

THE EFFECT OF MICROFINANCE INSTITUTIONS ACTIVITIES ON ECONOMIC GROWTH IN ARAB COUNTRIES

Lubna Sameer Khalaf, Freelance Researcher, Amman, Jordan
Nahil Ismail Saqfalhait, The University of Jordan, Amman, Jordan

ABSTRACT

This paper aims to investigate the impact of Micro-Finance Institutions (MFIs) on economic growth in Arab countries. To test the effect of MFIs on economic growth in Arab countries, the paper utilizes panel data model for six Arab countries over the period 1999-2016, the choice of the sample is based on data availability. The results reveal that MFIs have no effect on improving economic growth in Arab countries. The study findings can be of special importance for policymakers and stakeholders who may benefit from these results in improving regulations and strategies to strengthen the microfinance sector as main player in the financial system in Arab countries.

Keyword: Microfinance Institutions, Economic Growth.

INTRODUCTION

Since the 1970s, microfinance has played an important role in decreasing poverty and supporting economic growth (Maksudova, 2010). Over the past few decades, microfinance has grown from a few small, donor-driven programmes to a global, self-sustaining industry. 3,098 reported MFIs (State of the Campaign, 2014) bring access to financial services to more than 200 million clients worldwide. MFIs design optimal products that distribute funds over macro and micro levels, which in turn contribute to the growth of financial intermediaries. This growth increases households' access to finance, which in turn allows them to start small businesses that contribute to economic growth. Hermes et al. (2009) argue that, depending on the complement and the rival relationship of microfinance with mainstream banking, the degree and the maturity of the financial sector are shaped which is transferred to growth accordingly.

This paper analyses the impact of microfinance activities on the economic growth in Arab countries. It considers answering the questions "*What is the impact of MFIs activities on economic growth in Arab Countries?*". Section two presents problem statement, research objectives, importance and hypothesis. Section three presents theoretical background and a review of existing literature, section four describes study's methodology and data used, section five presents the model, section six presents the empirical results and discussion, and section seven concludes the paper.

Problem Statement

The idea of financial inclusion is best illustrated by the expansion of microfinance activities in developing countries. Formal financial institutions are generally hesitant to lend to low-income households with low income while households in Arab countries have reasonable access to banking services, they have limited access to loans (Tanmeyah, 2013).

In this context, it is worth studying the extent of the microfinance industry's contribution to financial inclusion and economic growth in Arab countries. The study explores the impact of MFIs on a major component of inclusive economic growth in Arab countries. It

aims to show the place of Arab countries in terms of the existence and influence of MFIs if studied globally. The existing literature on MFIs in Arab countries is limited, and this study provides further insight into the impact of MFIs on economic growth of Arab countries. The results of this study along with a better understanding of the MFIs' influence on economic growth will provide policy makers with some enlightening insights, which they can follow when creating relevant policies.

Based on this, the study considers answering the question:
What impact do MFIs have on economic growth in Arab countries?

Research Objectives and Importance

The main goal of this study is to understand the effect of MFIs on economic growth in Arab countries. This paper's goal is to examine the role of MFIs in the Arab world, and to study their impact on GDP growth in hope of informing policies related to the microfinance sector. This study also serves as a reference for academics and researchers studying microfinance in the Arab world.

Study Hypothesis

The following null hypothesis is formulated:

H₀: There is no statistically significant effect of MFIs activities on economic growth in Arab Countries over the period (1999-2016).

LITERATURE REVIEW

Microfinance has become an important and growing industry throughout the Arab world. The services of MFIs can facilitate economic growth through the channel of financial development in the market (Zhuang et al., 2009). Hermes et al. (2009), argue that financial markets and banks both influence MFI efficiency; the innovative financial markets represented by banks might contribute to the efficiency of MFIs as much as their deficiency.

(Maksudova, 2010) performed Granger-causality test on 1433 MFIs located in 102 countries. The results of this study indicate different microfinance capital transfer channels for middle and low-income countries, implying that the strength of MFIs' impact depends on a country's underlying level of economic development. (Adonsou and Sylwester, 2017) performed a comparison between the role of MFIs and that of commercial banks in the economic growth of developing countries. The study was conducted on 85 developing countries over the period 2002-2013, and concluded that, while commercial banks in developing countries played a significant role in investment, their role in economic growth remained limited. On the other hand, MFIs contributed to economic growth without playing a noticeable role in investment. Pietrovito (2009) argues that micro-credit and microloans, which create risk, encourage the growth of financial markets and financial intermediaries. The study argues that the existence of financial intermediaries leads to financial growth and technological development, which both in turn contribute in economic growth.

Amin and Jalal Uddin (2018) aim to examine the long run dynamic relationship among Grameen Bank loan financing and clients' deposit and economic growth. To examine this relationship, cointegration test and Granger's causality test have been applied considering annual time-series data. They conclude that both financing and depositing aspects of Grameen Bank have positive effect on economic growth in the long run. Mia (2017) discusses some key characteristics of Bangladesh that includes socio-economic macroeconomic indicators and some important aspects of the microfinance sector in

Bangladesh. Mai (2017) concluded that Bangladesh has made remarkable progress in socio-economic and economic development in the last few decades. Although the regulatory framework is still rather weak, and a majority of the MFIs are found to be concentrated in the well-off areas, the study revealed that microfinance has placed significant contribution on such socio-economic development.

Another study by Nwude and Anyalechi (2018) was conducted on microfinance in Nigeria for the period (2000-2015). The purpose of this study is to investigate the impact of microfinance activities on rural economic growth and savings in Nigeria. Results reveal that micro finance banking in Nigeria has not contributed to agricultural productivity but had assisted in increasing rural savings habits in Nigeria. Raihan et al. (2017) investigate the effect of microfinance on GDP in Bangladesh. They estimates that microfinance has added about (8.9%-11.9%) to the GDP according to the assumptions made about the working of the labour market. Moreover, results revealed that the contribution to rural GDP is even higher.

In evaluating the successful performance of MFIs, some studies indicate the importance of the macroeconomic environment in which the MFIs are situated, the degree of a country's financial development, and its level of economic formalization and industrialization (Assefa, et al., 2013; Vanroose and D'Espallier, 2009). The influence of microfinance on economic growth is perceived both directly and indirectly. The direct effect of MFIs on economic growth can be measured by examining the decrease in the percentage of individuals in poverty and the increase in value derived from entrepreneurship activities of the poor (Maksudova, 2010). Based on this, Maksudova believes the contribution of microfinance to economic growth can be characterized as a corporate action. MFIs may also contribute indirectly to growth by increasing liquid liabilities through financial deepening and retail banking system development.

METHODOLOGY

To construct an empirical model that examines the relationship between MFI activity and economic growth, a panel data analysis with an annual frequency is performed for six Arab countries, covering the years 1999 to 2016. Data were obtained from the Microfinance Information Exchange (MIX) market database.

The study population consists of all MFIs in Arab countries; the study's sample is constrained by data availability. The study uses a dataset comprised of MFIs from six countries: Jordan, Palestine, Lebanon, Morocco, Egypt, and Tunisia. The selected countries are active in the microfinance industry and have a wide range of services. The countries also have different levels of data availability. Some countries-such as Iraq, Sudan, Syria, and Yemen-are excluded from the dataset because of political instability. Other countries-Kingdom of Saudi Arabia, Bahrain, UAE, Kuwait, Qatar, Oman, Tunisia and Algeria-are excluded because of a lack of available data.

Arab countries are diverse both in terms of human capital and natural resource endowments. Economic growth and wealth distribution varies widely from one country to another. According to the World Bank's classification of countries by income brackets, the majority of Arab countries fall under the middle- and lower-income brackets, with the exception of the oil-rich countries of the Gulf Cooperation Council (GCC).

The Model

Based on Adonsou and Sylwester (2017), the following multiple linear regression model is estimated:

$$\ln\text{GDP}_{it} = \beta_0 + \beta_1 \ln\text{GDP}_{it-1} + \beta_2 \text{GLP}_{it} + \beta_3 \text{BOR}_{it} + \beta_4 \text{ASS}_{it} + u_{it} \dots\dots\dots (1)$$

In the right-hand side of equation (1) β_0 is the intercept. u_{it} is the error term in the equation across country i and time t . Real GDP is measured at constant 2010 international dollars (World Bank, 2017). In order to avoid non-linearity problem of the regression (Greene, 2012), GDP is converted into the natural logarithm.

Gross Loan Portfolio Per-Capita (GLP), borrowers (BOR), Assets (ASS) are microfinance activities indicators. Private credit from MFIs (GLP) and total assets of MFIs (ASS) are divided by GDP. BOR is the number of active borrowers of MFIs. Before estimation, a number of tests were performed to assist in model selection and increase the accuracy of the estimated parameters. The first is to test the existence of unit roots, followed by the test for correlation, and finally, the Hausman test.

Unit Root Tests

Table 1 provides unit root tests results. The results from panel unit root tests using the Levin, Lin and PP-Fisher Chi-square method show that all variables are stationary at first difference.

		Level			First difference		
		Intercept	Intercept and Trend	None	Intercept	Intercept and Trend	None
GDP	Levin, Lin & Chu test	-4.6050***	0.7079	5.1351	1.1038	-0.0727	-2.0710**
	PP-Fisher Chi-square	7.9377	7.9092	0.0977	35.8027***	34.5178***	21.2867**
GLP	Levin, Lin & Chu test	0.6426	-1.0537	-0.0231	-0.9587***	-.5263***	3.3732***
	PP-Fisher Chi-square	7.3653	6.1707	4.1136	35.6286***	41.0197***	56.6318***
BOR	Levin, Lin & Chu test	0.4933	-1.3807*	1.1811	-1.5262*	-0.3163	-0.7019***
	PP-Fisher Chi-square	3.6433	32.464***	2.3357	142.116***	63.9566***	80.1185***
ASS	Levin, Lin & Chu test	3.6433	-0.4404	0.5521	-1.9243	-0.3956***	-0.5414***
	PP-Fisher Chi-square	12.720	4.8161	5.7072	46.916***	58.5802***	68.8217***

Note: Levels of significance at *p<0.1, **p<0.05, ***p<0.01.

Correlation

According to correlation test, it is found that correlation between GLP and ASS is high, 0.88, as shown in Table 2.

Variable	D (LN_GDP)	D (LN_LAG_GDP)	D (GLP)	D (BOR)	D (ASS)
D (LN_GDP)	1.0000	-	-	-	-
D (LN_LAG_GDP)	0.4771	1.0000	-	-	-
D (GLP)	0.0905	0.0594	1.0000	-	-
D (BOR)	0.0837	0.0276	0.3004	1.0000	-
D (ASS)	0.0484	0.1109	0.8821	0.1616	1.0000

Source: Estimation based on MIX market data.

To avoid the collinearity problem, equation (1) is separated into two equations:

$$\ln\text{GDP}_{it} = \beta_0 + \beta_1 \ln\text{GDP}_{it-1} + \beta_2 \text{BOR}_{it} + \beta_3 \text{GLP}_{it} + u_{it} \dots\dots\dots (2)$$

$$\ln\text{GDP}_{it} = \beta_0 + \beta_1 \ln\text{GDP}_{it-1} + \beta_2 \text{BOR}_{it} + \beta_3 \text{ASS}_{it} + u_{it} \dots\dots\dots (3)$$

Hausman Test

The Hausman test for model specification upholds the appropriateness of the random effect model as the p-value obtained from the test is greater than 5%, as shown in Table 3 below.

Table 3			
HAUSMAN SPECIFICATION TEST			
Test Summary	Chi² Statistic	Chi² df	Prob.
Period random	3.266414	3	0.3523

EMPIRICAL RESULTS AND DISCUSSION

Equations (2) and (3) have been estimated using the generalized least squares technique (GLS) with panel data for the period (1999-2016). GLS is fully efficient and yields consistent estimates of the standard errors, as it eliminates serial correlation and heteroskedasticity.

As shown in Table 4 below, the results reveal that the MFI variables are statistically insignificant, while $\ln\text{GDP}_{it-1}$ is statistically significant with the expected sign. Based on the F-statistic, the whole model is statistically significant at 1% significance level.

Table 4						
RANDOM EFFECTS RESULTS OF THE DETERMINANTS OF MFI ACTIVITIES (DEPENDENT: GDP)						
	Model 2			Model 3		
	Estimated Parameters	P-Value	t-Statistic	Estimated Parameters	P-Value	t-Statistic
Intercept	0.0447***	0.0000	12.7313	0.0447***	0.0000	12.1046
D (LN_LAG_GDP)	0.0190***	0.0000	5.2643	0.0195***	0.0000	5.3532
D (BOR)	0.0000	0.7280	0.3489	0.0000	0.6857	0.4061
D (GLP)	-0.1440	0.9186	-0.1025			
D (ASS)				-0.5497	0.3989	-0.8479
D-W	0.5038			0.5433		
R-square	0.2512			0.2591		
F-statistic	9.2830			9.6751		
Prob (F-statistic)	0.0000			0.0000		
Number of observations	87			87		

Note: Significance level at ***<0.01.

Although several studies suggest MFIs have a positive effect on growth, such as (Adonsou and Sylwester, 2017; Dirks, 2011), our findings show that the main variables of microfinance do not affect the economic growth. The results of ASS and BOR are in line with (Dirks, 2011), and GLP results are in line with the results of (Maksudova, 2010) for low-income countries.

Despite that MFIs may bring better consumption over time, some studies are less optimistic about the benefits that MFIs provide. (Chowdhury, 2009) is one such example; Chowdhury argues that access to financial resources through MFIs may smooth the consumption, nevertheless, this will end up with a larger debt. Many factors may be behind the conclusion that microloans have no relationship to economic growth. Consider that the study sample period goes from 1999 to 2016, a period of political and financial crisis, such as the global financial crisis of 2008-2010 and the Arab Spring of 2011-2012. Additionally, the

microfinance sector has faced difficulties in some countries, such as Morocco, during the period sampled in the study.

Indeed, MFIs in Arab countries fell short in terms of providing services to their clients, which meant that they failed to achieve their economic and social aims. In 2008, for example, a survey conducted in Egypt found many borrowers who, because of unmet needs, abandoned MFIs. These borrowers claimed that MFIs offered loans smaller than the amount they needed to improve their projects. The survey also showed that many borrowers were unable to pay the high interest rates on their loans. This problem was exacerbated by the interest coming due on a bi-weekly basis.

Most poor people lack financial literacy, and thus do not have the basic education or experience to understand and manage even low-level business activities. Most of them are risk-averse, loss-averse, and struggling to survive. Hulme and Mosley (1996) argue that credit is only one factor that generates income or economic output; other complementary factors are also important for increasing the productivity of credit. Consequently, MFIs must provide other social services in addition to their financial products, including business skills, selection and motivation of micro-entrepreneurs, and business and technical training all services that will help to generate decent jobs and improve borrowers' standard of living.

Moreover, a positive effect on growth might not be achieved in countries with weak institutions characterized by poor enforceability of contracts (Bae and Goyal, 2006). Also, most borrowers may use microfinance credit for consumption purposes, which, of course, would not generate income. (Karnani, 2007) argues that "*Most people do not have the skills, vision, creativity, and persistence to be entrepreneurial. Even in developed countries with high levels of education and access to financial services, about 90% of the labour force is employees, not entrepreneurs*". Thus, MFIs must be selective about who they lend to and look for existing small enterprises in the informal sector instead of lending to very poor people without assets or entrepreneurial skills (Easterly, 2006). (Saqfalhait, 2011) emphasizes the importance of sound regulatory policy for MFIs. Therefore, microfinance should be accompanied by regulatory reform and well-designed, specialized financial institutions.

The high interest rates charged by MFIs may be another reason for the insignificant impact of MFIs on economic growth in Arab countries. Poor individuals are neither willing nor able to pay high interest rates charged by MFIs. Raising interest rates could be a favourable way for MFIs to reduce their dependency on donations, as doing so would lead to higher profits and thereby allow MFIs to access commercial banks. It is a fact that most MFIs in Arab countries are purely profit-motivated, rather than considerate of their social impact in addition to profit. As a result, it is expensive for low-income people to borrow from MFIs and establish small, productive enterprises that contribute to economic growth.

Regarding the economic aspects, Arab countries faced many difficulties during the Arab Spring, such as the decline in foreign direct investment and the increase in capital flight. Moreover, the credit rating of most Arab countries declined. Jordan's credit rating declined from Ba to B, which indicates a high credit risk. Indeed, over the last few years, many circumstances caused problems in Arab region. The global financial crisis and Arab Spring had a significant impact all over the Arab world; microfinance is one of the sectors that suffered most from the Arab Spring revolutions, on both the client and institutional level. According to MIX and Sanabel (2012) the revolutions impacted the internal operations of MFIs. In Egypt, for example, MFIs' operating expenses increased due to collection of loans under difficult circumstances. In Yemen and Tunisia, troubles in work schedules arose, along with an increase in staff turnover. This turnover, which also led to higher administrative costs, was particularly high among female employees. Additionally, some branches of MFIs closed altogether. The report also indicated that delayed repayments encouraged MFIs to cease issuing new loans and impose stricter loan terms.

CONCLUSION

This paper contributes to the efforts of existing literature through testing the importance of the microfinance and its role in enhancing economic growth in Arab countries. It also provides academics and researchers with information when studying on the microfinance sector, especially in Arab countries. The study analyses microfinance in Arab countries through the lens of its effects on GDP growth. This study contributes to the efforts of authorities and regulators through testing the importance of the microfinance and its role in promoting inclusive economic development. The study samples six Arab countries over the period 1999-2016, according to available data. Results show that there is no significant effect of MFI activity on economic growth in Arab countries. Therefore, financial services provided by MFIs may promote economic growth in other ways that do not involve increasing access to capital. These results may be due to many factors, including political realities, sectoral determinants, loan size, high interest rates, and moral hazards. Thus, to achieve improved economic performance by MFIs in Arab countries, this study recommends that there be sustainable and controlled loan portfolio growth, non-lenient lending policies, and reliance on effective tools to face risks, including solid strategies for risk management. Moreover, since interest gained from loans is viewed by MFIs as their most important source of income, initial borrowing costs should be lower. Finally, the paper suggests that more efforts are undertaken to draft legislation and develop regulatory frameworks related to the use of Islamic financial instruments in the microfinance sector.

REFERENCES

- Adonsou, F.D., & Sylwester, K. (2017). Growth effect of banks and microfinance: Evidence from developing countries. *The Quarterly Review of Economics and Finance*, 64, 44-56.
- Amin, Md., & Jalal Uddin, S. (2018). Microfinance-economic growth nexus: A case study on Grameen bank in Bangladesh. *International Journal of Islamic Economics and Finance*, 1(1).
- Assefa, H., & Meesters. (2013). Competition and the performance of microfinance institutions, applied financial economics. *Applied Financial Economics*, 23(9).
- Bae, H.K., & Goyal, V.K. (2006). Creditor rights, enforcement, and bank loans. *The Journal of Finance*, 64(2), 823-860.
- Chowdhury, A. (2009). Microfinance as a poverty reduction tool a critical assessment. *United Nations: Department of Economic and Social Affairs*, 89, 1-15.
- Dirks, F. (2011). Microfinance institutions and economic growth. *Journal of Business*, 250-267.
- Easterly, W. (2006). *The white man's burden: Why the west's efforts to aid the rest have done so much ill and so little good*. New York: Penguin Press.
- Hermes, N., Lensink, R., & Meesters, A. (2008). Outreach and efficiency of microfinance institutions. *SOM Research Reports*, 08002, 1-30.
- Hermes N., Lensink R., & Meesters A. (2009). Financial development and the efficiency of microfinance institutions. In Spence, L. J., Frynas, J. G., Muthuri, J. & Navare, J. (eds.), *Research Handbook on Small Business Social Responsibility: Global Perspectives* (pp.177-201). Cheltenham: Edward Elgar Publishing.
- Hulme, D., & Mosley, P. (1996). *Finance against poverty*. Routledge, London.
- Karnani, A. (2007). Microfinance Misses its Mark. *Stanford Social Innovation Review*, 34-40.
- Mia, Md. (2017). An overview of the microfinance sector in Bangladesh. *East Asian Journal of Business Management*, 7(2), 31-38.
- Mix Market (2017). Cross market analysis. Retrieved from Mix Market: <http://www.themix.org>
- Nargiza, M. (2010). Macroeconomics of microfinance: How do the channels work? *Working Paper Series*.
- Nwude, E., & Anyalechi, K. (2018). The impact of microfinance on rural economic growth: The Nigerian experience. *International Journal of Economics and Financial Issues*, 8(4), 27-31.
- Petrovito, F. (2009). Financial development and economic growth: A theoretical and empirical overview. *SSRN*. Retrieved from <https://ssrn.com>

- Raihan, S., Osmani, S.R., & BaquiKhalily, M.A. (2017). The macro impact of microfinance in Bangladesh: A CGE analysis. *Economic Modelling*, 62, 1-15.
- Saqfalhait, N. (2011). Microfinance regulation in Jordan: A comparative perspective with mena countries and other areas. *Applied Econometrics and International Development*, 11(1), 131-150.
- Vanroose, A., & D'Espallier, B. (2009). Microfinance and financial sector development. *Working Paper*.
- World Bank (2017). Retrieved from: World Bank: <http://databank.worldbank.org>
- Zhuang, J., Gunatilake, H., Niimi, Y., Khan, M.E., Jiang, Y., Hasan, R., Khor, N., Lagman Martin, A.S., Bracey, P., & Huang, B. (2009). Financial sector development, economic growth, and poverty reduction. *Working Paper Series*, (173), 1-48.

Print ISSN: 1096-3685
Online ISSN: 1528-2635