

“Assessing the impact of IFRS 9’s Expected Credit Loss model on capital allocation in Jordanian banks”

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ASSESSING THE IMPACT OF IFRS 9'S EXPECTED CREDIT LOSS MODEL ON CAPITAL ALLOCATION IN JORDANIAN BANKS

Abstract

This study investigates the empirical effects of implementing the Expected Credit Loss (ECL) model under IFRS 9 on capital budgeting decisions within the Jordanian banking sector. The analysis is based on a full population of all 13 Jordanian commercial banks listed on the Amman Stock Exchange from 2013 to 2023. Using panel data regression models, the study evaluates changes in three key financial ratios: Capital to Assets (CA), Equity to Assets (EA), and Loans to Assets (LA).

The findings reveal that adopting the ECL model led to a statistically significant increase in CA by 0.3% ($p = 0.04$), suggesting that banks have strengthened capital buffers in anticipation of higher provisioning requirements. Conversely, the EA ratio declined sharply by 1.1% ($p < 0.01$), indicating equity reallocation to absorb credit risks. Most notably, the LA ratio fell by 3% ($p = 0.006$), highlighting a more conservative lending approach post-ECL implementation. Each model exhibited strong explanatory power (R^2 values between 0.79 and 0.87), supporting the robustness of the results.

These outcomes confirm that IFRS 9 has triggered a structural shift in how Jordanian banks manage capital and credit risk. The study underscores the critical need for adaptable capital strategies in emerging markets, where regulatory changes like IFRS 9 can significantly reshape financial behavior and resource allocation.

Keywords

expected credit loss model, capital budgeting, IFRS 9, banking sector, financial decision-making, risk management, Jordan, regulatory compliance

JEL Classification

G21, G31, M41

INTRODUCTION

IFRS 9's Expected Credit Loss (ECL) model has been considered one of the largest recent financial reporting updates and has a considerable impact on organizational decision-making. Such a model causes financial institutions to shell out earlier for credit loss rather than later when defaults actually do happen, having some implications on certain financial choices, such as capital budgeting. Capital budgeting is at the very heart of an organization's strategy for its long-term investments, which need to be accurately forecasted financially and assessed in terms of risks. Linked to the application of the ECL model, the new approach to risk will impact the ways in which firms allocate capital, evaluate opportunities for projects, and optimize financial resources.

This study relies on a comprehensive sample that includes all 13 commercial banks operating in Jordan and listed on the Amman Stock Exchange (ASE), as detailed in Appendix A. The decision to use the full population of Jordanian commercial banks rather than a selected sample is intentional and rooted in the structure of the Jordanian banking system, where these banks account for the vast majority of fi-

nancial intermediation, credit creation, and capital investment activities. Given the relatively small and centralized nature of the sector, examining the complete set of institutions allows for a more accurate and holistic understanding of how IFRS 9's Expected Credit Loss model has influenced capital budgeting decisions across the entire commercial banking system in the country.

The implementation of IFRS 9, particularly through its ECL model, fundamentally alters the timing and extent of credit loss recognition. Unlike the incurred loss model, the ECL model requires proactive provisioning, prompting banks to reconsider their capital allocation and risk management strategies. This proactive approach impacts not only banks' immediate financial health but also their long-term strategic financial planning. On the other hand, the ECL model not only amplifies the credibility in credit risk assessment but also significantly complicates forecasting cash flows or investment returns – an integral element of capital budgeting. Conclusively, the present study tries to fill this gap by attempting to explain how this new model of credit loss provisioning affects strategic financial decisions, particularly for industries characterized by high dependence on borrowing.

1. LITERATURE REVIEW AND HYPOTHESES

To provide a comprehensive and academically grounded understanding of the implications of IFRS 9 and its Expected Credit Loss (ECL) model, this literature review adopts a thematic structure anchored in three primary analytical dimensions: financial stability, capital adequacy, and risk management. These themes dominate the scholarly dialogue around IFRS 9, particularly in emerging markets, and allow for a systematic synthesis of relevant empirical and conceptual studies.

In the Financial Stability and Procyclicality Effects topic, the transition from the Incurred Credit Loss (ICL) model to the ECL framework under IFRS 9 has been widely examined for its macro-financial implications. Abad and Suarez (2017) provided foundational insights into the potential procyclical effects of ECL provisioning, warning that buffers built during downturns may constrain credit supply and amplify economic fluctuations. They argued that this model may inadvertently create a feedback loop where stricter provisioning rules during recessions reduce banks' lending capacity, thereby worsening economic slowdowns. Ercegovac (2018) supported this concern but emphasized that timely recognition of losses may simultaneously strengthen resilience through early risk signaling. In her analysis, the ECL model is seen not only as a protective mechanism but also as a discipline-enhancing tool that enables banks to proactively manage credit risk exposures.

In the Chinese context, Jin and Wu (2023) used a difference-in-differences approach and found that ECL adoption led to a reduction in share price crash risk, particularly in banks with limited analyst coverage and weak investor protections. Their findings suggest that the forward-looking provisioning under ECL enhances investor confidence by reducing asymmetry in credit risk information. Similarly, Onali et al. (2024) conducted an event study across 115 European banks, finding that market reactions to ECL implementation were generally positive, especially among banks with high debt risk and lower earnings. The study revealed that the implementation of IFRS 9 was perceived as a commitment to transparency and prudent financial governance, ultimately enhancing shareholder trust and perceived bank stability.

In the capital adequacy and strategic implications topic, the literature widely reports that ECL implementation increases capital requirements, thus affecting banks' lending behavior and strategic financial planning. Ouma and Kirori (2019) observed that the elevated provisioning under ECL eroded capital adequacy ratios, potentially discouraging lending. The necessity to maintain higher levels of reserves was found to crowd out lending capacity, particularly in resource-constrained environments. Swamy (2014) linked regulatory changes to a contraction in credit growth, while Usman et al. (2019) described how Indonesian banks were forced to recalibrate capital policies to comply with the standard.

Sultanoğlu (2018) noted that Turkish banks with high levels of non-performing loans (NPLs) expe-

rienced significant provisioning pressures, weakening their equity positions and forcing balance sheet restructuring. In a similar vein, Africa (2018) and Abirami (2018), using the Bankometer model, confirmed that forward-looking provisioning improved distress anticipation, prompting pre-emptive capital accumulation to shield against credit events. Arzova and Sahin (2024) further emphasized that ECL implementation introduces volatility in capital buffers, particularly within emerging market banks. These insights were supported by Alshdaifat et al. (2024), who demonstrated that capital reserves under IFRS 9 are more responsive to macroeconomic stress and economic cyclicality, requiring banks to frequently reassess their capital allocation strategies.

Then, the Risk Management and Operational Capacity issue was covered by Bushman and Williams (2012), who argued that despite IFRS 9's goal of improving transparency, the use of internal models allows managerial discretion in provisioning, which may differ across regulatory environments. Their research highlighted the concern that judgment-based estimates can introduce inconsistencies in provisioning and limit comparability across institutions. Andries et al. (2017) expressed similar concerns, stressing that without external auditing enforcement, discretion could limit cross-bank comparability and potentially be exploited for income smoothing.

Operational readiness is another challenge; Casta et al. (2019) and Loew et al. (2019) documented significant technological and staffing constraints, particularly among smaller European banks, which increased costs and reduced profitability. The implementation of ECL was seen as an IT-heavy undertaking that required substantial investment in modeling, staff training, and data integration. Orbán and Tamimi (2020) showed that enhanced disclosure requirements under IFRS 9 improved stakeholder visibility into banks' credit risk positions. Their findings underscore the dual role of IFRS 9 in fostering financial clarity and demanding operational upgrades, highlighting the intricate balance between transparency and execution capability.

After that, Broader Governance, Disclosure, and Strategic Dimensions were addressed by several studies that have explored complementary issues

tied to IFRS 9 compliance, particularly in the areas of governance and disclosure. Sharif et al. (2025) explored how regulatory pressures contribute to technostress, influencing employee performance and system reliability. Their work reveals that rapid regulatory and digital transformation under IFRS 9 can challenge organizational resilience, calling for adaptive leadership and supportive governance. Alodat et al. (2024) demonstrated that board structure affects cybersecurity disclosures, indirectly influencing compliance integrity under IFRS 9, as robust governance ensures timely and accurate financial reporting.

Amara et al. (2025) found that strong board governance mediates the link between audit quality and tax behavior, reinforcing the importance of internal control frameworks. These findings imply that board composition and functionality play a decisive role in ensuring compliance with complex standards such as IFRS 9. Ab Aziz et al. (2024) extended this by examining the integration of ESG strategies with board dynamics, suggesting that governance reform is crucial for aligning with IFRS 9 standards. Khalaf et al. (2023) emphasized the need for trust, responsiveness, and timely internal coordination in effective implementation, stressing that cultural and organizational dimensions are as critical as regulatory compliance.

While Market Reactions and Shareholder Perceptions were based on earlier points, Onali et al. (2024) showed that transparent adoption of ECL provisions is well-received by markets, especially among high-risk banks. Their results underline that investor perception is shaped not only by compliance but by the perceived willingness of management to adopt stringent risk assessment mechanisms. Jin and Wu (2023) echoed this, highlighting that in contexts of weak oversight, ECL enhances investor trust by reducing the asymmetry in credit risk reporting. Their empirical results offer compelling support for the view that IFRS 9 enhances corporate credibility in capital markets.

Lastly, Capital Budgeting and the Jordanian Context studies are covered in this study. While IFRS 9 literature is rich in insights from developed and larger emerging markets, research on its capital budgeting implications within Jordanian banks remains limited. Shubita (2024) explored

the conservatism in financial reporting and its effects on investment efficiency in non-financial firms, offering indirect evidence that IFRS 9's conservative bias may alter capital allocation logic. His study suggests that accounting standards that prioritize prudence could lead banks to defer or reduce long-term investments.

Africa (2018) and Abirami (2018) highlighted IFRS 9's value in financial distress anticipation, while Arzova and Sahin (2024) and Alshdaifat et al. (2024) linked the model to volatility in capital buffers in fragile economies. Their work collectively signals that although IFRS 9 strengthens early warning systems and risk sensitivity, it may simultaneously constrain capital budgeting flexibility, especially in credit-constrained environments.

This study addresses a critical gap by empirically evaluating the influence of IFRS 9 on capital budgeting decisions in all 13 Jordanian commercial banks, whose names are listed in Appendix A. Given the unique institutional, economic, and regulatory structure of Jordan's banking sector, this research contributes new evidence on how forward-looking provisioning reshapes capital allocation in a developing market context.

This literature review demonstrates that while IFRS 9's ECL model has advanced transparency and credit risk management, it also introduces significant challenges related to capital adequacy, operational readiness, and governance alignment. These multidimensional impacts highlight the importance of context-specific investigations such as this study, particularly in understudied financial systems like Jordan.

Briefly, these works show the extent of the implications of IFRS 9 regarding risk management, transparency, and capital adequacy in banking. The literature is communicated as such that while IFRS 9 enhances credit risk early warning mechanisms, it is accompanied by capitalization and operating cost challenges, particularly in emerging markets. This study will, therefore, examine the effect of the IFRS 9 Expected Credit Loss model on Jordanian commercial banks' capital budgeting decisions.

The reviewed literature shows that IFRS 9 has introduced significant changes in the financial practice of banks, particularly with regard to capital

provisioning and risk management. While the model enhances transparency and forward-looking risk assessment, it creates concerns of higher capital volatility and may have implications for lending. Empirical research on its direct influence on capital budgeting is still limited, especially in emerging economies like Jordan.

In summary, the reviewed literature demonstrates that IFRS 9 introduces crucial changes in risk assessment, capital management, and financial disclosure practices. Despite enhancing transparency, these changes pose significant challenges, particularly for banks operating in emerging economies. Therefore, this study proposes to empirically test the specific impacts of the ECL model on Jordanian banks' capital allocation strategies.

This study aims to investigate the impact of employing the Expected Credit Loss (ECL) model on the capital budgeting practices of banks. Specifically, the research will assess the impact of the switch from the incurred loss to the ECL approach under IFRS 9 on the investment decisions, risk assessment, and allocation of financial resources for banks.

The study hypotheses are:

H01: There is no impact of applying the Expected Credit Loss model on the bank capital to assets ratio.

H02: There is no impact of applying the Expected Credit Loss model on the bank equity ratio.

H03: There is no impact of applying the Expected Credit Loss model on the bank loans to assets ratio.

2. METHODS

The population and sample consist of all Jordanian listed commercial banks, ensuring a comprehensive view of the impact of IFRS 9 implementation across the sector. The study covers a period from 2013 to 2023, allowing for a comparison of financial ratios before and after the mandatory adoption of the ECL model in 2018. The dataset used in this research has been made publicly available on the Zenodo repository (Zenodo, n.d.).

The study adopts a census-based approach by including all 13 commercial banks licensed to operate in Jordan throughout the 2013–2023 period. These institutions represent the core of the Jordanian banking system, making the sample both comprehensive and highly relevant to the research objective. Unlike selective sampling methods, this full-coverage approach ensures that no major institutional behavior is excluded, enhancing the generalizability of the findings. The list of these banks is provided in Appendix A to promote transparency and reproducibility. This methodological choice reflects the importance of contextualizing regulatory changes within the full operational landscape of the banking sector in Jordan.

The dataset employed in this study, covering all 13 Jordanian commercial banks from 2013 to 2023, was compiled specifically for this study. This dataset has not been used in any previously published articles by the authors or affiliated researchers. It represents a novel contribution to the literature and supports the empirical analysis presented in this manuscript.

The study employs three primary models to assess the impact of the ECL model on each of the financial ratios, defined as follows:

$$CL_{it} = A_0 + A_1 \cdot ECI_{it} + \varepsilon_{it}, \quad (1)$$

$$EA_{it} = A_0 + A_1 \cdot ECI_{it} + \varepsilon_{it}, \quad (2)$$

$$LA_{it} = A_0 + A_1 \cdot ECI_{it} + \varepsilon_{it}, \quad (3)$$

where CL is capital ratio and equal total capital over total assets; EA is equity ratio and equal total equity over total assets; LA is loan ratio and equal total loans over total assets; ECL is the Expected Credit Losses model and will be measured using dummy variable (0 for the data before 2018 (the year that this model is applicable as IFRS 9) and 1 after 1/1/2018; A_0, A_1 = OLS regression coefficients; i is bank; t is year; ε = OLS regression error.

The links between the implementation of the ECL model and the financial ratios of interest are analyzed with the help of the OLS regression method. This method is applied because it is robust with respect to the estimation of linear relationships in financial datasets and is also appropriate for the

testing of hypotheses. Each of the models has been tested separately, which corresponds to the hypothesis stated within the framework of the study. The study focuses on the financial implications of the ECL model in the Jordanian banking sector and provides some empirical evidence through their examination.

3. RESULTS

This section highlights the statistical analysis, interpretation of regression outputs, and hypothesis testing of the ECL model's influence on the capital budgeting decisions in Jordanian commercial banks. In fact, three major financial ratios include CA, EA, and LA, which are tested in light of the analysis. Table 1, descriptive statistics of the main variables (CA, EA, and LA), reports the averages, dispersion, and distribution properties for the sample period 2013–2023.

Table 1. Descriptive analysis

Variable	LA	EA	CA
Mean	0.53	0.144	0.11
Maximum	0.62	0.186	0.16
Minimum	0.3	0.08	0.07
STD	0.07	0.027	0.02
Skewness	-0.57	0.05	0.28
Probability (Jarque-Bera Test)	0.03	0.11	0.16

Capital to Assets Ratio (CA) has a mean of 0.11, a minimum of 0.07, and a maximum of 0.16, with a standard deviation of 0.02, indicating limited variability in capital adequacy among Jordanian banks. While Equity Ratio (EA) averages at 0.14 with a range between 0.08 and 0.19. The standard deviation of 0.03 also suggests low variability in equity levels across banks. Finally, the Loan to Assets Ratio (LA) has a mean of 0.50, with a wider range (minimum 0.3 and maximum 0.62), and a standard deviation of 0.07, showing moderate dispersion in loan allocation among assets.

The skewness values indicate that CA and EA are positively skewed, while LA is negatively skewed, implying that most banks maintain higher levels of loans relative to capital and equity. The p-value < 0.01 values from the Jarque-Bera test indicate a non-normal distribution for all variables at a 5% significance level.

From Table 2, the Variance Inflation Factor (VIF) and Tolerance values show no multicollinearity among the variables, with all VIF values near to 1.000 and tolerance values also at 1.000. This confirms that the variables (CA, EA, LA, CAR, NPL, and CI) independently contribute to the models without inflating each other's variance.

Table 2. Multicollinearity results

Variable	Tolerance	VIF
CA	1	1.2
EA	1	1
CAR	1	1.1
NPL	1	1
CI	1	1
LA	1	1

Table 3 represents the Augmented Dickey-Fuller (ADF) test results that confirm that all variables (CA, EA, CAR, NPL, CI, and LA) are stationary at level I(0), as indicated by p-value < 0.01 values below 0.05. The stationarity of these variables implies that they do not contain unit roots, making them suitable for regression analysis without the need for differencing.

Table 3. Augmented Dickey-Fuller test results

Variable	ADF Probability (statistics)	Result
CA	0.040	I (0)
EA	0.009	I (0)
CAR	0.000	I (0)
NPL	0.006	I (0)
CI	0.000	I (0)
LA	0.000	I (0)

The first model, which assesses the impact of the ECL model on the Capital to Assets Ratio (CA), shows the following results from Table 4:

- The coefficient for the dummy variable (ECL) is 0.003, with a p-value < 0.01 of 0.04, indicating a statistically significant positive relationship between the adoption of the ECL model and CA at the 5% level.

Table 4. First regression model results

Panel data model	Independent variable		R2	Prob. (F-statistics)	Durbin-Watson statistic
	Prob. (t-statistics)	Coefficient			
	Dummy variable	Dummy variable			
First Model	0.04	0.003	0.79	0	1.17

Note: Dependent Variable (CA).

- The model's R² value is 0.79, suggesting that approximately 79% of the variance in CA is explained by the ECL model.
- The Durbin-Watson statistic is 1.14, indicating some presence of autocorrelation.

These results suggest that applying the ECL model significantly affects the capital ratio, likely due to the increased provisions for credit losses under IFRS 9 (Shubita, 2019). This supports the rejection of H01, as the ECL model does influence the capital-to-asset ratio.

Table 5 shows that the Durbin-Watson statistic of 1.17 for the first model, combined with a Jarque-Bera p-value < 0.01 of 0.114, indicates some level of autocorrelation but is within an acceptable range for the model's reliability.

Table 5. Autocorrelation tests/Model 1

Test	Result
Durbin-Watson statistic	1.14
Jarque-Bera	0.114

The second model assesses the effect of the ECL model on the Equity Ratio (EA), showing the following results from Table 6:

- The coefficient for the dummy variable is -0.011, with a p-value < 0.01 of 0.00, indicating a significant negative impact of ECL on EA at the 1% level.
- The R² of 0.85 shows that 85% of the variance in EA can be explained by the model.
- The Durbin-Watson statistic of 1.50 suggests acceptable autocorrelation.

The findings here show a significant negative impact of ECL on EA, implying that banks are likely reducing their equity ratios under the stricter ECL provisioning requirements. This evidence leads to

Table 6. Second regression model results

Panel data model	Independent variable		R2	Prob. (F-statistics)	Durbin-Watson statistic
	Prob. (t-statistics)	Coefficient			
	Dummy variable	Dummy variable			
Second Model	0	-0.011	0.87	0	1.5

Note: Dependent Variable (EA).

rejecting $H02$, confirming that the ECL model impacts the equity ratio in Jordanian banks.

With a Durbin-Watson statistic of 1.50 and a Jarque-Bera p-value < 0.01 of 0.60, as from Table 7, the model shows minimal autocorrelation, supporting the robustness of Model 2's results.

Table 7. Autocorrelation tests/Model 2

Test	Result
Durbin-Watson statistic	1.50
Jarque-Bera	0.60

About the third and last model, Table 8 results investigate the ECL model's effect on the Loan to Assets Ratio (LA):

The dummy variable's coefficient is -0.03 with a p-value < 0.01 of 0.006, indicating a statistically significant negative impact at the 1% level. The R^2 value of 0.822 reveals that around 82% of the variation in LA is accounted for by the model. A Durbin-Watson statistic of 1.35 indicates moderate autocorrelation.

This negative relationship implies that banks may reduce their loan portfolios as a precautionary response to the ECL model, possibly due to the increased risk provisions under IFRS 9. This result supports the rejection of $H03$, as the ECL model does affect the loan ratio.

From Table 9, the Durbin-Watson statistic of 1.33 and the Jarque-Bera p-value < 0.01 of 0.487 suggest minor autocorrelation (Shubita, 2021), supporting the validity of the third model.

Table 8. Third regression model results

Panel data model	Independent variable		R2	Prob. (F-statistics)	Durbin-Watson statistic
	Prob. (t-statistics)	Coefficient			
	Dummy variable	Dummy variable			
Third Model	0.006	-0.03	0.822	0.000	1.35

Note: Dependent Variable (LA).

Table 9. Autocorrelation tests/Model 3

Test	Result
Durbin-Watson statistic	1.33
Jarque-Bera	0.487

3.1. Hypothesis testing summary

$H01$: *There is a significant positive impact of the ECL model on the capital-to-assets ratio. Rejected*

$H02$: *There is a significant negative impact of the ECL model on the equity ratio. Rejected*

$H03$: *There is a significant negative impact of the ECL model on the loans-to-assets ratio. Rejected*

The results reveal that adopting the ECL model has a material impact on Jordanian banks with respect to capital adequacy, equity, and loan apportionment. The changes realized in these ratios reflect the changes in the regulatory and strategic behavior by banks regarding IFRS 9, which realigns their capital budgeting and risk management strategy to match the new proactive approach to credit loss provisioning.

4. DISCUSSION

The findings of this study offer new empirical insights into how IFRS 9's Expected Credit Loss model has reshaped financial decision-making in Jordanian commercial banks. Notably, the sta-

tistically significant increase in the capital-to-assets ratio following ECL implementation reflects a deliberate strengthening of capital buffers in response to expected loss provisioning. At the same time, the decline in equity ratio suggests a strategic reallocation of shareholder resources to absorb anticipated credit risks. The reduction in the loans-to-assets ratio further supports the conclusion that banks are approaching lending with greater caution under the new model.

These results align with international evidence indicating that ECL leads to more resilient but conservative banking strategies. The enhanced R^2 values observed across all three models affirm the robustness of the statistical link between IFRS 9 and capital allocation. While these shifts may constrain short-term profitability, they contribute to long-term financial stability. Future research could investigate whether this conservatism holds during periods of macroeconomic distress or easing.

The positive effect on the capital to assets ratio (CA) aligns with studies that highlight how the ECL model reinforces banks' focus on capital adequacy, requiring more reserves for expected losses, like Shubita (2022), Sriraman and Kalyan (2020), Moad. Shubita and Moh. Shubita (2010), Mansour et al. (2024), and Yameen and Ali (2016). Comparing Islamic and conventional banks, Rana and Kamruzzaman (2021), Saleh and Mansour (2024), and Alhasnawi et al. (2024) reveal that IFRS 9 affects Islamic banks differently due to their unique financial products. Similarly, Abad and Suarez (2018) observed that European banks faced greater capital volatility following IFRS 9 implementation, requiring adjustments in capital planning strategies.

This divergence has various provisioning practice implications on the competitiveness and profitability of Islamic banks under IFRS 9. While many studies support the effect of IFRS 9 on lending and capital policy choices, research also sustains the postulation that the model induces stability in the banking sector. Mansour et al. (2023) noted that forward-looking provisioning reduces unexpected credit losses and increases risk transparency, although it has a negative impact on profitability in the short term. The findings support this percep-

tion, since the conduct of financial ratios reflects a more cautious and future-oriented management of credit risk.

The observed negative effect on the equity ratio (EA) supports the findings of Volarević and Varović (2018), who presented an internal model for ECL calculations, demonstrating that banks with well-developed risk assessment frameworks can better navigate the complexities of IFRS 9. Additionally, Gomaa et al. (2019) emphasize that the shift from incurred to expected loss models provides a more forward-looking view of credit risk, potentially reducing systemic risk.

With such tendencies in the evolution of the financial ratios being observed, future research can consider the long-term implications of the ECL model on financial stability and credit supply. Such a research article on the implications of the ECL model on profitability, particularly of small banks, would be a great complement to this study on the wider economic consequences of adopting IFRS 9 in developing economies. Furthermore, an exploration of how banks optimally deal with the trade-offs that may occur between compliance and profitability in a post-IFRS 9 world can probably outline how those risks can be optimally dealt with.

Through this, the study underlines the heavy impact of the ECL model on Jordanian banks' capital budgeting behavior. In any case, finding a balance between capital adequacy and sustainable growth through lending will be crucial to finding a balance that appeals to changing regulatory demands.

Despite the valuable insights provided by this study, some limitations must be acknowledged. First, the study is limited to Jordanian commercial banks, which restricts the power of generalizing the results to other banking systems. Second, the analysis relies on financial ratios, which are useful but insufficient to reflect all aspects of banks' strategic responses to IFRS 9. Future research could explore alternative measures, such as credit risk models or stress testing scenarios, to provide a more comprehensive view of IFRS 9's long-term effects. Additionally, further studies could examine the role of macroeconomic factors in moderating the impact of IFRS 9 on bank performance.

CONCLUSION

This study concludes that the implementation of IFRS 9's Expected Credit Loss model has significantly altered capital budgeting practices in Jordanian commercial banks. With data from 2013–2023, the findings reveal that ECL adoption is associated with a 0.3% increase in the capital-to-assets ratio, a 1.14% decline in equity ratios, and a 2.91% drop in the loan-to-assets ratio. These changes confirm that forward-looking credit loss provisioning fosters a more conservative and regulated approach to capital planning. Banks are now more likely to build financial buffers and adjust lending behavior to align with anticipated risks, reinforcing the objectives of IFRS 9 in promoting transparency and financial resilience.

Results have shown that the ECL model indeed made material changes in the above ratios. A positive change within the capital-to-assets ratio suggests that Jordanian banks are enhancing their capital adequacy towards responding to these new elevated provisioning requirements. This reduction in the equity ratio, therefore, means the use of resources by banks towards provisions for credit losses, possibly compromising their equity positions. The last but not least important fact is that the lending attitude has turned out to be more cautious, most probably to evade credit risk because of the new regulatory demands.

These findings highlight the ECL model's profound influence on banks' capital allocation and lending behavior, indicating that regulatory shifts can prompt structural changes in financial management practices. Going forward, banks may need to explore balanced strategies to manage compliance requirements without compromising growth through lending. This study underscores the importance of flexible capital budgeting frameworks that align with evolving regulatory landscapes, especially in smaller and emerging markets like Jordan.

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REFERENCES

1. Ab Aziz, N. H., Abdul Latiff, A. R., Osman, M. N. H., & Alshdaifat, S. M. (2024). The interaction effect of family ownership, board gender and skills on CSR strategy with ESG performance: evidence from ASEAN-5 countries. *Corporate Governance*, 25(4), 948-961. <https://doi.org/10.1108/CG-02-2024-0113>
2. Abad, J., & Suarez, J. (2017). Assessing the cyclical implications of IFRS 9 – A recursive model. *Occasional Paper Series*, 12. Retrieved from https://www.esrb.europa.eu/pub/pdf/occasional/20170717_occasional_paper_12.en.pdf
3. Abirami, D. K. (2018). Financial soundness of Indian banking industry: bankometer analysis. *International Journal of Applied Research*, 4(3), 357-362. Retrieved

- from <https://www.allresearchjournal.com/archives/2018/vol4issue3/PartF/4-3-51-933.pdf>
4. Africa, L. A. (2018). Bankometer models for predicting financial distress in banking industry. *Jurnal Keuangan dan Perbankan – Journal of Finance and Banking*, 22(2), 373-379. Retrieved from <https://doaj.org/article/e3c6aebf-170d4ae2b37538dcd986fe6e>
 5. Al-alawneh, N. A. K., Habibullah, M. S., Marei, A., & Alshdaifat, S. M. (2024). Assessing the impact of the coronavirus pandemic and non-pharmaceutical interventions on Bursa Malaysia KLCI Index using GARCH-M (1, 1) models. *Investment Management & Financial Innovations*, 21(3), 222-236. [https://doi.org/10.21511/imfi.21\(3\).2024.19](https://doi.org/10.21511/imfi.21(3).2024.19)
 6. Alhasnawi, M. Y., Alshdaifat, S. M., Aziz, N. H. A., & Almasoodi, M. F. (2024, June). Artificial Intelligence and Environmental, Social and Governance: A Bibliometric Analysis Review. In *International Conference on Explainable Artificial Intelligence in the Digital Sustainability* (pp. 123-143). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-63717-9_8
 7. Alodat, A. Y., Hao, Y., Nobanee, H., Ali, H., Mansour, M., & Al Amosh, H. (2024). Board characteristics and cybersecurity disclosure: evidence from the UK. *Electronic Commerce Research*, 15(1). <https://doi.org/10.1007/s10660-024-09867-w>
 8. Alshdaifat, S. M., Saleh, M. W., Mansour, M., Khassawneh, A., Shubita, M. F., Hanaysha, J. R., Al-Matari, E. M., Qamhan, M. A., & Alrawad, M. (2024). Audit committee effectiveness in times of crisis: Empirical insights on key audit matters disclosure. *Heritage and Sustainable Development*, 6(2), 845-860. <https://doi.org/10.37868/hsd.v6i2.860>
 9. Amara, N., Bouzgarrou, H., Bourouis, S., Alshdaifat, S.M., & Al Amosh, H. (2025). The Interaction Effect of Female Leadership in Audit Committees on the Relationship Between Audit Quality and Corporate Tax Avoidance. *Journal of Risk and Financial Management*, 18(1), 27. <https://doi.org/10.3390/jrfm18010027>
 10. Andries, K., Gallemore, J., & Jacob, M. (2017). The effect of corporate taxation on bank transparency: Evidence from loan loss provisions. *Journal of Accounting and Economics*, 63(2-3), 307-328. <https://doi.org/10.1016/j.jacc-ecco.2017.03.004>
 11. Arzova, S. B., & Sahin, B. S. (2024). The effect of financial soundness variables on bank performance: a macro-level analysis in MSCI Emerging Market Index countries. *Kybernetes*, 53(8), 2605-2623. <https://doi.org/10.1108/K-02-2023-0237>
 12. Bushman, R. M., & Williams, C. D. (2012). Accounting discretion, loan loss provisioning, and discipline of banks' risk-taking. *Journal of accounting and economics*, 54(1), 1-18. <https://doi.org/10.1016/j.jacc-ecco.2012.04.002>
 13. Casta, J. F., Lejard, C., & Paget-Blanc, E. (2019, August). The implementation of the IFRS 9 in banking industry. In *EUFIN 2019: The 15th Workshop on European Financial Reporting*. Retrieved from <https://hal.science/hal-02405140/>
 14. Ercegovac, R. (2018). IFRS 9 impact on Bank Landing Policy and Structural Risk Management. *Eurasian Journal of Business and Management*, 6(3), 53-60. <https://doi.org/10.15604/ejbm.2018.06.03.006>
 15. Gomaa, M., Kanagaretnam, K., Mestelman, S., & Shehata, M. (2019). Testing the efficacy of replacing the incurred credit loss model with the expected credit loss model. *European Accounting Review*, 28(2), 309-334. <https://doi.org/10.1080/09638180.2018.1449660>
 16. Jin, Q., & Wu, S. (2023). Shifting from the incurred to the expected credit loss model and stock price crash risk. *Journal of Accounting and Public Policy*, 42(2), 107014. <https://doi.org/10.1016/j.jaccpub-pol.2022.107014>
 17. Khalaf, A. M., Wan Ismail, W. N. S., Marei, A., Saleh, M.W. & Mansour, M. M. (2023). The Framework for System Trust's Effect on Organizational Commitment in the Jordanian Public Sector. *SciPap*, 31(2). <https://doi.org/10.46585/sp31021696>
 18. Loew, E., Schmidt, L. E., & Thiel, L. F. (2019). *Accounting for Financial Instruments under IFRS 9 – First-Time Application Effects on European Banks' Balance Sheets* (Working Paper Series No. 48). European Banking Institute. <http://dx.doi.org/10.2139/ssrn.3462299>
 19. Mansour, M., Al Zobi, M., Saram, M., Daoud, L., & Marei, A. (2023). Does executive compensation matter to bank performance? Experimental evidence from Jordan. *Banks and Bank Systems*, 18(3), 164-176. [https://dx.doi.org/10.21511/bbs.18\(3\).2023.14](https://dx.doi.org/10.21511/bbs.18(3).2023.14)
 20. Mansour, M., Shubita, M. F., Lutfi, A., Saleh, M. W. A., & Saad, M. (2024). Female CEOs and Green Innovation: Evidence from Asian Firms. *Sustainability*, 16(21), 9404. <https://doi.org/10.3390/su16219404>
 21. Onali, E., Ginesti, G., Cardillo, G., & Torluccio, G. (2024). Market reaction to the expected loss model in banks. *Journal of Financial Stability*, 74, 100884. <https://doi.org/10.1016/j.jfs.2021.100884>
 22. Orbán, I., & Tamimi, O. (2020). Accounting model for impairment under IFRS 9 and its impact on loss allowance. *European Research Studies Journal*, 23(4), 1259-1277. <https://www.um.edu.mt/library/oar/handle/123456789/76111>
 23. Ouma, M. O., & Kirori, G. N. (2019). Evaluating the financial soundness of small and medium-sized commercial banks in Kenya: an application of the bankometer model. *International Journal of Economics and Finance*, 11(6), 93-100. <https://doi.org/10.5539/ijef.v11n6p93>
 24. Rana, S., & Kamruzzaman, A. S. M. (2021). A comparison of financial soundness of conventional and Islamic commercial banks in Bangladesh: a bank-o-meter model approach. *International Journal of Management and Accounting*, 3(6), 130-136. <https://doi.org/10.34104/ijma.021.01300136>

25. Saleh, M. W. A., & Mansour, M. (2024). Is audit committee busyness associated with earnings management? The moderating role of foreign ownership. *Accounting Research Journal*, 37(1), 80-97. <https://doi.org/10.1108/ARJ-04-2023-0106>
26. Sharif, M. N., Zhang, L., Asif, M., Alshdaifat, S. M., & Hanaysha, J. R. (2025). Artificial intelligence and employee outcomes: Investigating the role of job insecurity and technostress in the hospitality industry. *Acta Psychologica*, 253, 104733. <https://doi.org/10.1016/j.actpsy.2025.104733>
27. Shubita, M. (2019). Intellectual capital and market value: evidence from Jordan. *Investment Management and Financial Innovations*, 16(4), 37-45. [http://dx.doi.org/10.21511/imfi.16\(4\).2019.04](http://dx.doi.org/10.21511/imfi.16(4).2019.04)
28. Shubita, M. (2021). Predictive value of accruals and the moderating role of company size: Empirical evidence from Jordan. *Investment Management and Financial Innovations*, 18(3), 142-150. [http://dx.doi.org/10.21511/imfi.18\(3\).2021.13](http://dx.doi.org/10.21511/imfi.18(3).2021.13)
29. Shubita, M. (2022). Intellectual capital and industrial firms' growth: Evidence from Jordanian manufacturing listed firms. *Problems and Perspectives in Management*, 20(3), 325-334. [http://dx.doi.org/10.21511/ppm.20\(3\).2022.26](http://dx.doi.org/10.21511/ppm.20(3).2022.26)
30. Shubita, M., & Shubita, M. (2010). The Incremental Information Content of Earnings Management. *International Research Journal of Finance and Economics*, 48, 62-73. Retrieved from https://www.researchgate.net/profile/Mohammad-Shubita/publication/287275819_The_incremental_information_content_of_earnings_management/links/66f2c0abc0570c21feb8a87b/The-incremental-information-content-of-earnings-management.pdf
31. Sriraman, V. P., & Kalyan, T. V. (2020). Recognition, Disclosure and Management of Credit Risk in Banking: Credit Impairment Model. *Nitte Management Review*, 1-10.
32. Sultanoglu, B. (2018). Expected credit loss model by IFRS 9 and its possible early impacts on European and Turkish banking sector. *Muhasebe Bilim Dünyası Dergisi – Accounting Science World Journal*, 20(3), 476-506. Retrieved from <https://dergipark.org.tr/tr/download/article-file/545863>
33. Swamy, V. (2014). Testing the interrelatedness of banking stability measures. *Journal of Financial Economic Policy*, 6(1), 25-45. <https://doi.org/10.1108/JFEP-01-2013-0002>
34. Usman, B., Lestari, H. S., & Puspa, T. (2019). Determinants of capital adequacy ratio on banking industry: Evidence in Indonesia Stock Exchange. *Jurnal Keuangan dan Perbankan*, 23(3), 443-453. <https://doi.org/10.26905/jkdp.v23i3.2981>
35. Volarević, H., & Varović, M. (2018). Internal model for IFRS 9-Expected credit losses calculation. *Ekonomski Pregled*, 69, 269-297. Retrieved from <https://ideas.repec.org/a/hde/epregl/v69y2018i3p269-297.html>
36. Yameen, I. Y., & Ali, M. S. (2016). Evaluating the financial soundness of the Jordanian commercial banks by applying bankometer's model. *Research Journal of Finance and Accounting*, 7(2), 124-130. Retrieved from <https://core.ac.uk/download/pdf/234631243.pdf>
37. Zenodo. (n.d.). *Open repository for EU-funded research*. Retrieved from <https://zenodo.org/uploads/15109094>

APPENDIX A

Table A1. Study sample

No.	Bank Name	Year Established
1	Arab Bank	1930
2	Jordan Ahli Bank	1955
3	Bank of Jordan	1960
4	Cairo Amman Bank	1960
5	Housing Bank for Trade and Finance	1973
6	Jordan Kuwait Bank	1976
7	Jordan Commercial Bank	1977
8	Bank al Etihad	1978
9	Arab Jordan Investment Bank (AJIB)	1978
10	Capital Bank of Jordan	1995
11	INVESTBANK	1982
12	Union Bank	1978
13	Arab Banking Corporation (Jordan)	1989