MICRO AND MACRO LEVEL DETERMINANTS OF BANKS PROFITABILITY, THE ROLE OF ASSET QUALITY: EVIDENCE FROM SELECTED COUNTRIES OF ASIA

ABDUL STAAR

01-229191-001

A thesis submitted in fulfillment of the

Requirements for the award of the degree of

Master of Philosophy (Management Sciences)

Department of Management Sciences

BAHRIA UNIVERSITY ISLAMABAD

APRIL, 2021

SUBMISSION FORM OF THESIS FOR HIGHER RESEARCH DEGREE BAHRIA UNIVERSITTY, ISLAMABAD

Candidate Name: ABDUL STAAR

I submit 2 **Copies** of thesis for examination for the degree of ___MPhil (MS)___ thesis Titled: **Micro and macro level determinants of banks profitability, the role of asset quality: evidence from selected countries of asia**

Candidate Signature:_____ Date:_____

Certificate of Principal Supervisor

I **Dr. Khalid Sohail** being the principal Supervisor for the above student, certify that thesis is in a form suitable for examination and that the candidate has pursued his course in accordance with the Rules of the University.

Signature: _____Date: _____

Recommendation for Examination

I recommend that the thesis be examined.

Principal Supervisor:_____ Date: _____

Not Recommended for Examination

I recommend that the thesis be examined.

Principal Supervisor: _____Date: _____

Co-Supervisor: _____Date: _____

Statement by the Head Faculty/Department

I support the submission of the thesis of the above named student for examination under the University Rules for higher degrees.

Signature: _____ Date: _____

BAHRIA UNIVERSITY, ISLAMABAD

APPROVAL SHEET

SUBMISSION OF HIGHER RESEARCH DEGREE THESIS

Candidate's Name: **ABDUL STAAR**

Discipline: **M.PHIL (MS)**

Faculty/Department: **MANAGEMENT STUDIES**

I hereby certify that the above candidate's work, including the thesis, has been completed to my satisfaction and that the thesis is in a format and of an editorial standard recognized by the faculty/department as appropriate for examination.

Signature(s): _____

Principal Supervisor: _____

Date: _____

The undersigned certify that:

1. The candidate presented at a pre-completion seminar, an overview and synthesis of major findings of the thesis, and that the research is of a standard and extent appropriate for submission as a thesis.
2. 0 I have checked the candidate's thesis and its scope, format; editorial standards are recognized by the faculty/department as appropriate.

Signature(s):

Dean/Head of Faculty/Department: _____

Date: _____

Author's Declaration

I, ABDUL STAAR hereby state that my M.PHIL (MS) thesis Titled "**Micro and macro level determinants of banks profitability, the role of asset quality: evidence from selected countries of Asia**" is my own work and has not been submitted previously by me for taking any degree from this university Bahria University, Islamabad or anywhere else in the country/world.

At any time if my statement is found to be incorrect even after my graduation, the University has the right to withdraw/cancel my M.PHIL (MS) degree.

Signature: _____

Name of scholar: ABDUL STAAR

Date: _____

Plagiarism Undertaking

I, ABDUL STAAR solemnly declare that research work presented in the thesis titled "**Micro and macro level determinants of banks profitability, the role of asset quality: evidence from selected countries of Asia**" is solely my research work with no significant contribution from any other person. Small contribution / help wherever taken has been duly acknowledged and that complete thesis has been written by me.

I understand the zero tolerance policy of the HEC and Bahria University towards plagiarism. Therefore, I as an Author of the above titled thesis declare that no portion of my thesis has been plagiarized and any material used as reference is properly referred / cited.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after award of MPhil degree, the university reserves the right to withdraw / revoke my MPhil degree and that HEC and the University has the right to publish my name on the HEC / University website on which names of scholars are placed who submitted plagiarized thesis.

Scholar / Author's Sign: _____

Name of the Scholar: ABDUL STAAR_____

Thesis Completion Certificate

Scholar's Name: ABDUL STAAR

Registration No.: 01-229191-001_

Program of Study: **M.PHIL (Management Studies)**
Thesis Title: **Micro and macro level determinants of banks profitability, the role of asset quality: evidence from selected countries of Asia.**

It is to certify that the above scholar's thesis has been completed to my satisfaction and, to my belief, its standard is appropriate for submission for examination. I have also conducted plagiarism test of this thesis using HEC prescribed software and found similarity index 12 % that is within the permissible limit set by the HEC for the MPhil degree thesis. I have also found the thesis in a format recognized by the BU for the MPhil thesis.

Principal Supervisor's Signature: _____

Date: _____

Name: Dr. Khalid Sohail

ACKNOWLEDGEMENTS

All praises and acclamations are for **Almighty ALLAH**, the merciful, the benevolent, the only creator of the Universe Who bestowed mankind knowledge, wisdom and potential to unravel its secrets. After Almighty Allah, praises to **Last messenger of Allah, Prophet Muhammad (Peace be upon him)**, who is the succorer of humanity, gem of mankind and the ruby of the universe.

First of all, I would like to express profound gratitude to my honorable supervisor, **Dr. Khalid Sohail**, for accepting me as a graduate student and giving me a wonderful opportunity to seek knowledge from him. I felt extremely fortunate to have him as my supervisor. Without his valuable suggestions, excellent guidance, exceptional efforts, remarkable insight and dynamic supervision, this project would not have been completed. The professional research skills that I learnt from him are invaluable for future endeavors. He always responded my queries and questions with great enthusiasm. His guidance and support have always been a source of encouragement for me throughout my stay at the Bahria University Islamabad (BUIC).

I express my heartiest gratitude and deep sense of honor to my affectionate, Father **Abdul Rauf and** Mother **Nasreen Begum** for their kind behavior and valuable guidance during my studies. Last but not the least; I convey my special thanks to brothers, paternal uncles and all those who pray for my brilliant future. Without their support, encouragement, and prayers, it was impossible to achieve what I did till date.

DEDICATION

To my beloved father and mother

Contents

1. INTRODUCTION 1
1.1 Background 1
1.2 Gap Analysis 5
1.3 Problem Statement 6
1.4 Research Questions 6
1.5 Research Objectives 7
1.6 Significance of study 7
1.7 Scope of the study 8
1.8 Organization of the study 8
2. LITERATURE REVIEW 9
2.1 Profitability (Dependent variable) 9
2.1.1 Return on Average Assets (ROAA) 9
2.1.2 Return on Average Equity (ROAE) 10
2.2 Independent variables 10
2.2.1 Poor Asset Quality 11
2.2.2 Capital Adequacy Ratio (CAR) 13
2.2.3 Liquidity Ratio (LR) 15
2.2.4 Income diversification 17
2.2.5 Inefficiency 20
2.2.6 Economic Growth (GDP) 20
2.2.7 Interest spread 22
2.2.8 Growth rate of CPI (Inflation): 23
2.3 Efficiency Theory 24
2.4 Signaling Theory 25
2.5 Conceptual Framework 26
3. METHODOLOGY 27
3.1 Research Design 27
3.2 Population and Sampling 27
3.3 Research Approach and Strategy 28
3.4 Choices of variable 28
3.4.1 Dependent variable 28
3.4.1.1 Return on average asset (ROAA) 28

3.4.1.2 Return on average asset (ROAE) 29
3.4.2 Independent variable 29
3.4.2.1 Internal factors of profitability 29
3.4.2.1.1 Poor asset quality 29
3.4.2.1.2 Capital adequacy 30
3.4.2.1.3 Liquidity ratio 30
3.4.2.1.4 Income diversification 31
3.4.2.1.5 Liquidity ratio 31
3.4.2.1.6 Inefficiency (ratio of Cost/Income) 31
3.4.2.2 External factors of profitability 32
3.4.2.2.1 Market potential (Growth rate of GDP) 32
3.4.2.2.2 Macroeconomic condition (Growth rate of CPI) 32
3.4.2.2.3 Interest spread 32
3.5 Sources of data: 32
3.6 Data analysis techniques: 33
3.6.1 Descriptive Analysis: 33
3.6.2 Regression: 33
3.6.3 Correlation: 33
3.7 Model Specification: 34
3.8 Table 1: Variables and expected signs 34
4. EMPIRICAL RESULTS AND DISCUSSION 31
4.1 Selected countries of Asia 31
4.1.1 Descriptive analysis (Selected countries of Asia) 31
4.1.2 Correlation analysis (Selected countries of Asia) 32
4.1.3 Fixed effects or Random effects estimation 33
4.1.4 ROAA Hausman test (Selected countries of Asia) 33
4.1.5 ROAA Fixed effect model (Selected countries of Asia) 34
4.1.6 ROAE Hausman test (Selected countries of Asia) 36
4.1.7 ROAE Fixed effect model (Selected countries of Asia) 36
Reign wise analysis 38
4.2 Western Asia 38
4.2.1 Descriptive Analysis (Western Asia) 38
4.2.2 Correlation Analysis (Western Asia) 39
4.2.3 ROAA Hausman test (Western Asia) 39
4.2.4 ROAA fixed effect model (Western Asia) 40

4.2.5 ROAE Hausman test (Western Asia) 41
4.2.6 ROAE fixed Effect model (Western Asia) 42
4.3 Southern Asia 43
4.3.1 Descriptive analysis (Southern Asia) 43
4.3.2 Correlation Analysis (Southern Asia) 44
4.3.3 ROAA Hausman test (Southern Asia) 45
4.3.4 ROAA fixed effect model (Southern Asia) 45
4.3.5 ROAE Hausman test (Southern Asia) 47
4.3.6 ROAE fixed effect model (Southern Asia) 47
4.4 South Eastern Asia 48
4.4.1 Descriptive analysis (South Eastern Asia) 48
4.4.2 Correlation Analysis (South Eastern Asia) 49
4.4.3 ROAA Hausman test (South Eastern Asia) 50
4.4.4 ROAA fixed effect model (South Eastern Asia) 51
4.4.5 ROAE Hausman test (South Eastern Asia) 52
4.4.6 ROAE Fixed effect model (South Eastern Asia) 52
4.5 Central Eastern Asia 54
4.5.1 Descriptive Analysis (Central Eastern Asia) 54
4.5.2 Correlation Analysis (Central Eastern Asia) 54
4.5.3 ROAA Hausman test (Central Eastern Asia) 55
4.5.4 ROAA fixed effect model (Central Eastern Asia) 55
4.5.5 ROAE Hausman test (Central Eastern Asia) 57
4.5.6 ROAE fixed effect model (Central Eastern Asia) 57
5. CONCLUSIONS AND RECOMMENDATIONS 59
5.1 Conclusion 59
5.2 Recommendations 60
5.3 Limitations 60
5.4 Future Research Directions 61
References: 62
APPENDIX 1 i
APPENDIX 2 ii

ABSTRACT

For economic segment, commercial banks are crucial, especially in emerging countries in which financial markets aren't very well evolved and powerful. Conventional banking financial performance is critical meanwhile worthiness regarding sector stands strongly related with economy's worthiness, as a whole**.** Study has researched profitability factors regarding the conventional banks functioning in developing countries of Asia, by specific emphasis on position towards quality of asset. That aspect became especially significant after the introduction of tighter banking regulatory standards. Study has involved both factors of financial performance; micro and macro level. Over the duration 2013-2018, the research has used a fixed effect or random estimation based on Houseman results for the balanced test panel data containing 383 commercial banks from 25 Asian countries. Furthermore, study has assessed profitability factors of developing-country's commercial banks, through the sub division of Asia into different 4 regions namely; Western Asia, Southern Asia, South Eastern Asia, and Central Eastern Asia, which has provide with an in-depth look into the factors influencing banks' performance. Results related to ROAA, a proxy of profitability, showed a significant impact of poor asset quality, capital adequacy ratio, inefficiency, and consumer price index. While, Results related to ROAE, a proxy of profitability, showed a significant impact of poor asset quality, capital adequacy, liquidity ratio, inefficiency ratio, and consumer price index. GDP growth rate and Interest spread insignificant effect on profitability. Income Diversification showed mixed results with profitability.

Keywords Non-performing loans, developing countries of Asia, profitability of Banks, Quality of asset, Panel data, micro and macro level factors of profitability.