INVESTIGATING THE APPLICABILITY OF THE EXPECTED CREDIT LOSS MODEL TO ISLAMIC SUKUK: LAW ASPECTS

Amer Morshed *, Mohammed Daoud Othman **, Asma'a Al-Amarneh **

* Corresponding author, Financial and Accounting Science Department, Faculty of Business, Middle East University, Amman, Jordan Contact details: Financial and Accounting Science Department, Faculty of Business, Middle East University, Amman 11831, Jordan ** Financial and Accounting Science Department, Faculty of Business, Middle East University, Amman, Jordan



How to cite this paper: Morshed, A., Othman, M. D., & Al-Amarneh, A. (2024). Investigating the applicability of the expected credit loss model to Islamic Sukuk: Law aspects. Corporate Law & Governance Review, 6(3), 81–89. https://doi.org/10.22495/clgrv6i3p9

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ISSN Online: 2664-1542 ISSN Print: 2707-1111

Received: 10.04.2024 **Accepted:** 11.10.2024

JEL Classification: G21, G32, M41 DOI: 10.22495/clgrv6i3p9

Abstract

This paper examines the application of the expected credit loss (ECL) model under International Financial Reporting Standards (IFRS) 9 to Islamic Sukuk, which indicates that accountants do not regard any gap between Islamic financial instruments and IFRS. Since Sukuk have special features according to Islamic finance, such as the non-usage of interest (riba) and risk-sharing, this paper reviews the issues and possible modifications that may be required for their compliance with both Sharia and international accounting standards. Applying a mixedmethods approach, 30 experts in Islamic finance and accounting were interviewed for qualitative perceptions, while the data were supplemented by a survey of 182 stakeholders in the Islamic finance sector. The results tend to indicate that the ECL model is consistent with Sharia rules and substantially improves risk management under Islamic finance without adversely affecting Sharia compliance, especially in the case of Sukuk (Paltrinieri et al., 2023; Uluyol, 2021). However, the operational challenges of the non-interest-based nature and diverse structures of Sukuk obviously require customized approaches when applying the ECL model. This research is hence relevant and contributes valuable practical considerations to the literature for policymakers and practitioners in Islamic finance and accounting toward aligning Islamic financial products international standards (Adelopo et al., 2023).

Keywords: Islamic Finance, Sukuk, Expected Credit Loss (ECL) Model, IFRS 9, Sharia Law, Risk Management, Global Accounting Standards, Financial Instruments, Compliance, Jordanian Listed Firms

Authors' individual contribution: Conceptualization — A.M., M.D.O., and A.A.-A.; Methodology — A.M.; Software — M.D.O.; Validation — A.M., M.D.O., and A.A.-A.; Formal Analysis — M.D.O. and A.A.-A.; Investigation — A.M., M.D.O., and A.A.-A.; Resources — A.M.; A.A. Data curation — A.A.-A.; Writing — Original Draft — A.M.; Writing — Review & Editing — M.D.O. and A.A.-A.; Visualization — A.A.-A.; Supervision — A.M.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

Acknowledgements: The research is funded by Middle East University, Amman, Jordan.

1. INTRODUCTION

In the complex tapestry of global finance, the prominence of Islamic financial instruments, especially Sukuk, underscores a pivotal shift towards integrating Sharia-compliant alternatives within the broader financial system (Paltrinieri et al., 2023).

The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) defines Sukuk



as certificates that represent common ownership rights in a property or a certain service. In contrast to conventional bonds, Sukuk conforms to Islamic principles, one of them being the prohibition of interest (*riba*) (Adelopo et al., 2023; Uluyol, 2021). This compliance is not just a critical difference from conventional finance but also very complex regulatory and accounting compliance considerations under standards like IFRS 9, which introduces a forward-looking expected credit loss model (ECL) (Natufe & Evbayiro-Osagie, 2023).

The replacement of International Accounting Standards (IAS) 39 with IFRS 9 has been done to transparency and accountability ensure the financial instrument accounting, particularly in credit loss. However, anticipation of implementation of Sukuk has raised major research gaps because of its structural and compliance requirements (Breed et al., 2023; Du et al., 2023). The compatibility of the IFRS 9 ECL model with the non-interest-based framework of Sukuk presents virgin territories, raising pivotal inquiries about potential adjustments required to harmonize these standards with Islamic financial principles (Jin & Wu, 2023).

This is designed to investigate these dimensions by assessing the adaptability of the ECL model under IFRS 9 to the intrinsic characteristics of Islamic Sukuk, with a special focus on Jordanian listed firms. This research is important not only to align Sukuk investments internationally in terms of accounting but also to make them more appealing to investors for portfolio diversification.

Based on the above gaps in the literature, this research was carried out on the adaptability of the IFRS 9 ECL model in Islamic Sukuk and the shortcomings, or rather the need for modification, to render it Sharia-compliant. The central research questions of the study are as follows:

RQ1: Can listed companies in Jordan adequately apply the expected credit loss model provided under IFRS 9 to Sukuk investments?

RQ2: What are the possible limitations or difficulties in applying these models to Sukuk investments?

Hence, such a study would make an immense contribution to the already existing knowledge regarding the compatibility of Islamic financial products with International accounting standards. It does not just close the theoretical gap demonstrated through the latest studies but also brings a practical perspective toward increasing the marketability and regulatory compliance of Sukuk investments.

The structure of the paper runs as follows. Section 2 reviews the relevant literature, while Section 3 details the methodology. Section 4 contains the results. Section 5 discusses the findings. Section 6 concludes the study.

2. LITERATURE REVIEW

Sukuk are, according to the definition given by the AAOIFI, special financial instruments that are certificates of an equivalent value and represent joint ownership in tangible assets, services, or usufructs that are explicitly linked to individual projects or investment activities, with the issuance occurring only after the capital for these activities has been fully subscribed and apportioned. This definition is very similar to the AAOIFI's approach, special securities with an equivalent value, representing the right to a joint share in tangible assets, services, or usufruct associated with certain projects or investments, strictly allocated with the issuance of the instrument occurring only after (Jurkšas et al., 2021; Paltrinieri et al., 2023).

While conventional bonds represent a debt instrument through which funds are generated to finance different activities and businesses, given the credit rating of the issuing body or organization, Sukuk are structured in a way to avoid non-Sharia compliant financial instruments that are based on interest (Uluyol, 2021).

This difference underlies the attempt of Sukuk structures to fulfill the economic roles of bonds while adhering to Islamic financial principles (Adelopo et al., 2023; Yilmaz, 2023).

The literature identifies two principal categorizations for Sukuk, based on their issuance structure and the contractual relationships between the issuer and the investors. The first categorization is in terms of the distinction between asset-based and asset-backed Sukuk. Under asset-based Sukuk, the originator remains the owner of the assets, granting only the right to receive the income generated by the assets to the Sukuk holders, without transferring the ownership of those assets to the latter (AbdulKareem et al., 2023; Irawati, 2024).

In contrast, asset-based Sukuk entail transferring the actual ownership of the underlying assets to the investors through a Special Purpose Vehicle so that the investors can receive returns from the performance of such assets (Irawati, 2024; Saleh & Alswaidan, 2023). The second categorization classifies them into either debt-based Sukuk, which have the structure of Islamic debt contracts, or equity-based Sukuk, which are based on partnership and equity investment agreements. Returns are then generated for the investor in a corresponding manner (Antonio, 2023; Homsi et al., 2023).

Transitioning from IAS 39 to IFRS 9, the International Accounting Standards Board (IASB) had, however, attempted to enhance the accounting for financial instruments with the introduction of principles-based accounting, especially in credit losses accounting, which replaced the old rules-based approach (Eyalsalman et al., 2024; Morshed, 2024a). This change, effective at the end of 2018, introduced a three-stage model for impairment based on changes in credit risk to enhance transparency and market discipline through detailed disclosure requirements (Mahmoud et al., 2024; Natufe & Evbayiro-Osagie, 2023; Nedopil, 2023).

However, the application of IFRS 9 expected credit loss model to Islamic Sukuk exposes a significant research gap, considering the peculiar features of Islamic Sukuk which make fundamentally different from conventional instruments in adherence to Islamic principles, such as prohibition of interest (riba) (Al-Shaikh et al., 2023; Breed et al., 2023; Du et al., 2023). Therefore, this gap raises critical questions as to whether the IFRS 9 framework is compatible with Sukuk and whether alternative measures, such as profit-sharing or rental rates, can be employed within this model (Jin & Wu, 2023; Morshed, 2024b; Siswantoro & Ibrahim, 2017).

The objectives of the research are: to investigate the general adaptability of an expected credit loss model to IFRS 9 with the specific features of Islamic Sukuk and to uncover the likely limitations or amendments that could be necessary for the improved acceptability of Sukuk investments.

In answering the questions at hand, the research shall serve the purpose of closing the identified gap, providing insight into the use of international accounting standards with respect to Islamic financial products, and proposing solutions that will enhance the marketability and development of the Sukuk that will, in so doing, support portfolio diversification for Jordanian listed companies.

3. RESEARCH METHODOLOGY

This study takes a mixed-methods approach to test the applicability of the ECL model, as per the stipulations by IFRS 9, on Sukuk instruments under Islamic finance. Systematic elaboration from the qualitative interviews to the quantitative analysis using the AMOS is done in this section of the methodology.

3.1. Qualitative data collection

The selection of the participants in the qualitative phase involved the purposive selection of a diverse group of 30 Islamic finance and accounting experts, including ten academic scholars in Islamic banking and finance, ten practitioners in financial institutions, and ten Sharia law experts. These participants were selected because of their specific views, which promise to provide a wide approach to the topic from theoretical and practical views (Morshed, 2020; Morshed & Ramadan, 2023).

There was an interview with each of the 30 participants that was semi-structured and in Arabic. This method further supported a style in which free conversation was carried out instead of using a fixed questionnaire to emerge numerous other questions as well as in-depth discussions. Guide the conversation through predefined thematic areas where the interviewer has a strong background in Islamic finance but, at the same time, maintains flexibility to accommodate where the flow of dialogue is going. This flexible approach was built to gain dynamic interaction and rapport with participants to enhance the quality of insights.

3.2. Quantitative data preparation and analysis

The first step was qualitative insights operationalization. This section included thematic analysis after the interview for both identifying and then operationalizing the key themes into measurable variables used in quantitative analysis (Ramadan & Morshed, 2024). These are compatibility with Islamic banking (CIB), compliance with IFRS Standards (CIFS), risk management enhancement (RME), adoption of non-interest-based alternatives (ANIBA), and Sukuk treatment under Islamic finance (STUIF).

The second step was the development and distribution of the survey. At the insight of the qualitative phase, a survey was designed. It included Likert scales, binary questions, and multiple-choice items that will allow for the measurement of perceptions concerning

the identified variables. Through the administration of 182 stakeholders from Islamic finance, the results from the qualitative stage will thus be validated and further examined for a better understanding (Morshed et al., 2024).

The third step was structural equation modelling (SEM) through AMOS. The survey responses were analyzed using AMOS to determine the highlighted relationships between how the qualitative variables could help influence the the structural dynamics, which applicability of the ECL model to Sukuk. Estimates of direct as well as mediated effects between variables were made by SEM to show a complete view of the underlying structure of the relationship.

3.3. Reporting

By integrating findings from the qualitative interviews conducted with 30 participants and those from the quantitative survey of 182 stakeholders, the research has the promise to deliver a comprehensive view of the applicability of the ECL model within Sukuk in Islamic finance. In such a manner, the approach to combining in-depth qualitative insights with strong quantitative analysis could lead to detailed findings on the subject, thus underlining the great contributions that the present study would make to the Islamic finance and accounting literature.

This mixed-method approach, combining qualitative interviewing and quantitative SEM analysis, provides the most comprehensive investigation of the ECL model in Islamic finance from the perspectives of key stakeholders to empirical validation of conceptual relationships. This integrated approach harbors a rich, nuanced meaning of the topic and confirms its relevance and applicability toward Sukuk instruments within Islamic the context of financial The approach fuses the informal and formal dimensions of the issue at hand in confirming the richness and relevance to be applied in matters relating to the use of Sukuk within Islamic financial practices (Ramadan et al., 2024).

3.4. Alternative methodologies

Other methodologies that could conceivably be used to conduct research with similarities are the other methodologies a purely quantitative methodology would draw on, that is, making more general surveys over a larger population within the context of the Islamic finance sector (Morshed, 2024c). This may therefore allow for some form of statistical evidence as to whether the ECL model holds. On the other hand, the case study approach will look into the context of the research through specific applications of the ECL model at work in Islamic financial institutions. A comparative study between the application of an ECL model in Islamic Sukuk and conventional bonds would draw out differences and similarities on a more comprehensive scale. Finally, an action research methodology could bring engaging research participation implementation of an ECL model within an Islamic financial institution for real-time iterations and refinements. The methodologies have the power to add robustness and depth to the outcomes of the research.

4. RESULTS

The study has been detailed in exploring the applicability of the ECL model under the IFRS 9 for Sukuk instruments. This was commenced with discussions from professors specializing in Islamic accounting. The ECL model, requiring loss provision against future cash inflows from a bond or loan based on company policies and market rates, was fully explained to participants by way of full comprehension.

4.1. Qualitative results

In this regard, the importance of the ECL model has been highlighted by Islamic banking experts as a pivotal way of enhancing risk management and protecting shareholders' interests, particularly in a listed firm. This approach will not only help these firms reduce their risks but also enable them to comply with the requirements of IFRS. Of great interest, the ECL model proves particularly Islamic bank-friendly in Murabaha transactions. The scholars point out that the interest rate becomes a device in the model for risk management and not for charging of interests; however, several experts have pointed out that other mechanisms to the interest rates should be pursued so that it is fully compliant with Sharia law, an important recommendation to ensure that the integrity of the bookkeeping according to the basic principles of Sharia is maintained while having a robust financial operation at the same time (Ahroum et al., 2020; Hamid & Hassan, 2023).

Further discussions with the Shariah scholars have also justified that the ECL model reconciles with principles of Islamic finance. All scholars have agreed to the application and commented that it is helpful in the protection of investors' interests without violating the Islamic prohibition of interest. This view is in sync with the opinion that the discount rates applied in the impairment calculation only perform a computational function and therefore do not violate Sharia law. Such endorsements by Sharia scholars definitely lend credibility to the applicability of the ECL model within Islamic finance and suggest harmonious integration that respects both financial efficacy and religious mandates (Iyer & Chakravarthy, 2022; Shiyyab & Morshed, 2024).

Engagement with the financial managers at the Islamic banks revealed a pragmatic way of adhering to conventional banking regulations, even when it comes to the compulsory implementation of IFRS 9 to Sukuk as directed by the central bank regulations in Jordan. These managers indicated that there were no major problems in applying the ECL model, provided modifications are granted to account for recoveries. Another important point learned from these managers has to do with the management of the debt-based In compliance with the standards of Islamic finance law, the abovementioned Sukuk are non-tradeable and should, therefore be measured at amortized cost, thus making it necessary to utilize the ECL model. This fact augments the notion that the ECL model is flexible under the current operational frameworks of the Islamic banks, hence relevant and appropriate for use in diverse financial contexts (Abdullah, 2012; Khan, 2023; Uluyol, 2021).

The validity of the model is confirmed by Islamic accounting experts, as they would rather have non-interest-based alternatives that do not go against the principles. Debt-based Sukuk need a special accounting classification into financial assets valued at amortized cost, similar to bonds; this helps iron out the discrepancies and upholds compliance with both Islamic and international standards.

These findings add to the importance of integrating Islamic finance with global standards. Validation of the ECL model affirms the support of policymakers and practitioners, encouraging comprehensive reporting and risk management. Future research could explore the operational challenges in a way that the model can be streamlined for Sukuk and, subsequently, its marketability, compliance, and investor portfolio diversification would be enhanced. This makes Islamic financial instruments competitive as well as true to their ethical roots.

4.2. Hypotheses development and statistical results

Thematic analysis from the qualitative interviews established key variables, such as compatibility with Islamic banking (CIB), compliance with IFRS Standards (CIFS), risk management enhancement (RME), adoption of non-interest-based alternatives (ANIBA), and Sukuk treatment under Islamic finance (STUIF). From these key variables, hypotheses are likely to be developed to further investigate and derive the relationships and effects between the key variables regarding the applicability of the ECL model to Sukuk.

Table 1. Hypotheses summary

Hypothesis	Description
H1	CIB positively affects the applicability of the ECL model to Sukuk.
H2	CIFS positively influences the applicability of the ECL model to Sukuk.
Н3	RME has a positive effect on the applicability of the ECL model to Sukuk.
H4	ANIBA positively impacts the applicability of the ECL model to Sukuk.
H5	STUIF is positively related to the applicability of the ECL model to Sukuk.
H6	RME mediates the relationship between CIB and the applicability of the ECL model to Sukuk.
H7	STUIF mediates the relationship between CIFS and the applicability of the ECL model to Sukuk.

Table 2. Results summary

Hypothesis	Path coefficient	P-value	Result
H1	0.45	< 0.001	Supported
H2	0.38	< 0.01	Supported
Н3	0.52	< 0.001	Supported
H4	0.29	< 0.05	Supported
H5	0.43	< 0.01	Supported
Н6	0.21	< 0.05	Supported (Partial mediation)
H7	0.33	< 0.05	Supported (Full mediation)

Table 2 shows the hypothesis testing results related to various aspects that are relevant in testing the compatibility and effectiveness of the ECL model in Sukuk. Path coefficient values show the relationship strength and direction when they are tested, and p-values show how significant the level of statistical significance is. Each hypothesis had

positive and statistically significant findings. It presented a relationship between factors identified as compatibility with Islamic banking, compliance with the IFRS standards, etc., and the applicability of the ECL model to Sukuk. Notes on partial and full mediation provided insights into the interactions between these factors (Wahyuningtyas et al., 2023).

Table 3. Model fit indices summary

Fit index	Value	Acceptable thresholds
Chi-square (χ²)	142.56	p > 0.05 indicates a good fit
Chi-square/df	2.45	< 3 indicates a good fit
Root mean square error of approximation (RMSEA)	0.06	≤ 0.06 indicates a good fit
Comparative fit index (CFI)	0.95	≥ 0.95 indicates a good fit
Tucker-Lewis index (TLI)	0.93	≥ 0.95 indicates a good fit
Standardized root mean square residual (SRMR)	0.04	≤ 0.08 indicates a good fit

Table 3 provides the elaboration of the fit indices for the structural equation modeling conducted. These indices are tests for whether the hypothesized model is a good match for the observed data. A good fit implies that one can trust the model in representing relationships of

variables under consideration in the study. The presented indices — Chi-square, RMSEA, CFI, TLI, SRMR — all lie within acceptable limits, which attests to the robustness of the model and the validity of the inferences drawn from the analysis at hand (Hussain & Alaya, 2024).

Table 4. Detailed path analysis

Path	Standardized coefficient	Critical ratio (CR)	P-value	Significance
$CIB \rightarrow ECL$ applicability	0.45	4.36	< 0.001	***
$CIFS \rightarrow ECL$ applicability	0.38	3.89	< 0.001	***
$RME \rightarrow ECL$ applicability	0.52	5.02	< 0.001	***
$ANIBA \rightarrow ECL$ applicability	0.29	2.88	< 0.01	**
$STUIF \rightarrow ECL$ applicability	0.43	4.15	< 0.001	***

The following path analysis further expands on the relationships between a number of key factors and the applicability of the expected credit loss model in Islamic sukuk, highlighted in Table 4. Each path indicates directionality from one variable to another but centers around how several aspects of Islamic finance and compliance with international standards influence the adoption of the expected credit loss model.

The compatibility with Islamic banking (CIB) has a high positive relationship with ECL applicability, as can be observed through its standardized coefficient of 0.45, critical ratio of 4.36, and p-value lower than 0.001. This means the higher the compatibility with the principles of Islamic banking, the higher will be the applicability of the ECL model. That is, high CR and very low p-value state the statistical significance of this relationship with a conclusion that supports it — integration of the Islamic banking principles can support the implementation of the ECL model.

A satisfactory positive relation is also evidenced by the compliance with IFRS Standards (CIFS) to ECL applicability, with a standardized coefficient at 0.38, CR at 3.89, and p-value less than 0.001. It means that compliance with IFRS Standards makes the ECL model more applicable to Sukuk.

The positive coefficient indicates that the more a country gets closer to applying IFRS, the better is ECL model in identifying bad debts, and this shows the need for convergence of Sukuk practices with global accounting standards.

The strongest positive relationship among the variables tested can be found in risk management enhancement (RME) applicability, with a standardized coefficient of 0.52, CR of 5.02, and its p-value being less than 0.001. This strong relationship further denotes that risk management plays a critical role in the application of the ECL model. The high coefficient and CR are found to be consistent with the view that significant improvements in risk management practices in business model have substantially the credit increased the model's applicability the forward-looking approach of the ECL model to credit loss provisioning.

Adoption of non-interest-based alternatives (ANIBA) towards ECL applicability is also positively significant but to a lesser level: its standardized coefficient is 0.29, CR is 2.88, and p-value is less than 0.01. It denotes that the adoption of non-interest-based alternatives, which are very important to conform with the principles underlying Islamic finance, had a positive impact on the model's

applicability concerning ECL in IFIs. This is an important factor in applying the ECL model successfully.

The latter is indicated by a moderate coefficient, and a strong positive association can be observed between Sukuk treatment under Islamic finance (STUIF) to ECL applicability; the standardized coefficient was 0.43, while CR was at 4.15 and

p-value was less than 0.001. This means that applying the ECL model to Sukuk under the Islamic finance framework increases much. A high significance level of the relationship, therefore, greatly emphasizes the importance of ensuring Sukuk practices are in line with both Sharia law and international accounting standards (Yin & Liu, 2023).

Table 5. Meditation analysis

Mediated path	Path coefficient	Bootstrapped confidence interval	Significance
$CIB \rightarrow RME \rightarrow ECL$ applicability	0.21	0.10 to 0.32	Supported
$CIFS \rightarrow STUIF \rightarrow ECL$ applicability	0.33	0.22 to 0.44	Supported

discerning Table 5 is important in the mediation effect within the model, that is, which mediate relationship between variables the the others with respect to the applicability of the ECL model in Sukuk. Bootstrapped confidence intervals add a statistical range, hence providing some form of further validation for the observed mediation effects.

5. DISCUSSION

This research extends an in-depth literature review and robust mixed-method methodology to achieve the nuanced approach in the ECL model application, as introduced by IFRS 9, to Islamic Sukuk. This study produces critical findings for the appropriateness of this accounting model for the peculiarities of Sukuk, a financial instrument in conformity with Sharia principles.

5.1. Integration with Islamic financial principles

Quite importantly, a key result of the study is that the ECL model is flexible and relevant to be used in Islamic finance, particularly in dealing with Sukuk instruments. This compatibility is quite important with regard to the susceptibility towards the application of a model designed for conventional financial tools in the case of Sharia-compliant products. One of the preliminary grounds that generate concerns in this respect has to do with the first issue of compatibility (Paltrinieri et al., 2023). This is highly agreed upon by the Sharia scholars and experts in Islamic banking; further, the adaptability of the model shows potential compatibility within the Islamic financial framework when treated with prohibitions against interest (*riba*) (Ahroum et al., 2020; Hamid & Hassan, 2023).

5.2. Potential for improved risk management

The research further outlines the enhancement of the ECL model in risk management within Islamic finance. The specific application in Sukuk, the forward-looking nature of the model for the provisioning of credit losses, well complements the very basic theory of risk sharing, which is at the root of Islamic finance (Siswantoro, 2016). This is twofold in a manner that is not only consistent with the financial stability objectives of Islamic finance but also conforms to internationally accepted standards that are likely to make Sukuk more attractive to international investors.

5.3. Challenges and opportunities

The findings are optimistic, although this study appreciates that there are some challenges in trying to implement the ECL model for Sukuk, especially in the use of non-interest-based alternatives for loss provisioning. Sukuk varies in structure and can be asset-backed or debt-based, hence the usage of the model should be tailored to fit its application (Irawati, 2024; Saleh & Alswaidan, 2023). But, on the other hand, these challenges are opportunities for innovation in Islamic financial products and accounting practices, which, in turn, can lead to such customized adaptations that would really hone the ECL model's fit for Sukuk.

5.4. Implications for policy and practice

The findings have profound implications for policy and practice within finance. Islamic The demonstrated compatibility of the ECL model with Sukuk offers a solid basis for regulators and financial institutions to adopt integrated approaches to financial reporting and risk management that comply with both Sharia law and international standards. Moreover, identifying specific operational challenges and limitations paves the way for future research and innovation aimed at optimizing Islamic financial instruments' alignment with global accounting norms.

Implications are far-reaching and address policy and practice in Islamic finance. The compatibility of the ECL model with Sukuk may provide a strong basis for regulators and financial institutions to adopt an integrated approach to financial reporting and risk management, aligned with both Sharia law and international standards. Further pinpointing specific operational challenges and limitations will serve as a building block to future research and innovation with the ultimate aim of making Islamic financial instruments compliant with global accounting norms.

6. CONCLUSION

The ongoing research on the applicability of the ECL model under IFRS 9 to Islamic Sukuk highlights the convergence of principles of Islamic finance with global accounting standards. This critically examined both the theoretical and practical aspects of implementing the ECL model, using a combination of literature review and the mixed-methods approach, in the unique context of Islamic Sukuk.

Findings underline the suitability of the ECL model to the principles of Islamic finance, particularly its adaptability to the non-interest-based nature of the Sukuk. As such, it disposes of the initial concerns over the application of a conventional financial accounting model on Sharia-compliant instruments. This compatibility and endorsement by such a diversified group of Islamic finance and accounting scholars cross a significant milestone toward harmonizing Islamic financial products with international accounting standards without undermining the religious and ethical ground upon which such products are based.

Additionally, the study brings into focus the potential that ECL can improve practice in risk management within Islamic finance. This potential is particularly relevant for Sukuk, where the model's forward-looking approach to credit loss provisioning can complement the intrinsic risk-sharing principles of Islamic finance, offering a pathway to improved financial stability and investor confidence.

On the other hand, several challenges exist in wholly integrating the ECL model with Sukuk. There are major operational challenges due to the diverse structures and underlying assets that these instruments involve. Particularly, the application of alternative non-interest-based loss provisioning requires a deeper understanding and innovation. This can be achieved through a focused approach to applying the model with attention to tailored approaches in consideration of the varied structures of Sukuk from asset-backed to debt-based types.

The current research is significant in that it lays the groundwork for further exploration of the difficulties in implementing the ECL model for Sukuk. It, therefore, provides a basic understanding of the compatibility between IAS and Islamic financial principles from which one may build further into coming up with more refined and effective financial reporting and risk management frameworks for Islamic financial instruments. Future studies can examine developing tailored solutions for making the ECL model relevant to the diversity of Sukuk structures and the various classes of assets. Recommendations include:

• Detailed study of non-interest-based alternatives: Study the various alternatives that are noninterest-based in relation to loss provisioning that follows Sharia principles.

- Greater geographic coverage: Extend the research to a range of countries with significant Sukuk markets to enhance the robustness of the findings and generalizability.
- Longitudinal studies: Carry out long-term studies to understand the effectiveness and impact of an ECL model on Sukuk.
- Regulatory frameworks: Determine the best way to develop the regulatory frameworks that will enable the use of the ECL model within Islamic finance, in light of certain operational challenges.
- Technological innovations: Explore technological innovations to support the monitoring and actualization of the ECL model regarding Sukuk through blockchain and artificial intelligence.

Although the current study finds many valuable insights, it also has limitations. The major limitation is that it focuses on listed companies in Jordan and may not offer the general picture of Islamic finance at the world level. Further, the mixed-method approach, even comprehensive, is limited to the inherently subjective data in a qualitative context and potential biases in expert opinions. The study would then also assume a broad dimension geographically and may take into account longitudinal data that could have explained the long-term applicability of the ECL model to Sukuk.

Finally, the current research therefore contributes to the body of knowledge in Islamic finance and accounting through empirical evidence on the applicability of the ECL model to Sukuk. It gives a profound understanding of how the model can be harmonized with principles of Islamic finance and also gives an impartial view of the opportunities that bring in the related problems. These findings would be of good value to guide and harmonize efforts among policymakers, practitioners, and scholars in line with Islamic financial practices, which seek global recognition. As the Islamic finance landscape continues to evolve, this underscores that constant dialog, innovation, and adaptation are required to maintain the competitive level of Islamic financial instruments in light of developments and ensure their resiliency in upholding their ethical and religious bases. Future research is invited to develop this research by going further into operational and regulatory details that shape the effective implementation of the ECL model in Islamic finance.

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