# PalArch's Journal of Archaeology of Egypt / Egyptology

# IMPACT OF FINANCIAL DEVELOPMENT ON ECONOMIC GROWTH IN MENA COUNTRIES

Monira Osama Bashaikh<sup>1</sup>, Faisal Rana<sup>2</sup>

<sup>1,2</sup> College of Business, Effat University, Qasr Khuzam St., Kilo. 2, Old Mecca Road. P.O.BOX

34689, Jeddah 21478, Saudi Arabia

Email: <sup>1</sup>mbashikh@effat.edu.sa, <sup>2</sup>frana@aud.edu

Monira Osama Bashaikh, Faisal Rana Impact of Financial Development on Economic Growth in Mena Countries -- Palarch's Journal of Archaeology of Egypt/Egyptology 18(13), 228-240. ISSN 1567-214x

Keywords: Development, Economic, Financial, Growth, Ols, Relationship

#### ABSTRACT

Financial development and economic growth are closely related terms and define each other. With more countries getting involved and clubbing their investments and money together allowing foreign trade and open market, many financial analysts have come to the point that there is a definite link between the financial development and the economic growth on a macro level. Financial development (both stock market and banking sector) is crucial to channelize savings into investment, thereby leading to economic growth but its impact changes across countries. Some financial analysts say the financial development is impact on economic growth. This study empirically examines the relationship between financial development and economic growth in MENA countries and the impact of financial development on economic growth in MENA countries over the period 2000-2015. The considered 14 MENA countries in this study are Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Tunisia, and UAE. The methodology used is quantitative thus presenting the numerical analysis for this research. The statistical method used to analyse numerical data is the ordinary least squares (OLS) thereby showing some important results as each country in the MENA had a different answer in defining the relationship. The obtained results show different significant relationship between GDP growth and financial development for each country.

# **INTRODUCTION**

Economic growth is important for a country to adhere to the competition and help the country sustain and survive during crises or any other events of the economy [1, 2]. Economic growth is defined as, "It is an increase in the capacity of an economy to produce goods and services, compared from one period of time to another" [3]. This means that the country should be able to

produce goods and services and have the ability to distribute it within the country and outside as well and this is calculated as GDP annually. Economic growth is not just related to making money; but other factors also influence or signify the growth of the economy like increased standard of living, higher birth rates, good health and educational systems, development of public services such as roads, parks, public transport, etc [4]. There are a lot of factors that have influenced the growth of the economy. The causes of economic growth are probably due to technological advancements, people specializing in different skills, developed economic resources, increased capital and efficient use of all the factors of the production [5].

Cherif & Kandil [6] stated in their research about the link between these two terms, "Development of the financial system is lead to economic development. Indeed, the stage of development and the depth of the financial sector are key elements that differentiate developed countries." This explains that according to the new investigation and studies carried out by the analysts and the researchers showed that they are related and are often linked to each other when comparing the development of the country on a whole. Due to the globalization, Arab countries have reformed many of the financial sectors to help and support the finance and economy of the country [7].

Khaled et al. [8] depicted in their research by their statement, "The majority of the Arab countries perform structural adjustment programs in order to develop, improve, their financial and banking sector. This is due to the awareness that developed within the Arab countries has an important role in enforcing and stabilizing their economic growth." Instead of just relying on the oil sources, they worked a lot to reform and structure their financial systems thereby developing banking and investment opportunities and choices. This automatically led to the economic growth in the countries too.

Eugene Iheanacho [9] claims the relationship between financial development and economic growth in Nigeria is found to be negative in the long-run and short-run over the period 1981–2011 using the auto-regressive distributed lag (ARDL) approach. This because controlling of the public sector and the weakness of the private sector in generating economic activities in the economy as a result the dependence of the economy on oil wealth. Bassil and Hamadi [10] show the results reject that financial development is unrelated to economic growth. Stock market development and bank development proved to be positive and importance to the economic growth during periods of stability. The data collecting from 13 MENA countries over the period 1988–2009 uses recent GMM techniques developed for dynamic panels. Wang et al. [11] shows that financial development has a negative effect on economic growth in general, but on the growth of industry in specifically. Also, it shows that financial development has no significant effect on the primary and secondary industries.

When considering financial development, people usually consider banking sector as the area of finance that is related to the economic conditions. This is true in addition to the fact that along with the banking industry, other fields of finance have also contributed to the rate of economic growth. MENA countries instead of just relying on the oil sources, they worked a lot to reform and structure their financial systems thereby developing banking and investment opportunities and choices. This automatically led to the economic growth in the countries too. Therefore, this study identifies connection between financial development and economic growth and will study how it has impacted the MENA countries.

# METHODOLOGY

This study used quantitative approach to determine the impact of financial development on economic growth in MENA Countries.

# **Data Collection**

The financial data of this study are obtained from word development indicators. The considered variables in this study are (GDP growth, broad money, consumer price index, Gross saving, market capitalization, Stocks traded turnover ratio, trade). The study uses the data from period 2000-2015. This study considered 14 MENA countries, namely Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Tunisia, and UAE.

# Data Assessment

Descriptive statistical analyses are performed and Scatter plot are executed on the 14 countries accordingly.

The ordinary least squares (OLS) methodology is used to examine the impact of financial development indicators on economic growth indicators in MENA countries.

# **RESULT AND DISCUSSION**

The graph of scatter plot shows the relation between economic growth and financial development (banks). The variables used are GDP growth with broad money.

In Figure 1, Bahrain shows the positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

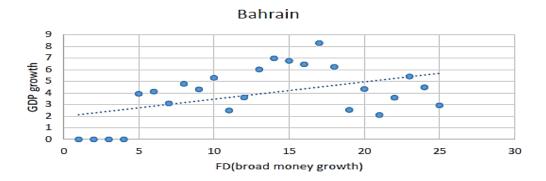


Figure 1. Scatter Plot Of GDP Vs Board Money In Bahrain

In Figure 2, Egypt shows the positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

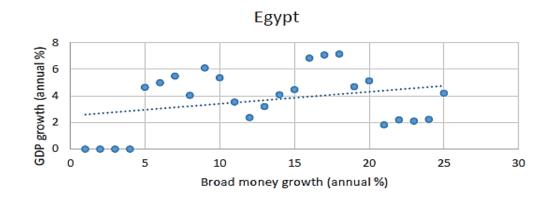


Figure 2. Scatter Plot Of GDP Vs Board Money In Egypt

In Figure 3, Iran shows the positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

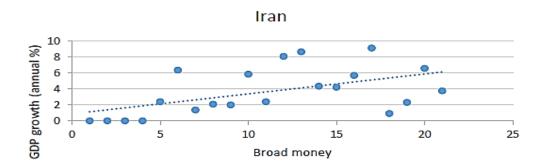


Figure 3. Scatter Plot Of GDP Vs Board Money In Iran

In Figure 4, Jordan shows the positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

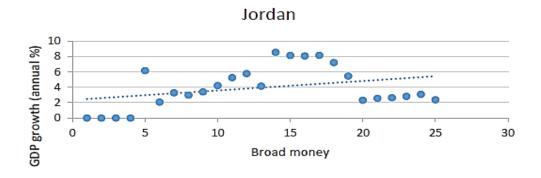


Figure 4. Scatter Plot Of GDP Vs Board Money In Jordan

In Figure 5, Kuwait shows trend to positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

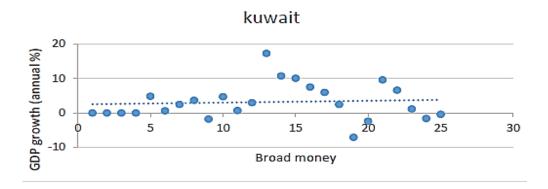


Figure 5. Scatter plot of GDP vs Board Money in Kuwait

In Figure 6, Lebanon shows a positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

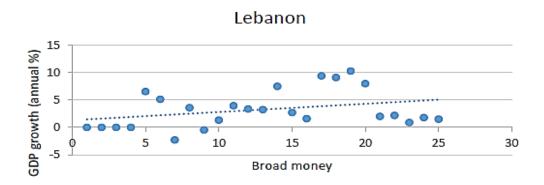


Figure 6. Scatter Plot Of GDP Vs Board Money In Lebanon

In Figure 7, Libya shows no relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth will not effect.

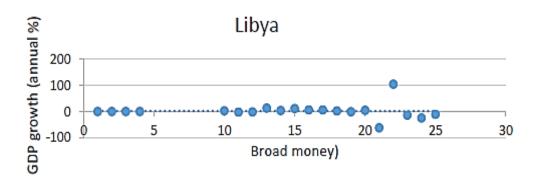


Figure 7. Scatter Plot Of GDP Vs Board Money In Libya

In Figure 8, Morocco shows the positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

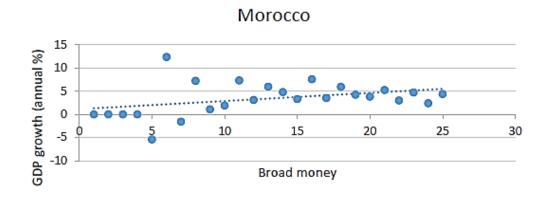


Figure 8. Scatter Plot Of GDP Vs Board Money In Morocco

In Figure 9, Oman shows the positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

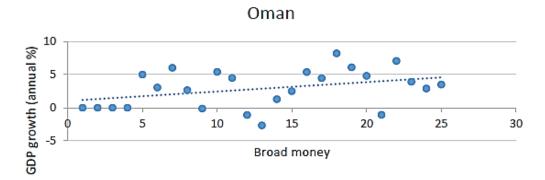


Figure 9. Scatter Plot Of GDP Vs Board Money In Oman

In Figure 10, Qatar shows the positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

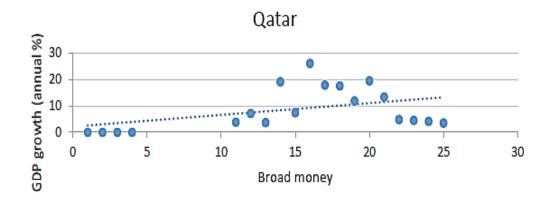


Figure 10. Scatter Plot Of GDP Vs Board Money In Qatar

In Figure 11, Saudi Arabia shows the positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

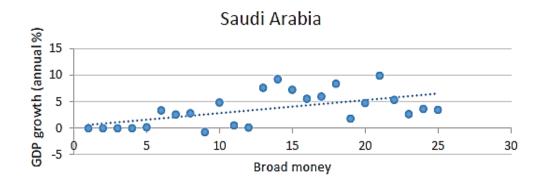


Figure 11. Scatter Plot Of GDP Vs Board Money In Saudi Arabia

In Figure 12, Sudan shows trend to positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

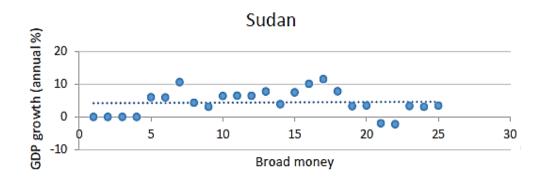


Figure 12. Scatter Plot Of GDP Vs Board Money In Sudan

In Figure 13, Tunisia shows trend to positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.

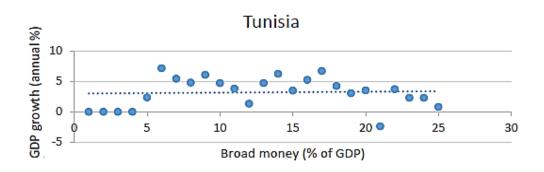
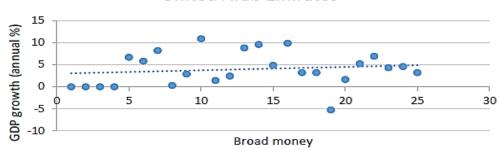


Figure 13. Scatter Plot Of GDP Vs Board Money In Tunisia

In Figure 14, United Arab Emirates shows a positive relationship between GDP growth and finance development (broad money growth) it tells us if the finance development (banks) increases the economic growth also increase.



United Arab Emirates

Figure 14. Scatter Plot Of GDP Vs Board Money In UAE

Almost all the country graphs show or trend to positive relationship between GDP growth and finance development (broad money growth) this mean if finance development (banks) increase, the economic growth also increases.

# **ORDINARY LEAST SQUARES**

This study employs ordinary least squares (OLS) methodology to examine the impact of financial development indicators on economic growth indicators in MENA countries.

# Bahrain

GDP growth = 3.27 + 0.078BroadMoney - 0.012CPI + 0.042Savings + 0.00Trade+ 0.00market capitalization - 0.023stock trade

P-Value = (0.17) (0.81) (0.36) (0.95) (0.46) (0.88)

There is no significant relationship between GDP growth and financial development in Bahrain. The R-square shows that 53 percent of the variations in GDP growth are explained by broad money, CPI, savings and trade, market capitalization and stock trade.

# Egypt

 $GDP \ growth = 9.50 - 0.074 BroadMoney - 0.049 CPI - 0.261 Savings + 0.067 Trade+ 0.03 market capitalization + 0.00 stock trade$ 

P- Value = (0.37) (0.00) (0.05) (0.20) (0.03) (0.63)

The broad money is insignificant however CPI, saving and market capitalization significant relationship between GDP growth and the financial development in Egypt. The OLS estimations indicate that a 1 percentage point increase in CPI, saving, market capitalization leads to - 0.27 percentage point increase in GDP growth. The R-square shows that 69 percent of the variations in GDP growth are explained by broad money, CPI, savings, trade, market capitalization and stock trade.

Iran

GDP growth = -8.46 + 0.345BroadMoney + 0.033CPI + 0.018 Savings + 0.086Trade - 0.037market capitalization - 0.091stock trade

P- Value = (0.04) (0.14) (0.81) (0.48) (0.63) (0.49)

There is a significant relationship between GDP growth and financial development (broad money) in Iran. The OLS estimations indicate that a 1 percentage point increase in broad money leads to 0.345 percentage point increase in GDP growth. The R-square shows that 62 percent of the variations in GDP growth are explained by broad money, CPI, savings, trade and market capitalization and stock trade.

# Jordan

GDP growth = -3.70 + 0.152BroadMoney -0.028 CPI -0.071 Savings +0.088Trade+0.00market capitalization -0.014stock trade

P- Value = (0.02) (0.31) (0.45) (0.00) (0.95) (0.73)There is a significant relationship between CDP

There is a significant relationship between GDP growth and financial development (broad money and trade) in Jordan. The OLS estimations indicate that a 1 percentage point increase in broad money and trade leads to 0.024 percentage point increase in GDP growth. The R-square shows that 71 percent of the variations in GDP growth are explained by broad money, CPI, savings, trade, market capitalization and stock trade.

# Kuwait

 $GDP \ growth = -9.02 - 0.214 BroadMoney + 0.068 CPI + 0.339 Savings - 0.130 Trade + 0.128 market capitalization - 0.062 stock trade$ 

P- Value = (0.47) (0.53) (0.13) (0.29) (0.00) (0.15)

The broad money is insignificant however the market capitalization significant relationship between GDP growth and financial development in Kuwait. The OLS estimations indicate that a 1 percentage point increase in market capitalization leads to 0.128 percentage point increase in GDP growth. The R-square shows that 56 percent of the variations in GDP growth are explained by broad money, CPI, savings, trade, market capitalization and stock trade.

# Lebanon

GDP growth = 0.07 - 0.034Broad Money + 0.018CPI - 0.146Savings - 0.021trade + 0.223market capitalization - 0.232stock trade

P- Value = (0.79) (0.34) (0.20) (0.65) (0.00) (0.04)

The broad money is insignificant however market capitalization and stock trade significant relationship between GDP growth and financial development in Lebanon. The OLS estimations indicate that a 1 percentage point increase in market capitalization and stock trade leads to -0.008 percentage point increase in GDP growth. The R-square shows that 62 percent of the variations in GDP growth are explained by broad money, CPI, savings, market capitalization and stock trade.

#### Libya

GDP growth = -33.04 - 0.058BroadMoney + 0.301CPI + 0.301Savings + 0.126Trade + 0.00market capitalization - 0.00stock trade

P- Value = (0.51) (0.28) (0.47) (0.63) (-) (-)

There is no significant relationship between GDP growth and financial development in Libya. The R-square shows that 10 percent of the variations in GDP growth are explained by broad money, CPI, savings and trade, market capitalization and stock trade.

# Morocco

GDP growth = -2.50 - 0.168BroadMoney + 0.068CPI + 0.366Savings - 0.123Trade - 0.014market capitalization + 0.136stock trade P- Value = (0.42) (0.70) (0.27) (0.28) (0.98) (0.98)

There is no significant relationship between GDP growth and financial development in Morocco. The R-square shows that 15 percent of the variations in GDP growth are explained by broad money, CPI, savings and trade, market capitalization and stock trade.

## Oman

GDP growth = -1.35 + 7.853BroadMoney + 0.021CPI + 0.043Savings - 0.017Trade + 0.02market capitalization + 0.132stock trade

P-Value = (0.99) (0.48) (0.69) (0.63) (0.66) (0.05)

The broad money is insignificant however stock trade significant relationship between GDP growth and financial development in Oman. The OLS estimations indicate that a 1 percentage point increase in stock trade leads to 0.132 percentage point increase in GDP growth. The R-square shows that 47 percent of the variations in GDP growth are explained by broad money, CPI, savings, market capitalization and stock trade.

#### Qatar

GDP growth = -81.36 + 0.012BroadMoney + 0.427CPI - 0.367Savings + 0.664Trade - 0.047market capitalization - 0.049stock trade P- Value = (0.95) (0.00) (0.04) (0.21) (0.42) (0.74)

The broad money is insignificant however CPI and saving significant relationship between GDP growth and financial development in Qatar. The OLS estimations indicate that a 1 percentage point increase CPI and saving leads to 0.06 percentage point increase in GDP growth. The R-square shows that 67 percent of the variations in GDP growth are explained by broad money, CPI, savings, market capitalization and stock trade.

# Saudi Arabia

GDP growth = -6.68 - 0.234BroadMoney + 0.027CPI + 0.249Savings + 0.040Trade - 0.082market capitalization + 0.021stock trade

P-Value = (0.29) (0.79) (0.08) (0.78) (0.23) (0.62)

The broad money is insignificant however saving significant relationship between GDP growth and financial development in Saudi Arabia. The OLS estimations indicate that a 1 percentage point increase saving leads to 0.06 percentage point increase in GDP growth. The R-square shows that 55 percent of the variations in GDP growth are explained by broad money, CPI, savings, market capitalization and stock trade.

# Sudan

GDP growth = 6.15 - 0.038BroadMoney - 0.016CPI - 0.071Savings + 0.095Trade + 0market capitalization + 0stock trade

P-Value = (0.67) (0.17) (0.71) (0.47) (-) (-)

There is no significant relationship between GDP growth and financial development in Sudan. The R-square shows that 24 percent of the variations in GDP growth are explained by broad money, CPI, savings and trade, market capitalization and stock trade.

# Tunisia

GDP growth = 1.82 + 0.161BroadMoney - 0.016CPI + 0.204 Savings - 0.021Trade - 0.00market capitalization - 0.104stock trade

P- Value = (0.25) (0.83) (0.56) (0.63) (0.98) (0.71)

There is no significant relationship between GDP growth and financial development in Tunisia. The R-square shows that 53 percent of the variations in GDP growth are explained by broad money, CPI, savings and trade, market capitalization and stock trade.

# UAE

GDP growth = 5.10 + 0.029 BroadMoney - 0.027 CPI + 0 Savings - 0.006 Trade + 0.001 market capitalization - 0.019 stock trade

P- Value = (0.81) (0.42) (-) (-) (0.98) (0.76)

There is no significant relationship between GDP growth and financial development in United Arab Emirates. The R-square shows that 17 percent of the variations in GDP growth are explained by broad money, CPI, savings and trade, market capitalization and stock trade.

#### **OVERALL DISCUSSION**

The summarise result of the ordinary least squares (OLS) on each country based on the data obtained from World Development Bank are:

• In Bahrain, there is no significant relationship between GDP growth and financial development.

• In Egypt, CPI, saving and market capitalization significant relationship between GDP growth and the financial development.

• In Iran, a significant relationship between GDP growth and financial development (broad money).

• In Jordan, a significant relationship between GDP growth and financial development (broad money and trade).

• In Kuwait, the market capitalization significant relationship between GDP growth and financial development.

• In Lebanon, the market capitalization and stock trade significant relationship between GDP growth and financial development.

• In Libya, there is no significant relationship between GDP growth and financial development.

• In Morocco, there is no significant relationship between GDP growth and financial development.

• In Oman, the stock trade significant relationship between GDP growth and financial development.

• In Qatar, the CPI and saving significant relationship between GDP growth and financial development.

• The broad money is insignificant however saving significant relationship between GDP growth and financial development in Saudi Arabia.

• In Saudi Arabia, saving significant relationship between GDP growth and financial development.

• In Sudan, there is no significant relationship between GDP growth and financial development.

• In Tunisia, there is no significant relationship between GDP growth and financial development.

• In United Arab Emirates, there is no significant relationship between GDP growth and financial development.

#### CONCLUSION

The relationship between financial development and economic growth has always been available to discuss. This is probably due to the changing results in different countries produce based on their change in economic conditions and financial markets. Different countries all across the world have different economic conditions due to which they have a different relationship with that of their financial market. Each of them grows and develops differently with different ratios. The 14 countries in the MENA region produced different relationship between two variables. Some showed positive relationship while some describe negative and the others showed no relation at all. The results obtained from the OLS helped to determine the real level of development attained by the financial sectors of the MENA economies, the growth of the economy and show the linkages through the financial development have influenced growth of these economies.

#### REFERENCES

- Maurice, E. S. 2013. Is competition always good? Journal of Antitrust Enforcement. 1, 1, 162–197.
- Mukherji, R. 2009. The State, Economic Growth, and Development in India. *India Review.* 8, 1, 81-106.
- Das, R. 2017. Handbook of research on economic, financial, and industrial impacts on infrastructure development. 60-61.
- Brooks, D., Hasan, R., Lee, J., Son, H. and Zhuang, J. 2010. Closing Development Gaps: Challenges and Policy Options. *Adb.org*. Retrieved September 7, 2019 from https://www.adb.org/sites/default/files/publication/28416/economicswp209.pdf.

- Peterson, E. 2017. The Role of Population in Economic Growth. *SAGE Open*. 7, 4, 1-15.
- Cherif, M., Kandil, M. and Naceur, S. M. 2014. What drives the development of the MENA financial sector? *Borsa Istanbul Review*. 14, 4, 212 223.
- Hamed El-Said, and Harrigan, J. 2006. Globalization, International Finance, and Political Islam in the Arab World. *Middle East Journal*, 60, 3. 444-466. Retrieved September 7, 2019 from http://www.jstor.org/stable/4330281
- Khaled, A. Z., Mhareb, A. E. and Samer, A. R. 2006. Financial development and economic growth, a new empirical evidence from the MENA countries, 1989-2001. Applied Econometrics and International Development. 6-3.
- Iheanacho, E. 2016. The Impact of Financial Development on Economic Growth in Nigeria: An ARDL Analysis. *Economies.* 4, 4, 26.
- Bassil, C. and Hammadi, H. 2015. Financial Development and Economic Growth in the MENA Region. *Comparative Economic Studies*. 57, 4, 598-622.
- Wang, Y., Li, X. Y., Abdou, H. and Ntim, C. G. 2015. Financial Development and Economic Growth in China. *Investment Management and Financial Innovations*, 13, 3, 8-18.