Libyan International Medical University
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The Impact of Bank Specific Variables on Stability of Banks in MENA Region

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Content:

Research Objectives

The following objectives and achievements are:

- To examine whether the capital has an impact on the stability of banks.
- To examine whether the size of a bank has an impact on stability.
- To investigate the impact of loan ratio on the stability of banks in MENA.
- To determine the impact of the non-interest income on the bank's stability.
- To identify if the cost management has an impact on the bank's stability.
- To assess whether loss loan reserves impact the stability of banks.

Research Importance

- There is lack of studies that examined banking sector in MENA region.
- Findings of the study are beneficial for various stakeholders such as: policy makers, managers, shareholders, future investors, and the government
- This study outlines the importance of the banking sector in MENA as this region needs to transform from oil based-economy to market-based economy and this target requires an efficient and a stable banking sector.

Research Problem

- Profitability and stability are crucial for survival.
- Stability of banks helps to improve macroeconomic factors.
- Examining bank specific variables provides implications that will be in favor for a sound banking sector.
- Banks typically act as quality controllers for successful projects to ensure higher returns and secure growth and thus, the banking sector's stability is critical to the financial system's overall strength (Dwumfour, 2017, Pg.4).

Research Structure

This study is sectioned into five chapters as follows:

- **Chapter 1:** Provides an introduction to the topic, and outlines the importance of the study.
- **Chapter 2:** Literature review and MENA background chapter provides a background on MENA in terms of the political situation, economy, and banking sector. In addition, it presents literature that covered banking stability determinants with hypotheses.
- **Chapter 3:** Data and Methodology, this chapter presents data, source of data, and model.
- **Chapter 4:** Empirical findings, this chapter provides findings and discussion.
- **Chapter 5:** Conclusion and policy implication, this chapter outlines the conclusion and policy implications for different stakeholders.

Research Methodology

- This study aims to examine how bank specific variables impact banks stability.
- This study collected data from 149 banks from 11 MENA countries.
- Variables used in this study were collected from the Bankscope and the World Bank Outlook for the period (2000-2015).

Definition of Variables

Variables	Description	Source of Data
Z-SCORE	Z-score using return on equity.	Bankscope
EQAS	Equity to total assets. This variable to measure capital adequacy is computed as equity to total assets. High capital-asset ratios indicate low leverage and therefore lower risks.	Bankscope
LNSIZE	Natural logarithm of total assets to represent a bank size including earning assets + cash and due from banks + foreclosed real estate + fixed assets + goodwill.	Bankscope
LOANAST	This is a measure of liquidity computed as loans to total assets. Higher ratios imply lower liquidity.	Bankscope
LOARESG	Loaresg is the loan loss reserves to gross loans to measure the credit quality.	Bankscope

Definition of Variables (cont.)

Variables	Description	Source of Data
NII_AA	Income diversification is measured by Non-financial activities/total assets.	Bankscope
COST	The cost to income ratio provides information on the efficiency of the management concerning expenses relative to the revenues it generates. Higher ratios indicate less efficient management.	Bankscope
GDPGR	Higher GDP growth rate indicates higher economic growth	World Bank
GDP CONSTANT	GDP constant is the gross domestic product at constant prices	World Bank
INF_P	The real inflation rate measured by the growth of the consumer price index (annual %).	World Bank

The Regression Model

- The below regression model is applied to accomplish the objectives of the study:

$$Z - SCORE_{it} = \beta_1 EQAS_{it} + \beta_2 LNSIZE_{it} + \beta_3 LOANAST_{it} + \beta_4 LOARESG_{it} + \beta_5 \mathrm{NII\_AA}_{it} + \beta_6 \mathrm{COST}_{it} + \beta_7 \mathrm{INF\_P}_{it} + \beta_8 \mathrm{LNGDPGR}_{it} + \varepsilon_{it}$$

- Ordinary Least Square Regression Method has been employed to examine the impact of the bank-specific variables on the stability of banks.

Regression Findings

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
EQAS	1.684*** (11.10)	1.664*** (11.00)	1.306*** (11.40)	1.538*** (10.54)	1.403*** (9.22)
COST	0.0667* (1.92)	0.0682* (1.97)	0.0195 (0.61)	0.0925*** (2.71)	0.0775** (2.18)
LOANAST	-0.3329*** (-7.05)	-0.3304*** (-7.05)	-0.1775*** (-4.49)	-0.3414*** (-7.62)	-
LNLOARESG	-0.7815*** (-7.94)	-0.7801*** (-7.95)	-	-0.8060*** (-8.34)	-0.6010*** (-6.29)
LNSIZE	-1.524*** (-2.65)	-1.586*** (-2.77)	-0.0856 (-0.17)	-1.226** (-2.25)	-2.144*** (-3.66)
NII_AA	-3.472*** (-5.28)	-3.6492*** (-5.67)	-3.605*** (-5.74)	-	-4.422*** (-6.76)
GDPGR	-0.2017 (-0.99)	-	-0.1654 (-0.83)	-0.3420* (-1.72)	-

Regression Findings (cont.)

INF_P	-0.4393** (-2.40)	-	-0.4513** (-2.52)	-0.4668*** (-2.59)	-
Constant	57.174*** (5.44)	55.5061*** (5.32)	28.15*** (3.22)	50.026*** (5.00)	50.907*** (4.79)
NO of observation	1,380	1,392	1,536	1,464	1,406
F stat p-value	31.32 0.0000	40.24 0.0000	26.21 0.0000	30.59 0.0000	36.23 0.0000
R^2	0.1545	0.1484	0.1072	0.1282	0.1146

Key Findings

- Capital adequacy has a positive and significant impact on banking stability.
- Banking stability is negatively influenced by bank size.
- The loan ratio negatively reduces banking stability.
- Non-interest income has a negative impact on bank stability.
- Cost management has a positive impact on a bank’s stability.
- Loss loan reserves negatively impact banks’ stability
- Banking stability is negatively influenced by the macroeconomic variables GDP and inflation.

Implications and Recommendations

- Findings provide regulators, policymakers, and bank management bodies better insight into the stability and efficiency of banks and their behavior.
- Policymakers in the MENA region should begin developing effective policies to convert the economy from an oil-based to a market-based economy.
- Well capitalized bank are able to avoid bankruptcy and withstand potential financial distress.
- MENA banks need to reconsider their credit of lending.
- Size of a bank needs to receive much attention from central banks and banks managers.

Limitations

- The data set covers limited period (2000-2015) which is considered an old set of data whereas the current study is being conducted in the year 2022.
- Up to date there is no sufficient number of studies that examined banking issues in this region.
- Other variables such as non-performing loans and spending on banks' employees were not collected due to unavailability on Bankscope database.

Thank You
For Your Attention

Any Questions ?