table No 06. The first objective of this study was to find out the association between accounting conservatism and default risk, and the results showed that in the Pakistani market, conservatism has a negative significant impact on a firm's default risk (β = -0.0045, p-value = 0.034). Hence, hypothesis H1= "there is a significant negative relationship between accounting conservatism and default risk" is accepted Pakistani context. The results statistically mean that if the firm confronts 1 unit positive change in accounting conservatism, the practice will reduce default risk by 0.0045 units. Agency theory suggests that accounting conservatism lessens information uncertainty and asymmetry via less optimistic reporting of net income and assets. The timely reporting of terrible news significantly decreases the firm's default risk (Watts, 2003, Guay and Verrecchia, 2007).

This study aimed to explore how takeover threats are related to default risk. Through testing hypothesis H-2 "takeover threat and default risk have a negative relationship," the results confirmed a significant negative relationship between takeover threat and default risk related to the Pakistani economy (β = -1.7610, p-value = 0.001). The results statistically mean that if the firm confronts 1 unit positive change in takeover threat, its default risk will decrease by 1.76 units. The results confirmed that takeover threats significantly negatively impact default risk. If a company faces a takeover threat, its default risk will likely decrease. The findings also support a previous study by Balachandran, B., Duong, H. N., van Zijl, T., & Zudana, A. E. (2023). Accordingly, the theory confirms the relationship between takeover threat and default risk. A takeover threat pressures managers to improve performance and reduce default risk to avoid being acquired. Managers are incentivized to manage the company efficiently, make value-enhancing decisions, and maintain financial stability (Bertrand &

Mullainathan, 1999, 2003; Fama, 1980; Francis et al., 2010; Lel & Miller, 2015; Manne, 1965). The increased monitoring and scrutiny resulting from the takeover threat can improve corporate governance practices and reduce the likelihood of default. The theory also explains that takeover threats can influence managers' decisions regarding the company's capital structure. Managers may opt for a more conservative capital structure, with lower leverage and a higher equity base, to deter potential acquirers and protect against default risk. This adjustment can enhance the financial stability and resilience of the firm (Myers, S. C. 1977).

This research study also determined the link between a company's internal governance practices and its risk of default.

The hypothesis, H-3 "There is a significant negative relationship between governance mechanism anddefault risk." was tested. The value of the estimation (β = -2.3423, p-value = 0.013) confirmed the significant negative relationship between corporate governance mechanism and firms' default risk; it statistically means that if a firm changes one unit in corporate governance mechanism, firms decrease 2.34 units of default risk in Pakistan's economy. The results align with previous research findings that good corporate governance significantly reduces the risk of default. This is supported by the work of Hodgson et al. (2011), Luqman et al. (2018), Younas, Noman & Uddin, Shahab & Awan, Tahira & Khan, Yar (2021), and aligns with the theory that effective governance improves company performance, ultimately leading to a lower risk of default. According to the agency theory, effective corporate governance mechanisms are essential for mitigating agency conflicts and reducing the likelihood of default. As corporate governance comprises Board Size, Gender Diversity, Board independence, Bank Power, and Block ownership, it is confirmed that the effect of the variables on a firm's default risk is highly valuable. Findings suggested that larger board sizes may lead to better corporate governance practices and monitoring.

A larger board enhances the diversity of skills and expertise, reduces the concentration of power, and improves decision-making processes (Yermack, 1996). These factors contribute to lower default risk. Independent directors play a crucial role in overseeing management and protecting shareholders' interests. Studies suggest that a higher proportion of independent directors on the board is associated with improved governance and lower default risk (Fosberg & Srinidhi, 2009). The presence of banks on a firm's board or as major shareholders provides monitoring and access to financial resources, reducing default risk (Belkhir et al., 2013). Concentrated ownership can influence managerial behavior, lowering agency costs and

reducing default risk. Blockholders with a long-term orientation and significant ownership stakes can align their interests with those of other shareholders, enhancing governance and reducing default risk (Faccio & Lang, 2002). Similarly, findings also suggested that gender diversity on corporate boards can enhance decision-making processes and reduce groupthink, leading to better risk management and lower default risk (Adams & Ferreira, 2009).

Regarding controlling variables, the impacts of firm size with coefficients and probability score ($\beta = -0.3105$, p-value = 0.606), growth ($\beta = -0507$, p-value = 0.588), and age ($\beta = 0.9500$, p-value = 0.841), on default risk was insignificant. The findings revealed that firm size and growth have a negative and insignificant influence on default risk, while firm age has a positive and insignificant impact on default risk. However, firm leverage significantly negatively impacts default risk, meaning that as leverage increases, default risk decreases. According to the theory, when we take leverage, we create watchdogs that keep an eye on our company; as a result, default risk should decrease. After controlling the firm size, growth, leverage, and age, the variables of our interest, which are Accounting Conservatism, Takeover threat, and Corporate Governance Mechanism, significantly impact the firm's default risk. The Chi-square value is (282.59) significant at p-value (0.0000), showing that the model applied is fit and appropriate.

US Data Results

Descriptive Analysis

Table: 08 Descriptive Statistics

Variable Name	Mean	Std.Dev.	Min	Max
Dr	9.545644	6.197542	-25.17819	72.23902
Accon	-0.3289	.2490288	-2.176704	.3059831
Tot	.8573077	.3498261	0	1
Cgindex	1.289	1.000001	-.5616066	4.778609
Fz	9.7419	1.2373	5.7959	13.2207
Fml	.6196155	.2149287	0	2.919128
Fmgrot	.0107044	.1146217	-.2258609	.2354313
Fmage	2.766272	.8665561	.69897	3.305566

Number of Observations: 2600

Note: This tables report the descriptive statistics of the sample of U.S Firms. The number of observations is 2600. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age

Our analysis of US data was focused on assessing the default risk (DR) of companies using the Altman Z score. In total, we examined 2600 observations and have presented the findings in the Table No. 08, above. The mean DR value was 9.54, with a standard deviation of 6.2. This indicates that, on average, the companies in our dataset are relatively safe from bankruptcy. However, it's important to note that there were some hazardous companies included in the dataset, with a minimum DR value of -25.2. On the other end of the spectrum, there were also some very secure companies with a maximum DR value of 72.24. Overall, our analysis provides valuable insights into the financial health of companies in the US. After analyzing the accounting conservatism (Accon) mean value of -0.33 (STD=.25), it can be concluded that most of the companies in the data set are not conservative. This is because a positive value represents conservativeness, while a negative value indicates non-conservativeness. However, it is worth noting that both types of companies (conservative and non-conservative) are present in the data set, as evidenced by the minimum and maximum values of -2.2 and 0.31, respectively. To measure the takeover threat, a dummy variable with a minimum value of 0 and a maximum value of 1 is used. The mean value for the CG index (CGindex) is 1.289 (STD=1), with a minimum value of -0.5616 and a maximum value of 4.778 in the data set.

We have completed the computation of the descriptive statistics for the control variables. In order to gauge the size of each firm (Fz), we took the natural logarithm of Total assets. The resulting mean value for this measure is 9.74 (with a standard deviation of 1.237). It is worth noting that the smallest firm size we have encountered is 5.795, while the largest is 13.22. Additionally, we have calculated firm leverage (Fml) as a ratio, with a mean value of 0.6196 (with a standard deviation of 0.214). It is interesting to observe that the minimum value for firm leverage is 0, while the maximum is 2.919. According to the available data, it has been observed that companies can experience both positive and negative growth. This is measured by the firm's growth rate (Fmgrot), which has an average value of 0.107 (with a standard deviation of 0.114). This calculation is made by taking the difference between the revenue and

its lag value. The minimum growth rate value is -0.22, whereas the maximum growth rate value is 0.234. Moreover, the age of a company is determined by calculating the natural logarithm of its operational age. The average age of companies is 2.766 (with a standard deviation of 0.866). The minimum age value is 0.698, while the maximum age value is 3.305.

Correlation Analysis

Table: 09 Correlation

	Dr	Accon	Tot	Cgindex	Fz	Fml	Fmgrot	Fmage
Dr	1.0000							
Accon	-0.2944**	1.0000						
Tot	-0.0144*	0.0271**	1.0000					
Cgindex	-0.1159*	0.1220	0.0177*	1.0000				
Fz	-0.3244**	0.2794	-0.0456	0.1256	1.0000			
Fml	0.4967	-0.3638**	0.0407	-0.0391**	-0.1000	1.0000		
Fmgrot	-0.0029*	0.0736*	-0.1069**	0.0466*	0.0154**	-0.0371*	1.0000	
Fmage	-0.1398	0.1858	0.0291	0.0632	0.3130	0.0281	-0.0045*	1.0000

Note: ***, **, * state 1%, 5% and 10% significance level respectively.

This table reports the value of correlation analysis by using data gather from U.S Firms. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age. Before analyzing further estimation, correlation analysis has to be performed to check whether the data has multicollinearity issues. The correlation between variables was examined in this study using the Pearson correlation matrix. Table No. 09, indicates that Default Risk (Dr) has a positive correlation with Firm Leverage (Fml) (r =

0.4967). While Default risk (Dr) has a negative relationship with Accounting Conservatism (Accon) (r = -0.2944), Takeover Threat (Tot) (r = -0.0144), Corporate Governance Index (Cgindex) (r = -0.1159), Firm Size (Fz) (-0.3244), Firm Growth (Fmgrot) (r = -0.0029) and Firm Age (Fmage) (r = -0.1398). Similarly, Accounting Conservatism (Accon) has a positive correlation with Takeover Threat (Tot) (r = 0.0271), Corporate Governance Index (Cgindex) (r = 0.1220), Firm Size (Fz) (r = 0.2794), Firm Growth (Fmgrot) (r = 0.0736) and Firm Age (Fmage) (r = 0.1858). On the other hand, Accounting Conservatism (Accon) is negatively correlated with Firm Leverage (Fml) (r = -0.3638).

Furthermore, correlation analysis shows that Takeover Threat has a positive relationship with Corporate Governance Index (Cgindex) (r = 0.0177), Fim Leverage (Fml) (r = 0.0407) and Firm Age (Fmage) (r = 0.0291). In contrast, it has a negative correlation with Firm Size (Fz) (r = -0.0456) and Firm Growth (Fmgrot) (r = -0.1069). The correlation table also confirmed that the Corporate Governance Index (Cgindex) has a positive relationship with Firm Size (Fz) (r = 0.1256) Firm Growth (Fmgrot) (r = 0.0466) and Firm Age (Fmage) (r = 0.0632), While it has a negative correlation with Firm Leverage (Fml) (r = -0.0391) In the same way Firm Size (Fz) has a positive correlation with Firm Growth (Fmgrot) (r = 0.0154) and Firm Age (Fmage) (r = 0.3130) and has a negative correlation with Firm Leverage (Fml) (r = -0.1000) Firm Leverage has a positive correlation with Firm Age (Fmage) (r = 0.0281) and has a negative correlation with Firm Growth (Fmgrot) (r = -0.0371). Firm Growth (Fmgrot) has a negative correlation with Firm Age (Fmage) (r = -0.0045).

The study being discussed here implemented a corporate governance index that took into account five distinct factors: Board Size, Board Independence, Gender Diversity, Bank Power, and Block Ownership. To create these indexes, the researcher employed Stata software's principal component analysis method (PCA). This method extracted principal components based on the coefficient values, resulting in a comprehensive and reliable set of indexes. CGINDEX=f (BS, GD, BI, BP, BO). Through the utilization of Principal Component Analysis (PCA), we have successfully obtained the coefficients necessary for the development of the corporate governance index. CGINDEX= 0.3172(BS)+ 0.2682(GD)+ 0.2002(BI)+ 0.1305(BP)+ 0.0839(BO)

The Governance Index is a comprehensive measure of corporate governance, determined by various factors that together form the CGI Index. These factors, namely Board Size, Gender Diversity, Board Independence, Bank Power, and Block Ownership, were

carefully selected and subjected to the Principle Component Analysis (PCA) to create the index. Among all the factors, Board Size carries the most weight, accounting for 31.72% of the index, followed by Gender Diversity at 26.82%, Board Independence at 20.02%, Bank Power at 13.05%, and Block Ownership at 8.39%. By using the equation presented above, the results of the index can be clearly illustrated.

Diagnostic Tests

Test

Breusch-Pagan/ Cook-Weisberg Test has used for Heteroscedasticity and reported the following results; to conduct an accurate regression analysis, it's important to check for the presence of heteroscedasticity in the dataset. Homoscedastic data is preferred for this type of analysis. Breusch-Pagan test detect heteroscedasticity and found a significant chi-square value of 485.44 with a p-value < 0.001, indicating the presence of heteroscedasticity in the data. Another effective method to examine the gathered information is through the utilization of a plot diagram, which will be elaborated on in the following section.

Variable	Fitted Values of dr
Chi2 (1)	485.44
Prob>chi2	0.000

Check through Residual Plot
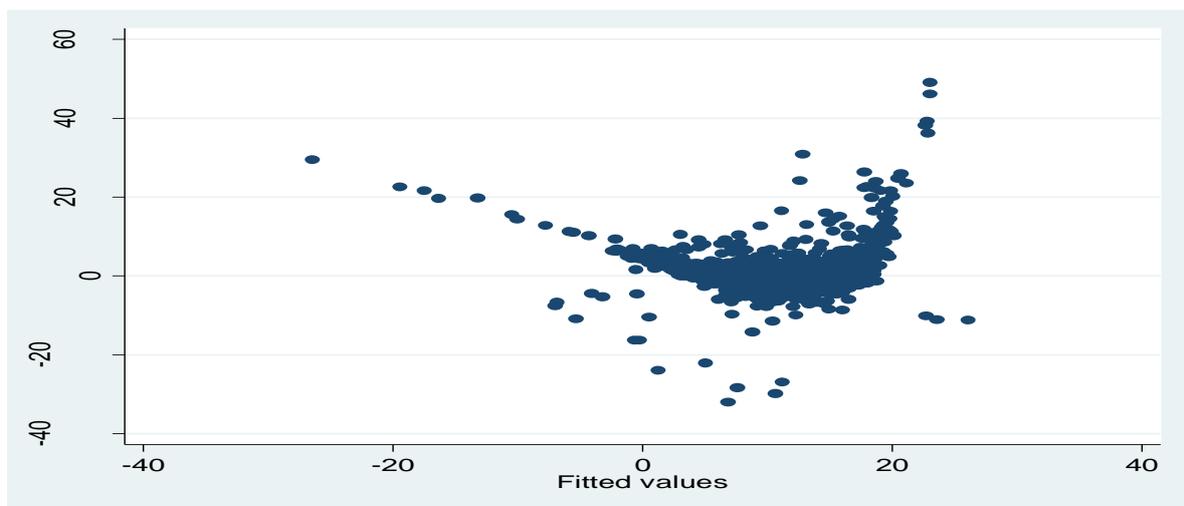
Upon careful examination of the diagram, it appears that there could be a potential concern with heteroscedasticity within the data. This suggests that the variability of errors may not

remain consistent across all levels of the independent variable, which can significantly impact the dependability and precision of any statistical analysis conducted on the information. It may be imperative to address this issue before drawing any conclusions based on the data.

Panel Unit Root Analysis

To determine if there was a unit root in each variable series, we employed the Levin-Lin-Chu Test. This test was conducted on each variable individually, and the outcomes are as follows.

Table: 10 Unit Root Test

Variable Name	p-value at level	p-value at 1st difference	Stationery
Dr	0.0000	-----	I (0)
Accon	0.0000	-----	I (0)
Tot	0.0000	-----	I (0)
Cgindex	0.0000	-----	I (0)
Fz	0.0000	-----	I (0)
Fml	0.0000	-----	I (0)
Fmgrot	0.0000	-----	I (0)
Fmage	0.0000	-----	I (0)

This table reports Panel Unit Root Analysis by using data gather from U.S Firms. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age

According to the data presented in the Table No. 10; above, which showcases the findings of the Levin-Lin-Chu test examining panel unit root, it appears that all variables are stable at the level. This implies that there is no necessity to modify the series in any way. To ensure the accuracy of our analysis, we performed a Variance Inflation Factor (VIF) Test to detect any potential multicollinearity issues among the independent variables. The outcome of this test is presented in detail below:

Table: 11 Multicollinearity

Variable Name	VIF	1/VIF
Accon	1.60	0.6242
Tot	1.02	0.9814

Cgindex	1.05	0.9502
Fz	1.24	0.8036
Fml	1.32	0.7552
Fmgrot	1.02	0.9780
Fmage	1.14	0.8736
Mean VIF:	1.21	

This table reports Multicollinearity Analysis by using data gathered from U.S Firms. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age

Note: Typically, a reliable way to assess the presence of multicollinearity in a dataset is by examining the Variance Inflation Factor (VIF) values. If the VIF value exceeds 5 and the reciprocal of the VIF value falls below 0.2, then there may be a multicollinearity issue. In light of these criteria, it can be concluded that the dataset under consideration does not exhibit any signs of multicollinearity. Endogeneity testing involves assessing the presence of endogeneity in regression models and determining the need for addressing this issue. The Durbin-Wu-Hausman (DWH) test is commonly used to test for endogeneity in instrumental variable (IV) estimation. It compares the coefficients estimated by the IV approach with those estimated by ordinary least squares (OLS) (Hausman, 1978). If the difference between the two sets of coefficients is statistically significant, it indicates the presence of endogeneity.

Table: 12 Endogeneity

Variable	Statistics	p-value
Durbin (score) Chi(2) 3	10.4131	0.0004
Wu-Hausman F (3, 2389)	6.1568	0.000

The Table No. 12, shows the results of two tests that checked for endogeneity. The χ^2-statistics (10.4131) (6.1568) are statistically significant concerning the p-values (0.0004) and (0.000). These results indicate that there is an endogeneity problem with the data.

Following the completion of the aforementioned diagnostic examinations, the researcher proceeded to employ the Dynamic Generalized Method of Movement (GMM) model for the purpose of scrutinizing the interrelationships among the variables.

Regression Analysis via Dynamic GMM model

The Arellano-Bond estimator is particularly useful when dealing with unobserved individual-specific effects, serial correlation, and endogenous regressors. It extends the difference-in-differences approach by using lagged levels of the dependent variable as instruments to control for endogeneity. The basic idea behind the Arellano-Bond estimator is to exploit the orthogonality between the first-differenced errors and lagged levels of the dependent variable as instruments. This helps to address the problem of endogeneity and generate consistent and efficient estimates.

Table: 13 Regression Analysis

Independent Variables	Dependent Variable= Dr		
	Coefficients	z-value	p-value
drL1.	0.4480	18.46	0.000
Accon	-2.6579	13.84	0.000
Tot	-0.1791	-2.10	0.035
cgindex	-0.4011	-4.31	0.000
Fz	-0.8698	-5.04	0.000
Fml	15.5002	26.49	0.000
Fmgrot	0.6439	2.24	0.025
Fmage	20.2427	10.95	0.000
Constant	-30.5233	-7.41	0.000
Wald Chi 2 (8)	1767.08		
Prob›Chi2	0.0000		

This table reports Regression Analysis through GMM Model by using data gathered from U.S Firms. Whereas, Dr = Default Risk, Accon = Accounting Conservatism, Tot = Takeover Threat, Cgindex = Corporate Governance Index, Fz = Firm Size, Fml = Firm Leverage, Fmgrot = Firm Growth, Fmage = Firm Age

On the basis of the diagnostic tests, GMM model estimation has been applied to the data set, the results of which are presented in the above Table No. 13. As GMM takes its first lag in its independent variables, and this first lag is also significant, which shows GMM is an appropriate estimation model for this data. The first objective of this study was to find out the association between accounting conservatism and default risk, and the results show that in a developed economy like United States, conservatism has a significant inverse impact on a

firm's default risk (β = -2.6579, p-value = 0.000). Hence, hypothesis H1= "there is a significant relationship between accounting conservatism and default risk" is approved which statistically means that a 1 unit increase in accounting conservatism, reduces the default risk by 2.6579 units. These results supported the previous study of (Biddle, G. C., Ma, M. L., & Song, F. M. 2022). Through testing hypothesis H-2 "There is a significant relationship between threat of takeover and default risk," the above results showed the inverse significance of takeover threat (β = -0.1791, p-value = 0.035) in predicting default risk. Study findings were as per the research conducted by Cain et al. in 2017, takeovers have the potential to function as a governance mechanism that can replace other external governance mechanisms and ultimately lead to enhanced performance.

The value of the estimation (β = -0.4011, p-value = 0.000) confirmed the significant negative relationship between corporate governance mechanism and firms' default risk; it statistically means that if a firm increases corporate governance mechanism by 1 unit, that will decrease its default risk by 2.34 units in the US Economy. This results in stronger monitoring and oversight of management and reduced default risk. Finally, higher levels of block ownership are associated with stronger monitoring and governance mechanisms. Large shareholders with substantial stakes in the company have incentives to protect their investments, leading to more effective oversight and reduced default risk. Overall, these factors contribute to the development of a board that is capable of overseeing management effectively, making sound decisions, and reducing default risk.

Regarding controlling variables, the impacts of firm size with coefficients and probability score (β = -0.8698, p-value = 0.000), show a significant negative relationship with default risk. The results are according to the findings of Berger and Udell's (1998) research, it was determined that large companies typically have a more varied range of operations. Firm Leverage is another controlled variable used in this study, the results show that firm leverage (β = 15.5002, p-value = 0.000), has a significant positive relationship with firms' default risk. Results of the study supported the previous findings of (Titman, S., & Wessels, R. 1988); when a firm takes on higher levels of debt, it increases its financial obligations in terms of interest payments and principal repayments. If the firm faces financial distress or experiences a decline in its cash flow, it may struggle to meet these obligations. This heightened financial burden raises the risk of default. The results of firm growth (β = 0.6439, p-value = 0.025), show a significant positive relationship with default risk. It is explained that Fast-growing firms may

face operational challenges in effectively managing their expansion. Based on the coefficient value of 20.2427 and a p-value of 0.000, it is evident that there is a significant positive correlation between default risk and firm age. A study by Balachandran, Duong, and Kedia (2015) suggests that older companies may have difficulty keeping up with the latest technological advancements, which could result in a decrease in market share and profitability, and an increased risk of default. On the other hand, younger firms may have an advantage in adapting to new technologies and using them to gain a competitive edge over established companies. Therefore, it is crucial to stay updated on technological changes to stay relevant and successful in the fast-paced business world of today.

Current research has revealed that accounting conservatism, takeover threat, and corporate governance mechanisms have a significant impact on a company's default risk in the United States, independent of its size, growth rate, level of leverage, and age. The Chi-square value is (1767.08) significant at p-value (0.0000), showing that the model applied is fit and appropriate.

Comparative Analysis between Pakistan and USA

This is a comparative study between Pakistan and USA non-financial firms selected based on consecutive data availability. The sample size for each country consisted of 200 non-financial firms. Panel data analysis techniques have been performed separately on both countries' data. According to the diagnostics, both of the countries' data were heteroscedastic. All of the series were stationary at the level in both countries except Corporate Governance Index (CGI), which was stationary at the first difference in Pakistani data. An endogeneity problem was found in the USA data, but this problem was absent in the Pakistani data. Based on diagnostics tests, Feasible Generalized Least Square (FGLS) was performed on Pakistani data, and the Generalized Method of Movement (GMM) model was performed on USA data.

The regression results confirmed a significant relationship between independent variables such as Accounting conservatism, Takeover threat, and Corporate governance mechanism (Index) with the dependent variable Default risk. The results obtained from the regression analysis are used to compare the firm's solvency in developing and developed economies such as Pakistan and U.S. The results confirmed that accounting conservatism, takeover threat, and corporate governance mechanisms are detrimental in mitigating the firm's default risk in both countries, such as Pakistan and the U.S. Findings from both economies (American and Pakistani) claimed that the takeover threat reduces default risk by promoting better

managerial discipline and improving the efficiency of resource allocation and encouraging managers. The possibility of being acquired by a more efficient competitor or an activist investor exerts pressure on managers to focus on enhancing firm performance and shareholder value. This helps reduce agency conflicts and inefficient resource allocation, ultimately reducing the likelihood of default. Previous studies also support this relationship in determining the negative effect of default risk by takeover threats (Luintel & Khan, 1999 and Shleifer & Vishny, 1997).

Similarly, effective corporate governance mechanisms, such as independent boards, the board size, bank power, and block ownership, reduce the default risk. These mechanisms improve monitoring and oversight of management, enhance financial reporting quality, and mitigate agency conflicts in firms of both developing and developed economies. Research findings confirmed a significant negative relationship between corporate governance and default risk in both countries, indicating that stronger governance practices contribute to reduced default risk.

It has also been noted that the impact of accounting conservatism on default risk in both countries (Pakistan and U.S) are uniform. Accounting conservatism involves a cautious approach to recognizing and reporting financial information, where losses and liabilities are recognized more promptly than gains and assets. This conservative reporting can provide a more accurate and reliable representation of a firm's financial position, reducing the likelihood of default. Additionally, conservative accounting practices may enhance the transparency and credibility of financial statements, thereby reducing information asymmetry and increasing investor confidence. The study's findings also confirmed the previous study of Khan and Watts (2009).

Conclusion

The study focused on the default risk as it is a core element for the sustainability of firms. The firm's solvency depends on several factors, including external and internal governance mechanisms such as accounting conservatism, takeover threats, and corporate governance index comprised of board size, board independence, bank power, gender diversity, and block ownership therefore this study aimed to find the relationship among the variables by using a sample of 200 non-financial firms in Pakistan and 200 from the USA. The data were collected covering the period from 2009 to 2021 and used the FGLS model to investigate the relationship among these variables for Pakistani firms, while the GMM model was used for US firms. The

research findings supported the stated hypothesis. This section summarizes previous sections and provides concluding remarks. It also reflects critically on the findings and discusses the implications for theory and policy, which may help identify and formulate recommendations. The conclusion highlights individual contributions to existing literature, research limitations, and motivations for further research. In the end, this chapter concludes the research journey.

Summary of the Study Findings

According to the study, the agency theory is supported by the idea that accounting conservatism can help to decrease uncertainty and information asymmetry by reporting net income and assets in a less optimistic manner. Timely reporting of bad news can also lower a company's default risk significantly (Watts, 2003; Guay and Verrecchia, 2007). The study also found that the threat of a takeover can motivate managers to enhance performance, reduce default risk, and manage the company effectively (Bertrand & Mullainathan, 1999, 2003; Fama, 1980; Francis et al., 2010; Lel & Miller, 2015; Manne, 1965). This can lead to better corporate governance practices, reducing the likelihood of default.

The study also supports the agency theory in stating that effective corporate governance mechanisms, such as Board Size, Gender Diversity, Board independence, Bank Power, and Block ownership, are crucial in mitigating agency conflicts and lowering the likelihood of default. This aligns with previous literature, such as Chen, Su, & Wu's (2017) analysis, which suggests that effective corporate governance practices can reduce information asymmetry and enhance the reliability and transparency of financial reporting, benefiting both managers and shareholders. Corporate governance can also act as a monitor to prevent earnings manipulation and enhance transparency. Overall, the study highlights the importance of accounting conservatism, takeover threat and corporate governance mechanism in mitigating default risk in the firms of both developing and developed economies (Pakistan and US).

Policy Implications and Recommendations

This research makes valuable contributions to the literature on a firm's risk of default, with a focus on agency theory. The study uses various econometric methods and samples from both developing and developed economies to gather empirical evidence. As a result, the study offers policy recommendations and implications that could have noteworthy impacts on businesses, academicians, professionals, and regulatory organizations. For businesses to minimize their risk of default, it's crucial that they maintain careful financial reporting, use effective

governance methods, and proactively manage risks. These measures can help improve financial stability, increase transparency and accountability, and reduce the chances of default. Policymakers, regulators, and businesses should continually monitor and adjust their policies and practices in response to changing market conditions and emerging risks to effectively manage default risk. In summary, implementing these practices can greatly reduce the likelihood of default.

Limitations of the study

Although accounting conservatism, takeover threat, and corporate governance mechanism are crucial in determining a firm's default risk, this research has some limitations in producing consistent findings. Collecting reliable and complete data is often a difficult task for researchers. In this particular study, there were obstacles in obtaining the necessary information on strategies for defending against takeover attempts. Additionally, the data used in this study only covered the last thirteen years, which may limit the significance of the results. It is worth noting that insufficient data can hinder the precision and thoroughness of research findings.

Avenue of future research

When conducting a thorough study, it is common to uncover new questions. To further investigate the correlation between accounting conservatism, takeover threat, and corporate governance with a company's default risk, there are several recommendations for future studies. These suggestions aim to broaden the scope of knowledge and fill any gaps in the current literature. Here are some potential research avenues for the future:

- In the future, the researcher can also investigate the long-term effects of accounting conservatism, takeover threat, and corporate governance on a firm's default risk. Explore how these factors influence default risk over extended periods and assess their sustainability in mitigating or exacerbating default risk over time.

- Researchers may examine the role of moderating factors that may influence the relationship between accounting conservatism, takeover threat, corporate governance, and default risk. Factors such as firm size, industry characteristics, regulatory environment, and macroeconomic conditions could impact the strength and direction of these relationships.

- Researchers may also explore the dynamic interactions among accounting conservatism, takeover threat, corporate governance, and default risk. Investigate how

changes in one factor influence the relationships and outcomes associated with the others. Consider employing dynamic panel data models or event study methodologies to capture these dynamic interdependencies.

References:

Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earningsl. *Journal of accounting and economics*, *24*(1), 3-37.

Biddle, G. C., Ma, M. L., & Song, F. M. (2022). Accounting conservatism and bankruptcy risk. *Journal of Accounting, Auditing & Finance*, *37*(2), 295-323.

Watts, R. L. (2003). Conservatism in accounting part I: Explanations and implications. *Accounting horizons*, *17*(3), 207-221.

Jensen, M. C., & Ruback, R. S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial economics*, *11*(1-4), 5-50.

Morck, R., Shleifer, A., & Vishny, R. W. (1988). Alternative mechanisms for corporate control.

Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of political economy*, *94*(3, Part 1), 461-488.

Switzer, L. N., & Wang, J. (2013). Default risk estimation, bank credit risk, and corporate governance. *Financial Markets, Institutions & Instruments*, *22*(2), 91-112.

Switzer, L. N., & Wang, J. (2013). Default risk and corporate governance in financial vs. non-financial firms. *Risk and Decision Analysis*, *4*(4), 243-253.

Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *the Journal of Finance*, *48*(3), 831-880.

Tribo, J. A., Berrone, P., & Surroca, J. (2007). Do the type and number of blockholders influence R&D investments? New evidence from Spain. *Corporate Governance: An International Review*, *15*(5), 828-842.

Asri, M. (2017). Accounting Conservatism and Earning Quality. *Available at SSRN 3000190*.

Lel, U., & Miller, D. P. (2015). Does takeover activity cause managerial discipline? Evidence from international M&A laws. *The Review of Financial Studies*, *28*(6), 1588-1622.

Kroszner, R. S., & Strahan, P. E. (2001). Bankers on boards:: monitoring, conflicts of interest, and lender liability. *Journal of financial Economics*, *62*(3), 415-452.

Tribo Gine, J. A., & Martínez, M. J. C. (2010). Banks as firms' blockholders: a study in Spain. *Applied Financial Economics*, 20(5), 425-438.

Mangena, M., Priego, A. M., & Manzaneque, M. (2020). Bank power, block ownership, boards and financial distress likelihood: An investigation of Spanish listed firms. *Journal of Corporate Finance*, 64, 101636.

Wilson, N., & Altanlar, A. (2009). Director characteristics, gender balance and insolvency risk: an empirical study. *Gender Balance and Insolvency Risk: An Empirical Study (September 22, 2009)*.

Ali, S., Liu, B., & Su, J. J. (2018). Does corporate governance quality affect default risk? The role of growth opportunities and stock liquidity. *International Review of Economics & Finance*, 58, 422-448.

Jensen, M.C., Meckling, W.H. (1979). Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. In: Brunner, K. (eds) Economics Social Institutions. Rochester Studies in Economics and Policy Issues, vol 1. Springer, Dordrecht. https://doi.org/10.1007/978-94-009-9257-3_8

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Davis, Schoorman, and Donaldson reply: The distinctiveness of agency theory and stewardship theory. *Academy of Management. the Academy of Management Review*, 22(3), 611.

Ross, S. A. (1977). The determination of financial structure: the incentive-signalling approach. *The bell journal of economics*, 23-40.

Dharwadkar, R., George, G., & Brandes, P. (2000). Privatization in emerging economies: An agency theory perspective. *Academy of management review*, 25(3), 650-669.

Sivaramakrishnan, S., & Yu, S. C. (2008, April). On the association between corporate governance and earnings quality. AAA.

Akileng, G. (2014). The efficacy of corporate governance in reducing opportunistic accounting earnings manipulations. *management*, 5(24), 44-69.

Kachouri, M., & Jarboui, A. (2017). Exploring the relation between corporate reporting and corporate governance effectiveness. *Journal of Financial Reporting and Accounting*, 15(3), 347-366.

Watts, R. L., & Zimmerman, J. L. (1990). Positive accounting theory: a ten year perspective. *Accounting review*, 131-156.

Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. *The journal of Finance*, *46*(4), 1325-1359.

Darmadi, S., & Sodikin, A. (2013). Information disclosure by family-controlled firms: The role of board independence and institutional ownership. *Asian review of Accounting*, *21*(3), 223-240.

Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance?. *The Review of financial studies*, *22*(2), 783-827.

Bertrand, M., & Mullainathan, S. (2003). Enjoying the quiet life? Corporate governance and managerial preferences. *Journal of political Economy*, *111*(5), 1043-1075.

Cain, M. D., McKeon, S. B., & Solomon, S. D. (2017). Do takeover laws matter? Evidence from five decades of hostile takeovers. *Journal of financial economics*, *124*(3), 464-485.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, *26*(2), 301-325.

Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The quarterly journal of economics*, *118*(1), 107-156.

Manne, H. G. (1965). Mergers and the Market for Corporate Control. Journal of Political Economy, 73(2), 110–120.

Morck, R., Shleifer, A., & Vishny, R. W. (1989). Alternative Mechanisms for Corporate Control. The American Economic Review, 79(4), 842–852.

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of financial economics*, *94*(2), 291-309.

Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management review*, *28*(3), 383-396.

PFEFFER, J., & SALANCIK, G. R. (2003). THE EXTERNAL CONTROL. *The Sociology of Organizations: Classic, Contemporary, and Critical Readings*, 233.

Pirson, M., & Turnbull, S. (2015). The future of corporate governance: Network governance-a lesson from the financial crisis. *Human Systems Management*, *34*(1), 81-89.

Louizi, A., & Kammoun, R. (2016). Evaluation of corporate governance systems by credit rating agencies. *Journal of Management & Governance*, *20*(2), 363-385.

Crosbie, P., & Bohn, J. (2019). Modeling default risk. In *World Scientific Reference on Contingent Claims Analysis in Corporate Finance: Volume 2: Corporate Debt Valuation with CCA* (pp. 471-506).

Malekipirbazari, M., & Aksakalli, V. (2015). Risk assessment in social lending via random forests. *Expert Systems with Applications*, *42*(10), 4621-4631.

Zhong, Y., & Li, W. (2017). Accounting conservatism: A literature review. *Australian Accounting Review*, *27*(2), 195-213.

Ruch, G. W., & Taylor, G. (2015). Accounting conservatism: A review of the literature. *Journal of Accounting Literature*, *34*(1), 17-38.

Ghalibaf Asl, H., Nikravesh, M., Dolatkami, M., & Emami, A. (2015). CConditional Accounting Conservatism and Financial Flexibility. *Empirical Research in Accounting*, *5*(2), 107-123.

Lara, J. M. G., Osma, B. G., & Penalva, F. (2016). Accounting conservatism and firm investment efficiency. *Journal of Accounting and Economics*, *61*(1), 221-238.

Balachandran, B., Duong, H. N., Luong, H., & Nguyen, L. (2020). Does takeover activity affect stock price crash risk? Evidence from international M&A laws. *Journal of Corporate Finance*, *64*, 101697.

Surroca, J., Tribó, J. A., & Zahra, S. A. (2013). Stakeholder pressure on MNEs and the transfer of socially irresponsible practices to subsidiaries. *Academy of Management journal*, *56*(2), 549-572.

Bowen, R. M., Rajgopal, S., & Venkatachalam, M. (2008). Accounting discretion, corporate governance, and firm performance. *Contemporary accounting research*, *25*(2), 351-405.

Armstrong, C. S., Blouin, J. L., & Larcker, D. F. (2012). The incentives for tax planning. *Journal of accounting and economics*, *53*(1-2), 391-411.

Belloc, F. (2012). Corporate governance and innovation: A survey. *Journal of Economic Surveys*, *26*(5), 835-864.

Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, *237*, 117727.

Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of accounting and economics*, *39*(1), 83-128.

Vassalou, M., & Xing, Y. (2004). Default risk in equity returns. *The journal of finance*, *59*(2), 831-868.

Francis, J. R., & Martin, X. (2010). Acquisition profitability and timely loss recognition. *Journal of accounting and economics*, *49*(1-2), 161-178.

Lara, J. M. G., Osma, B. G., & Penalva, F. (2016). Accounting conservatism and firm investment efficiency. *Journal of Accounting and Economics*, *61*(1), 221-238.

Berkovitch, E., & Israel, R. (1998). The bankruptcy decision and debt contract renegotiations. *Review of Finance*, *2*(1), 1-27.

Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of accounting and economics*, *39*(1), 83-128.

Kravet, T. D. (2014). Accounting conservatism and managerial risk-taking: Corporate acquisitions. *Journal of Accounting and Economics*, *57*(2-3), 218-240.

Roychowdhury, S., & Martin, X. (2013). Understanding discretion in conservatism: An alternative viewpoint. *Journal of Accounting and Economics*, *56*(2-3), 134-146.

Bushman, R. M., Piotroski, J. D., & Smith, A. J. (2011). Capital allocation and timely accounting recognition of economic losses. *Journal of Business Finance & Accounting*, *38*(1-2), 1-33.

Nikolaev, V. V. (2010). Debt covenants and accounting conservatism. *Journal of accounting research*, *48*(1), 137-176.

Tan, L. (2013). Creditor control rights, state of nature verification, and financial reporting conservatism. *Journal of Accounting and Economics*, *55*(1), 1-22.

Uhrig-Homburg, M. (2005). Cash-flow shortage as an endogenous bankruptcy reason. *Journal of Banking & Finance*, *29*(6), 1509-1534.

Ahmed, A. S., Billings, B. K., Morton, R. M., & Stanford-Harris, M. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review*, *77*(4), 867-890.

Francis, B. B., Hasan, I., John, K., & Waisman, M. (2010). The effect of state antitakeover laws on the firm's bondholders. *Journal of Financial Economics*, *96*(1), 127-154.

Berger, P. G., Ofek, E., & Yermack, D. L. (1997). Managerial entrenchment and capital structure decisions. *The journal of finance*, *52*(4), 1411-1438.

Klock, M. S., Mansi, S. A., & Maxwell, W. F. (2005). Does corporate governance matter to bondholders?. *Journal of financial and quantitative analysis*, *40*(4), 693-719.

Subramaniam, C., & Daley, L. A. (2000). Free cash flow, golden parachutes, and the discipline of takeover activity. *Journal of Business Finance & Accounting*, *27*(1-2), 1-36.

Bertrand, M., & Mullainathan, S. (2000). Agents with and without principals. *American Economic Review*, *90*(2), 203-208.

Morck, R., Shleifer, A., & Vishny, R. W. (1988). Characteristics of targets of hostile and friendly takeovers. In *Corporate takeovers: Causes and consequences* (pp. 101-136). University of Chicago Press.

Sheikh, S. (2019). CEO inside debt, market competition and corporate risk taking. *International Journal of Managerial Finance*, *15*(4), 636-657.

Berger, A. N., & Roman, R. A. (2018). Finance and the real economy: Evidence from the US. *Handbook of finance and development*, 261-288.

Bharath, S. T., & Hertzel, M. (2019). External governance and debt structure. *The Review of Financial Studies*, *32*(9), 3335-3365.

Rogelja, I., & Tsimonis, K. (2020). Narrating the China threat: Securitising Chinese economic presence in Europe. *The Chinese Journal of International Politics*, *13*(1), 103-133.

Baghdadi, G. A., Nguyen, L. H., & Podolski, E. J. (2020). Board co-option and default risk. *Journal of Corporate Finance*, *64*, 101703.

Jiang, W. (2021). Leveraged speculators and asset prices. *Available at SSRN 2525986*.

Eisdorfer, A., Morellec, E., & Zhdanov, A. (2022). Takeover Protections and Asset Returns. *Swiss Finance Institute Research Paper*, (20-105).

Srivastav, A., & Hagendorff, J. (2016). Corporate governance and bank risk-taking. *Corporate Governance: An International Review*, *24*(3), 334-345.

Ballester, L., González-Urteaga, A., & Martínez, B. (2020). The role of internal corporate governance mechanisms on default risk: A systematic review for different institutional settings. *Research in International Business and Finance*, *54*, 101293.

Younas, N., UdDin, S., Awan, T., & Khan, M. Y. (2021). Corporate governance and financial distress: Asian emerging market perspective. *Corporate Governance: The International Journal of Business in Society*, *21*(4), 702-715.

AlHares, A., Ntim, C. G., & King, D. (2018). Block ownership and companies' R&D intensity: The moderating effect of culture. *AlHares, A., Ntim, CG, & King, D.(2018). Block*

ownership and companies' R&D intensity: The moderating effect of culture. Corporate Ownership & Control, 15(2), 19-32.

Hunjra, A. I., Hanif, M., Mehmood, R., & Nguyen, L. V. (2021). Diversification, corporate governance, regulation and bank risk-taking. *Journal of Financial Reporting and Accounting, 19*(1), 92-108.

Cao, Z., Leng, F., Feroz, E. H., & Davalos, S. V. (2015). Corporate governance and default risk of firms cited in the SEC's Accounting and Auditing Enforcement Releases. *Review of Quantitative Finance and Accounting, 44*, 113-138.

Zakaria, N. B. (2012). Corporate governance and the relationship between default risk and the earning response coefficient.

Ali, M. J., Singh, R. K. S., & Al-Akra, M. (2018). The impact of audit committee effectiveness on audit fees and non-audit service fees: Evidence from Australia. *Accounting Research Journal, 31*(2), 174-191.

Othmani, H. (2021). Does board gender diversity matter in the banking sector? Evidence from Tunisia. *African Development Review, 33*(1), 14-24.

Chen, S., Ni, X., & Tong, J. Y. (2016). Gender diversity in the boardroom and risk management: A case of R&D investment. *Journal of Business Ethics, 136*, 599-621.

Umer, R., Abbas, N., Hussain, S., & Naveed, N. (2020). The gender diversity and earning management practices: evidence from Pakistan. *City University Research Journal, 10*(2).

Cain, M. D., & McKeon, S. B. (2016). CEO personal risk-taking and corporate policies. *Journal of Financial and Quantitative Analysis, 51*(1), 139-164.

Altman, E. I., Iwanicz-Drozdowska, M., Laitinen, E. K., & Suvas, A. (2017). Financial distress prediction in an international context: A review and empirical analysis of Altman's Z-score model. *Journal of International Financial Management & Accounting, 28*(2), 131-171.

Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The journal of finance, 23*(4), 589-609.

Altman, E. I., & Suggitt, H. J. (2000). Default rates in the syndicated bank loan market: A mortality analysis. *Journal of Banking & Finance, 24*(1-2), 229-253.

Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of accounting and economics, 43*(2-3), 411-437.

Sinha, S. (1991). Share repurchase as a takeover defense. *Journal of Financial and Quantitative Analysis*, *26*(2), 233-244.

Harris, M., & Raviv, A. (1988). Corporate control contests and capital structure. *Journal of financial Economics*, *20*, 55-86.

Stulz, R. (1988). Managerial control of voting rights: Financing policies and the market for corporate control. *Journal of financial Economics*, *20*, 25-54.

Fang, D., & Olteanu-Veerman, D. (2019). Decompose Composite Equity Issuance Anomaly. *Available at SSRN 3456079*.

Franks, J., & Mayer, C. (1998). Bank control, takeovers and corporate governance in Germany. *Journal of Banking & Finance*, *22*(10-11), 1385-1403.

Franks, J., & Mayer, C. (2001). Ownership and control of German corporations. *The Review of Financial Studies*, *14*(4), 943-977.

Mangena, M., Priego, A. M., & Manzaneque, M. (2020). Bank power, block ownership, boards and financial distress likelihood: An investigation of Spanish listed firms. *Journal of Corporate Finance*, *64*, 101636.

Konijn, S. J., Kräussl, R., & Lucas, A. (2011). Blockholder dispersion and firm value. *Journal of Corporate Finance*, *17*(5), 1330-1339.

Basu, N., Paeglis, I., & Rahnamaei, M. (2016). Multiple blockholders, power, and firm value. *Journal of Banking & Finance*, *66*, 66-78.

Alam, A. (2013). Corporate Governance and Its Impact on Firm Risk. Published MS Thesis, Management Science, International Islamic University Islamabad, Pakistan.

Duan, J. C., & Wang, T. (2012). Measuring distance-to-default for financial and non-financial firms. World Scientific Book Chapters, 95-108.

Li, X. (2015). Accounting conservatism and the cost of capital: An international analysis. *Journal of Business Finance & Accounting*, *42*(5-6), 555-582.

Hui, K. W., Klasa, S., & Yeung, P. E. (2012). Corporate suppliers and customers and accounting conservatism. *Journal of Accounting and Economics*, *53*(1-2), 115-135.

Lozano, M. B., Martínez, B., & Pindado, J. (2016). Corporate governance, ownership and firm value: Drivers of ownership as a good corporate governance mechanism. *International Business Review*, *25*(6), 1333-1343.

Zhang, J. (2008). Efficiency gains from accounting conservatism: Benefits to lenders and borrowers. *Journal of Accounting and Economics*, *45*(1), 27-54.

Cen, L., Dasgupta, S., & Sen, R. (2016). Discipline or disruption? Stakeholder relationships and the effect of takeover threat. *Management Science*, *62*(10), 2820-2841.

Luo, Y., Hong, J., Ni, C., & Wang, G. (2020). Can individual investors identify economic links? Evidence from initial quarterly earnings announcements within industries. *China Journal of Accounting Studies*, *8*(1), 121-153.

Desender, K., López-Puertas, M., Pattitoni, P., & Petracci, B. (2020). Corporate social responsibility and cost of financing-The importance of the international corporate governance system.

Cremers, M., Guernsey, S., & Sepe, S. M. (2019). Stakeholder orientation and firm value. *Scott and Sepe, Simone M., Stakeholder Orientation and Firm Value (December 27, 2019)*.

Chiaramonte, L., Dreassi, A., Girardone, C., & Piserà, S. (2022). Do ESG strategies enhance bank stability during financial turmoil? Evidence from Europe. *The European Journal of Finance*, *28*(12), 1173-1211.

Jiang, W. (2021). Leveraged speculators and asset prices. *Available at SSRN 2525986*.

José García, C., Herrero, B., & Morillas, F. (2022). Corporate board and default risk of financial firms. *Economic research-Ekonomska istraživanja*, *35*(1), 511-528.

El Ghoul, S., Guedhami, O., Kwok, C. C., & Mishra, D. R. (2011). Does corporate social responsibility affect the cost of capital?. *Journal of banking & finance*, *35*(9), 2388-2406.

Habbash, M. (2010). The effectiveness of corporate governance and external audit on constraining earnings management practice in the UK (Doctoral dissertation, Durham University).

Kao, L., & Chen, A. (2004). The effects of board characteristics on earnings management. Corporate Ownership & Control, 1(3), 96-107.

Greene, W. H. (2012). 201 1. Econometric Analysis.

Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data. MIT press.

Guay, W. R., & Verrecchia, R. E. (2018). Conservative disclosure. Journal of Financial Reporting, 3(1), 73-92.

Balachandran, B., Duong, H. N., van Zijl, T., & Zudana, A. E. (2023). Does the threat of takeover affect default risk?. Journal of Business Finance & Accounting, 50(9-10), 1572-1611.

Mullainathan, S., & Bertrand, M. (1998). Is there discretion in wage setting?: a test using takeover legislation.

Fama, E. F. (1980). Agency problems and the theory of the firm. Journal of political economy, 88(2), 288-307.

Francis, B. B., Hasan, I., John, K., & Waisman, M. (2010). The effect of state antitakeover laws on the firm's bondholders. Journal of Financial Economics, 96(1), 127-154.

Myers, S. C. (1977). Determinants of corporate borrowing. Journal of financial economics, 5(2), 147-175.

Hodgson, A., Lhaopadchan, S., & Buakes, S. (2011). How informative is the Thai corporate governance index? A financial approach. International Journal of Accounting & Information Management, 19(1), 53-79.

Luqman, R., Ul Hassan, M., Tabasum, S., Khakwani, M. S., & Irshad, S. (2018). Probability of financial distress and proposed adoption of corporate governance structures: Evidence from Pakistan. Cogent Business & Management, 5(1), 1492869.

Younas, N., UdDin, S., Awan, T., & Khan, M. Y. (2021). Corporate governance and financial distress: Asian emerging market perspective. Corporate Governance: The International Journal of Business in Society, 21(4), 702-715.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. Journal of financial economics, 40(2), 185-211.

Belkhir, M., Boubaker, S., & Rouatbi, W. (2013). Excess control, agency costs and the probability of going private in France. Global Finance Journal, 24(3), 250-265.

Faccio, M., & Lang, L. H. (2002). The ultimate ownership of Western European corporations. Journal of financial economics, 65(3), 365-395.

Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. Journal of personality and social psychology, 102(6), 1271.

Hausman, J. A. (1978). Specification tests in econometrics. Econometrica: Journal of the econometric society, 1251-1271.

Laeven, L., & Levine, R. (2009). Bank governance, regulation and risk taking. Journal of financial economics, 93(2), 259-275.

Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. Journal of banking & finance, 22(6-8), 613-673.

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. The Journal of finance, 43(1), 1-19.

Hitt, M. A., Harrison, J. S., & Ireland, R. D. (2001). Mergers & acquisitions: A guide to creating value for stakeholders. Oxford University Press.

Luintel, K. B., & Khan, M. (1999). A quantitative reassessment of the finance–growth nexus: evidence from a multivariate VAR. Journal of development economics, 60(2), 381-405.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. The journal of finance, 52(2), 737-783.

Khan, M., & Watts, R. L. (2009). Estimation and empirical properties of a firm-year measure of accounting conservatism. Journal of accounting and Economics, 48(2-3), 132-

Guay, W., & Verrecchia, R. E. (2007). Conservative disclosure. Working paper. University of Pennsylvania