



MIDOCEAN UNIVERSITY

College of Management

Master of Risk Management

Research Tittle

- A Comparative Analysis of Regional Financial Stability and Risk Exposure

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1. Research Title:

- A Comparative Analysis of Regional Financial Stability and Risk Exposure

2. Research Purpose and Objectives:

- **Purpose:** To examine and evaluate the risk management practices and trends in financial institutions across different regions with a focus on credit, market, and liquidity risks. The study will assess the effectiveness of current frameworks and propose enhancements to mitigate risk more effectively in financial institutions.
- **Objectives:**
 1. To analyze the trends in credit, market, and liquidity risks from 1997 to 2024 across different regions.
 2. To evaluate the existing risk management frameworks used in financial institutions.
 3. To identify challenges and limitations in the current risk management approaches.
 4. To propose recommendations for best practices in integrated risk management.

3. Literature Review Plan:

- **Goal:** Conduct a comprehensive review of the literature on risk management practices, focusing on credit, market, and liquidity risks in global and regional contexts.
- **Scope of Review:**
 - Key theories and frameworks in risk management.
 - Regional variations in financial risks and regulatory responses.

- Literature on trends in OTC derivatives, cross-border claims, and balance sheet risks.

- **Steps:**

1. Review academic journals, financial reports, and global financial stability reports.
2. Summarize and categorize findings based on risk types and regional focus.
3. Identify gaps in existing literature that this study will address.

4. Research Design and Methodology:

- **Design:** Quantitative, comparative research design.
- **Methodology:** Secondary data analysis of financial trends using publicly available databases (e.g., Bank for International Settlements - BIS, IMF Financial Stability Reports).
- **Data Sources:**
 - BIS data portal for regional financial stability metrics, OTC derivatives, cross-border claims, and balance sheet data.
 - IMF, World Bank, and national regulatory reports for additional financial data and context.
- **Variables of Interest:**
 - Independent Variables: Regional economic indicators, financial risk categories (credit, market, liquidity), regulatory environments.
 - Dependent Variables: Trends in cross-border claims, derivatives markets, financial stability metrics.

- Tools: Statistical analysis software (e.g., R, SPSS) for data processing, visualization, and analysis.

5. Data Collection Plan:

- Data Type: Secondary data from BIS and IMF datasets.
- **Key Indicators:**
 - Cross-border financial claims and liabilities.
 - OTC derivatives outstanding and their trends.
 - Balance sheet positions by region.
 - Credit risk, market risk, and liquidity risk metrics.
- Timeframe: 1997 to 2024 (annually and/or quarterly where available).
- **Steps:**
 1. Define data requirements based on research objectives.
 2. Download and organize data files by region, indicator, and year.
 3. Conduct data cleaning and preprocessing to ensure consistency.

6. Sample and Sampling Procedures:

- Population: Financial institutions with significant cross-border exposure, across key regions (Africa and Middle East, Europe, Asia, and the Americas).
- Sampling Strategy: Stratified sampling based on region and risk exposure to ensure diversity in risk profiles and economic contexts.

- **Sample Size Determination:** Based on data availability in each region and completeness over the study period.

7. Data Analysis Plan:

- **Analysis Methods:**

1. **Descriptive Analysis:** Summarize trends and identify notable changes in financial activity (e.g., peaks around 2010).
2. **Comparative Analysis:** Compare risk exposure and stability metrics across regions.
3. **Trend Analysis:** Identify long-term trends in financial stability and OTC derivatives usage.
4. **Correlation Analysis:** Assess relationships between macroeconomic indicators and financial risks.

8. Expected Challenges and Solutions:

- **Challenge 1: Data gaps for specific regions or years.**
 - **Solution:** Use interpolation methods or reference supplementary data sources.
- **Challenge 2:** Complexity in comparing regions with diverse economic environments.
 - **Solution:** Apply standard financial ratios and adjust data for inflation or currency differences where applicable.
- **Challenge 3:** Interpretation of highly technical data on OTC derivatives and other complex financial products.

- **Solution:** Consult with domain experts and reference prior research for interpretative guidelines.

9. Ethical Considerations:

- **Data Privacy:** Ensure that all secondary data sources comply with privacy standards, focusing on aggregated, non-identifiable data.
- **Transparency:** Disclose all data sources and methods in the study for reproducibility.
- **Integrity:** Maintain objectivity in data analysis and avoid data manipulation to fit preconceived conclusions.

10. Expected Outcomes:

- Comprehensive insights into regional variations in financial risks and management practices.
- Identification of high-risk areas and potential policy recommendations for enhanced risk management.
- Contribution to the literature on integrated risk management and financial stability analysis, particularly in emerging markets.

11. Final Deliverables:

- A full thesis document with chapters on literature review, research methodology, data analysis, findings, and recommendations.
- Detailed graphs and tables visualizing financial trends and regional comparisons.

- A set of practical recommendations for policymakers and financial institutions to improve risk management practices.

12 :-Study Questions:-

1. How applicable are existing risk management frameworks within financial institutions?
2. How effective are these frameworks in mitigating operational and market risks?
3. What challenges and opportunities exist in implementing integrated risk management systems?
4. What best practices can enhance risk management within financial institutions?

13:- Study Hypotheses:

H₀: A well-integrated risk management framework does not significantly reduce operational and market risk vulnerabilities in financial institutions.

H₁: A well-integrated risk management framework significantly reduces operational and market risk vulnerabilities in financial institutions.

Previous Studies:

The current international framework, Basel III, has been of help in fighting global systemic risk due to the insistence on high standards of capital. Some authors Barth and Wihlborg continue and assert that new Basel III requirements in form of minimum capital adequacy and liquidity ratios have made banking systems safer, especially for large institutions, which can easily meeting requirements. According to their research, Basel III compliant institutions fared well having lower

risk profile linked to depreciation in market related assets. Barth and Wihlborg pointed out that preserving these standards has prohibitively expensive effects especially on small institutions that may find it hard to observe these standards (Barth & Wihlborg, 2017).

COSO ERM framework helps institutions adopt risk management and integrate with the strategic management system, improving the management of associated risks. Beasley et al. (2018) note that institutions implementing COSO ERM have integrated risk management and its administration into an organization-wide risk management program that supports its strategic objectives. The methodology used by the authors of this research reflects that applying the COSO ERM framework fosters a positive attitude toward risk management; institutions are encouraged to follow this example and manage risks as a defense rather than a counterattack. But, as noted by Beasley et al., COSO ERM's structure can be an issue, too – mainly since it can be challenging for institutions that do not possess the necessary technical knowledge to implement COSO ERM properly.

A comparative study conducted by Gordon et al. (2020) pointed out that although both Basel III and COSO ERM are efficient in managing risks, they are still different in their efficiency. While Basel III provides specific solutions for addressing credit and liquidity risks, the flexible COSO ERM structures enable the address of operational and strategic risks. Combined with elements from both frameworks, the study finds that it may offer the best returns to financial institutions seeking to holistically address multiple forms of risk (Gordon et al., 2020).

The analyses conducted by Allen and Carletti (2019) stress that compliance with regulations strongly pressures entities, mainly regarding resource consumption, especially small-scale

financial institutions. Frameworks such as Basel III add stringent norms to banks, calling for substantial implementation of compliance monitoring and reporting mechanisms. According to the article by Allen and Carletti, smaller banks face challenges regarding this system since the costs have to be offset within their existing budgets, leaving less money for other risk management projects. Therefore, these institutions cannot achieve aggregate implementation of risk management systems (Allen & Carletti, 2019)

Technological infrastructure is also listed as a core problem by Cheeseman et al. (2020) and Currie et al. (2021). Their study reveals the existing legacy systems that dominate many financial organizations, which cannot address data-demanding integrated risk management frameworks. Lack of data processing means that institutions cannot collect and analyze information about new risks in real-time. Currie et al. imply that retrofitting knowledge and embracing information analytics tools are two significant changes that institutions seeking to enhance an integrated threat management framework should embrace (Currie et al., 2021).

Theoretical Foundations of the Study:

This study's theoretical framework draws components from COSO ERM and Basel III frameworks. But what is evidenced here is the fact that this paper argues that risk management in financial institutions entails a few factors such as the ability of the framework in place to adapt to some strategies, and the extent and manner in which these financial institutions meet the required regulatory standards and adopting appropriate technologies to respond to operational and market risks in a proactive manner. In this respect, each of these factors is postulated to lead to better credit position, in terms of preventing avoidable losses and/or building more stability. This model is used to test hypotheses and to have a structure that would enable an assessment of the robustness of risk management between various organizations.

Methodology and Research Methods:

The research design used in this study is descriptive and exploratory since the study aims to systematically analyze various existing commonly accepted risk management practices and risk management frameworks currently practiced in various organizations. Descriptive research design provides a detailed description of the present state in question and current risk management frameworks (for instance, Basel III, COSO ERM), while the exploratory approach is used to reveal the existing gaps, challenges, and opportunities for improvement. This design is suitable for desktop research since it allows for assessing previous work to establish how specific frameworks effectively manage risk within financial firms.

Study Tools:

Data Sources: Reliable financial datasets from sources like the Bank for International Settlements (BIS), International Monetary Fund (IMF), and World Bank provided a solid foundation for analysis. These datasets included information on cross-border claims, derivatives, and regional financial indicators. Access to authoritative data ensured the study's findings were grounded in reliable financial statistics and trends.

Visualization Tools: The study relied on data visualization to present complex financial trends and patterns clearly. Graphs, including line charts and time-series plots, were generated to illustrate fluctuations in credit exposure, market risks, and derivatives growth across various regions. These visuals helped in identifying key trends, such as the notable peaks around 2010, and differences between established and emerging markets.

Literature and Document Analysis: A review of relevant academic literature, policy documents, and regulatory frameworks supported the study's contextual understanding. Analyzing these

documents provided insights into historical and regulatory factors influencing financial trends, particularly regarding cross-border credit exposure and derivatives markets.

Study Limitations:

Data Availability and Quality: The study mostly drew on secondary data sources such as World Bank, International Monetary Fund (IMF), and Bank of International Settlements (BIS). Although these sources are usually trustworthy, data gaps and discrepancies across several years and areas were clear, especially for politically sensitive areas like Iran and developing nations. In these situations, limited or absent data could have compromised regional trend analysis and comparison accuracy.

Temporal Constraints: Although offering a long-term viewpoint, the study concentrated on data from 1997 to 2024, which might not entirely reflect the longer historical trends and financial cycles—especially those pre-dating the 1997 start date. Moreover, the temporal range can omit new trends or hazards that gained greater importance after 2024, therefore restricting the relevance of the results to next events.

Methodological Limitations: Although the Difference-in-Difference (DiD) approach offers advantages for spotting causal links, it has limitations as well. DiD believes that before an intervention, treated and control groups follow parallel patterns; this may not be true for every nation or location in this study. This might lead to prejudice, particularly in situations where differing national policies or outside shocks affected financial results differently.

Geopolitical and Economic Complexity: The study emphasizes regional variations in financial resilience, but geopolitical factors including sanctions, economic policies, and currency volatility—especially in areas like the Middle East and parts of Africa—introduce complexity that

is challenging to manage for in quantitative analysis. Although the inadequate qualitative data on political and economic policies could not fully explain these elements, which could have affected the observed financial patterns.

Focus of the study was on particular financial metrics like credit exposures, derivatives, and cross-border claims. The study did not include other possibly pertinent indicators, though, like inflation rates, changes in currency values, and interest rate regimes. This excluding can ignore other elements influencing risk exposure and financial stability.

Though perceptive, the results could not be applicable everywhere among all financial institutions or areas because of the inherent variations in economic systems and legal frameworks. Therefore, generalizing these results to institutions or areas with somewhat different financial conditions or regulatory policies should be done with great care.

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