Physical Education, Health and Social Sciences

https://journal-of-social-education.org

E-ISSN: 2958-5996
P-ISSN: 2958-5988

Impact of Corporate Life Cycle Stages on Financial Restructuring: The Moderating Effect of Financial Distress

Madiha Jabeen [1] Dr. Naveed [2] Aisha Jabeen [3]

[1] Lecturer, Department of Management Sciences, Shaheed Benazir Bhutto Women University, Peshawar
[2] Professor and Dean of Management Sciences, City University of Science and Information Technology, Peshawar
[3] Lecturer, Institute of Management Sciences, Peshawar

DOI: https://doi.org/10.63163/jpehss.v3i3.528

Abstract

In the current era of uncertainty, the importance of restructuring an organization has increased even more. Among several ways of reorganizing a firm, financial restructuring stands out as one of the key strategies that organizations adopt to improve their performance. The current study aims to find the impact of corporate life cycle stages on financial restructuring. The independent variable in the study is the stages of the corporate life cycle, classified using the methodology developed by Dickinson (2011). The stages include Birth, Growth, Maturity, Shakeout, and Decline. Financial restructuring is measured through three different proxies, i.e., dividends, net debt, and net equity. Financial distress serves as a moderating variable in the study. The influence of corporate life cycle stages on financial restructuring is analyzed both individually and in the context of financial distress. The study uses a panel data set of 314 non-financial Pakistani firms across thirteen diverse sectors over ten years, from 2013 to 2022. The study utilizes a multiple regression model to investigate the impact of CLC stages on financial restructuring empirically. The results indicate that firms in Pakistan typically avoid dividend payments across all stages of the Corporate Life Cycle (CLC), except the decline stage. Financially distressed firms reduce dividend payments to shareholders throughout all stages of the corporate life cycle (CLC). firms at all stages of their lifecycle tend to increase net debt, except during the decline stage. financially distressed firms in Pakistan are inclined to adopt debt financing. When firms face financial difficulties, they typically have limited internal funds, leading them to depend more on debt. Pakistani firms utilize equity financing at all stages of their lifecycle, except during the decline stage.

Keywords: Corporate Life Cycle (CLC) stages, Financial Restructuring, Financial Distress, Dividends, Net Debt, Net Equity

Introduction

As the corporate landscape continues to evolve rapidly, firms must adapt and innovate to remain competitive. Corporate restructuring involves changing a company's organizational structure, operational processes, or financial framework to improve efficiency and increase profitability. It acts as a crucial tool for companies facing the challenges of today's dynamic business environment. Financial, operational, and strategic restructuring all play a crucial role in transforming organizations, optimizing resource allocation, and enhancing overall corporate performance (Vo, Vo, Dinh, & Tran, 2024).

Following the global financial crisis, corporate restructuring became increasingly important as companies sought to recover from its effects (Ashby, 2015). As a result of the 2007-2008 financial crisis, many businesses reevaluated their strategies to stay competitive, foster growth, and strengthen their operational and financial stability (Reddy, Nangia, & Agrawal, 2014). Corporate restructuring is one of a firm's most effective and reliable strategies to enhance its financial performance (Muhammad, Waqas, & Migliori, 2019). Firms facing financial difficulties are more likely to engage in restructuring because, during times of financial distress, managers often face intense pressure to reorganize the company to improve their chances of survival (Powell & Yawson, 2012). Financial corporations worldwide employ restructuring strategies to enhance their market position and gain a competitive edge (Kumaraswamy, Ebrahim, & Nasser, 2019; Mathieu, 1996).

Corporate restructuring decisions are critically important in a company's lifecycle; therefore, implementing such restructuring strategies is vital for a business's survival (Koh, Durand, Dai, & Chang, 2015; Ahsan, Wang, & Qureshi, 2016; Akbar, Hussain, Sokolova, & Sabahat, 2022). The business life cycle serves as a foundational framework for understanding organizational dynamics (Ramzan & Lau, 2023). Organizations generally experience a structured and sequential progression, moving through defined stages of the business life cycle until eventual exit or closure (Gray & Ariss, 1985; Miller & Friesen, 1984; Quinn & Cameron, 1983). Numerous prior studies have indicated that as organizations grow and evolve, they transition through distinct stages of the corporate life cycle (Torbert, 1974; Mintzberg, 1984; Hanks, Watson, Jensen, & Chandler, 1993; Dodge, Fullerton, & Robbins, 1994; Miller & Friesen, 1984). Dickinson (2011) extended the corporate life cycle theory by identifying five distinct stages that reflect a firm's progression: introduction, growth, maturity, shake-out, and decline. In recent years, the importance of financial sustainability in the corporate world has grown (Akbar, Akbar, Tang, & Qureshi, 2019), especially after the global 2008-2009 financial crisis (Mahmood, Rizwan, & Rashid, 2018).

In recent years, the significance of financial sustainability in the corporate world has increased (Akbar et al., 2019), especially following the 2008-2009 global financial crisis (Mahmood, Rizwan, & Rashid, 2018). An important issue faced by firms is financial distress, which poses a critical challenge for businesses, adversely affecting their operational continuity and diminishing their appeal to investors. Firms facing such distress frequently struggle to fulfill financial obligations, resulting in eroded investor confidence and, in severe cases, bankruptcy. This situation is often exacerbated by the absence of effective predictive mechanisms, which hinders the early detection of financial instability (Tariq, Hasan, Khanji, & Aziz, 2025).

A financially distressed firm is typically one that struggles to meet its financial obligations, shows a poor credit history, possesses a net worth lower than its real assets, experiences declining sales, and suffers from reduced profitability. Financial distress is often viewed as an early warning stage preceding bankruptcy—a deterioration in a company's financial health that signals the onset of potential insolvency (Ambarwati & Haryono, 2021). Firms need to adopt an appropriate corporate restructuring strategy to handle their financial challenges, on the basis of their corporate life cycle stage. Among many other strategies, one key strategy is the financial restructuring strategy, which is an important strategic tool for firms striving to navigate the complexities of the modern business landscape. It is a critical strategy for companies aiming to optimize resources, increase shareholder value, and gain a competitive advantage (Agarwal, 2025).

In light of the problem under investigation, the study conducts an empirical investigation to find the impact of corporate life cycle stages on financial restructuring adopted by firms while they face financial distress. The study formulates the following research questions and sets the corresponding research objectives.

Research questions

RQ1: What is the impact of corporate lifecycle stages on financial restructuring?

RQ2: Do corporate lifecycle stages affect financial restructuring when firms face financial distress?

Research objectives

RO1: To assess the impact of corporate lifecycle stages on financial restructuring.

RO2: To evaluate the effect of corporate lifecycle stages on financial restructuring when firms face financial distress.

Literature review

Corporate restructuring

Restructuring begins with a clear understanding of its core purpose, often achieved by rethinking or reassessing the business's primary objectives. Business restructuring can generally be described as a purposeful effort to realign policies, programs, products, processes, and staff to support a new organizational purpose sustainably. Corporate restructuring, therefore, involves dismantling outdated ideas, obsolete technologies, and traditional practices and adopting a renewed approach to how the organization operates (Srivastava & Mushtaq, 2011). Corporate restructuring involves a series of non-continuous, conclusive actions taken to improve a company's competitive position and value (Crum & Goldberg, 1998). It can be described as actions aimed at reorganizing ownership, legal, operational, or other structures within a firm to enhance its organization and profitability. Restructuring can also occur for other reasons, such as changes in ownership structure, buyouts, repositioning, bankruptcy, or demergers. An effectively restructured company will be more efficient, better organized, and leaner, allowing it to focus more effectively on its core business areas by implementing a revised financial and strategic plan. Firms adopt restructuring to increase revenues and productivity, improve employee welfare, boost shareholder wealth, reduce costs, and enhance overall organizational efficiency (Norley, Swanson, & Marshall, 2001). Corporate restructuring decisions are crucial in a company's lifecycle. A corporation can avoid financial problems by generating enough cash flow, earning profits, and covering expenses; the company's survival depends on such restructuring strategies. Restructuring is also known as a strategy used by management when a company faces financial difficulties. (Koh, et al., 2015; Ahsan et al., 2016).

Financial Restructuring

Financial restructuring is a strategy that firms use to reshuffle and reorganize their financial structure, which is comprised of debt and equity capital. This type of restructuring is conducted as a necessary measure or as part of a firm's financial strategy. This restructuring involves changes in either the asset side or liabilities side of the balance sheet, and changes on one side of the balance sheet need corresponding changes on the other side (Bacharudin, Massie, & Arie, 2023). Financial restructuring strategies are implemented to enhance profitability and reduce debt burdens (Kaczmarek, Kolegowicz, & Szymla, 2022).

Financial restructuring includes debt or equity restructuring, thus directly influencing the capital structure (Miller & Modigliani, 1958; Myers & Majluf, 1984; Majumdar & Chibber, 1999). It involves the revision of capital structure by a firm and is conducted using two strategies, equity-based and debt-based. Firms using equity-based strategies reduce or omit dividend payments due to liquidity problems in financial distress (DeAngelo & DeAngelo, 1990). Debt-based strategies involve a great amount of restructuring of firm debt to avoid financial distress. According to Gilson (1989,1990), debt restructuring is a transaction that replaces existing debt with a new contract having characteristics that reduce principal or interest, extend in maturity period, or debt-equity swap. Debt restructuring is defined as a process where a company seeks assistance from its creditors to ease its financial obligations through various means, such as reducing or delaying scheduled payments of a contractual

nature, receiving new funding, or exchanging existing debt securities for those with lower priority. Financial restructuring encompasses a situation where shareholders recapitalize, launching the firm again by either increasing capital or issuing bonds. (Fedele & Antonucci, 2015). The financial reorganization aims to restore balance in equity and assets funds, financing on a short-term and long-term basis, minimizing financial expenses, decrease capital loss, enhance earnings per share, increase the share's market value, and reduce the influence of financiers on the management of the firm among other objectives (Aurora, 2010).

Corporate life cycle stages

The Corporate Life Cycle is a representation of the phases a company experiences from its beginning to its eventual decline. It considers the firm's strategies and resource allocation, as well as its inherent characteristics. CLC provides insights into a company's progression and growth over time (Dickinson, 2011). The dynamic resource-based theory is the foundation of CLC stages, which states that the overall trajectory and development of a firm's organizational capabilities tend to transform over time (Hasan, Hossain, & Habib, 2015).

Each company evolves through a similar series of life cycle stages, regardless of the proposed number of phases—whether three or ten (Gulec & Karacaer, 2017). According to CLC theory, firms experience a predictable progression of stages, akin to the growth phases of an organic entity. Firms typically move linearly from birth to decline in a sequential manner. At each stage of the life cycle, the firm's strategies, structures, and actions are aligned with the demands of that specific stage (Miller & Friesen, 1980, 1984; Quinn & Cameron, 1983; Gray & Ariss, 1985). Cash flow patterns have been a reliable indicator for gauging the various phases of a firm's life cycle as they demonstrate the interplay between the allocation of resources, operational capacity, and overall corporate strategies (Thanatawee, 2011). Cash flow patterns allow us to record non-sequential transitions between stages that may not be evident through conventional sequential proxies like firm age (Tian, Han, & Zhang, 2015). A comprehensive categorization of CLC stages was provided by Dickinson (2011) by using the patterns of cash flows, describing it as a reliable method for forecasting firm performance. Cash flow patterns have a greater amount of information regarding the business life cycle and exert a more significant influence on decisions related to capital structure than the age of the firm (Tian, Han, & Zhang, 2015).

Financial Distress

Financial distress is a condition when a firm fails to meet its financial obligations (Dirman, 2020; Hayes, 2021; Ijaz, Hunjra, Hameed, Maqbool, & Azam, 2013; Rahmawati, 2014; Tandiawan, 2023; Usmansyah & Pudjiastuty, 2023). Many researchers focus on predicting corporate financial distress (Ramser & Foster, 1931; Fitzpatrick, 1932; Winakor & Smith, 1935; Merwin, 1942; Altman, 1968; Mahmood, Rizwan, & Rashid, 2018). Corporate financial distress is a state in which a firm is unable to pay its financial obligations due to insufficient cash flows. In such a situation, a firm must rearrange its financial structure (Rao & Jessica, 2017). A financially distressed firm has difficulty in paying back its obligations, holds a disappointing record of bad loans, has poor sales, has real assets more than its net worth, and has decreasing profitability (Kuo, Wang, Sheu, & Li, 2003; Ashta, 2004). According to Asquith, Gertner, and Scharfstein (1994), financial distress is a situation of financial difficulty in which a firm is unable to clear its financial obligations at the time of maturity, which ultimately leads the firm to bankruptcy. A firm is considered to be in financial distress if its earnings before interest, taxes, depreciation, and amortization (EBITDA) are less than its reported expenses in two successive years. Financial distress is the condition faced by a firm that continuously faces financial problems before bankruptcy. The causes of financial difficulties are: 1) the high-interest expense held by a company, 2) poor operating performance in comparison to industry performance, and 3) declining market

conditions (Asquith et al., 1994). A financially distressed firm has a negative operating profit for many years (Hofer, 1980; Whitaker, 1999; Sari, 2022).

Considering the theoretical foundations and empirical findings, the following hypotheses are formulated to further explore the relationship under investigation.

H1: There is a significant relationship between Corporate Life Cycle stages and financial restructuring.

H2: Financial distress moderates the relationship between Corporate Life Cycle stages and financial restructuring.

Research Methodology

Aligned with the research objectives, this study utilizes a positivist paradigm and a deductive approach to test hypotheses. It is a quantitative analysis based on secondary panel data. The population includes non-financial firms across all sectors listed on the Pakistan Stock Exchange (PSX), totaling 407 firms. A sample of 314 firms was selected from 23 non-financial sectors using simple random sampling, a probability technique where every element has an equal chance of selection (Berger & Zhang, 2005). Data was collected over ten years, from 2013 to 2022, from the annual reports of the selected non-financial listed firms. Relevant data was gathered from multiple sources, including the firm's official websites, khistocks.com, opendoors.com, and the PSX official website. The PSX Data Portal was also accessed to obtain financial statements from the listed non-financial firms.

To test the hypotheses for financial restructuring, namely H1 and H2, this study employed multiple regression analysis to explore the relationships among financial restructuring strategy, firm life cycle stages, and financial distress. STATA version 15 served as the main statistical software for data analysis and testing research hypotheses. It was used to perform descriptive statistics, regression analysis, and diagnostic tests to explore the relationships among variables.

Operational Definition and Measurement of Variables

The dependent variable in the present study is financial restructuring, the independent variable is corporate life cycle stages, and the moderating variable is financial distress. The control variables include leverage, firm size, profitability, and sales growth.

The variables used for calculating financial restructuring are as follows:

DIV = The percentage change of dividend payments from the previous year to the current year

Net Debt =The percentage change of Net debt from the previous year to the current year

Net Equity =The percentage change of Net equity from the previous year to the current year

To measure the stages of the corporate life cycle, this study employs the method proposed by Dickinson (2011), which categorizes firms based on their cash flow patterns derived from accounting information, specifically the statement of cash flows. This approach is considered a robust indicator by Dickinson (2011). The rationale for using this model lies in its various benefits; it emphasizes a firm's financial information and acknowledges that the life cycle does not necessarily follow a specific sequence (Akbar et al., 2019). Firms are classified into life cycle stages—introduction, growth, maturity, shake-out, and decline—based on their cash flow from operating activities (CFO), investing activities (CFI), and financing activities (CFF).

According to Dickinson's methodology, the classifications are as follows:

- Introduction Stage: $CFO < 0$, $CFI < 0$, $CFF > 0$
- Growth Stage: $CFO > 0$, $CFI < 0$, $CFF > 0$
- Maturity Stage: $CFO > 0$, $CFI < 0$, $CFF < 0$
- Decline Stage: $CFO < 0$, $CFI > 0$, $CFF \leq 0$ or ≥ 0

The remaining years of a firm are classified under the shake-out stage (Dickinson, 2011).

These eight patterns are consolidated into five distinct stages as identified by Dickinson (2011).

Table 1: Patterns of Cashflows in different stages

Pattern	1	2	3	4	5	6	7	8
Stage	Introduction	Growth	Mature	Shakeout	Shake out	Shake out	Decline	Decline
CFO	-	+	+	-	+	+	-	-
CFI	-	-	-	-	+	+	+	+
CFF	+	+	-	-	+	-	+	-

Financial distress acts as a moderating variable. To examine this moderation, the study employs Model 1, as proposed by Hayes (2013). Several models have been established to predict financial distress, including the Altman, Springate, Fulmer, Taffler, Grover, Ohlson, and Zmijewski models (Indriyanti, 2019) been developed to predict financial distress, including the Altman, Springate, Fulmer, Taffler, Grover, Ohlson, and Zmijewski models (Indriyanti, 2019). To assess financial distress, this study utilizes the Altman Z-score model developed by Edward Altman in 1968. The model assesses a company's financial strength by combining various balance sheet values and income data. The Altman Z-score is based on five key explanatory variables.
According to this model:

- A Z-score value of less than 1.8 indicates that the company is in financial distress.
- A Z-score between 1.81 and 2.99 signifies that the company is in the "caution" zone.
- A Z-score above 3.0 indicates that the company is in the safe zone.

The following formula is used to calculate the Z-score:

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$$

Where:
X_1 represents the working capital to total assets ratio.
X_2 represents the retained earnings to total assets ratio.
X_3 represents the earnings before interest and taxes to total assets ratio.
X_4 represents the market value of equity to book value of total debt ratio.
X_5 represents the sales-to-total-assets ratio.
Many models have been developed to assess financial distress, but the Altman Z-score is widely recognized as the most effective tool for evaluating a company's financial strength (Bhandari & Iyer, 2013; Chouhan, Chandra, & Goswami, 2014; Mizan & Hossain, 2014; Almamy, Aston, & Ngwa, 2016).

In this study, the control variables include leverage, firm size, profitability, and sales growth. These variables are calculated using specific formulas.

$$\text{Leverage} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Firm size: Natural Log of Total Assets

$$\text{Profit Margin} = \frac{\text{Net profit before tax}}{\text{Total Sales}}$$

$$\text{Sales Growth} = \frac{\text{Sales in Year T} - \text{Sales in year T} - 1}{\text{Sales in Year T} - 1}$$

Econometric Model

Financial Restructuring = $\alpha+\beta_1(BIR) + \beta_2(GRW) + \beta_3(MAT) + \beta_4(SO) + \beta_5(DEC) + \beta_6(LEV) +\beta_7(FS) + \beta_8(PRO) + \beta_9(SG) + \beta_{10}(FD) +\beta_{11}(BIR*FD) + \beta_{12}(GRW*FD) +\beta_{13}(MAT*FD) + \beta_{14}(SO*FD) + \beta_{15}(DEC*FD) +\beta_{16}(LEV) +\beta_{17}(FS) + \beta_{18}(PRO) + \beta_{19}(SG) + e$

Where,
BIR= Birth
GRW= Growth
MAT= Maturity
SO= Shake-out
DEC= Decline
LEV= Leverage
FS= Firm size
PRO= Profitability
SG= Sales Growth
FD= Financial Distress

Results and Discussion

The tables below present the results of the quantitative analysis conducted to address the previously outlined research questions. This includes descriptive statistics and correlation matrices, followed by an evaluation of the assumptions underlying the regression model. The results of the regression analysis are then presented and interpreted in the context of the research objectives.

Table 2
Descriptive Statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
IntroBirth	2,986	0.1812	0.3852	0	1
Growth	2,986	0.1976	0.3982	0	1
Maturity	2,986	0.3552	0.4787	0	1
Shakeout	2,986	0.1403	0.3474	0	1
Decline	2,986	0.1253	0.3311	0	1
Dividends	2,986	50044.4	190722	-743.348	1.04e+08
Net Debt	2,986	9360.702	505291.5	-262300.5	2.76e+07
Net Equity	2,986	563.4531	34078.94	-154329.6	1845488
Birthzscore	2,986	0.2681	2.921033	-4.4405	154.6924
Growthzscore	2,986	0.4811	2.7173	-15.3939	122.4637
Maturityzscore	2,986	1.2596	2.3072	-15.0744	37.7180
Shakeoutzscore	2,986	0.2868	1.7002	-5.3724	69.2467

Declinezscore	2,986	0.2732	2.6407	-11.0141	52.2870
Leverage	2,986	1.6348	20.9383	-271.1905	1010.233
Firm size	2,986	22.59	1.8060	14.6563	27.7532
Profitability	2,986	80351.4	4389265	-104.0539	2.40e+08
Sales growth	2,986	0.2788	1.2536	-3.0927	24.0238

The table above presents descriptive statistics for firms at various stages of the corporate life cycle, based on a sample of 2,986 observations across all the relevant variables. Approximately 18.1% of firms are in the introduction or birth stage, while 19.8% are in the growth stage. The maturity stage is the most prevalent, accounting for 35% of the firms. Approximately 14% of the firms are in the shake-out stage, and only 12.5% are in the decline stage, making it the least represented stage. The minimum value of 0 and the maximum value of 1 indicate that the stages are coded as dummy variables, with 1 representing firms in that particular stage and 0 representing all other firms. The higher mean and standard deviation of 0.4787 suggest that the maturity stage is the dominant phase, with a well-distributed representation. Firms tend to stabilize and remain in this maturity phase for an extended period. The mean value for the percentage change in dividends is 50044, while the mean values for the percentage change in net debt and net equity are 9,9360.70. 70 and 563.45, respectively. These results show that financial distress, as measured by z-scores, varies significantly across different stages of the corporate life cycle. While distress is relatively low on average during the growth phase, it tends to increase in maturity, shake-out, and decline stages. This highlights the need for restructuring strategies tailored to each specific stage of development.

Variance Inflation Factor

Multicollinearity was assessed by calculating the Variance Inflation Factor (VIF) for all independent variables. The results showed that all VIF values were well below the commonly accepted threshold of 10, suggesting that multicollinearity was not a significant concern.

Table 3
Variance Inflation Factor

Variable	VIF	1/VIF
IntroBirth	2.02	0.4945
Growth	1.74	0.5763
Maturity	1.24	0.8084
Shakeout	1.13	0.8814
Decline	1.12	0.8903
Birthzscore	1.04	0.9633
Growthzscore	1.03	0.9708
Maturityzcsore	1.02	0.9818
Shakeoutzscore	1.02	0.9837
Declinezscore	1.01	0.9858
Leverage	1.01	0.9863
Firm size	1.00	0.9979
Profitability	1.00	0.9996
Sales growth	1.00	0.1000
Mean VIF	1.16	

Regression Results
Impact of Corporate Life Cycle Stages on Financial Restructuring

The following Table shows the regression outcomes for all the variables used for measuring financial restructuring strategy. The table not only exhibits the impact of CLC stages on financial restructuring, but also its impact in the presence of financial distress is represented.

Table 4

Regression Models-Financial Restructuring

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity (H0:constant variance)	Model 1	Model 2	Model 3
Hausman Test (p-value)	<0.05	>0.05	<0.05
	DIVIDENDS	NET EQUITY	NET DEBT
Birth	-11157.22	20020.4	161.3953
	(5598.6)**	(11567.2)	(85.541)
Growth	-18747.18	222771.2	301.7232
	(10461.6)	(109501)**	(154.49)
Maturity	-11520.65	968.4479	173.3082
	(5233.4)**	(441.5)**	(80.74)**
shake-out	-28044.25	6183.201	312.1879
	(15244.2)	(3036.8)**	(122.823)**
Decline	55442.84	-4290.119	-492.429
	(29496.5)	(2069.9)**	(207.087)**
birth*financial distress	-4095.22	282.2908	70.1093
	(1645.102)**	(143.55)**	(35.9623)**
growth*financial distress	-6088.068	-3380.003	44.7241
	(3439.913)	(1850.66)	(18.895)**
maturity*financial distress	-16157.95	-438.9144	126.1081
	(7742.711)**	(211.49)**	(59.3958)**
shake-out*financial distress	-1863.832	-38.2795	3.7294
	(869.705)**	(19.87)**	(52.3958)
decline*financial distress	-14803.27	-107.0628	104.2562
	(5813.438)**	(53.78)**	(44.5960)**
Leverage	-312.2583	-61.5322	3.0659
	(489.3397)	(31.613)**	(0.7538)*
firm size	-232250.9	-2757.347	1279.778
	(23007.75)*	(1400.15)**	(176.4967)*
Profitability	3242.185	152.0958	163.542
	(977.2551)*	(74.183)**	(7.4967)*
sales growth	40404.21	-3357.219	-921.291
	(10185.44)*	(1644.27)**	(78.1344)*
Constant	5288714	69489.47	-29178.3

	(560794.7)*	(35473.4)	(4301.962)*
F statistics	8.88	79.67	57.81
(p-value)	(0.0000)	(0.0000)	(0.0000)
Rsquared	0.0494	0.1256	0.253
( ) standard error in parenthesis		*p<0.01; **p<0.05	

Heteroskedasticity is controlled through the use of the 'robust' standard errors option. For Hausman test, the null hypothesis is that the preferred model is random effects vs. the alternative, the fixed effects.

Dividends

The results indicate an R-squared value of 0.0494, which means that CLC stages explain 4.94% of the variation in financial restructuring. The F-statistic, accompanied by a p-value of 0.00, demonstrates that the overall model is statistically significant. This implies that the CLC stages, taken together, significantly account for the variation in financial restructuring.

The table indicates that the introduction and maturity stages have a negative and significant effect on dividends. This suggests that firms in the birth and maturity phases tend to pay fewer dividends. Similarly, the growth and shakeout stages also show a negative but statistically insignificant impact on dividends. Firms in early stages, such as those in the birth and growth phases, prefer to retain earnings for investment opportunities, resulting in low or no dividend payments. Conversely, mature firms, despite having fewer growth opportunities, may reduce dividends to focus on share repurchases and address agency costs (DeAngelo et al., 2006). Often, in their maturity phase, firms cut dividends due to lower growth prospects or shifts in business models, such as transitioning or buying back shares. Market pressures also compel mature firms to conserve cash to stabilize their operations instead of paying dividends (Grullon, Michaely, & Swaminathan, 2002). Firms in the birth stage avoid dividend payments to maintain liquidity for research, development, and market entry. Firms entering maturity typically delay dividends until cash flows stabilize, creating a lagged relationship between maturity and payout policies (Bulan, Subramanian, & Tanlu, 2007). High-growth firms often skip dividends, preferring to reinvest earnings for expansion (Hussain, Md-Rus, Al-Jaifi, & Hussain, 2022). To fund future projects, firms with substantial growth prospects retain earnings and depend more on internal financing, which lowers dividend payments during the growth phase (Ahmed & Javid, 2009; Bushra, 2012). The decline stage shows a positive but statistically insignificant impact on dividends, implying these firms may increase dividends, but the evidence is weak. During this phase, companies tend to keep or slightly raise dividends to signal stability and maintain investor confidence. However, the influence on dividends remains statistically insignificant, as other factors such as earnings, economic outlook, profitability decline, and cash reserves are more critical (Bulan et al., 2007; Haleem and Javid, 2011; Kaur, 2019). In emerging markets, declining firms sometimes increase dividends to satisfy minority shareholders in family-controlled businesses, but the effect remains insignificant due to limited free cash flow, constraining their payout capacity (Kuo, Philip, & Zhang, 2013).

The table also examines how life cycle stages impact dividends when financial distress is considered as a moderating factor. Firms in financial distress across the introductory, maturity, shakeout, and decline stages significantly reduce dividends. Growth-stage firms facing financial difficulties also show a negative, though statistically insignificant, impact on dividends. This demonstrates that distressed firms tend to cut dividends at all stages of the CLC. Introductory stage firms, which focus on reinvesting earnings for growth, are especially affected, with distress amplifying this tendency, leading to major dividend cuts. In the decline phase, insufficient earnings and liquidity shortages force firms to cut dividends (DeAngelo et al., 2006). Stable cash flows usually enable mature firms to pay higher dividends, but financial distress disrupts this, resulting in notable negative effects. Liquidity

issues and debt covenants further restrict dividend payments during distress (Denis & Osobov, 2008). Across all lifecycle stages, financially distressed firms are less likely to pay dividends; this pattern is even stronger in mature and declining firms due to higher leverage and operational risks (Fama & French, 2001). In early stages, like birth and growth, firms avoid paying dividends during distress to conserve cash. During the shake-out phase, firms reduce dividends as they restructure for survival (Bulan et al., 2007). According to another study by Ahmed and Javid (2009), firms with higher debt levels often cut dividends to meet debt obligations and sustain financial health. Instead of dividend payouts, larger firms reinvest earnings into assets for growth and expansion.

Net Equity

In Table 4 above, Model 2 outlines the net equity used to assess financial restructuring. The results indicate an R-squared value of 0.1256, meaning that 12.56% of the variation in net equity can be explained by the CLC stages, while the remaining variation is attributed to other factors.

The first four stages of the CLC — introduction, growth, maturity, and shakeout —have a positive impact on net equity, whereas decline-stage firms negatively impact net equity. Except for the birth-stage firms, which exhibit an insignificant impact on net equity, all the other stages have a significant impact on net equity. This suggests that when firms are in the first four stages of the CLC, they tend to rely more on equity financing. However, while in the decline stage, firms depend less on equity financing.

Firms in the birth and growth stages are more inclined to use equity financing to support expansion and operational needs, maintain flexibility, and avoid debt obligations. Decline-stage firms tend to avoid equity financing and instead rely on increasing debt levels due to reduced profitability, the need to meet existing obligations, and lower earnings, which limit their internal funding (Castro, Fernández, & Tapia, 2014; Amin, Bowler, Hasan, Lobo, & Tresl, 2023). Firms in the early stages of the CLC, such as birth and growth, and those in their maturity phase, are more likely to engage in equity restructuring than debt restructuring due to better growth prospects, which makes equity more accessible and attractive. On the other hand, declining firms tend to prefer debt over equity restructuring, as they face higher financial risk, leading them to rely more heavily on debt restructuring (Akbar et al., 2022). Since investors view growth and mature-stage firms as less risky, these firms have a lower cost of equity capital, making equity financing a more attractive option for them. On the contrary, firms in the decline stage are hazardous, as they discourage equity financing due to a higher cost of equity, which can potentially lead to increased debt reliance (Wadood, Khan, & Alvi, 2020).

A study by Dickinson (2011) finds that firms in the introduction, growth, maturity, and shakeout stages increase their reliance on net equity financing, while decline-stage firms reduce their reliance on equity. Due to a high degree of uncertainty and limited cash flows, and to preserve cash for reinvestment, firms tend to seek equity rather than debt during the birth and growth stages. Similarly, mature and shakeout stage firms prefer equity financing to fund strategic expansions, such as mergers, during industry consolidation. Decline-stage firms' lower profitability due to falling stock prices and investor exits makes them borrow more debt than issue equity.

The table above also examines the impact of life cycle stages on net equity in the presence of financial distress as a moderating factor. The results show that financially distressed firms in the birth stage have a positive and significant impact on net equity. This suggests that such firms tend to acquire equity financing during periods of distress. On the other hand, firms in the growth stage exhibit a statistically insignificant negative impact on net equity during financial distress situations. This implies that as financially distressed firms enter their growth phase, their reliance on net equity decreases; however, this impact lacks statistical significance. The last three stages exhibit a negative but statistically significant impact on net equity, suggesting that financially distressed firms in the maturity, shakeout, and decline stages tend to reduce their dependence on net equity. Firms in their

growth stage prefer internal funds, hence, avoiding equity financing during periods of financial constraints. Similarly, mature firms and those in other later stages do not typically prefer equity financing during financial distress, as they avoid diluting their shares and protecting their stock price and dividend payouts (Fama & French, 2005). Financially distressed firms in the decline stage are observed to reduce equity financing to avoid undervaluation and hostile takeovers. This strategy helps declining firms as equity issuance during distress signals weakness, thus, pushing them towards less reliance on equity (Opler & Titman, 1994). Financially distressed birth-stage firms often find equity financing a viable option for survival, as they typically lack collateral and a credit history, making debt financing inaccessible during periods of financial distress. In early-stage firms, equity investors accept higher risk during periods of distress due to the potential for future growth prospects (Koh et al., 2015). Equity financing is a more viable option for financially distressed firms in the introduction stage, as these firms often have uncertain cash flows and limited access to debt markets. As firms enter the growth stage, their reliance on equity financing reduces due to better access to internal funds and alternative financing options. Moreover, they also avoid equity dilution to preserve control. During financial constraints, mature, shakeout, and decline firms are more inclined to debt restructuring and asset sales rather than equity restructuring, as they usually face reduced profitability and increased financial pressure; moreover, they prefer to protect ownership control and prevent stock price declines (Koh et al., 2015; Akbar et al., 2022).

Net Debt

In Table 4, Model 3 describes net debt, one of the proxies used to measure financial restructuring within organizations. The findings yield an R-squared value of 0.253, indicating that CLC stages account for 25.3% of the variation in financial restructuring.

The results show that the first four stages of the CLC —i.e., birth, growth, maturity, and shake-out — positively impact net debt. This suggests that firms rely more heavily on debt financing at all these stages. However, birth-stage firms have an insignificant impact, whereas firms at all the other stages have a significant effect on net debt. Firms in growth, maturity, and shake-out stages rely more on external sources of financing, including debt financing, to fund investments and manage competition. Debt is an attractive option for firms at the growth and maturity stages, as they typically have stable cash flows and collateral. However, birth-stage firms exhibit lower reliance on debt due to limited collateral, asymmetric information, and more risk perceptions, which reduces lenders' willingness to extend debt, leading to an insignificant debt impact (Dickinson, 2011). Growing firms exhibit higher leverage adjustment rates due to increased investment opportunities, enabling them to adjust their capital structures by altering the composition of new issues (Ahsan, Wang, & Qureshi, 2016). During the introductory stage, firms require significant investments and have more opportunities to invest in projects with positive NPVs, leading to higher debt ratios (Akbar et al., 2019). Results show that the decline stage has a significant negative impact on net debt. This indicates that firms in the decline stage tend to decrease their use of debt financing. During the decline stage, firms decrease their financial leverage, indicating a reduction in debt financing. Firms in this stage face weakening sales growth and uncertain prospects. To mitigate financial risk, they reduce leverage by limiting additional debt (Sumail & Akob, 2022). Firms in the decline stage are more likely to engage in equity restructuring than debt restructuring as they have limited access to debt markets (Akbar et al., 2022). Declining firms reduce debt to maintain financial flexibility as lower profits limit the tax shield benefits of debt (DeAngelo & DeAngelo, 2007).

Conclusion

Results highlight that firms in Pakistan avoid dividend payments at all stages of the CLC except for the decline stage. During the early stages, the results indicate that firms in Pakistan typically avoid

dividend payments across all stages of the Corporate Life Cycle (CLC), except the decline stage. In the early phases, firms tend to retain their earnings to seize investment opportunities, ensure liquidity, promote research and development, and adopt a market penetration strategy. Mature companies also reduce dividends due to low growth, opting instead to buy back shares, stabilize operations, and conserve cash (Grullon, Michaely, & Swaminathan, 2002; DeAngelo et al., 2006; Bulan, Subramanian, & Tanlu, 2007; Ahmed & Javid, 2009; Bushra, 2012; Hussain, Md-Rus, Al-Jaifi, & Hussain, 2022). Firms in the decline phase demonstrate a trend of increasing dividend distributions. This aligns with findings from previous studies, which suggest that declining firms prefer to enhance dividend payments to sustain investor confidence and signal financial stability. Instead of holding onto earnings for reinvestment, these firms prioritize returning cash to shareholders through dividends, as they face limited growth opportunities and fewer investment projects (Akbar et al., 2019).

Empirical evidence shows that in Pakistan, financially distressed firms reduce dividend payments to shareholders throughout all stages of the corporate life cycle (CLC). Prior research indicates that companies facing financial difficulties are inclined to cut dividend payments. Firms in the birth and decline stages often reduce dividends due to insufficient retained earnings and liquidity constraints during periods of financial distress (DeAngelo et al., 2006).

A lack of transparency in distressed Pakistani firms leads to asymmetric information, where managers may withhold dividend payments to avoid disclosing liquidity problems (Bin Tariq & Butt, 2008). Dividend cuts by financially distressed firms are often viewed as a warning sign, prompting these companies to delay such reductions until necessary. However, once financial distress becomes evidently clear, firms tend to make significant cuts to dividends to prevent reputational damage and legal scrutiny from minority shareholders (Akhtar, Hunjra, Andleeb, & Butt, 2012).

The empirical evidence from the study shows that firms at all stages of their lifecycle tend to increase net debt, except during the decline stage, where the opposite occurs. Previous studies conducted in Pakistan and globally support this finding. Mature firms are more likely to utilize debt because they have stable cash flows and a lower risk of bankruptcy. In contrast, firms in the decline stage significantly reduce their net debt usage due to facing higher credit risks, which often leads creditors to impose restrictive debt terms (Bregonci, Marques, Pinto, & Amaral, 2023). The findings indicate that financially distressed firms in Pakistan are inclined to adopt debt financing, which aligns with numerous prior studies. When firms face financial difficulties, they typically have limited internal funds, leading them to depend more on debt. Creditors are generally more willing to lend to companies in their early and mature stages due to their possession of collateralized assets and strong growth potential. In contrast, firms in the shakeout stage often lack clear indicators of future growth, which makes creditors hesitant to lend to them (Myers & Majluf, 1984).

Pakistani firms utilize equity financing at all stages of their lifecycle, except during the decline stage. In the birth and growth stages, firms tend to adopt equity financing to support expansion, address operational needs, maintain financial flexibility, and avoid incurring debt obligations. However, firms in decline primarily rely on debt financing. This is due to limited internal funding, lower profitability, and a need to meet existing obligations (Castro, Fernández, & Tapia, 2014; Amin, Bowler, Hasan, Lobo, & Tresl, 2023).

Equity financing is especially attractive for firms in the growth and maturity stages because, during these phases, they typically face a lower cost of equity capital. In contrast, firms in the decline stage prefer debt financing over equity financing, primarily due to the higher costs associated with equity (Wadood, Khan, & Alvi, 2020). Since declining firms are at a higher risk of bankruptcy, they frequently resort to debt restructuring and increase their use of debt financing to manage these financial challenges (Akbar et al., 2019, 2022). Factors such as low profitability, asymmetric information, and a scarcity of profitable projects compel firms in both the birth and decline stages to turn to debt financing during periods of financial distress (Saleem and Jabeen, 2023).

The study also examined the impact of different stages of the Corporate Life Cycle (CLC) on net equity, with financial distress acting as a moderating variable. The results indicate that Pakistani firms in the birth stage tend to rely more on equity financing, a finding that aligns with previous studies. Young companies often pursue equity financing to support their business activities, which suggests their potential for significant growth (Fluck, 2000). Firms in the introduction and decline stages encounter higher equity costs due to limited resources and increased risk, which makes equity financing less appealing (Hasan, Hossain, & Habib, 2015). A study by Ahsan, Wang, and Qureshi (2016) observes that both growing and mature firms display a trade-off financing behavior, balancing their reliance between debt and equity. In contrast, firms at the decline stage often move away from equity financing due to financial constraints. Research by Akbar et al. (2022) reveals that decline-stage firms tend to favor debt restructuring over equity restructuring. This is primarily due to the high costs and dilution effects associated with equity, an urgent need for liquidity that is more easily accessed through debt channels, and limited investor interest, which makes issuing equity less viable.

Recommendations

The study recommends that firms manage their debt and equity financing cautiously by maintaining a balance appropriate to their current stage in the business life cycle. Companies should adopt dynamic capital structure policies and regularly reassess their debt-equity ratios as they transition through different life cycle stages. Financial institutions and investors need to evaluate a firm's life cycle stage before making investment and lending decisions. Financial stability can vary across the various stages of a firm's corporate life cycle (CLC); therefore, investors are strongly encouraged to critically assess a firm's current stage before proceeding with investments. Policies that provide financial restructuring support, particularly for firms in the shakeout and decline stages, as well as those in earlier stages, can help sustain struggling enterprises, minimize insolvencies, and enhance financial stability in the corporate sector. Tax incentives should be introduced for firms experiencing financial distress. The Federal Board of Revenue (FBR) could offer temporary tax relief or deferred payments for firms undergoing verified financial or operational restructuring to support business continuity.

The findings emphasize that aligning restructuring strategies with a firm's stage of development and financial condition can lead to more effective turnaround outcomes, increased stakeholder confidence, and long-term sustainability.

References

Agarwal, R. (2025). Integration of Artificial Intelligence and Project Management Techniques in Financial Restructuring.

Agarwal, R. (2025). Integration of Artificial Intelligence and Project Management Techniques in Financial Restructuring.

Ahmed, H., & Javid, A. (2009). Dynamics and determinants of dividend policy in Pakistan: Evidence from Karachi stock exchange non-financial listed firms. JISR management and social sciences & economics, 7(1), 167-194.

Ahsan, T., Wang, M., & Qureshi, M. A. (2016). How do they adjust their capital structure along their life cycle? An empirical study about capital structure over life cycle of Pakistani firms. Journal of Asia Business Studies, 10(3), 276-302.

Ahsan, T., Wang, M., & Qureshi, M. A. (2016). How do they adjust their capital structure along their life cycle? An empirical study about capital structure over life cycle of Pakistani firms. Journal of Asia Business Studies, 10(3), 276-302.

Ahsan, T., Wang, M., & Qureshi, M. A. (2016). Mean reverting financial leverage and firm life cycle: Theory versus evidence (Pakistan). Emerging Economy Studies, 2(1), 19-26.

Akbar, A., Akbar, M., Tang, W., & Qureshi, M. A. (2019). Is bankruptcy risk tied to corporate life-cycle? Evidence from Pakistan. Sustainability, 11(3), 678.

Akbar, M., Hussain, A., Sokolova, M., & Sabahat, T. (2022). Financial distress, firm life cycle, and corporate restructuring decisions: evidence from Pakistan's economy. Economies, 10(7), 175.

Almamy, J., Aston, J., & Ngwa, L. N. (2016). An evaluation of Altman's Z-score using cash flow ratio to predict corporate failure amid the recent financial crisis: Evidence from the UK. Journal of Corporate Finance, 36, 278-285.

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

Ambarwati, S. D. A., & Haryono, S. (2021). Management restructuring on distress firm in Indonesia. RSF Conference Series: Business, Management and Social Sciences, 1(3), 137–146. https://doi.org/10.31098/bmss.v1i3.304

Ambarwati, S. D. A., & Haryono, S. T. (2021). Ownership Structure and Corporate Restructuring: Does It Have an Impact?. International Journal of Economics, Business and Accounting Research (IJEBAR), 5(4).

Amin, A., Bowler, B., Hasan, M. M., Lobo, G. J., & Tresl, J. (2023). Firm life cycle and cost of debt. Journal of Banking & Finance, 154, 106971.

Ashby, L. (2015). The enigma of 21st century corporate restructuring: successes and failures (ten-step best-practice framework). Insolvency & Restructuring Int'l, 9, 9.

Asquith, P., R. Gertner, and D. Scharfstein (1994): "Anatomy of Financial Distress: An Examination of Junk-Bond Issuers," The Quarterly Journal of Economics, 109, 625–658.

Aurora, D. R. S. (2010). NPA's A Comparative Analysis on Banks & Financial Institutions and its Implications. Journal of Business and Finance, 2(2), 93-98.

Bacharudin, A., Massie, J., & Arie, F. V. (2023). FINANCIAL PERFORMANCE ANALYSIS OF PT. PEGADAIAN CABANG BISNIS MIKRO MANADO SELATAN BEFORE AND DURING FINANCIAL RESTRUCTURING. Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi, 11(1), 173-182.

Berger, V. W., & Zhang, J. (2005). Simple random sampling. Encyclopedia of statistics in behavioral science.

Bhandari, S. B., & Iyer, R. (2013). Predicting business failure using cash flow statement based measures. Managerial Finance, 39(7), 667-676.

Bin Tariq, D. Y., & Butt, S. A. (2008, May). Impact of corporate governance practices on financial performance: Empirical evidence from Pakistan. In Paper presented & published in conference proceedings at 8th Annual Hawaii International Conference on Business (pp. 22-25).

Bregonci, L. V., Marques, V. A., Pinto, B. M. M., & Amaral, H. F. (2023). Life Cycle Stages and Debt Maturity in Brazilian Listed Companies. BBR. Brazilian Business Review, 20(4), 407-425.

Bulan, L., Subramanian, N., & Tanlu, L. (2007). On the timing of dividend initiations. Financial management, 31-65.

Bushra, A. (2012). The determinants of corporate dividend policy in Pakistan (Doctoral dissertation, © Lahore Schoool of Economics).

Castro, P. C., Fernández, M. T. T., & Tapia, B. A. (2014). The role of life cycle on the firm's capital structure= El papel del ciclo de vida en la estructura de capital de la empresa. Pecunia: revista de la Facultad de Ciencias Económicas y Empresariales, (19), 131-155.

Chouhan, V., Chandra, B., & Goswami, S. (2014). Predicting financial stability of select BSE companies revisiting Altman Z score. International Letters of Social and Humanistic Sciences, 15(2), 92-105.

Crum, R. L., Goldberg, I. (1998): Restructuring and managing the enterprise in transition,Washington: World Bank, pp. 341.

DeAngelo, H., & DeAngelo, L. (2007). Capital structure, payout policy, and financial flexibility. Marshall school of business working paper no. FBE, 02-06.

DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory. Journal of Financial Economics, 81(2), 227–254.

Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. Journal of Financial economics, 89(1), 62-82.

Dickinson, V. (2011). Cash flow patterns as a proxy for firm life cycle. The accounting review, 86(6), 1969-1994.

Dirman, A. (2020). Financial distress: the impacts of profitability, liquidity, leverage, firm size, and free cash flow. International Journal of Business, Economics and Law, 22(1), 17-25.

Dodge, H. R., Fullerton, S., & Robbins, J. E. (1994). Stage of the organizational life cycle and competition as mediators of problem perception for small businesses. Strategic management journal, 15(2), 121-134.

Fama, E. F., & French, K. R. (2001). Disappearing dividends: changing firm characteristics or lower propensity to pay?. Journal of Financial economics, 60(1), 3-43.

Fama, Eugene F. and Kenneth R. French, 2005, "Financing decisions: Who issues stock?" Journal of Financial Economics, Vol. 76, No. 3, pp. 549–82.

Fedele, M., & Antonucci, E. (2015). Firms Restructuring: From Crisis to Development. International Journal of Management Sciences and Business Research, 4(1)

Fitzpatrick, P. J. (1932). A comparison of ratios of successful industrial enterprises with those of failed firms. Certified Public Accountant, Washington:

Fluck, Z. (2000). Capital structure decisions in small and large firms: a life-cycle theory of financing.

Gilson, S. C. (1989). Management turnover and financial distress. Journal of financial Economics, 25(2), 241-262.

Gilson, S. C. (1990). Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default. Journal of financial economics, 27(2), 355-387.

Gray, B., & Ariss, S. S. (1985). Politics and strategic change across organizational life cycles. Academy of management review, 10(4), 707-723.

Grullon, G., Michaely, R., & Swaminathan, B. (2002). Are dividend changes a sign of firm maturity?. The journal of Business, 75(3), 387-424.

Gulec, O.F. and Karacaer, S., (2017). Corporate life cycle methods in emerging markets: evidence from Turkey. Journal of Economics, Finance and Accounting (JEFA), V.4, Iss.3, p.224-236.

Haleem, F., & Javid, A. Y. (2011). The dividend policy in manufacturing sector of Pakistan: The perception of corporate managers. Journal of Economics and Behavioral Studies, 3(1), 63-75.

Hanks, S. H., Watson, C. J., Jansen, E., & Chandler, G. N. (1994). Tightening the life-cycle construct: A taxonomic study of growth stage configurations in high-technology organizations. Entrepreneurship theory and Practice, 18(2), 5-29.

Hasan, M. M., Hossain, M., & Habib, A. (2015). Corporate life cycle and cost of equity capital. Journal of Contemporary Accounting & Economics, 11(1), 46-60.

Hayes, A. S. (2021). The active construction of passive investors: roboadvisors and algorithmic 'low-finance'. Socio-Economic Review, 19(1), 83-110

Hofer, C. W. (1980). Turnaround strategies. Journal of Business Strategy, I(I): 19-31.

Hussain, H., Md-Rus, R., Al-Jaifi, H. A., & Hussain, R. Y. (2022). Determinants of corporate pay-out policy and the moderating effects of firm's growth: evidence from Pakistan. Studia Universitatis Vasile Goldiș Arad, Seria Științe Economice, 32(3), 65-101.

Ijaz, M. S., Hunjra, A. I., Hameed, Z., & Maqbool, A. (2013). Assessing the financial failure using Z-Score and current ratio: A case of sugar sector listed companies of Karachi Stock Exchange.

Indriyanti, M. (2019). The accuracy of financial distress prediction models: Empirical study on the world's 25 biggest tech companies in 2015–2016 Forbes's version. KnE Social Sciences, 442-450.

Kaczmarek, J., Kolegowicz, K., & Szymla, W. (2022). Restructuring of the coal mining industry and the challenges of energy transition in Poland (1990–2020). Energies, 15(10), 3518.

Kaur, J. (2019). Firm's Life Cycle Spurs the Dividend Payments: A Fallacy or an Actuality?. Paradigm, 23(1), 36-52.

Koh, S., Durand, R. B., Dai, L., & Chang, M. (2015). Financial distress: Lifecycle and corporate restructuring. Journal of Corporate Finance, 33, 19-33.

Kumaraswamy, S., Ebrahim, R., & Nasser, H. (2019). Impact of corporate restructuring on the financial performance of gulf cooperation council firms. Polish Journal of Management Studies, 19(2), 262-272.

Kuo, H. C., Wang, L. H., Sheu, H. J., & Li, F. K. (2003). Credit evaluation for small and medium-sized enterprises by the examination of firm-specific financial ratios and non-financial variables: Evidence from Taiwan. Review of Pacific Basin Financial Markets and Policies, 6(01), 5-20.

Kuo, J. M., Philip, D., & Zhang, Q. (2013). What drives the disappearing dividends phenomenon?. Journal of Banking & Finance, 37(9), 3499-351

Mahmood, Y., Rizwan, M. F., & Rashid, A. (2018). Exploring the relationship between financial distress, financial flexibility, and firm performance: empirical evidence from Pakistan stock exchange. NICE Research Journal, 1-16.

Mahmood, Y., Rizwan, M. F., & Rashid, A. (2018). Exploring the relationship between financial distress, financial flexibility, and firm performance: empirical evidence from Pakistan stock exchange. NICE Research Journal, 1-16.

Majumdar, S. K., & Chhibber, P. (1999). Capital structure and performance: Evidence from a transition economy on an aspect of corporate governance. Public Choice, 98, 287-305.

Mathieu, N. (1996). Industrial restructuring: World Bank experience, future challenges. World Bank Publications.

Merwin, C. L. (1942). Financing small corporations in five manufacturing industries. National Bureau of Economic Research, New York.

Miller, D., & Friesen, P. (1980). Archetypes of organizational transition. Administrative Science Quarterly, 268-299.

Miller, D., & Friesen, P. H. (1980). Momentum and revolution in organizational adaptation. Academy of management journal, 23(4), 591-614.

Miller, D., & Friesen, P. H. (1984). A longitudinal study of the corporate life cycle. Management science, 30(10), 1161-1183.

Miller, M. H., & Modigliani, F. (1958). The cost of capital, corporation finance and the theory of investment. American Economic Review, 48, 261- 297.

Mintzberg, H. (1984). Power and organization life cycles. Academy of Management review, 9(2), 207-224.

Mizan, A. N. K., & Hossain, M. M. (2014). Financial soundness of Cement industry of Bangladesh: An empirical investigation using z-score. American Journal of trade and policy, 1(1), 16-22.

Muhammad, H., Waqas, M., & Migliori, S. (2019). The impact of M&A on bank's financial performance: Evidence from emerging economy. Corporate Ownership & Control, 16(3), 52-63.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. Journal of financial economics, 13(2), 187-221.

Norley, L., Swanson, J., & Marshall, P. A Practitioner's Guide to Corporate Restructuring, (2001)., L., Swanson, J., & Marshall, P. (2008). A practitioner's guide to corporate restructuring. City & Financial Publishing.

Opler, T. C., & Titman, S. (1994). Financial distress and corporate performance. The Journal of finance, 49(3), 1015-1040.

Powell, R., & Yawson, A. (2012). Internal restructuring and firm survival. International Review of Finance, 12(4), 435-467.

Quinn, R. E., & Cameron, K. (1983). Organizational life cycles and shifting criteria of effectiveness: Some preliminary evidence. Management science, 29(1), 33-51.

Rahmawati, M. (2014). Analisis Pengaruh Karakteristik Komite Audit Terhadap Financial Distress. 3, 1–8.

Ramser, J. R. and Foster, L. O. (1931). A demonstration of ratio analysis. University of Illinois, Bureau of Business Research Bulletin No.(4).

Ramzan, M., & Lau, W. Y. (2023). Impact of asset preferences on firm performance over its life cycle: Is agency theory or neo-classical theory more relevant?. Managerial and Decision Economics, 44(1), 595-607.

Rao, K.A. and Jessica, V. (2017) 'Corporate financial distress – corporate debt restructuring mechanism in India', People: International Journal of Social Sciences, 3(1), pp. 516–522. DOI: 10.20319/PIJSS.2017.S31.516522.

Reddy, K. S., Nangia, V. K., & Agrawal, R. (2014). The 2007–2008 global financial crisis, and cross-border mergers and acquisitions: A 26-nation exploratory study. Global Journal of Emerging Market Economies, 6(3), 257-281.

Saleem, M. S., & Jabeen, M. (2023). FIRM LIFECYCLE AND FINANCIAL DISTRESS: A STUDY OF NON-FINANCIAL FIRMS LISTED ON THE PAKISTAN STOCK EXCHANGE. International Journal of Business and Management Sciences, 4(1), 66-86.

Sari, N. A. (2022). The effect of corporate life cycle on corporate restructuring. Riset Akuntansi dan Keuangan Indonesia, 7(1), 16-25.

Srivastava, V., & Mushtaq, G. (2011). Corporate restructuring-a financial strategy. Asian Journal of Technology & Management Research, 1(01).

Srivastava, V., & Mushtaq, G. (2011). Corporate Restructuring-A Financial Strategy. Asian Journal of Technology & Management Research, 5(3), 111-124.

Sumail, O., & Akob, R. A. (2022). The testing of pecking order theory for behavior financing in the company's life stage. Jurnal Keuangan dan Perbankan, 26(3), 580-598.

Tandiawan, W. (2023). The Effect of Financial Distress and Corporate Governance on the Discretionary Allowance for Impairment Losses. Studi Akuntansi, Keuangan, dan Manajemen, 2(2), 99-111.

Tariq, M., Hasan, M., Khanji, A., & Aziz, A. (2025). Investigating the Factors Predicting the Financial Distress of Firms: A Study Based on Pakistani Firms. The Critical Review of Social Sciences Studies, 3(1), 1381-1393.

Tariq, M., Hasan, M., Khanji, A., & Aziz, A. (2025). Investigating the Factors Predicting the Financial Distress of Firms: A Study Based on Pakistani Firms. The Critical Review of Social Sciences Studies, 3(1), 1381-1393.

Thanatawee, Y. (2011). Life-cycle theory and free cash flow hypothesis: Evidence from dividend policy in Thailand. International Journal of Financial Research, 2(2).

Tian, L., Han, L., & Zhang, S. (2015). Business life cycle and capital structure: evidence from Chinese manufacturing firms. China & World Economy, 23(2), 22-39.

Torbert, W. R. (1974). Pre-bureaucratic and post-bureaucratic stages of organization development. Interpersonal development, 5(1), 1-25.

Usmansyah, U., & Pudjiastuty, P. (2023). To Recognize Indication of Financial Distress and Or Bankruptcy of Five Textile Company for Five Years Period Using Five Financial Distress Models. Return: Study of Management, Economic and Bussines, 1(05), 216-225.

Vo, D. H., Vo, A. T., Dinh, C. T. H., & Tran, N. P. (2024). Corporate restructuring and firm performance in Vietnam: The moderating role of digital transformation. Plos one, 19(5), e0303491.

Wadood, M., Khan, H., & Alvi, M. A. (2020). DOES FIRM'S LIFE CYCLE STAGES AFFECT THE COST OF EQUITY CAPITAL IN ASIA?. International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 11(15), 11A15C-1.

Whitaker, R. B. (1999). The early stages of financial distress. Journal of Economics and Finance, 23(2), 123–132. https://doi.org/10.1007/bf02745946

Winakor, A., & Smith, R. F. (1935). Changes in financial structure of unsuccessful industrial companies. University of Illinois Press: Bureau of Business Research Bulletin, 51.