DETERMINANTS OF FINANCIAL INCLUSION AND ADOPTION OF ISLAMIC BANKING: EVIDENCE FROM MAURITANIA

BY

MOHAMED SIDI

A thesis submitted in fulfilment of the requirement for the degree of Doctor of Philosophy in Islamic Banking and Finance

Institute of Islamic Banking and Finance
International Islamic University Malaysia

FEBRUARY 2021

ABSTRACT

It has been globally acknowledged that financial inclusion (FI) is one of the most important pathways to achieve sustainable development and reduce the incidence of poverty in society. However, not less than 50% adults in low-income segments are still financially excluded all over the world. Demographic factors, as well as other relevant factors such as financial literacy, religion, location, and cost of financial services are among the most significant determinants of financial inclusion globally as discussed in the literature review. Therefore, the general aim of this study is to investigate factors and barriers of FI, and the potential role of Islamic banking in tackling financial exclusion in the case of Mauritania. The specific objectives are (1) to investigate the driving forces that influence financial inclusion in Mauritania; (2) to investigate the driving forces that influence people's intention to adopt Islamic banking in Mauritania; (3) To assess the moderate effects of socioeconomic and demographic factors on the relationships between attitude, subjective norms, and perceived behavioural control, with behavioural intention towards adopting Islamic banking in Mauritania; (4) to provide policy recommendations based on the results and enhance the inclusion within Islamic banking that can help Mauritanians to be financially included. The importance of this research is that it is the first of its kind in Mauritania and it includes several cities and various stakeholders as well as using multiple econometric methods. The non-probability sampling technique is used for gathering primary data through structured questionnaires from three Mauritanian cities, namely Nouakchott, Nouadhibou, and Kiffa. Exactly 800 questionnaires were distributed; however, only 583 were usable in the analysis. The research objectives of this study were achieved by using different statistical methods. Logistic regression analysis was used to answer RQ1, whereas Structural Equation Modeling (SEM) and Multi Group Analysis (MGA) were used to answer RQ2, RQ3, and RQ4. The result shows that educational level, income, employment status, religious factors, financial cost, and financial education are proven to influence financial inclusion in Mauritania. In the context of behaviour towards Islamic banking, it is proved that attitude, subjective norms, and perceived behavioural control significantly and directly affect behavioural intention towards adopting Islamic banking. Further, awareness of Islamic banking and finance, geographical factors, religious factors, financial cost, and financial education are proven to have indirect influence on behavioural intention. Meanwhile, actual behaviour towards accessing Islamic banking and finance were found to be significantly and directly influenced by behavioural intention. Socioeconomic and demographic factors are found to have moderating effects on all direct paths towards behavioural intention. This study suggests that the first priority for policy makers should be the designing of a specific financial inclusion strategy to stem the negative tide of exclusion taking into consideration the outcome of this study. Secondly, financial education should include Islamic finance courses to enhance the level of awareness of finance and Islamic finance in formal education. Third, government should promote Islamic banking as an alternative to conventional banking, taking into consideration all factors and barriers referred to in this study. Finally, the study mainly contributes to the practical and theoretical aspects of tackling financial exclusion.

خلاصة البحث

يعتبر الإدماج المالي أحد أهم وأنجع الوسائل لتحقيق التنمية المستدامة والقضاء على ظاهرة الفقر في المجتمع. ورغم أهميته لاتزال هناك نسبة تفوق 50% من البالغين في الدول المنخفضة الدخل غير مدمجة في النظام المالي. لقد قامت العديد من الدراسات والأبحاث السابقة على مستوى العالم بدراسة العوامل المؤثرة في مستوى الإدماج المالي ومن أهمها العوامل الإجتماعية والإقتصادية بالإضافة إلى عوامل أخرى منها المعرفة المالية و المعتقد الديني و الموقع الجغرافي وتكلفة الخدمات المالية. هذه الدراسة تهدف بشكل رئيسي إلى استكشاف وتحديد العوامل المؤثرة في الإدماج المالي في موريتانيا، بالإضافة إلى إستكشاف وبحث الدور الذي قد تلعبه المصارف الإسلامية في دعم وتعزيز الإدماج المالي في موريتانيا. تتوزع الأهداف التفصيلية لهذه الدراسة كمايلي: (1) إستكشاف العوامل المؤثرة في الإدماج المالي في موريتانيا، (2) إستكشاف العوامل المؤثرة في نية الأفراد نحو التعامل مع المصارف الإسلامية في موريتانيا، (3) قياس مدى تأثير العوامل الإجتماعية والإقتصادية كمتغيرات وسيطة على نظرية السلوك المخطط والتي تم استخدامها لتحقيق الهدف الثاني، (4) كما تهدف الدراسة إلى صياغة مقترحات وتوصيات فعالة بناءاً على نتائج الدراسة. تكمن أهمية هذه الدراسة في كونها تعتبر الأولى من نوعها على مستوى موريتانيا حيث تستخدم عدة تقنيات إحصائية متقدمة لتحليل البيانات التي تم جمعها من ثلاث مدن رئيسية هي انواكشوط، كيفة ، وانواذيبوا. لقد تم استخدام أسلوب الإستبيان في جمع عينة الدراسة باستخدام طريقة جمع العينة الغير احتمالية حيث تم توزيع 800 إستبيان وقد تم جمع 583 استبيان بطريقة ناجحة وكانت صالحة للتحليل الإحصائي. في مرحلة تحليل البيانات، تم إستخدام الإنحدار اللوجستي كتقنية إحصائية لتحقيق الهدف الأول لهذه الدراسة، بينما تم استخدام طريقة نمذجة المعادلة الهيكلية (SEM)، بالإضافة إلى تقنية تحليل المجموعات المتعددة (MGA) لتحقيق الهدفين الثاني والثالث لهذه الدراسة. أظهرت نتيجة الدراسة وجود عدة عوامل لها دلالة إحصائية عالية في التأثير على الإدماج المالي في موريتانيا وهي: مستوى التعليم، مستوى الدخل، الحالة الوظيفية، المعتقد الديني، تكلفة الخدمات المالية، والتعليم والمعرفة المالية. كما أظهرت نتيجة الدراسة أن نية الأفراد في التعامل مع المصارف الإسلامية تتأثر بطريقة مباشرة بثلاث عوامل رئيسية وهي: المواقف اتجاه السلوك، المعايير الإجتماعية المدركة، وإدراك السيطرة على السلوك؛ كما تتأثر بطريقة غير مباشرة بخمسة عوامل وهي: المعرفة والدراية بالمصارف الإسلامية، الموقع الجغرافي، المعتقد الديني، تكلفة الخدمات المالية، التعليم والمعرفة المالية. ومن ناحية أخرى أظهرت نتيجة الدراسة تأثير نية الأفراد في التعامل مع المصارف الإسلامية على التعامل الفعلي مع هذه المصارف بعلاقة إيجابية. كما أبرزت نتيجة الدراسة وجود تأثير معدل لكل من العوامل

الإقتصادية والإجتماعية للأفراد على نظرية السلوك المخطط. لقد خرجت الدراسة بعدة توصيات من أهمها توصية لأصحاب القرار في موريتانيا بأن يضعوا من ضمن أولوياتهم تصميم وتطبيق خطة استراتيجية للإدماج المالي تأخذ بعين الإعتبار نتائج هذه الدراسة وذلك لتعزيز وزيادة نسبة الإدماج المالي في موريتانيا. ثانياً توصية بضرورة تحديث التخصصات المالية لتتضمن مواد متخصصة في المالية والمصرفية الإسلامية من أجل نشر المعرفة والوعي بالمالية الإسلامية. ثالثا أوصت الدراسة بضرورة دعم المصارف الإسلامية وإحلالها كبديل للمصارف التقليدية آخذين بعين الإعتبار نتائج هذه الدراسة. لقد ساهمت هذه الدراسة في نواحي تطبيقية ونظرية بالغة الأهمية من أجل إيجاد حلول للقيود التي تمنع الأشخاص من المشاركة والإستفادة من النظام المالي.

APPROVAL PAGE

The thesis of Mohamed Sidi has been approved by the following:

PROF. DR. SALINA HJ. KASSIM
IIUM Institute of Islamic Banking & Finance (IIiBF)

Salina Hj. Kassim
Supervisor

Romzie Rosman
Internal Examiner

Raditya Sukmana
External Examiner

Rosylin Mohd Yusoff
External Examiner

Roslina Othman
Chairman

DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Mohamed Sidi

Signature .... Date ....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

DETERMINANTS OF FINANCIAL INCLUSION AND ADOPTION OF ISLAMIC BANKING: EVIDENCE FROM MAURITANIA

I declare that the copyright holders of this thesis are jointly owned by the student and IIUM.

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below

1. Any material contained in or derived from this unpublished research may be used by others in their writing with due acknowledgement.

2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.

3. The IIUM library will have the right to make, store in a retrieved system and supply copies of this unpublished research if requested by other universities and research libraries.

By signing this form, I acknowledged that I have read and understand the IIUM Intellectual Property Right and Commercialization policy.

Affirmed by Mohamed Sidi

....

Signature Date

ACKNOWLEDGEMENTS

بِسْمِ اللهِ الرَّحْمَنِ الرَّحِيْم

"All that is in the heavens and all that is in the earth extols the glory of Allah, The Sovereign, the Holy, the All-Mighty, the All-Wise" (Surah Al-Jumu'ah: Verse 1)

First and foremost, praise and gratitude be to Allah SWT for His unwavering mercy and guidance showered upon me which have enabled the completion of this PhD journey. It is my utmost pleasure to dedicate this work to my One and Only Rabb, Allah SWT for He has ordered me to continue seeking knowledge from the cradle to the grave. This dissertation would not have been possible without His will.

I would like to take this opportunity to express my deepest and sincere gratitude to my wonderful inspiring supervisor, Prof. Dr. Salina Hj. Kassim for her continuous generous support, encouragement, motivation, kindness, patience, advise, and valuable guidance during my time in IIUM. Her immense knowledge, valuable insights and suggestions have immensely helped me in shaping and improving myself and my knowledge as well as this thesis.

My sincere thanks also goes to all the respected lecturers and administrative staff of the IIiBF - IIUM for their endearing support. Also, I sincerely thank the faculty of the library for offering all the facilities for our smooth research.

I can't thank Allah enough for the most precious people in my life: my parents, Khalifa Sidi Hintar and Sultana Taqi Md'Allah, my sisters Afaf Khalifa and Khadijah Khalifa, my wife Batool Abdullah, my children Farah and Abdul-Aziz. I am indebted to them for all my achievements; their prayers, unlimited generous support and unconditional love kindle in me a desire to strive and succeed. I dedicate this thesis to them and I am proud to be part of them.

Last but not the least, I would like to thank all my relatives and friends for all my efforts would go in vain without their support and help. In all honesty, I would not have been where I am today if it was not for their continuous prayers, support, and words of motivation for me.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

UMOA	West African Monetary Union
BCM	Bank Central of Mauritania
MRU	Mauritanian Ouguiya (National Currency)
FI	Financial Inclusion
MCM	Mauritanian Copper Mine
FCFA	Franc de Communauté Financier Africaine
SMB	Mauritanian Banking Corporations
BNM	National Bank of Mauritania
BIMA	International Bank of Mauritania
SSA	Sub-Saharan Africa
OIC	Organization of Islamic Cooperation
GFC	Global Financial Crisis
CFI	Center of Financial Inclusion
MFW4A	Making Finance Work for Africa
OECD	Organization for Economic Cooperation and Development
SEM	Structural Equation Modeling
MGA	Multi Group Analysis
BoP	Bottom of the Pyramid
CFI	Comparative Fit Index
GFI	Good-of-Fit Index
NFI	Normed Fit Index
RMSEA	Root Mean Square Error Approximation
SRMR	Standardized Root Mean Residual

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

The crux of financial intermediation lies in facilitating the circulation of resources from the haves to the have-nots. As many empirical studies have suggested in recent decades, the preceding statement has become synonymous with prospects of the banked and the unbanked. It is a case of the haves are the only ones that are banked, or partially banked, and the have-nots are more or less unbanked. Studies have linked this phenomenon to insidious cases of vicious cycles of poverty, intergenerational income depression, political disenfranchisement, and socio-economic marginalisation. Therefore, most academics and concerned global citizens have been pressing the urgent nature of financial inclusion.

In essence, financial inclusion denotes the delivery of banking and financial facilities in nugatory costs to broad sections of an impoverished or disadvantaged populace, such as low-income earners, ethnically disenfranchised minorities, or geographically isolated rural people (Demirguc-Kunt, Klapper, & Randall, 2014). Financial inclusion entails efforts to make sure that all households and enterprises, irrespective of economic status, are provided access to pertinent financial services that they need and/or deserve to ameliorate their livelihood. This is especially true for poor countries where the majority of poor folk live in an informal or shadow economy. Despite owning very little money and possessing minimal productive assets, they still save, borrow, sometimes even lend, and actively manage perfunctory expenses. This can be in the form of cash in hand, pawn broking, money lending, or simply stuffing it in a pillow. These choices are inadequate, risky, and unpredictable. This is why financial inclusion has been a pressing issue for many regulators aiming to improve lives of their poor citizens. For instance, many governments have been pushing for no-frills accounts, as evidenced by Indian, Bangladeshi, and Pakistani central banks.

As far as Muslims are concerned, it is hardly a secret that Islam promulgates the virtues of social equity, inclusivity, and the appropriate and just sharing of resources between the financially well-off and the needy. As the global drumbeats for financial inclusion ring louder, Islamic finance has stepped up to the plate. This has been argued to be an advantageous facet of Islamic financing, due to its intrinsic edge in incorporating elements of justices and sharing. To this effect, the proponents and practitioners of Islamic finance (Mohieldin, Iqbal, Rostom, & Fu, 2012) have pointed out the potency of Islamic finance in promoting financial inclusion through its inherent advantage of exploiting Islam's in-built default, justice-oriented, and wealth redistributive mechanisms, which also help with risk-sharing rather than risk transferring. Thus, one of the main aims of fast-growing Islamic banks is to reduce income inequality by providing credit to those who are at the bottom of the wealth pyramid. This could improve the standard of living of the poorest socio-economic groups, hence, supports economic and financial development. Relevant studies by Gheeraert (2014) and Imam & Kpodar (2016) found that the growth of Islamic banks has a positive impact on economic and financial development in developing countries.

As financial exclusion is something that is not just confined to developed countries, a lot has been discussed about the relationship it has with economic development and the reduction of poverty. By making use of financial services, poor households can plan for their expenses, cope with sudden external shocks, contribute to facilitating improved access to productive activities, and come out of the grip of poverty. Therefore, products must be designed and customised in order to cater to the needs of the underprivileged sections that fall at the bottom of the pyramid. With this notion, Mauritania took its first step towards financial inclusion by issuing new licenses for Islamic banks and planning to create a special legal framework for Islamic finance. In spite of the willingness of the highest authorities in Mauritania to mollify financial exclusion, rates of those who are financially included are still at low level (Figure1.1)[1]. Furthermore, most of those who have access to financial services available in Mauritania are not actively using financial services.

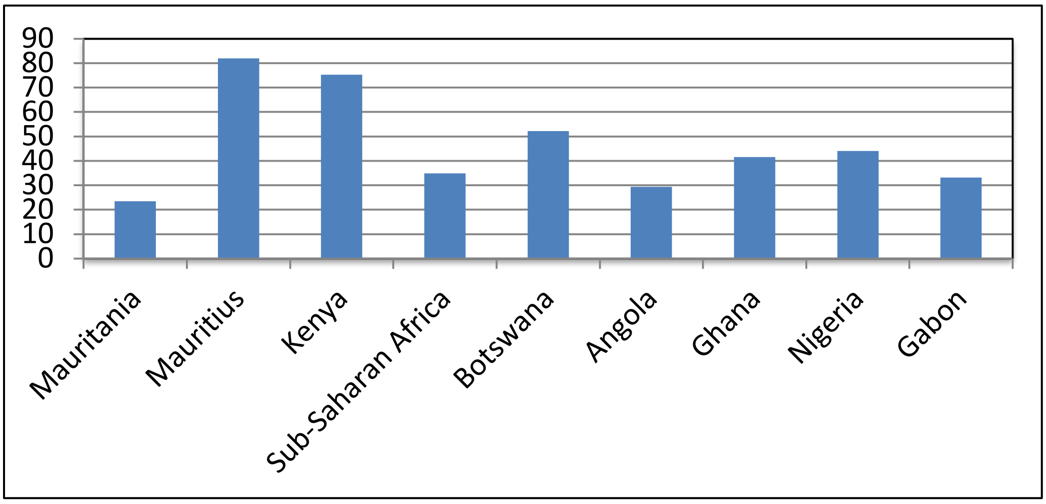

Figure 1. 1 Account at a Financial Institution (% age 15+)

Therefore, this study is going to investigate the determinants of financial inclusion as well as Mauritanian's behaviour towards Islamic banks in order to determine factors and barriers that influence accessibility to financial services and customers' intention towards Islamic banks in Mauritania. Given the shortage of data and literature on the determinants of financial inclusion in Mauritania's Islamic

[1] Source: Data collected from database: Global Financial Inclusion (FINDEX 2017), World Bank

banking and finance sector, this study will be useful for policy-makers and future researchers in Mauritania.

1.2 PROBLEM STATEMENT

It is evident that the development of a financial system can play a key role in the growth of an economy and improve living standards of individuals. A well-designed financial system is certainly able to facilitate access to different financial products and services with negligible cost, which, in turn, will more likely benefit people who are financially excluded as well as those in the casual sector. Approximately two billion adults in the world have no access to any formal financial services (Demirgüç-Kunt, Klapper, Singer, & Van Oudheusden, 2015). This number is considered high, thus many governments and non-governmental organizations are now paying special attention to financial inclusion by tackling economic and financial issues and improving the accessibility to credit for all of the population. The performance curve on financial inclusion, though, has not kept apace. Enormous amounts of credit do not always translate to broader use of financial services because credit is often focused among the biggest corporations. Furthermore, firms in developing countries manifestly continue to face hurdles in retrieving financial services. For example, 51% of firms in advanced economies use a bank loan or line of credit as opposed to 34% in developing economies (Allen, Carletti, Cull, Senbet, and Valenzuela, 2014).

In fact, the majority of unbanked adults and those who have no access to financial services are located in developing countries where Muslims represent the largest part of the population. Therefore, most academics and researchers suggest that Islamic banking could be able to reduce the rate of financial exclusion among these countries. For instance, Demirgüç-Kunt et al., (2015) and Mohieldin et al. (2012)

suggest that in countries with a majority Muslim population, developing Sharia'h-compliant products could be key for improving the account ownership penetration rate, hence financial inclusion. Nevertheless, the theory does not always hold true; it sometimes depends on several factors such as economic conditions, readiness of the market, customer's education level, and the quality of legal framework implemented in the country. For instance, the African Development Bank (2013) found that an undeveloped Islamic banking system, lack of customer's awareness of Islamic banking, and a lack of government willingness to support Islamic banking are among the main factors preventing Islamic banks from playing a vital role in enhancing the development of and financial inclusion in North Africa. Meanwhile, developing countries with majority Muslim populations can be financially included only through Islamic banking because Islamic teachings prevent them from being involved in any financial transactions that is based on interest (Riba). Mauritania is no exception, with 100% of population being Muslim, 31% of which live under the international poverty line[2]. As a matter of fact, this population is strongly influenced by religious values and instructions. The majority of them eagerly avoid interest-based financial services and any prohibited transactions from a Sharia'h perspective, which has led to the pushing of a lot of money out of the economy and banking system in Mauritania.

Although the issuance of new licenses for Islamic banks by the central bank of Mauritania (BCM) between 2010 to 2017 was a crucial move towards financial inclusion, the rate of adults with an account at a financial institution is still too low, reaching only 20% compared to the rest of the sub-Saharan region, where 34% of adults hold an account at a financial institution (Demirgüç-Kunt et al., 2015). Furthermore, the high frequency of account usage, the rate of borrowing from a

[2] https://www.indexmundi.com/mauritania/population_below_poverty_line.html

financial institution, and the rate of savings at a financial institution by adults were respectively 3.1%, 7.7%, and 10.6%[3].

Despite the ambitious reforms promised by authorities who are highly appreciated, the position of financial inclusion is still lower than what it is in neighbouring developing countries.

"*All Mauritanian banks have special counters dedicated to Islamic finance*" the governor of Mauritanian's Central Bank (BCM) told PANA news agency (2012).

Taking the above extract jointly with the low account ownership's penetration rate raises issues such as lack of accessibility to financial services as well as the inefficiency of financial products and services.

Fortunately, these issues are gaining recognition at the highest financial authorities in Mauritania. Al-AKHBAR Info reported on 20/5/2017 that the new governor of the Mauritanian central bank had declared that they were working on a new, special Islamic banking legal framework in order to enhance the financial system and increase the accessibility to financial services all over the country[4]. However, the Mauritanian financial system is still functioning under the conventional financial framework. Therefore, there is a compelling need for more researches that explore the status and determinants of financial inclusion in Mauritania and identifies the main barriers preventing inclusive financial growth. Achieving the objective of this study is obviously crucial in assisting in formulating a comprehensive framework that can be effective for enhancing financial inclusion in Mauritania.

While the role of Islamic banking in financial inclusion has been documented in many other countries around the globe as presented in the third chapter of this study, no one single previous research has been written on its potential in Mauritania.

[3] http://databank.worldbank.org/data/reports.aspx?source=2&series=WP_time_01.1&country=MRT#
[4] http://alakhbar.info/?q=node/3462