

The Corporate Financial Policy and the Firm Value

Rana Shahid Imdad Akash¹, Majid Imdad Khan², Falik Shear^{3*}

¹ School of Business Management, NFC-IEFR, Faisalabad, Pakistan

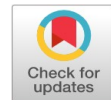
² Ph.D Finance, Department of Management Sciences, COMSATS University Islamabad (CUI),
Lahore Campus, Lahore, Pakistan

³ Assistant Professor, Faisalabad Business School, National Textile University, Faisalabad, Pakistan

Abstract: The capital structure remained a hot debate from few decades. Capital structure in relation to firm's value in developing economies was examined from January 1, 2013 to Dec 30, 2022. A lot of studies were conducted to get a better solution regarding a mix of results were drawn regarding capital structure to attain best mix of financing. The problem is the validity of the model is vague due to inappropriate estimation. The inappropriate estimation leads towards puzzling decisions. To avoid the puzzling decisions, the Extreme Bound Analysis (EBA) method is applied for examining the validity of the model. The results indicate that there is mix effect of capital structure on the value of the firm. The Return on Equity (ROE) has been negative and significantly affected whereas Operating Profit Margin (OPM) has been significant and positive affected. The other factors of value of the firm have negative relation with capital structure. The hypothesis four (04) explored the significant robust variables – Market Value Added (MVA), Return on Assets (ROA), Economic Value Added (EVA), ROE, Tobin's Q (TQ), and Earning Per Share (EPS). The results for these variables remained persistent regarding policy making. The optimal capital structure accelerates value additive resources in firm value, and financial levels deviate in different regions requiring particular attention. The analysis could also be extended to financially constrained and unconstrained firms.

Keywords: Optimal capital structure, Market value, Irrelevance theorem, Extreme bound analysis, Return on equity, and Tobin's Q

Received: 31 January 2023 / Accepted: 12 March 2023 / Published: 23 May 2023



INTRODUCTION

Financial corporate policies remained a hot issue and widespread debate to optimize the capital structure and firm value (Baihagi et. al., 2021, Irawati et. al., 2021 & Khan, Bashir, & Amir, 2023). The role of corporate policies in firms are as old as finance and particularly in developing countries (Filippova, 2016, Khan, Akhter, & Bhutta, 2020 & Wang et al., 2021) but investment funds could also be enhanced through corporate financial policies (Gu & Zhang, 2022, Trinh et al., 2022 & Khan, Bahir, & Amir, 2023).

Funds (debt and equity) work like a life blood for a business enterprise. The debt and equity are the primary sources of business financing. Corporate financing may include short term financing, long term financing and shareholder's equity (Kochhar, 1997). Financing for the firms may differ as environment changes. The change in the ratio of debt vs. equity may affect the firm value (Durand, 1952) which is known as relevance theory. The different costs of financing are included in weighted average cost of capital. As per the irrelevance theory the combination of debt and equity doesn't affect the firm value but the market must be perfect (Miller & Modigliani 1958). Trade off theory claims that debt financing give birth to interest and interest decrease the tax and finally value of the firm may increase. By netting off the benefit of tax and cost of interest we can achieve an optimum capital structure. Pecking order theory conducted a debate on information asymmetry. This is an interesting debate to compare variety of research which resultantly occurred in developing and developed markets. But in emerging markets, the effect of capital structure remained negative with firm's value that means that high debt reduces debt level (Aziz, 2022; Luu, 2021; Khan et al., 2021). This is in support of Pecking order theory but limited to manufacturing firms. In the context of that needs of funds are limited to meet internal funds sources, the firm will change into externa funds

*Corresponding author: Falik Shear

†Email: falik.shear@ntu.edu.pk

sources and firm should target low risk debt of it over equity financing (AL-Takhayneh et al., 2022; Yildirim & Celik, 2021). The support of Pecking order theory is also provided by Mahirun and Kushermanto (2018), Luu, (2021), Khan, Amir, and Bilal (2023).

It is explored that the most private information is with the internal stake holders rather than external. On the basis of unequal information, we can't achieve optimum capital structure. The firm uses retained earnings first then debt and at last shareholders equity. The problem of under investment may be established due to agency problem which may finally affect the firm value. The optimum combination of debt and equity is the key to enhance the value of the firm and maximize the shareholders wealth. The theories of capital structure focused on the above discussed agenda. The reliability of the results, their robustness and sensitivity are a matter of debate. This will be achieved by applying a reasonable technique. The sensitivity analysis in this study will be examined by applying EBA. The downsides of careful consideration are avoided by applying this technique. The development of EBA was made by Leamer (1978, 1983, and 1985) and extended by Granger and Uhlig (1990). The upper and lower bounds of strongly significant variables are examined by EBA. The dependent and explanatory variables are estimated for robust coefficient and found significant. The issues may be significantly explored further by explaining the capital structure theories as follows.

Theories of Capital Structure

Optimum capital structure explored the estimation and evaluation regarding to consider behavior underpinning theoretically. Variety of assumptions are focused theoretically as under.

Relevance theory: Durand (1952) suggested that the firm value is affected by the change in combination of debt vs. equity ratio. So, the decisions of capital structure are relevant to the value of firm. The rise in financial leverage will result in decline in weighted average cost of capital while the value of the firm and share will increase.

Irrelevance theory: Miller and Modigliani (1958) proposed irrelevance theory that the combination of debt and equity doesn't affect the firm value but the market must be perfect. The assumption of the theorem is that the income tax and distress cost is not present in the business environment.

Static trade off theory: Mayers (1984) proposed the static trade off theory of capital structure estimates that the firm will select the combination of debt and equity financing to cost and benefits of debt. It estimates reversion of the actual debt ratio towards the optimum.

Pecking order theory: Mayers and Majluf (1984) proved the asymmetric information framework. According to the pecking order theory the financing operations of the companies are prioritized by the managers on the grounds of hierarchy. The follow already set preferences such as they use retained earnings first then follow debt financing and after that go towards equity.

Market timing theory: Williamson (1988) described the theory of transaction cost economics. The decisions of financing under this theory would follow the market conditions. This theory is compared with trade off theory and pecking order theory. When the prices of shares are high in market the shares are issued to get the benefit of high prices. On the other hand, when the prices are low no shares are issued financing is made from other side.

Life stage theory: Frielinghaus, Mostret, and Firer (2005) explored the life stage theory. The theory elaborates that how organizational life stage to capital structure. On the different stage of life of a corporate setting how an organization select the choice of financing and significant impact to the firm value.

Signaling process: The symmetrical information can be achieved by providing equal access to all stakeholders. In the efficient market situation, the fair value may be attained. The investor can under or over estimate the value due to information asymmetry. Investor's psychology interacts with financial signals and expose the financial asymmetry and distress which further explored signaling effect. The agency cost may be balanced with above stated problems. Moreover, trade off signaling effect arise due to less financial distress, and asymmetric behavior of information which could become the best strategy under corporate governance.

In view of above, capital structure is dormant in-depth studies and in developing countries like Pakistan. Moreover, the focus is on developing countries like Pakistan which dominating the researcher's interest in Asian developing countries by determining the capital structure (Bajaj et al., 2020; Jam et al., 2013). The research could expediate the decisions and explore the scope in developing countries by expecting the better results and exposition to revised downward firm's growth for stock prices fall impact. For better results, EBA approach is used which based on regression analysis Penal data, is further the novelty in this research.

On the basis of above, the following research objective and question is exposed as that how the corporate financial policies have effect on firm value by considering the optimal capital structure? Capital structure is mandatory in decisions making for business which could expose the validity of profit for shareholders and make the decisions in accordance with signaling and asymmetric behavior through capital structure for predicting the firm's value which is the core objective of this study.

LITERATURE REVIEW

Capital structure is the core concept to focus the corporate financial policies and firm's value. Both the perspective, like the policy is powerful to help in incremental change in firm's value or otherwise. Debt and Equity both extended by capital structure in financing activities of the firms (Danila et al., 2020).

The financial determinants highly focused in transitional market. Firm's value depends upon market's incomplete and inefficient weak signal. Perk and Jang (2013) documented that the liability decreases the future cash flows and firm's performance. It is explored that age, and size showed significant results but negative growth (Huynh & Petrunia, 2008). Simerly and Li (2000) explained that the size and age linked with firm's upturn. They further documented that competitiveness of environment may change this link of financial structure and economic performance. Thomsen and Pedersen (2000) expressed that there is a significant association of ownership of investor and market's book value, profit share, asset's returns and declined sale growth.

It is considered that corporate strategy of business and performance is significantly influenced by large family owners, institutional investors, banks, governments and firms. Leary and Roberts (2005) explained the persistency of shocks on leverage. Miao (2005) documented that financing and production decisions are influenced by output cost of capital structure and industry dynamics. Strebulaev (2007) demonstrated that at the time of re adjustment the capital structure of dynamic economy and optimal level of capital structure may differ. Due to the availability of friction the firms adjust financial structure infrequently. Chowdhury and Chowdhury (2010) documented that there is a strong distress in growth, debt vs equity regarding size, and industries that evidently supporting exposition of Modigliani and Miller (1958). He elucidated the concept of debt vs equity regarding firm's value. The debt's issuance above or below regarding industrial average is the indication for firm's leverage announcement (Hatfield et al., 1994). The agency cost mechanism exposed to elucidate the conflicts regarding managers and shareholders (Jenson & Meckling).

The debt is a solution to mitigate this conflict. Akash, et al. (2020) explored the information asymmetries and bankruptcy that cause agency cost, and distress. The agency problem and financial distress are significant costs in financial market. The optimal capital choice can have implication to reduce agency cost and agency risk. The reduction in agency costs and agency risk are the result of optimal capital structure assist to future growth of market value. Asset specificity preceded by debt/equity, capital structure with Transaction Cost Economies (TCE) (Williamson, 1988). Mayers (1984) argued static trade off theory. He exposed that agency cost; taxes & financial distress are served from optimum capital structure. Trade off theory explored that higher the arrangements of profit in firms may accelerate the ratio of high leverage (Abel, 2017). Moreover, the equity will encourage more participation in higher leverage that is riskier and negative NPVs (Choi et al., 2020). There are several studies noticed that firm's value positively influenced by capital structure (Hirdinis, 2019; Khan, Akhter, & Bhutta, 2020; Dang & Do, 2021; Mills & Mwasambili, 2022). Jensen (1986) and Meckling (1990) concluded that by enhancing management stake in the firm the problem of agency cost can be solved.

Ross (1977) documented that most private information has within the managers as compared to investors. So, he discussed the information asymmetry theory. Akash et al. (2019) explored the agency problem and information asymmetries are prerequisite of threat of bankruptcy and financial distress. The bankruptcy and financial distress are used to create the adverse signaling impact on the orientation of market. The adverse signaling assist towards not to fair play in market value. Bender and Ward (1993) elucidated life stages of the firm influenced the capital structure. The financing of the firms may vary as the firm circumstances changed. Akash and Abbas (2015) resulted the corporate governance has significant influence on the performance of a firm due to a corporate governance and cost of economics. The governance is very useful for a firm performance where a good set of portfolios. The portfolio is used for diversification of risk due to signaling. The diversification can have implications to mitigate the signaling risk and asymmetric cost to increase in market value. Hameed et al. (2011) evidenced the asymmetries and agency cost revealed the signaling process and incorporation of debt hypothesis have impact on the investor

psychology. The study makes the space to set a portfolio for attainment of riskless market values.

DATA AND METHODOLOGY

To conduct the study the data is taken for a period from 2013 to 2022. Income statement and balance sheet data is obtained from Pakistan stock exchange. The five non-financial sectors are selected on the basis of availability of complete data.

Panel Data:

The data collected is a panel data so to avoid the heterogeneity problem we applied Panel data analysis. Panel data avoids problem of co linearity and it is more informative and have more variability and degree of freedom. This is an efficient technique for dealing of complicated models in finance. Panel may be of two types balanced and unbalanced. There are same numbers of observations in balanced panel data and vice versa. This study deals with the balanced panel. This model is used to consider the effect of Six financial covariates of the Firm value.

$$Y_{ct} = \alpha_t + \delta MVA_{tc} + \mu_{tc} \quad (1)$$

As the model can be explored as above

Y_{ct} = Market value response regarding company c in year t (t = 1..... 10)

FC_{nct} = Time varying market performance as financial covariate f (f = 1.....1) for c-company in year t (t = 1.....10).

β = Intercepts and parametres coefficient of change

μ_{tc} = random error term for c-company in year t.

Financial Covariates of Debt Vs. Equity and Market value.

$$Y_{ct} = \alpha_t + \beta_t(\text{Market Performance}) + \mu_{tc} \quad (2)$$

Y_{ct} = Debt Vs. Equity

Where independent Covariates:

MVC_{ct} = Market Value Covariates

ROA = Return on Assets

ROE = Return on Equity

OPM = Operating Profit Margin

EPS = Earnings per share

TQ = Tobin's Q

MVA = Market Value Added

μ_{tc} = Error term

Extreme Bounds Analysis (EBA)

The reliability of the results, their robustness and sensitivity are a matter of debate. This will be achieved by applying a reasonable technique. The sensitivity analysis in this study will be examined by applying EBA. The downsides of careful writing are avoided by applying this technique. The development of EBA was made by Leamer (1978, 1983, and 1985) and extended by Granger and Uhlig (1990). The upper and lower bounds of strongly significant variables are examined by EBA. Coefficients regarding dependent, and explanatory variables explored as robust if significantly estimated. Same explanatory if not explored as same then the sign reflection ignored, means no change. EBA insisted by researchers to explore the program like EBA. E-views 9 is motive to option regarding this programming. Log linear model explored parameters like β_{2ji} regarding to interpret sensitivity and financial signaling, applied in EBA.

$$Y = \beta_{1ji} + \beta_{2ji}M + \beta_{2ji}Z + \varepsilon_{ji} \quad (3)$$

Y is explored as debt, and equity indicator, i interest variables. M denoted as variables of interest in study. The results includes basic proxies regarding theories of capital structure. Variables pool can be denoted as subset and Z.

RESULTS AND DISCUSSION

Covariates Regarding Signaling, and Asymmetric Firm's Value

The mean return of the Debt Equity is 0.041234 with its standard deviation 0.062734 whereas the highest mean return is 6.52103 of EPS and highest standard deviation is 72.6713. The mean returns of the OPM and MVA are negative. To examine the relationship among variables correlation is applied.

Table 1: Descriptive Statistics

	DE	ROA	ROE	OPM	EPS	Tobin's Q	MVA
Mean	0.041234	0.067219	0.034552	-0.0064	6.52103	7.54756	-0.170148
Median	0.016578	0.041732	0.084278	0.083256	1.68959	0.386438	-0.015502
Std. Deviation	0.062734	0.17634	5.758968	2.386743	32.1264	62.53539	-8.336752
Skewness	-2.40449	32.58785	-31.5543	-21.6457	-35.3261	30.536879	-0.805785
Minimum	-0.81546	-3.32719	-321.106	-153.508	-182.754	-25.218901	-190.522
Maximum	0.66759	14.7295	132.7325	39.99579	236.989	335.4789	168.021
Count	3260	3260	3260	3260	3260	3260	3260

According to the correlation results the Debt equity is negatively correlated with all variables except OPM. The Debt equity is highly correlated with ROE -0.81546.

Table 2: Correlations among Variables

Variables	DE	ROA	ROE	OPM	EPS	Tobin's Q	MVA
DE	1						
ROA	-0.00341	1					
ROE	-0.80953	0.02658	1				
OPM	0.00521	0.341256	0.006891	1			
EPS	-0.004263	0.052368	0.023681	0.035426	1		
Tobin's Q	-0.002569	-0.004364	-0.00261	-0.005681	-0.00358	1	
MVA	-0.002689	0.0254735	0.006572	0.003628	0.025981	0.025612	1

Table 3: The Sensitivity, and Validity of Firm's Value and Financial Covariates

Variables	Coefficients	t value
ROA	-.00001381	-0.69
ROE	-.0172368	-8.835***
OPM	0.00019214	6.23***
EPS	-.00082156	-0.86
TQ	-.00000593	-0.09
MV	-0.0016879	-0.21

***, **, * Significant at 1%, 5%, and 10% level.

There are mix results found in our study. Only ROE and OPM has significantly influenced by the change in combination of debt vs. equity. But the other factors of firm value are not affected. This proves that there is the firm's value which found irrelevant to each other debt vs equity, and remained inconsistent regarding to theoretical work of Modigliani and Miller (1958), opposed Fama and French (1963), the movement of leverage, and firm's value in same direction. The support remained consistent with Modigliani, and Miller, 1963 that incremental equity's cost like firm's debt also increases.

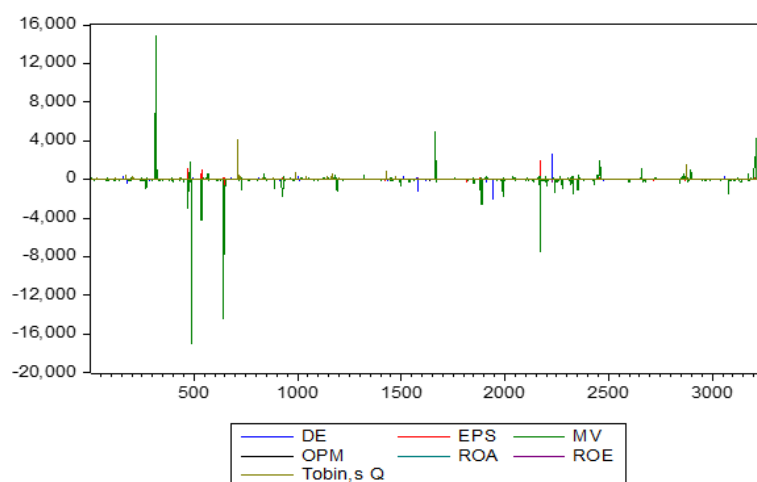


Figure 1: Financial Signaling and Information Asymmetries of Firm Value Covariates and Debt vs. Equity from 2013 to 2022

The results exposed that interest variables, and its parameters values ranges regarding to reflection of its sensitivity. β_{max} , and β_{min} observed the sensitivity regarding to 5% significance level, and β is an estimator regarding coefficient of interest variable M.

Table 4: EBA of the Coefficients Sensitivity: Modified Approach

Variables	β Base	β max	β min	Sign β , s (%)	EBA Results
ROA	-0.627	-0.383	-0.628	100%	Robust
ROE	-0.130	-0.156	- 0.131	100%	Robust
OPM	0.127	0.128	0.126	26.6%	Fragile
+EPS	-0.367	-0.323	-0.367	100%	Robust
TQ	-0.073	-0.081	-0.073	100%	Robust
MVA	-0.437	-0.416	-0.437	100%	Robust
Robust Relationships in the Group			89.97 %		Globally Robust

The extreme bound regarding to explore the maximum, and minimum bounds, β is used. These bounds could expose the maximum, and minimum bounds regarding to explore the sensitivity in debt vs. equity, and firm's value. Moreover, fragility, and robustness relation explored in this analysis which further extended to estimate change in debt vs. equity.

In the table, ROA, ROE, EPS, Tobin's Q (TQ), EVA, and MVA are expressed to identify the robust relation, and highly sensitive to Debt Vs Equity. The results explored that range regarding upper, and lower bounds denoted β at 5% significance level in relation to interest variables. Moreover, these bounds further provide robust or fragile link to extreme bounds. Hypothesis four (04) estimates the robustness of variables i.e., ROA, ROE, EPS, Tobin's Q, EVA, and MVA. The reliability of consistent results explored the confirmation regarding to policy making and further significance change.

Table 5: EBA of the Coefficients Sensitivity: Leamer Approach

Variables	Mean μ	Upper bound ($\mu+2s$)	Lower bound ($\mu-2s$)	Cases Sign. at 5%	Leamer EBA Results
ROA	-0.407	-0.383	-0.439	100%	Robust
ROE	-0.138	-0.152	- 0.118	100%	Robust
OPM	0.123	0.124	0.124	26.6%	Fragile
EPS	-0.325	-0.312	-0.358	100%	Robust
TQ	-0.068	-0.074	-0.062	100%	Robust
MVA	-0.422	-0.434	-0.450	100%	Robust
Robust Relationships in the Group			88.97 %		Globally Robust

The ultimate goals of firm particularly, wealth maximization which could be attained by control over financial signaling, misrepresentations, and problem of agency. This argument is importantly justifying the reason regarding to expose the transitional and emerging markets in theoretically. The deviations provide better guidance to control the reasons which could help to explore the firm's value.

CONCLUSION

In this research of capital structure is risky in perspective of transitional and developing economies. As a matter of fact, mix of capital structure and firm's value are significant to risk, returns and vice versa.

The results explored the negative and significant flight between capital structure and firm's value. The results showed that ROE has significantly and negatively affected whereas the OPM is positively and significantly influenced by capital structure. The study documented the negative relationships of ROA, EPS, Tobin's Q (TQ), and MVA, elucidated with Debt Equity (DE). Focus of relation found positive regarding debt and profitability, and inverse submitted by Rajan and Zingales, 1995, and Mayers, 1984. The irrelevancy of market regarding to explore the decisions for financial policy in case of perfect market is the hypothesis of Miller and Modigliani favorable to emerging, and transitional economies. Mayers (2001) stated that for the choice of financial policy there is no any universal rule and elucidated those managerial decisions originated from asymmetric information, tax interpretation, and agency cost.

The capital structure remained a hot debate from few decades. The previous studies explored both positive and negative impact of capital structure on the value of the firm. A lot of studies were conducted to get a better solution regarding the best mix of financing and a mix of results were drawn regarding capital structure. But the problem is appropriate estimation. Sometimes the validity of the model is vague and inappropriate estimation lead towards inappropriate decisions. The objective of this study is to observe the power of financing choices on the value of firm. The secondary data of all sectors from Karachi stock exchange of Pakistan are taken basis on the availability of data. The data is taken for a period from 2013 to 2022. Panel data is used in this study. To avoid the problem of inappropriate estimation the EBA technique is used for examining the validity of the model. The results indicate that there is mix effect of capital structure on the value of the firm. The ROE has been negative and significantly affected whereas OPM has been significant and positive affected. The other factors of value of the firm have negative relation with capital structure. In accordance with the hypothesis four, ROA, ROE, EPS, Tobin's Q (TQ) – EVA and MVA are the robust variables. Hence, the results confirmed the reliability of previous results that all these are consistent with objective five and not to change significance for further policy making. Moreover, the optimal capital structure is seeming to be a value relevance in transitional and emerging economies.

IMPLICATION, LIMITATION AND FUTURE DIRECTIONS

It is implicated that corporate financial policies are an important tool for firm's value and its success depends upon optimization of capital structure. The study is limited to Pakistani companies which are used to analyze the results of corporate financial policies in work. This dilemma could be taken into consideration to explore the further encourage able results in other developing countries of the world and to obtain better results in future. Moreover, this study exposed the corporate financial strategies for the companies of non-financial sector and they have different capital structure. By this research, the focus could be increased on capital structure in other countries and the same by inclusion of other corporate financial policies like stock splits, dividends, and leverage buyouts etc. in future.

REFERENCES

- Abel, A. B. (2018). Optimal debt and profitability in the tradeoff theory. *The Journal of Finance*, 73(1), 95-143. <https://doi.org/10.1111/jofi.12590>
- Adizes, I. (1979). Organizational passages: diagnosing and treating lifecycle problems of organizations. *Organizational Dynamics*, 8(1), 3-25. [https://doi.org/10.1016/0090-2616\(79\)90001-9](https://doi.org/10.1016/0090-2616(79)90001-9)
- Akash, I. S. R., Ghafoor, M. & Siddique. (2020). Impact of macroeconomic conditions, industry attributes and firms related variables on capital structure. *Journal of Business and Social Review in Emerging Economias*, 6(1), 287-302. <https://doi.org/10.26710/jbsee.v6i1.1058>

- Akash, R. S. I., Mahmood, I., & Hamid, K. (2019). The Impact of Financial Signaling and Information Asymmetries of Macroeconomic Covariates and Debt vs. Equity. *Review of Economics and Development Studies*, 5(4), 891-902. <https://doi.org/10.26710/reads.v5i4.876>
- Akash, R. S. I., & Abbas, Z. (2015). Mediating and moderating role of financial signaling, information asymmetries of corporate governance in debt vs. equity and market value behavior. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 9(2), 461-484.
- Akash, I. S. R., Shah, S. Z., Hassan, A., Hamid, K., & Suleman, T.M., (2011). The impact of Sensitivity and Validity of Debt Signaling Hypothesis on Emerging and Transitional Economy: Perspective from Pakistan. *International Research Journal of Finance and Economics*, 71(1), 7-18.
- AL-Takhayneh, S. K., Karaki, W., Alhwayan, O. A. A., Khader, R., & Altarawneh, A. J. O. A. (2022). Mother's lifestyle in digital era, life satisfaction and well-being: Moderating role of E-learning anxiety among Jordanian mothers of grade 1-3 students. *Pakistan Journal of Life and Social Sciences*, 20(1), 63-79.
- Aziz, S. (2022). Individual characteristics and innovation performance in SMEs: Moderating role of psychological capital. *Journal of Advanced Research in Social Sciences and Humanities*, 7(3), 122-135.
- Bacidore, J. M., Boquist, J. A., Milbourn, T. T., & Thakor, A. V. (1997). EVA and total quality management. *Journal of Applied Corporate Finance*, 10(2), 81-89. <https://doi.org/10.1111/j.1745-6622.1997.tb00138.x>
- Baihaqi, N., Geraldina, I., & Wijaya, S. Y. (2021). Pengaruh struktur modal terhadap nilai perusahaan pada kondisi kedaruratan pandemi Covid-19. *Jurnal Akunida*, 7(1), 72-84.
- Bajaj, Y., Kashiramka, S., & Singh, S. (2021). Application of Capital Structure Theories: A Systematic Review. *Journal of Advances in Management Research*, 18, 173-99. <http://dx.doi.org/10.1108/JAMR-01-2020-0017>
- Bardia, S. C. (2008). Evaluation of financial performance: A dialectics. *Icfai Journal of Accounting Research*, 7(1), 36-49.
- Bender, R., & Ward, K. (1993). *Corporate financial strategy*. Oxford: Butterworth-Heinemann.
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14, 257-273. <http://dx.doi.org/10.1016/j.jcorpfin.2008.03.006>
- Carpentier, C. (2006). The valuation effects of long-term changes in capital structure. *International Journal of Managerial Finance*, 2(1), 4-18. <https://doi.org/10.1108/17439130610646144>
- Chaganti, R., & Damanpour, F. (1991). Institutional ownership, capital structure, and firm performance. *Strategic Management Journal*, 12(7), 479-491. <https://doi.org/10.15388/Ekon.2020.2.4>
- Choi, P. M. S., Choi, J. H., Chung, C. Y., & An, Y. J. (2020). Corporate governance and capital structure: Evidence from sustainable institutional ownership. *Sustainability*, 12, 4190. <https://doi.org/10.3390/su12104190>
- Chowdhury, A., & Chowdhury, P. S. (2010). Impact of capital structure on firm's value: Evidence from Bangladesh. *Business and Economic Horizons*, 3(3), 111-122. <http://dx.doi.org/10.15208/beh.2010.32>
- Dang, T. D., & Do, T. V. T. (2021). Does capital structure affect firm value in Vietnam? *Investment Management and Financial Innovations*, 18, 33-41. [http://dx.doi.org/10.21511/imfi.18\(1\).2021.03](http://dx.doi.org/10.21511/imfi.18(1).2021.03)
- Danila, N., Noreen, U., Azizan, N. A., Farid, M., & Ahmed, Z. (2020). Growth opportunities, capital structure and dividend policy in emerging market: Indonesia case study. *Journal of Asian Finance, Economics and Business*, 7, 1-8. <http://dx.doi.org/10.13106/jafeb.2020.vol7.no10.001>
- Firer, C., Ross, S. A., Westerfield, R. W., & Jordon, B. D. (2004). *Fundamentals of corporate finance* (3rd ed.). Berkshire: McGrawHill.
- Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 67(2), 217-248. [https://doi.org/10.1016/S0304-405X\(02\)00252-0](https://doi.org/10.1016/S0304-405X(02)00252-0)
- Gu, L., & Zhang, H. (2022). Stakeholder-oriented corporate investment: A catering perspective. *Finance Research Letters*, 48, 102863. doi:<https://doi.org/10.1016/j.frl.2022.102863>

- Hameed, K., Akash, I. S. R., Asghar, M., & Ahmed, S. (2011). Corporate social performance, financial performance and market value behavior (An information asymmetry perspective). *African Journal of Business Management*, 5(15), 6342–6349.
- Hatfield, B. G., Cheng, W. T. L., & Davidson, N. W. (1994). The determination of optimal capital structure: The effect of firm and industry debt ratios on market value. *Journal of Financial and Strategic Decisions*, 7(3).
- Hirdinis, M. (2019). Capital structure and firm size on firm value moderated by profitability. *International Journal of Economics and Business Administration*, 7, 174–191. <http://dx.doi.org/10.35808/ijeba/204>
- Huynh, P. K., & Petrunia, J. R. (2008). Age effects, leverage and firm growth. *Journal of Economic Dynamics & Control*, 34, 1003–1013.
- Hutchinson, R. W. (1995). The capital structure and investment decisions of the small owner-managed firm: Some exploratory issues. *Small Business Economics*, 7, 231-239. <https://doi.org/10.1007/BF01135368>
- Irawati, E., Diana, N., & Mawardi, M. C. (2021). Struktur Modal, Profitabilitas Dan Nilai Perusahaan: Efek Moderasi Good Corporate Governance Saat Masa Pandemi Covid-19. *e_Jurnal Ilmiah Riset Akuntansi*, 10(13). <https://doi.org/10.47065/ekuitas.v3i2.1128>
- Jam, F. A., Mehmood, S., & Ahmad, Z. (2013). Time series model to forecast area of mangoes from Pakistan: An application of univariate ARIMA model. *Acad. Contemp. Res*, 2, 10-15.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Khan, M. I., Akhter, W., & Bhutta, M. U. (2020). Nexus between volatility of stocks and macroeconomic factors during global financial crisis: Evidence from conventional & Islamic stocks. *Journal of Accounting and Finance in Emerging Economies*, 6(2), 465-473. <http://dx.doi.org/10.26710/jafee.v6i2.1197>
- Khan, M. I., Akhter, W., & Bhutta, U. (2020). Interest rate exposure and stocks returns during global financial crisis: Evidence from Islamic and conventional markets. *Journal of Islamic Business and Management*, 10(1). <https://doi.org/10.26501/jibm/2020.1001-009>
- Khan, M. I., Hussain, F., & Akash, R. S. I. (2023). Lucrative Role of Animated Spoke and Brand Character to Brand Awareness in Pakistan. *Journal of Development and Social Sciences*, 4(2), 472-479. [https://doi.org/10.47205/jdss.2023\(4-II\)42](https://doi.org/10.47205/jdss.2023(4-II)42)
- Khan, M. I., Bashir, Z., & Amir, H. (2023). Lucrative Role of Financial Institutions on Willful Default-Financial Risk, and Fiscal Recovery: Evidence from Judgements of Apex Courts in Pakistan. *Journal of Development and Social Sciences*, 4(2), 683-691. [http://dx.doi.org/10.47205/jdss.2023\(4-II\)60](http://dx.doi.org/10.47205/jdss.2023(4-II)60)
- Kochhar, R. (1997). Strategic assets, capital structure, and firm performance. *Journal of Financial and Strategic Decisions*, 10(3), 23-36.
- Leary, M. T., & Roberts, M. R. (2005). Do firms rebalance their capital structures?. *The Journal of Finance*, 60(6), 2575-2619. <https://doi.org/10.1111/j.1540-6261.2005.00811.x>
- Luu, D. H. (2021). The impact of capital structure on firm value: A case study in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(5), 287-292. <https://doi.org/10.13106/jafeb.2021.vol8.no7.0469>
- Mahirun, M., & Kushermanto, A. (2018). Capital structure, investment opportunity set, growth sales, firm size and firm value: R&D intensity as mediating. *Calitatea*, 19(164), 117-122.
- Majumdar, S. K., & Chhibber, P. (1999). Capital structure and performance: Evidence from a transition economy on an aspect of corporate governance. *Public choice*, 98(3-4), 287-305. <http://dx.doi.org/10.1023/A:1018355127454>
- Miao, J. (2005). Optimal capital structure and industry dynamics. *The Journal of Finance*, 60(6), 2621-2659. <https://doi.org/10.1111/j.1540-6261.2005.00812.x>
- Mills, E. F. E. A., & Mwasambili, J. J. (2022). Capital structure and firm value nexus: The Ghanaian experience. *International Journal of Applied Decision Sciences*, 15(1), 46-67. <https://dx.doi.org/10.1504/IJADS.2022.120295>

- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *The American Economic Review*, 433-443.
- 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. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
- Park, K., & Jang, S. S. (2013). Capital structure, free cash flow, diversification and firm performance: A holistic analysis. *International Journal of Hospitality Management*, 33, 51-63. <https://doi.org/10.14738/abr.63.4275>
- Ross, S. A. (1977). The determination of financial structure: the incentive-signalling approach. *The Bell Journal of Economics*, 23-40.
- Simerly, R. L., & Li, M. (2000). Environmental dynamism, capital structure and performance: A theoretical integration and an empirical test. *Strategic Management Journal*, 21(1), 31-49. [http://dx.doi.org/10.1002/\(SICI\)1097-0266\(200001\)21:1%3C31::AID-SMJ76%3E3.0.CO;2-T](http://dx.doi.org/10.1002/(SICI)1097-0266(200001)21:1%3C31::AID-SMJ76%3E3.0.CO;2-T)
- Stanley, M. T. (1981). Capital structure and cost-of-capital for the multinational firm. *Journal of International Business Studies*, 12, 103-120.
- Stern, J. M. (1970). The case against maximizing earnings per share. *Financial Analysts Journal*, 26(5), 107-112. <https://doi.org/10.2469/faj.v26.n5.107>
- Strebulaev, I. A. (2007). Do tests of capital structure theory mean what they say?. *The Journal of Finance*, 62(4), 1747-1787.
- Stulz, R. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics*, 26(1), 3-27. <https://doi.org/10.1016/0304-405X%2890%2990011-N>
- Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6), 689-705.
- Taggart, R. A. (1977). A model of corporate financing decisions. *The Journal of Finance*, 32(5), 1467-1484. <https://doi.org/10.1111/j.1540-6261.1977.tb03348.x>
- Trinh, V. Q., Kara, A., & Elnahass, M. (2022). Dividend payout strategies and bank survival likelihood: A cross-country analysis. *International Review of Financial Analysis*, 81, 102129. <https://doi.org/10.1016/j.irfa.2022.102129>
- Wang, K. T., Wu, Y., & Sun, A. (2021). Acquisitions and the cost of debt: Evidence from China. *International Review of Financial Analysis*, 78, 101925.
- Yıldırım, D., & Çelik, A. K. (2021). Testing the pecking order theory of capital structure: Evidence from Turkey using panel quantile regression approach. *Borsa Istanbul Review*, 21(4), 317-331. <http://dx.doi.org/10.1016/j.bir.2020.11.002>