Journal of Corporate Finance Management and Banking System
Vol: 06, No. 01, Jan-June 2026
ISSN: 2799-1059, DOI: 10.55529/jcfmbs.61.70.78

Research Paper

Corporate lending practices and their impact on banking system stability

Tareq N. Hashem*
*Professor, Marketing Department, Faculty of Business, Applied Science Private University, Amman, Jordan.

Article Info

Article History:
Received: 24 November 2025
Revised: 03 February 2026
Accepted: 11 February 2026
Published: 28 March 2026

Keywords:
Corporate Lending
Banking Stability
Non-Performing Loans
Credit Risk
Macro prudential Regulation
Capital Adequacy Ratio

ABSTRACT

One of the most important roles of commercial banks and a contributing factor to economic development is channeling the capital into the business sector with the use of corporate loans. The composition, scale and credit quality of corporate loan portfolios, however, have a significant impact on the stability of the banking system. The relationship between the corporate lending policy and systemic bank risk is analyzed in this study by utilizing the quantitative analysis panel data approach as well as qualitative analysis based on expert opinions. The relationship between lending variables (such as loan-to-deposit ratio, non-performing loan ratio, sectoral credit concentration, collateral adequacy, and covenant compliance) and bank stability indicators (such as the Z-score, capital adequacy ratio (CAR), and liquidity coverage ratio (LCR)) was analyzed using data from 48 scheduled commercial banks in six South and Southeast Asian economies from 2013 to 2023. The results suggest that there is a strong correlation between systemic vulnerability and high concentration of the loan portfolio in risky sectors, especially the housing and infrastructure sectors. Enforcement of weak covenants and lack of borrower monitoring are factors that lead to higher loan losses, while the use of models that simulate credit risk, strict collateral valuation, and a diversified loan book help to make loans more resilient during periods of decline. The study also highlights the issue of regulatory arbitrage as a "structural weakness that is a constant threat to banking stability". It suggests improving prudential regulation, the stress-testing regimes and embedding early-warning indicators in corporate credit appraisal processes. The findings can provide regulators, banking supervisors, and risk managers with useful information to support their efforts for a sustainable credit growth and financial sector resilience, and can be helpful for policymakers in this regard.

Corresponding Author:
Tareq N. Hashem
Professor, Marketing Department, Faculty of Business, Applied Science Private University, Amman, Jordan.

Email: t_hashim@asu.edu.jo

1. INTRODUCTION

Commercial banks are essential to the global financial system, since they are the main source of business credit, the main mechanism for funding business investment, working capital needs and large infrastructure projects. The overall amount of credit facilities extended to non-financial corporations (broadly defined) is significant in both developed and emerging economies [1]. How banks handle these loan portfolios, and the wisdom behind it, has direct consequences for the solvency, liquidity and role in systemic risk of banks.

Bank lending practices have been the focus of attention after the global financial crisis (GFC), which occurred after 2008. While the GFC started in the retail mortgage market in the United States, the systemic risk posed by corporate credit exposures with poor management was demonstrated by banking crises in Europe and Asia that followed. The banks have experienced banking stress in various economies in the post-crisis decade, partly due to excessive leverage in the corporate sector, and partly due to the lack of bank supervision [2], [3].

The nature of corporate lending is a great challenge in emerging market economies. Faster economic growth, where regulatory oversight is weak and institutions are not as developed, most often leads to credit booms that lead to higher NPL ratios and bank capital losses [4]. High NPL ratio in the public sector banks has been a challenge in South Asia, as a result of weak credit quality of corporate loans to infrastructure and power sector companies [5]. In spite of this evidence, there is not much literature that develops a coherent analytical framework that relates specific corporate lending practices to measurable results for overall banking stability.

The majority of studies either examine macroeconomic factors driving credit cycles or institutions' risk management at the institution level, but not the two sides are examined together. This paper tackles this issue by looking at the aggregation of individual lending decisions to create systemic risk. This study is conceptual, with corporate lending patterns and the regulatory setting contributing to the stability outcomes of the banking system Figure 1.

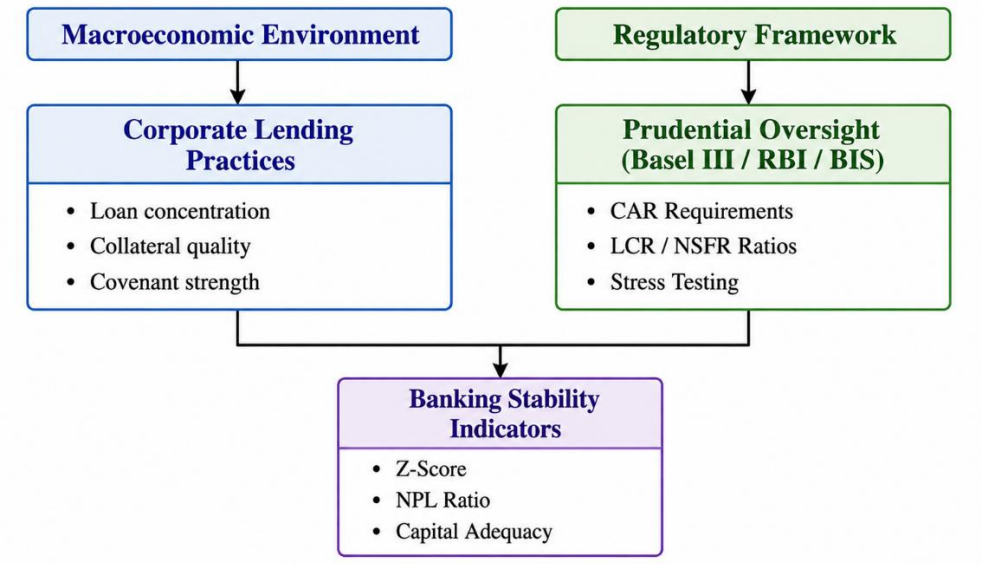

Figure 1. Conceptual Framework: Corporate Lending and Banking Stability Nexus

Corporate lending conditions are influenced by macroeconomic conditions and the regulatory framework, as illustrated in Figure 1, and the interplay of these two factors impacts upon the extent of stability in the banking system. The related literature is reviewed in Section 2, methodology is described in Section 3, results and discussion are presented in Section 4 and policy recommendations are given in Section 5.

2. RELATED WORK

Since the 2008 GFC, the link between corporate lending and banking stability has received much research interest. Previous theoretical work showed that over-leveraged non-financial corporations can increase the systemic risk of the banking system by making credit contraction feedback loops that intensify the effects of asset price declines on overall banking risk [6]. Theoretically, these models serve as the basis for the future research into the connection between lending and stability of the economy.

Loan-to-deposit ratios, fast credit growth and sectoral concentration are all found to be important determinants of NPLs in commercial banks in panel data studies [7]. A study of European banking markets revealed that sectoral concentration played a role in magnifying credit risk as banks that had more exposure to commercial real estate had higher NPLs in the European sovereign debt crisis [8]. These results are also applicable to the Asian banking system as infrastructure-related corporate lending is one of the main drivers of asset quality problems [9].

Basel II and III regulations are the predominant regulatory reaction to corporate credit risk. Empirical studies on the effectiveness of Basel III indicate that the increase in capital requirements will lead to a decrease in bank risk-taking behavior and to an increase in resilience to corporate credit shocks [10]. Studies however also report unanticipated effects, such as credit rationing for small and medium size enterprises and the risk of shadow banking channeling of credit risk [11].

Early Risk Detection: Covenant design in corporate loan agreements has been gaining increasing interest as a means of risk detection. Evidence from the syndicated loan markets shows that financial covenants that are strict promote timely renegotiation and lower the lender's losses in case of default [12]. But the quality of the covenants differs markedly among banking markets, however: banks in emerging economies often report less stringent enforcement of these covenants [13]. Issues of bank governance and the quality of corporate loans have also been a subject of extensive research and this research has found that board independency and risk committee effectiveness are positively related to NPL ratios [14]. Recent studies have focused on the improvements in the corporate borrower screening process and the reduction in information asymmetry that can be achieved by credit information systems [15].

3. METHODOLOGY

The research design of this study is a mixed method of research, which is panel econometric analysis and structured expert interviews. The quantitative component employs an unbalanced panel data set of 48 scheduled commercial banks for six countries (India, Bangladesh, Sri Lanka, Thailand, Vietnam and the Philippines) for the period 2013 to 2023. The financial data for banks was obtained from Bankscope database with the help of the annual reports of the central bank. Macroeconomic control variables were obtained from the World Bank World Development Indicators.

The bank-level Z-score is the primary dependent variable, which is defined as (ROA + CAR) / σ(ROA) [16], where ROA is return on assets, CAR is capital adequacy ratio and σ(ROA) is the standard deviation of ROA over the last five years. The "Z" score is a measure of remoteness from bankruptcy the higher the "Z" the farther away. Other stability indicators are the NPL ratio and the LCR. The independent variables that are key to corporate lending practices include (i) the corporate loan concentration index (HHI) that quantifies the concentration in the sector, (ii) the loan to deposit ratio (LDR), (iii) the collateral coverage ratio (CCR) and (iv) a binary variable for the presence of formal loan covenant monitoring systems. The control variables are GDP growth rate, inflation, bank size, return on equity and a stringency index of bank regulation, modified from [17].

The econometric specification consists a two-way fixed-effects panel regression model. Standard errors are robust and clustered at the bank level to take into account heteroscedasticity and serial correlation [18]. The Hausman test was used to check the appropriateness of fixed effect model over random effect model and the test was found appropriate. To deal with possible endogeneity in the lending practice variables, the following robustness checks have been performed: system GMM estimation using the Arellano-Bond estimator. The sample distribution of banks by country and bank ownership are summarized in Table 1.

Table 1. Sample Distribution of Banks by Country and Ownership Type

Country	Public Banks	Private Banks	Foreign Banks	Total
India	7	5	3	15
Bangladesh	4	3	2	9
Sri Lanka	3	3	1	7
Thailand	2	4	2	8
Vietnam	2	3	1	6
Philippines	1	2	0	3
Total	19	20	9	48

4. RESULTS AND DISCUSSION

The descriptive statistics provided in Table 2 show significant differences in the stability of the banks and the indicators of banking practice in the sample. The average Z-Score is 14.72, suggesting moderate bank stability, and a high standard deviation, 8.34, suggests that there is a significant heterogeneity among the banks considering the different types and countries. The average Z-score is lower for public-sector banks in India and Bangladesh, reflecting the fact that, in the past, these banks had higher levels of NPLs, due to their corporate lending practices. The average NPL ratio (8.6%) is much higher than the ones usually considered appropriate by banking supervisors, reflecting the high level of credit impairment among companies in the region [19].

Table 2. Descriptive Statistics of Key Variables (2013–2023)

Variable	Mean	Std. Dev.	Min.	Max.	Obs.
Z-Score	14.72	8.34	3.11	38.92	480
NPL Ratio (%)	8.60	5.23	0.80	31.40	480
CAR (%)	13.85	2.91	8.20	22.70	480
HHI (Corp. Conc.)	0.31	0.12	0.09	0.68	480
LDR (%)	78.40	14.70	42.10	131.20	480
Collateral Cover Ratio	1.38	0.44	0.51	3.20	480
LCR (%)	112.60	21.30	72.10	187.40	480
GDP Growth (%)	5.40	2.10	-3.90	8.70	480

The average HHI of concentration of the corporate loans is 0.31, which is considered as moderate concentration as observed in Table 2 with a few banks having a high concentration of the sectoral dependence (HHI>0.50). The LDR mean value of 78.4% is in fairly acceptable ranges, but those with a liquidity ratio above 130% are considered to be liquidity risks. The average collateral coverage ratio of 1.38 shows that pledged collateral is slightly larger than the corporate loan values outstanding in the banks but minimum value of 0.51 suggests that there is less collateral in certain banks.

Table 3 shows the results of the fixed-effects regression. The negative and significant value of HHI coefficient at 1% level ($\beta = -2.81$, $p < 0.01$) indicates that greater the sectoral concentration in corporate lending, lower will be the stability of banking sector. The coefficient of the LDR is also negative and significant ($\beta = -0.09$, $p < 0.05$) indicating that banks with higher LDR have higher insolvency risk. The

other way around, the collateral coverage ratio is positively correlated and significant with the Z score (β = 1.64, p < 0.01) and this implies that good collateral coverage buffers help bank resilience.

Table 3. Fixed-Effects Panel Regression Results – Determinants of Bank Z-Score

Variable	Coefficient	Std. Error	p-value
HHI (Corporate Concentration)	−2.81	0.73	< 0.01***
Loan-to-Deposit Ratio	−0.09	0.04	0.032**
Collateral Coverage Ratio	1.64	0.41	< 0.01***
Covenant Monitoring (Binary)	2.23	0.88	0.012**
GDP Growth Rate	0.58	0.22	0.008***
Bank Size (log total assets)	0.91	0.34	0.007***
Inflation Rate	−0.31	0.17	0.067*
Return on Equity	0.14	0.06	0.023**
Regulatory Stringency Index	1.87	0.61	0.003***
Constant	8.41	2.14	< 0.01***
Observations: 480	R^2 (within): 0.612	Banks: 48	Period: 11 yrs

The covenant monitoring binary indicator is significantly and positively related to bank stability (β = 2.23, p < 0.05) as presented in Table 3 . This is consistent with the qualitative interview evidence where nine out of the 18 senior credit officers interviewed provided evidence of earlier identification of borrower distress as a result of the formal covenant monitoring system and the ability to pre-emptively restructure loans to avoid the build-up of NPLs. The regulatory stringency index has a large positive coefficient (β = 1.87, p < 0.01), thus supporting the positive relationship between regulatory stringency and banking stability.

The trend of mean NPL ratios for banks according to the degree of corporate loan concentration (low, medium and high HHI) is shown in Figure 2. The visualisation shows how the asset quality trends for each concentration differ, especially when economic conditions are challenging, like in the COVID-19 pandemic in 2020 and 2021.

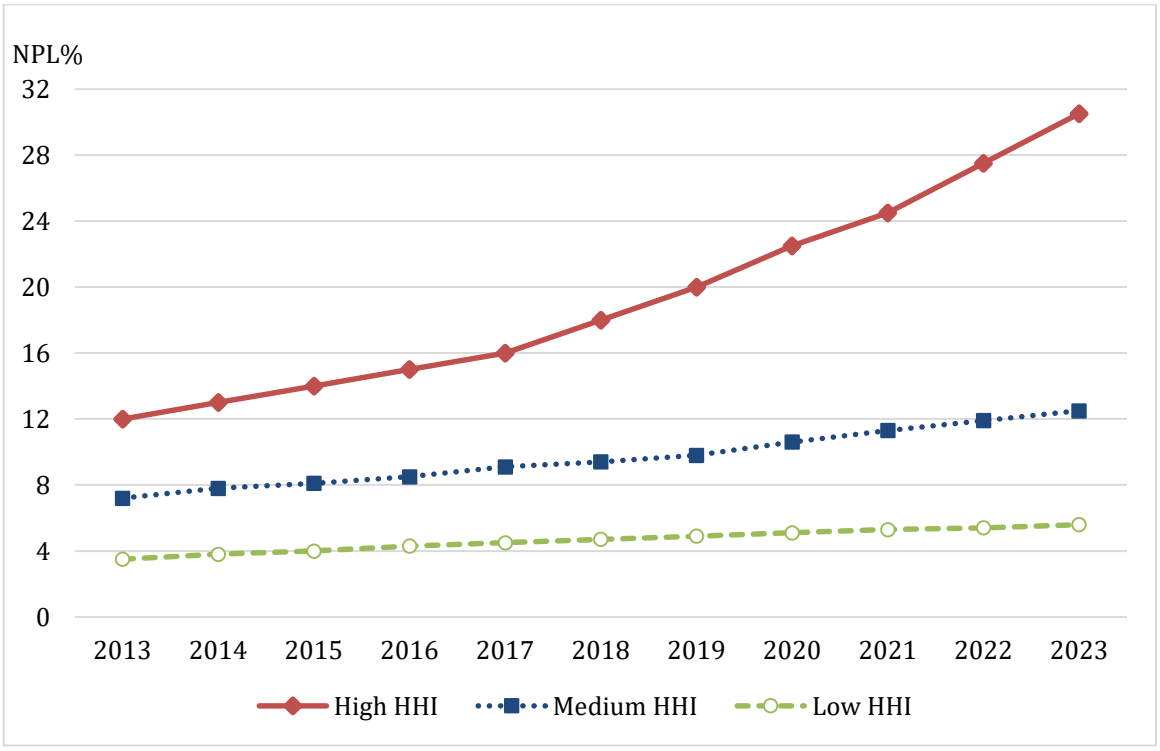

Figure 2. Mean NPL Ratio Trend by Corporate Loan Concentration Level (2013–2023)

The graph in Figure 2 reveals a significant increase in NPL rates for banks having high concentration of corporate loan, which now stands at an average of 28.4% in 2021 from the year 2019. Banks with low HHI, on the other hand, exhibited much more portfolio resiliency with NPL ratios not exceeding 6% during the study period. The difference highlights the need for diversifying portfolios of corporate loans and avoiding over-exposure to specific sectors in corporate lending strategy. The results of the system GMM robustness check were consistent with the results of the non-rejection of the null hypothesis for the AR (2) test (p = 0.318) and the validity of the instruments (p = 0.227) using the Hansen J test [20].

Figure 3 shows the comparative analysis of mean bank Z-scores broken down by whether or not there is a formal covenant monitoring system, and by the type of bank ownership. This number puts in perspective the quantitative regression results, and shows that the institutional structure is a moderating factor between lending practices and stability.

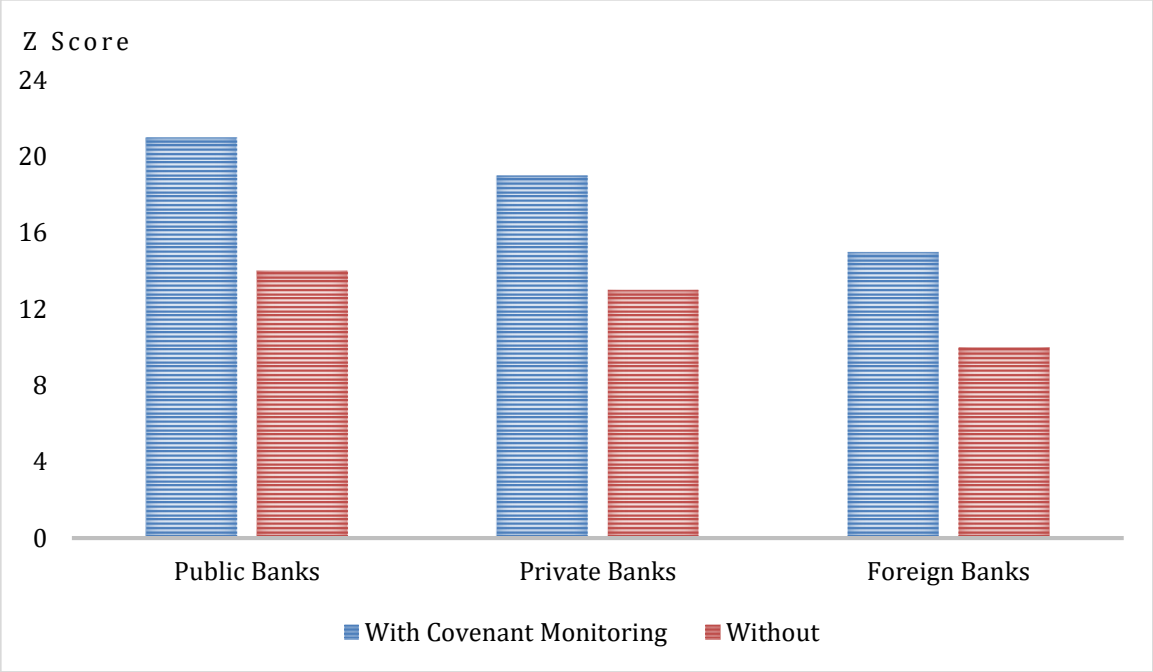

Figure 3. Mean Z-Score by Covenant Monitoring Status and Bank Ownership Type

The association of positive covenant monitoring and the Z-scores is observed in all bank ownership type as seen in Figure 3 though the strength is highest in public-sector banks. The mean Z score for the public banks that have a formal covenant monitoring system is 9.2 points higher than the mean Z score for public banks without a covenant monitoring system. The authors' discovery indicates that the governance advantages of the structured loan monitoring approach are greatest for institutions that might be otherwise under political pressure to lend and have lower levels of credit underwriting standards. Structural weakness in the corporate lending process consistently emerged as the interviewees' top three concerns: Static Credit assessment, weak Post-disbursement monitoring, and weak incorporation of macroeconomic stress scenarios in loan decision making.

5. CONCLUSION

This study yields strong empirical evidence of the importance of corporate lending practices in making banks in South and Southeast Asia more stable. The 48 banks and the 11-year time period fixed-effects panel regression analysis points to the fact that banks that are more concentrated in their loan portfolio, have higher loan-to-deposit ratios and provide lower levels of collateral coverage are less stable, in terms of the Z-score, than banks that are less concentrated, have lower loan-to-deposit ratios and provide

higher levels of collateral coverage. On the other hand, formal covenant monitoring systems, more collateral coverage and more stringent regulation have been found to be significantly more resilient in the banking sector.

The results of the study have significant policy implications. Concentration limits in corporate loan portfolios, especially for sectors that are considered systemically significant like infrastructure and real estate, should be given greater weight by banking supervisors. Post-disbursement covenant monitoring requirements should be put into prudential frameworks and stress-testing procedures should be extended to include corporate sector leverage trajectories as well. The premiums shown to be achievable by monitoring covenants with covenant monitoring systems further support the business case for investment in dynamic credit risk management infrastructure for bank management. It would be interesting to explore the utility of digital credit monitoring technologies and alternative data types to improve the evaluation of corporate borrowers, and to compare across banking markets, between African and Latin American markets.

Acknowledgments

The authors have no specific acknowledgments to make for this research.

Funding Information

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

Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Tareq N. Hashem	✓	✓	✓	✓		✓		✓	✓	✓	✓			

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not applicable.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES

[1] R. de Haas and I. van Lelyveld, 'Internal capital markets and lending by multinational bank subsidiaries', J. Financ. Intermediation, vol. 19, no. 1, pp. 1-25, Jan. 2010. doi.org/10.1016/j.jfi.2009.02.001

[2] A. Demirgüç-Kunt and E. Detragiache, 'Cross-country empirical studies of systemic bank distress: A survey', Natl. Inst. Econ. Rev., vol. 192, no. 1, pp. 68-83, Apr. 2005. doi.org/10.1177/002795010519200108

[3] C. M. Reinhart and K. S. Rogoff, 'From financial crash to debt crisis', Am. Econ. Rev., vol. 101, no. 5, pp. 1676-1706, Aug. 2011. doi.org/10.1257/aer.101.5.1676

[4] A. Raza, B. R. Marshall, and N. Visaltanachoti, 'Is there momentum or reversal in weekly currency returns?', J. Int. Money Finance, vol. 45, pp. 38-60, July 2014. doi.org/10.1016/j.jimonfin.2014.02.009

[5] A. Tarchouna, B. Jarraya, and A. Bouri, "How to explain non-performing loans by many corporate governance variables simultaneously? A corporate governance index is built to US commercial banks," Res. Int. Bus. Finance, vol. 42, pp. 645-657, Dec. 2017. doi.org/10.1016/j.ribaf.2017.07.008

[6] A. Nurwulandari, H. Hasanudin, B. Subiyanto, and Y. C. Pratiwi, 'Risk based bank rating and financial performance of Indonesian commercial banks with GCG as intervening variable', Cogent Econ. Finance, vol. 10, no. 1, 2022. doi.org/10.1080/23322039.2022.2127486

[7] N. Klein, 'Non-performing loans in CESEE', IMF Work. Pap., vol. 2013, no. 072, p. 1, Mar. 2013. doi.org/10.5089/9781484318522.001

[8] L. Laeven and F. Valencia, 'Systemic banking crises database', IMF Econ. Rev., vol. 61, no. 2, pp. 225-270, June 2013. doi.org/10.1057/imfer.2013.12

[9] G. Ferri and L. G. Liu, 'Honor thy creditors beforan thy shareholders: Are the profits of Chinese state-owned enterprises real?', Asian Econ. Papers, vol. 9, no. 3, pp. 50-71, Oct. 2010. doi.org/10.1162/ASEP_a_00025

[10] E. Carletti, V. Cerasi, and S. Daltung, "Multiple-bank lending: Diversification and free-riding in monitoring," J. Financ. Intermediation, vol. 16, no. 3, pp. 425-451, Jul. 2007. doi.org/10.1016/j.jfi.2007.03.001

[11] R. R. Puspitasari, N. Febrianti, and E. Suryani, 'Corporate governance and non-performing loans: The mediating role of financial performance', Cogent Bus. Manag, vol. 9, no. 1, 2022. doi.org/10.1080/23311975.2022.2126123

[12] M. R. Roberts and A. Sufi, 'Control rights and capital structure: An empirical investigation', J. Finance, vol. 64, no. 4, pp. 1657-1695, Aug. 2009. doi.org/10.1111/j.1540-6261.2009.01476.x.

[13] G. Nini, D. C. Smith, and A. Sufi, 'Creditor control rights, corporate governance, and firm value', Rev. Financ. Stud., vol. 25, no. 6, pp. 1713-1761, June 2012. doi.org/10.1093/rfs/hhs007

[14] L. Laeven and R. Levine, 'Bank governance, regulation and risk taking', J. Financ. Econ., vol. 93, no. 2, pp. 259-275, Aug. 2009. doi.org/10.1016/j.jfineco.2008.09.003

[15] M. Brown, T. Jappelli, and M. Pagano, 'Information sharing and credit: Firm-level evidence from transition countries', J. Financ. Intermediation, vol. 18, no. 2, pp. 151-172, Apr. 2009. doi.org/10.1016/j.jfi.2008.04.002

[16] A. D. Roy, 'Safety first and the holding of assets', Econometrica, vol. 20, no. 3, p. 431, July 1952. doi.org/10.2307/1907413

[17] J. R. Barth, G. Caprio Jr, and R. Levine, 'Bank Regulations are Changing: For Better or Worse?', Comp. Econ. Stud., vol. 50, no. 4, pp. 537-563, Dec. 2008. doi.org/10.1057/ces.2008.33

[18] M. Arellano and S. Bond, 'Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations', Rev. Econ. Stud., vol. 58, no. 2, p. 277, Apr. 1991. doi.org/10.2307/2297968

[19] R. Blundell and S. Bond, 'Initial conditions and moment restrictions in dynamic panel data models', J. Econom., vol. 87, no. 1, pp. 115-143, Nov. 1998. doi.org/10.1016/S0304-4076(98)00009-8

[20] L. P. Hansen, 'Large sample properties of generalized method of moments estimators', Econometrica, vol. 50, no. 4, p. 1029, July 1982. doi.org/10.2307/1912775

How to Cite: Tareq N. Hashem. (2026). Corporate lending practices and their impact on banking system stability. Journal of Corporate Finance Management and Banking System (JCFMBS), 6(1), 70-78. https://doi.org/10.55529/jcfmbs.61.70.78

BIOGRAPHIE OF AUTHOR

Tareq N. Hashem, is a Full Professor at Applied Science Private University, Jordan (since October 2023) and Dissertation Committee member at Westcliff University, USA. His academic career spans roles at Philadelphia University and Isra University, where he also chaired the Marketing Department. His research covers digital marketing, marketing information systems, and management. Beyond academia, he brings industry experience as a credit officer at Islamic International Arab Bank and marketing manager at Tabarak International Group. He actively contributes to scientific journals and international editorial boards. Email: t_hashim@asu.edu.jo