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# IMPACT OF MICROFINANCE IN ALLEVIATING POVERTY IN MENA COUNTRIES

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# **ABSTRACT**

Microfinance is a powerful development tool that can reach the poor, raise their living standards, create jobs, and contribute to economic growth. Developing the microfinance industry in the MENA Regions will require building local capacity, increasing the efficiency and sustainability of microfinance programs, and engaging the formal financial sector. Microfinance programs provide financial services, such as credit, deposit, and savings services to the entrepreneurial poor that are tailored to their needs. This study investigates the impact of microfinance on the GDP growth and the relationship between them in MENA countries, and raises the awareness of micro finance among people to run their businesses. Ordinary Least Square Regression method is used to exam the relationship between microfinance and its impacts on GDP growth. The liner regression model is used to measure the relationship between GDP growth and the indicators denoted by broad money, CPI, employment, import, export, and manufacturing. The chosen countries in this study consist of Algeria, Bahrain, Egypt, Jordan, Morocco, and Saudi Arabia. The results showed a significant and insignificant relationship between Microfinance and GDP growth in selected countries.

# **INTRODUCTION**

Microfinance is a group of banking services that provides loans, savings accounts, and insurance to individuals who have low-income or on the poverty line [1, 2]. In addition, Microfinance services can be found mostly in independent organizations that provide these services. However, some conventional banks do offer some type of Microfinance, and that is usually the microcredit/ micro-lending. This way, such services have helped many people

that are trapped in poverty to elevate or escape from it into better living conditions with this small loan, where many other institutions might not have given them.

Microfinance gives the borrowers the chance to have better education, health, credit, insurance, and savings account that can protect them from any unforeseen events which might happen in the future [3]. In addition, the type of customers how got to Microfinance institutions are usually unemployed and low-income individuals who can't get an affordable service from a conventional bank. Therefore, the main goal of Microfinance is to elevate poverty, promote education, better standards of living, and eventually a better economy. As a result, people become self-sufficient with their savings and insurance, while having money to grow a business or paying daily expenses.

Microfinance is an economic development approach that involves providing financial services, through institutions, to low-income clients, where the market fails to provide appropriate services. The services provided by the Microfinance Institutions (MFIs) include credit saving and insurance services. Many microfinance institutions also provide social intermediation services such as training and education, organizational support, health and skills in line with their development objectives.

According to Barr, Michael [4] and Kirsten Leikem [5] microfinance has provided important contributions to the development world. It has primarily focused on alleviating poverty through providing financial services to the poor, low-income households and micro-enterprises. According to James Roth [6], "Microfinance is a bit of a catch all-term. Very broadly, it refers to the provision of financial products targeted at low-income groups. These financial services include credit, savings and insurance products. A series of neologisms has emerged from the provision of these services, name micro-credit, microsavings and micro-insurance". The Canadian International Development Agency (CIDA) defines microfinance as, "the provision of a broad range of financial services to poor, low-income households and micro-enterprises usually lacking access to formal financial institutions.

Khandker et al. [7], emphasize that Muhammad Yunus believed that everyone should have the opportunity to obtain credit in order to create opportunities to reduce poverty. Even today, Muhammed Yunus [8] strongly believes that credit is the main factor in modern economies and it is essentially the only way to obtain financial stability. In Muhammed Yunus book [8], he stated that it is essential to provide opportunities to the poor people. He wrote "Micro credit views each person as a potential entrepreneur and turns on the tiny economic engines of a rejected portion of society". Shahidir Khandker (1998), provided the first insight into the specific social mechanisms that microfinance institutes apply, such as group-based lending. Khandker [9] provided evidence that microfinance is effective in reducing poverty by giving individuals access to resources to grow independently as entrepreneurs. Khandker [9] stated that when poverty is the result of unemployment, it is essential to create new jobs to reduce poverty. On the other hand, when poverty stems from low income and productivity, it is important to invest in physical capital. This is where the

concept of microfinance is effective in providing the essentials that the poor lack. Easily accessible credit from MFIs will produce self-employment for the poor, providing a realistic price that the individuals will be able to afford. Khandker [9] is the first to analyze microfinance's success in poverty reduction. However, he doesn't mention the specifics characteristics of countries and how microfinance varies due to those characteristics. (Elaine Chamberlain [10] explored in previous study the various factors which affect the microfinance sector in the Middle East and North Africa region. Also, he defined microfinance "is a system of decentralized bankers lending to the poor in order to improve economic systems and emphasize entrepreneurial development".

To clarify more, the term micro-credit is the same as micro-lending and micro-loan, which is used a lot in the Microfinance field. However, it is not as new as many might think. Moreover, as the name and services suggest, Microfinance is designed for people who are in need. Therefore, most Microfinance institutions are in the developing countries like India, or virtual institutions that reach out to more people in need even in the developed countries like Kiva.org. Another key term is default, which refers to the failure to pay back the principle and the interest required to the lender from the borrower. In addition, default risk occurs only when the borrower is unable or unwilling to meet the obligations and thus, doesn't pay what is due. However, in Microfinance, the default risk is fairly low as people tend to pay small obligations more than larger ones. As a result, such institutions prefer to keep everything in a small range to increase the likelihood of getting them back on time. Therefore, this study identifies the impact of micro finance in alleviating poverty in MENA countries

# **METHODOLOGY**

This research used Ordinary Least Square (OLS), which is one of the techniques that used in liner regression model to measure the relationship between GDP growth and the indicators (broad money, CPI, employment, import, export, and manufacturing) that effect on it.

# Quantitative Approach

Quantitative research is the collection of numerical data as well as analysis for various sorts of measurements. Though quantitative research is tough to design, but result achievement of precise and accuracy can help to judge statistics. One of the reasons for carrying qualitative approach along with quantitative is to gather data according to data that collected from the financial reports. All the data would provide distinct information that would be feasible for this research and findings. Moreover, the data selection would be carried among from different data reports and the aim would collection of data as well as remarks that would definitely consider as value adding feature for this research.

# The Model

The model that used in this study to find the impacts of broad money, CPI, employment, export, import, and manufacturing on GDP growth is Ordinary

Least Square (OLS). OLS is a statistical technique to determine the line of best fit for a model. The least squares method is specified by an equation with certain parameters to observed data. This method is extensively used in regression analysis and estimation.

According to Hutcheson [11], OLS is considered as one of the major techniques used to analyse data and forms the basis of many other techniques for example ANOVA and the generalized linear models. Also, OLS regression is particularly powerful as it relatively easy to also check the model assumption such as linearity, constant variance and the effect of outliers using simple graphical methods the technique may be applied to single or multiple explanatory variables and also categorical explanatory variables that have been appropriately coded. The OLS regression equation used to identify the relationship between GDP growth and Microfinance, and identifies the impact on each other.

#### RESULT AND DISCUSSION

In this study, the OLS regression method is used to investigate the impact of microfinance on GDP growth in MENA countries (Algeria, Bahrain, Egypt, Jordan, Morocco, and Saudi Arabia). Microsoft Excel is used to obtain the results of Microfinance impacts on GDP growth.

# Algeria

GDP Growth = 0.41 + 0.13BroadMoney + 0.03 CPI + (-0.08) Employment + 0.30 Export + 0.09 Import + 0.06Manufacturing

P Value = (0.66) (0.00) (0.10) (0.09) (1.38) (0.00) (0.28)

There is a significant relationship between microfinance (Broad Money) and GDP growth in Algeria (at ANOVA Significant F of 5.68225E-16). The R-square shows that 80 percent of the variations in GDP growth are explained by broad money, CPI, employment, exports, import and manufacturing. The graph in Figure 1 shows that there is a positive relationship between broad money and GDP growth in Algeria. That means the GDP growth is increasing.

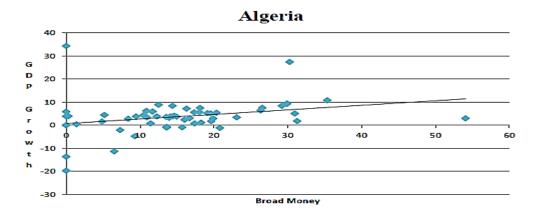


Figure 1. Relationship Between Broad Money and GDP Growth in Algeria

### Bahrain

GDP Growth = (-0.813) + 0.03BroadMoney + 0.02CPI+ 0.05Employment + 0.02Export+ 0.06Import + (-0.24) Manufacturing

P Value = (0.43) (0.15) (0.21) (0.00) (0.95) (0.54) (0.56)

There is a significant relationship between microfinance (Broad Money) and GDP growth in Bahrain (at ANOVA Significant F of 0.0002). The R-square shows that 40 percent of the variations in GDP growth are explained by broad money, CPI, employment, exports, import and manufacturing. The graph in Figure 2 shows that there is a positive relationship between Microfinance (Broad Money) and GDP growth in Bahrain. So, the GDP growth is increase.

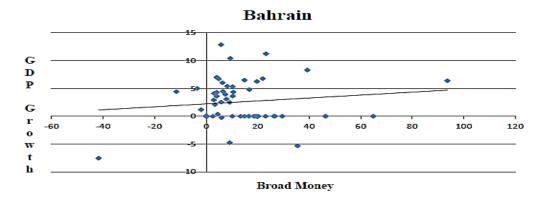


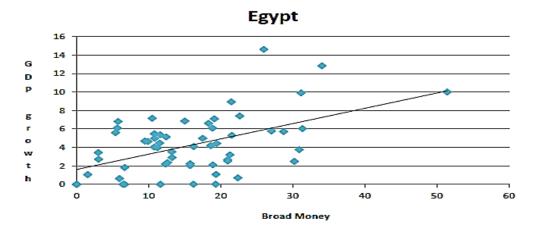
Figure 2. Relationship Between Broad Money and GDP Growth in Bahrain

# Egypt

GDP Growth = 1.30 + 0.13BroadMoney + 0.00CPI + (-0.01) Employment + 0.14Export + (-0.03) Import + 0.17Manufacturing

P Value = (0.11) (0.00) (0.87) (0.59) (0.00) (0.30) (0.22)

There is a significant relationship between microfinance and GDP growth in Egypt (at ANOVA Significant F of 5.54825E-05). The R-square shows that 43 percent of the variations in GDP growth are explained by broad money, CPI, employment, exports, import and manufacturing. The graph in Figure 3 shows a positive relationship between Microfinance (Broad Money) and GDP growth in Egypt. So, there is increasing in GDP growth.



**Figure 3.** Relationship Between Broad Money and GDP Growth in Egypt *Jordan* 

GDP Growth = (-1.37) + 0.23BroadMoney + 0.00CPI + 0.07Employment + 0.09Export + 0.02Import + 0.13Manufacturing

P Value = (0.50) (0.02) (0.92) (0.30) (0.38) (0.75) (0.21)

There is a significant relationship between microfinance (Broad Money) and GDP growth in Jordan (at ANOVA Significant F of 0.045854953). The R-square shows that 22 percent of the variations in GDP growth are explained by broad money, CPI, employment, exports, import and manufacturing. The graph in Figure 4 shows a positive relationship between broad money and GDP growth in Jordan, which is means the GDP is increasing.

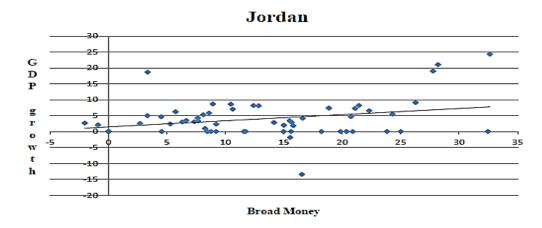


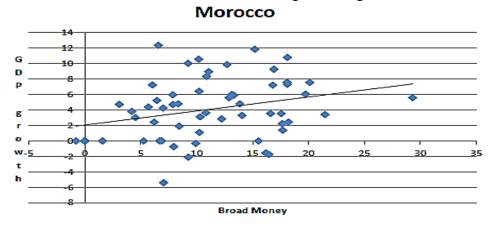
Figure 4. Relationship between Broad Money and GDP growth in Jordan

# Morocco

GDP Growth = 0.97 + 0.09BroadMoney + 0.03CPI + (-0.04) Employment + 0.06Export + 0.02Import + 0.25Manufacturing

P Value= (0.50) (0.33) (0.38) (0.45) (0.37) (0.68) (0.27)

There is an insignificant relationship between microfinance (broad money) and GDP growth in Morocco (at ANOVA Significant F of 0.152622598). The R-square shows that 16 percent of the variations in GDP growth are explained by broad money, CPI, employment, exports, import and manufacturing. The graph in Figure 5 shows the positive relationship between GDP growth and Microfinance in Morocco. There is increasing in GDP growth.



**Figure 5.** Relationship Between Broad Money and GDP Growth in Morocco

# Saudi Arabia

GDP Growth = 1.87 + 0.14BroadMoney + (-0.06) CPI + 0.06Employment + 0.59Export+ 0.02Import + 0.44Manufacturing

P Value= (0.38) (0.00) (0.06) (0.12) (0.37) (0.96) (0.00)

There is a significant relationship between microfinance and GDP growth in Saudi Arabia (at ANOVA Significant F of 0.003567913). The R-square shows that 31 percent of the variations in GDP growth are explained by broad money, CPI, employment, exports, import and manufacturing. The graph in Figure 6 shows that there is a positive relationship between Microfinance (Broad Money) and GDP growth in Saudi Arabia. Thus, the GDP growth is increasing.

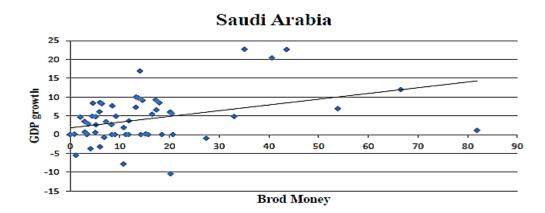


Figure 6. Relationship Between Broad Money and GDP Growth in Saudi Arabia

# **CONCLUSION**

This study examined the impact of microfinance on GDP growth for MENA countries. Annually data were used to apply ordinary least square regression model to correlate GDP growth and various financial indicators of microfinance in MENA region and measure the impacts. It found that some of the financial indicators (broad money, CPI, employment, export, import, and manufacturing) were significantly correlated with GDP growth and some were insignificant. Microfinance showed a positive effect on GDP growth which is means that it is useful tool to alleviate poverty in MENA region. The aim of microfinance is not only to provide capital to the poor to combat poverty it is also to effect change GDP growth.

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