

KUWAIT STOCK MARKET DEVELOPMENT AND ECONOMIC GROWTH

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Abstract: *This study investigated the relationship between stock market development and economic growth in Kuwait. The methodology used included the ordinary least square of multiple regression analysis (OLS) and Pairwise Granger Causality Test. The data covered the period from 2001Q1 to 2019Q4. The results from OLS show a significant positive relationship between the stock market and economic development. In contrast, the findings of this study revealed a one-way causation from market capitalization to economic growth and from the Kuwait stock market index to economic growth.*

Keywords: *Kuwait Stock Market, Stock Market development, OLS, Economic Growth and Kuwait Stock Market Index.*

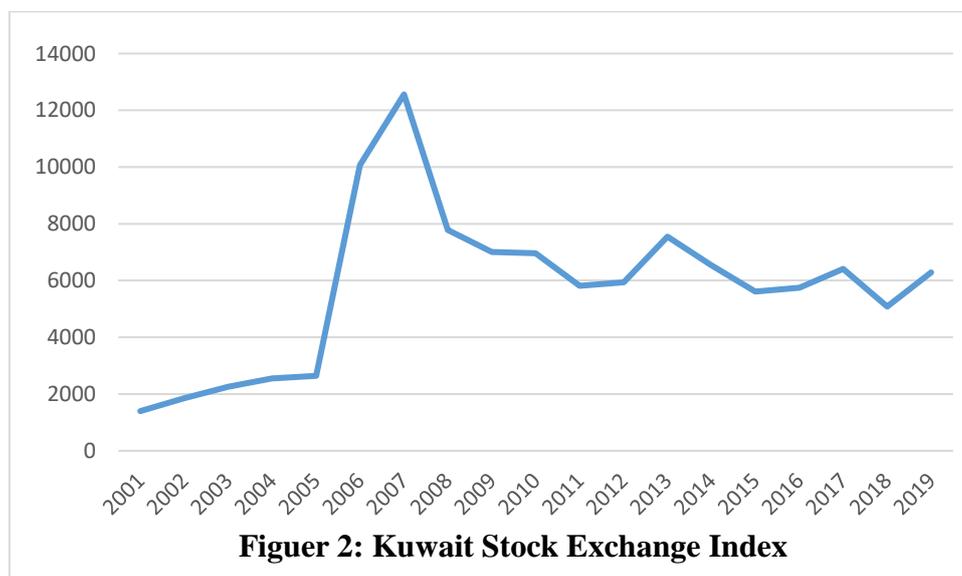
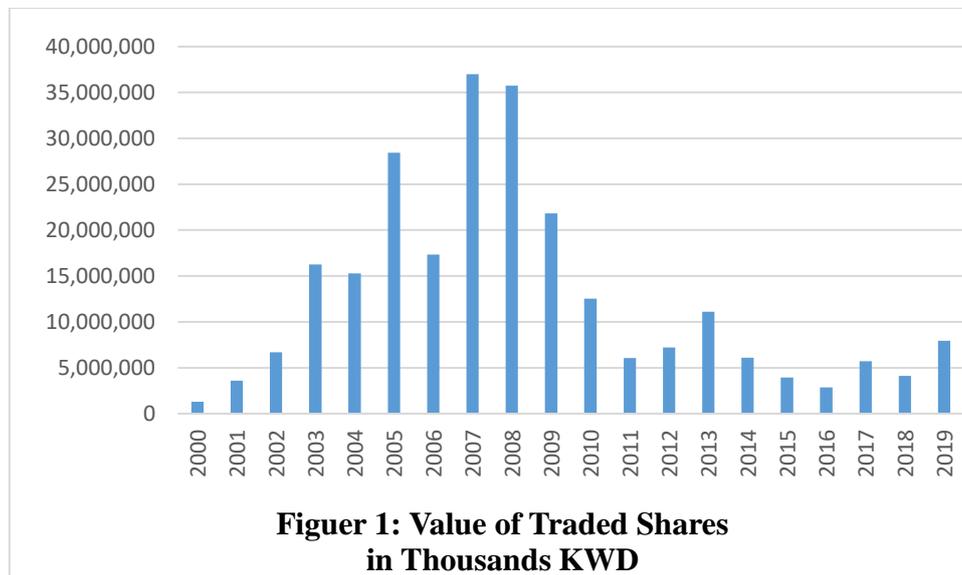
Introduction

Stock markets play an essential role in the country's economy as they mediate between surplus and deficit units efficiently to create new economic units that are supposed to contribute to and also create new opportunities and products that participate directly or indirectly in economic growth. In this context, a large number of studies have examined the relationship between stock market development and economic growth, such as Bahadur and Newpane (2007), Bernard and Austin (2012), Abubakar (2016), and Pan and Mishra (2018). The results of these studies are contradictory, as some of them indicate a positive relationship between the stock market and economic growth while others detect no significant relationship or even a negative one. These results might be due to either the methodology or data used. However, most of these studies found that stock market development has positive effects on economic growth. This study aims to examine the relationship between Kuwaiti stock market development and economic growth in Kuwait. Kuwait is considered to be a good case for examining such a relationship. The question that the study explores is whether the stock market contributes positively to economic

growth in Kuwait. In other words, does this market play a developmental role in the Kuwaiti economy or is it simply recycling surplus funds in the secondary market only.

Review of The Kuwaiti Stock Exchange

The Kuwaiti Stock Exchange (KSE, hereafter) was established on April 2 1977, and is believed to be the oldest stock market among the GCC stock markets. At the end of 2019, there were 175 listed shareholder companies in the KSE. However, since 2010, the KSE has witnessed significant regulatory changes, targeting the liberation and upgrading of the KSE to the level of the other emerging stock markets across the world. Figure 1 shows the value of traded shares in the KSE during the period from 2001 to 2019. It is clear that the highest value traded was in 2007 while, in 2019, the value of traded shares reached about 7.9 billion K.D. Moreover, Figure 2 shows the Kuwaiti stock market index during the period from 2001 to 2019. It also reached its highest level in 2007.



Literature Review

A large number of studies have tested the effect of stock market development on economic growth. It is challenging to address all of the studies that have examined this topic so, in this part of the research, we will briefly present the most important recent studies on the relationship between stock market development and economic growth, with a greater focus on developing countries. However, an early argument by Schumpeter (1911) indicated the importance of the role of the financial and banking sector in economic growth in terms of financing technology projects and inventions that would produce, through entrepreneurs, new products that contribute to economic growth. Caporale et al. (2004) argued that well-developed stock markets could affect economic growth positively in the long term. In another study, Janor et al. (2005) used the ARDL model and revealed that the Malaysian stock market is leading the changes in economic development. At the same time, Bahadur and Neupane (2007) investigated the relationship between the Nepalese stock market and economic growth for the period from 1988 to 2005. They concluded that the stock market in Nepal plays a vital role in economic development. However, Nowbutsing and Odit (2009) examined the role of the stock market on economic growth in Mauritius for the period from 1989 to 2006 and reported that the stock market positively impacts economic growth in Mauritius in both the short- and long-run.

On the other hand, in the case of Nigeria, for example, several researchers, such as Nurudeen (2009), Alajekwu and Achugbu (2012), Ejededawe (2014), Adigwe et al. (2015), Nwaolisa and Chijindu (2016), Owen (2020), and Sikiru and Yusuf (2020), found a positive relationship between the stock market and economic growth, while others, like Osakwe and Ananwude (2017), Ananwude and Osakwe (2017), Nzomo and Dombou-Tagne (2017), and Ezeibekwe (2019), revealed that there was no relationship between the stock market and economic growth, which led them to conclude that the stock market does not play a vital role in economic growth in Nigeria. In this context, these differing results may be due to either the methodology or data employed.

Jecheche (2011) reported a positive long- and short-term relationship between stock market development and economic growth in another African country (Zimbabwe) for the period from 1991 to 2007; while Mundena et al. (2019) investigated the dynamic relationship between stock market development and economic growth in Zambia for the period from 1996 to 2015 and revealed that there is unidirectional causality from market capitalization to economic growth. Furthermore, a study by Boubakari and Jin (2010) examined the relationship between the stock market and economic growth in five selected countries (Belgium, France, Portugal, the Netherlands and the U.K.) for the period from 1995 to 2008 and demonstrated a positive relationship between the stock market and economic growth in France, the Netherlands and the U.K., while no significant causation was found for Belgium or Portugal. The researchers argued that stock market liquidity plays a crucial role in economic development. However, Kajurova and Rozmahel (2016) reported a significant short-run impact of the stock market only development on economic growth in the European Union countries.

Similarly, Touny (2012) examined the relationship between stock market development and economic growth for selected Arab countries (Bahrain, Egypt, Jordan, Oman, Qatar, Saudi Arabia, Tunis, and United Arab Emirates) for the period from 1980 to 2008 and revealed that the former positively influences the latter in these countries. Saleh et al. (2015) investigated the effect of insurance and bank shares on economic growth in Jordan for the period from 1998 to

2014 and reported that the bank and insurance stock markets have positive effects on economic growth in that country. Moreover, numerous studies based in other countries, such as Serbia, Bangladesh, Turkey, Sri Lanka, India, and China, produced similar findings. Marinkovic et al. (2013), for example, investigated the relationship between stock market development and economic growth in Serbia for the period from 2002 to 2011. They revealed that stock market liquidity granger causes economic growth in Serbia. Mia et al. (2014), meanwhile, examined the relationship between stock market development and economic growth in Bangladesh for the period from 2000 to 2013. They reported long-run bi-directional causality between the stock market and economic growth. In the short-run, there is one-way causality from stock market development to economic growth. Bayar and Yildirim (2014), on the other hand, explored the relationship between stock market development and economic growth in Turkey for the period from 1999 to 2013. They reported a significant long-run relationship between economic growth in Turkey and the total value of traded stocks, turnover ratio and stock market capitalization. DAI and AWGCN (2015) studied the relationship between stock market development and economic growth in Sri Lanka for the period from 2004 to 2014, and their results show the existence of a long-run equilibrium between stock market development and economic growth. Sharif and Afshan (2016) examined the relationship between stock market development and economic growth in Pakistan for the period from 2002 to 2011. They reported that there is a significant positive impact of stock market development on economic growth in that country. A recent study of Pakistan by Karman et al. (2018) employed a Ordinary Least Square (OLS) and Fully Modified Ordinary Least Square (FMOLS) approach to assess the period from 2000 to 2017. Their results show that there is a positive relationship between economic growth and foreign direct investment (DFDI), and stock market capitalization. In contrast, there is no relationship between stock market liquidity and economic growth. They argued that their results might be affected by deficient data.

Ruwaydah and Ushad (2015) revealed that there is a positive relationship between stock market development and economic growth in 15 countries, including Botswana, Malawi, Mauritius, Mozambique, Namibia, South Africa, the Seychelles, Swaziland, Tanzania, Zambia and Zimbabwe. Abubakar (2016) reported that the stock market in India has a negative influence on economic growth in the long-run while, in the short-run, the impact of the stock market on economic development is positive. Pan and Mishra (2018) examined the effects of the stock market on the Chinese economy for the period from 2007 to 2012. They used the ARDL model, and the results show no evidence of a relationship between the stock market and the real economy in the short-run. However, they reported a long-run negative association between the stock market index and the real sector of the economy.

In more recent studies, Tsauroi (2018), for example, investigated the role of stock market development in economic growth in 21 emerging countries. He revealed that stock market development has positive impacts on economic growth. In another study, Jiang (2019) argued that the co-movement of stock returns and economic growth in the U.S. is strong and fluctuating, while in China, it is weak but stable. On the other hand, Cave et al. (2019) concluded in their paper that there was a negative relationship between the banking sector and economic growth in 101 selected countries for the period from 1990 to 2014. They also reported a positive relationship between the stock market and economic growth in these countries.

Osaseri and Osamwonyi (2019) pointed out that stock market development has a positive correlation with BRIC'S economic growth, while Kapaya (2020) examined the impact of stock market development on economic growth in Tanzania for the period from 2001 to 2019. He reported that stock market development has a positive effect in the long-run. However, economic growth has a negative impact on the liquidity of the market in both the long- and short-runs. Having compared the results obtained in this study with a previous study by Abbas et al. (2016), in which they did not find a significant relationship between the stock market and economic growth, it may be argued that the role of the stock market in Tanzania has become important in promoting economic growth. This might be due to the fact that the Tanzanian stock market witnessed regulatory changes during this period.

Based on the foregoing literature review, we may argue that most of the previous studies have reached a general conclusion that the stock market plays a crucial role in the economic growth of countries. The more the markets are organized and open to foreign investment, the more they play a positive role in promoting the economic growth of the country.

Methodology and Data Analysis

This study uses the ordinary least squares (OLS) regression method to examine the following null hypotheses;

1. H_0 = There is no significant relationship between stock market size (MCGDP) and economic growth.
2. H_0 = There is no significant relationship between the stock market index (KSEI) and economic growth.
3. H_0 = There is no significant relationship between the value of traded shares (VALUGDP) and economic growth.

Thus, our model is specified as follows:

$$GDPG = a_0 + a_1 d(MCGDP) + a_2 d(KSEI) + a_3 VALUGDP + u_t \quad (1)$$

Where; a_0 , a_1 , a_2 , a_3 are unknown parameters to be estimated while u_t is the error term, GDPG is the real GDP growth that refers to economic growth, MCGDP is the market capitalization divided by GDP and refers to the market size, KSEI is the market price index that refers to stock market activity, and VALUGDP is the value of traded shares divided by the real GDP for each quarter, refers to market liquidity, and is an indicator of KSE liquidity. This study employed quarterly data covered the period from Q1 2001 to Q4 2019, obtained from the Central Bank of Kuwait and KSE websites. EViews 11 was used to apply the regression analysis. Table 1 shows the results of the stationary (unit root) test for all variables.

Table 1: Augmented Dickey-Fuller Test Unit Root Tests Results

Variable	<i>ADF-statistic</i>	Critical values	Status
GDPG	-8.135949	1%=-3.521579 5%=-2.901217 10%=-2.587981	Stationary at level
MCGDP	-9.503919	1%=-3.521579 5%=-2.901217 10%=-2.587981	Stationary at first difference
KSEI	-7.340252	1%=-3.521579 5%=-2.901217 10%=-2.57981	Stationary at first difference
VALUGDP	-3.067624	1%=-3.520307 5%=-2.900670 10%=-2.587691	Stationary at level

Source: Prepared by The Authors.

*P-values rejection of the null hypothesis at 1% and 5%.

Table 1 shows that the GDPG and VALGDP are stationary at level, while the market MCGDP and KSEI are stationary at first difference. Equation No. 2 shows the OLS regression results.

$$GDPG = -1.150585 - 0.091660 MCGDP + 0.001931 KSEI + 0.061379 VALUGDP \quad (2)$$

(-0.845) (-5.1103) (2.62153) (2.57097)

Where; R-squared =0.34; Adjusted R-squared = 0.31; F-statistic = 12.344; Prob(F-statistic) = 0.000001; and Durbin-Watson statistic = 1.9168.

Ordinary Least Square (OLS) is a simple, powerful statistical instrument that is used to examine the relationship between a set of independent and dependent variables. OLS Regression Results show that all of the *t*-statistics are significant at 5%, and that the relationship between MCGDP and GDPG is negative while it is positive between GDPG and KSEI and VALUGDP. The R-squared is 0.34, which indicates that 34% of the variation in economic growth (GDP) in Kuwait is explained by KSE development variables (MCGDP, KSEI, and VALUGDP) compared with Adigwe et al. (2015), who revealed that stock market development variables explained about 26.5% of variation in economic growth. However, the Prob (F-statistics) shows the probability that the null hypothesis is true. According to our results, the probability is almost zero. This suggests that, overall, the regressions are fine. However, the Durbin-Watson is 1.98, which indicates the absence of homoscedasticity from this model. By comparing our results with those of other studies, such as Nurudeen (2009), Adigiwe et al. (2015), Ejededawe (2014), Touny (2012) and Sikiru and Yusuf (2020), we conclude that our results are in line with these studies. However, we did not find any explanation for the negative sign for the MCGDP variable which should be positive, similarly to Abubakar (2016), who reported that the stock market in India has negative impacts on economic development. Our other variables, such as the value of traded shares to GDP, which can be used as an indicator of market liquidity and the stock market index, are positive and significant. These two variables can be used as indicators of Kuwaiti stock market development. To examine the effect of the stock market development variables on economic growth, we ran a pairwise granger causality test. Table 2 shows that there exists a causality relationship from MCGDP and KSEI to economic growth in Kuwait, with two lags.

Table 2: Pairwise Granger Causality Tests

Null Hypothesis:	Obs.	F-Statistic	Prob.
D(KSEI) does not Granger Cause GDPG	73	3.74487	0.0286*
GDPG does not Granger Cause D(KSEI)		0.14935	0.8616
D(MCGDP) does not Granger Cause GDPG	73	11.4928	5.E-05*
GDPG does not Granger Cause D(MCGDP)		0.46941	0.6274
VALUGDP does not Granger Cause GDPG	73	1.62476	0.2045
GDPG does not Granger Cause VALUGDP		0.01233	0.9877
D(MCGDP) does not Granger Cause D(KSEI)	73	4.87990	0.0105*
D(KSEI) does not Granger Cause D(MCGDP)		0.60601	0.5484
VALUGDP does not Granger Cause D(KSEI)	73	1.45384	0.2408
D(KSEI) does not Granger Cause VALUGDP		2.95573	0.0588
VALUGDP does not Granger Cause D(MCGDP)	73	0.46327	0.6312
D(MCGDP) does not Granger Cause VALUGDP		1.18854	0.3109

Source: Calculated by Authors.

*Denotes causality.

Table 2 shows that we can reject the null hypothesis that KSEI does not cause the GDPG since the corresponding P value is less than 5%; therefore, the KSEI granger causes the GDPG. The same table reports that, for the MCGDP, the P-value is less than 5%, so we can also reject the null hypothesis. Therefore, there is one-way causation from MCGDP to GDPG and also from MCGDP to KSEI. Mia et al. (2014) produced similar findings for Bangladesh, and found one-way causality from stock development to economic growth. Our findings are in line with several previous studies, such as DAI and AWGCN (2015), Abubakar (2016) and Pan and Mishra (2018). However, Parts and Sandoval (2015) found that, except for Slovakia, at least one of the variables of market capitalization (MC), total traded value (TTV), and Turnover ratio (T.R.) granger causes economic development. Their sample contains a panel of six Eastern Europe countries (Bulgaria, Slovakia, Hungary, Poland, the Czech Republic and Romania).

Conclusion and Recommendations

This study examined the relationship between stock market development and economic growth in Kuwait. An ordinary least square multiple regression analysis was used to test the relationship between three main variables that are believed to reflect stock market development, and GDP at the current prices was used as a proxy for economic growth. These three variables are: market capitalization, the value of traded shares, and the Kuwaiti Stock Exchange Index. The study revealed that market capitalization has a significant negative relationship with economic growth, while the Kuwaiti stock exchange index and value of traded shares have significant positive impacts on economic growth. However, Granger causality was used, and it confirmed that market capitalization and the Kuwaiti stock market Granger-cause economic growth, while the value of traded shares does not. It may be argued here that further investigation is required regarding the role of the stock market in economic development. By using other methodologies, such as ARDL and ECM analysis, clearer results may be obtained. However, as data on other important variables, such as the turnover ratio, are unavailable, we were unable to examine the impact of all of the financial variables that might affect economic growth in Kuwait.

References

- Abbas, A.O., Pei, Y.X, and Rui, Z. (2016). Impact of Stock Market on Economic Growth Evidence: Dar-es Salaam Stock Exchange – Tanzania, *Journal of Finance and Accounting*, 4 (6), pp. 321-327. Doi:10.11648/j.jfa.20160406.12
- Abubakar, A. B. (2016). Economic growth Impact of Indian Stock Market: An Economic Investigation. *Pacific Business Review International*, 1(1), 128-134.
- Adigwe, P. K., Nwanna, O. I., & Amala, A. (2015). Stock Market Development and Stock Growth in Nigeria: An Empirical Examination (1985-2014). *Journal of Policy and Development Studies*, 9(5), 134-154.
- Alajekwu, U. B., & Achugbu, A. A. (2012). The Role of Stock Market Development on Economic Growth in Nigeria: A Time Series Analysis. *African Research Review*, 6(1), 51-70. doi:10.4314/afrrrev.v6i1.5
- Ananwude, A. C., & Osakwe, C. I. (2017). Stock Market Development and Economic Growth in Nigeria: A Camaraderie Reconnaissance. *Research Journal of Economics*, 1(3), 1-6. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-56311-3>
- Bahadur, S. G., & Neupane, S. (2007). Stock Market and Economic Development: A Causality Test. *Journal of Nepalese Business Studies*, 3(1), 36-44. Retrieved from <https://doi.org/10.3126/jnbs.v3i1.481>
- Bayar, Y. K., & Yildirim, M. (2014). Effects of Stock Market Development on Economic Growth: Evidence from Turkey. *International Journal of Financial Research*, 5(1), 93-100.
- Bernard, A. U., & Austin, A. A. (2012). The Role of Stock Market Development on Economic Growth in Nigeria: A Time Series Analysis. *African Research Review, An International Multidisciplinary Journal*, 6(1), 51-71.
- Boubakari, A., & Jin, D. (2010). The Role of Stock Market Development in Economic Growth: Evidence from Some Euronext Countries. *International Journal of Financial Research*, 1(1), 14-20.
- Caporale, G. M., Howells, P. G., & Soliman, A. M. (2004). Stock Market Development and Economic Growth: The Causal Linkage,. *Journal of Economic Development*, 29(1), 33-50.
- Cave, J., Chaudhuri, K., and Kumbhakar, S.C. (2019). Do Banking Sector and Stock Market Development Matter for Economic Growth?. *Empirical Economics*, 59, pp. 1513-1535, <https://doi.org/10.1007/s00181-019-01692-7>
- Central Bank of Kuwait. (2020), Quarterly Statistical Bulletin, several Issues, Retrieved from Central Bank of Kuwait: <https://www.cbk.gov.kw/ar>.
- DAI, D., & AWGCN, W. (2015). Stock Market Development and Economic Growth: War and Post War Evidence from Sri Lanka. *4th Annula International Research Conference*, 263-270.
- Ejededawe, O. A. (2014). The Role of Stock Market on Nigeria's Economic Development. *International Journal of Scientific and Research Publications*, 4(4), 1-6.
- Ezeibekwe, O.F.(2019). Stock Market Development and Economic Growth: Empirical Evidence from Nigeria, 2019 awards for Excellence in Student Research and Creative – Documents, 4. http://thekep.eiu.edu/lib_awards_2019_docs/4
- Janor, H. H., & Abdulrahman, A. (2005). Stock Market and Economic Activity in Malaysia,. *Investment Management and Financial Innovations*, 4, 116-123.

- Jecheche, P. (2011). The Effect of the Stock Exchange on Economic Growth: A Case of the Zimbabwe Stock Exchange. *Research in Business and Economics Journal*, 1-17. Retrieved from <http://www.aabri.com/manuscripts/111088.pdf>
- Jiang, Y. (2019). Dynamics in the Co-Movement of Economic Growth and Stock Return: Comparison Between the United States and China. *Economic Research-Ekonomska Istrazivanja*, 32(1), 1965-1976.
- Kajurova, V. & Rozmahel, P. (2016). Stock Market Development and Economic Growth: Evidence from the European Union. *ACTA Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis*, Vol. 64, No. 6, pp. 1927-1963.
- Kamran, M., Zahid, M., Wali, S. & Rizwan, K. (2018). Stock Market Development and Economic Growth: Evidence from Pakistan. *Journal of Business and Tourism*, Vol 4, No. 2, pp.21-38.
- Kapaya, S. M. (2020). Stock Market Development and Economic Growth in Tanzania: An ARDL and Bound Testing Approach. *Review of Economics and Political Science*, 5(3), 187-206.
- Kuwait Stock Exchange. (2020), Quarterly Bulletin, several Issues, retrived from: <https://www.boursakuwait.com.kw>.
- Marinkovic, S., Stojkovic, D., & Radovic, O. (2013). Stock Market Development and Economic Growth (The Case of Belgrade Stock Exchange). *Actual Problems of Economics*, 143(5), 399-408.
- Mia, A. H., ACMA, Q., & Ara, L. A. (2014). Stock Market Development and Economic Growth of Bangladesh; A Causal Analysis. *Bangladesh Journal of MIS*, 6(2), 62-74.
- Mundena, M. M., Pickson, R. B., & Agbenyo, W. (2019). The Dynamics of the Relationship Between Stock Market Development and Economic Growth. *European Online Journal of Natural and Social Sciences*, 8(2), 239-252.
- Nowbusting, B., & Odit, M. P. (2009). Stock Market Development and Economic Growth: The Case of Mauritius. *International Business & Economics Research Journal*, 8, 77-88.
- Nurudeen, A. (2009). Does Stock Market Development Raise Economic Growth? Evidence from Nigeria. *The Review of Finance and Banking*, 1(1), 15-26.
- Nwaolisa, E. F., & Chijindu, A.A. (2016). The Linkage between the Depth of Development in Nigerian Stock Market and Economic Growth: a Johansen Cointegration Approach (1981-2015). *Frontiers of Accounting and Finance*, Volume 01, Issue 01, pp.16–28.
- Nzomo, T.J., & Dombou-Tagne, D.R. (2017). Stock Markets, Volatility and Economic Growth: Evidence from Cameroon, Ivory Coast and Nigeri. *Panorama Economco, Esciela Superior de Economia, Instituto Politecnico Nacional*, Vol 12 (4), pp. 145-175.
- Osakwe, C.I. & Ananwude, A.C. (2017). Stock Market Development and Economic Growth: A comparative Evidence from two Emerging Economies in Africa – Nigeria and South Africa. *Archives of Current Research International*, 11(1), pp. 1-15.
- Osaseri, G., & Osamwonyi, I. O. (2019). Impact of Stock Development of Economic Growth in BRICS. *International Journal of Financial Research*, 10(1), 23-30.
- Owen, M.A., (2020). Stock Market Development and Economic Growth: Empirical Evidence from an Institutional Impaired Economy. *International journal of Financial Research*, Vol 11, No. 5, pp. 496-509. doi:10.5430/ijfr.v11n5p496.
- Pan, L., & Mishra, V. (2018). Stock Market Development and Economic Growth: Empirical Evidence from China. *Economic Modelling*. Retrieved from <https://doi.org/10.1016/j.econmod.2017.07.005>

- Ruwaydah, A. & Ushad, S.A. (2015). Effects of Stock Market Development on Economic Growth: The Case of SAD Countries. Proceedings of the Third Middle East Conference on Global Business, Economics, Finance and Banking, ME15 Dubai, October Conference, 16-18 October 2015.
- Saleh, M., Jaber, J. J., & Al-Khawaldeh, A. A. (2015). The Impact of Bank and Insurance Stock Market on GDP: Evidence from Jordan. *European Journal of Economics, Finance and Administrative Sciences*(72), 125-134.
- Schumpeter, J. A., (1911), (2008). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, and the Business Cycle*, translated from the German by Redvers Opie, New Brunswick (U.S.A) and London (U.K.); Transaction Publishers.
- Sharif, A. A., & Afshan, S. (2016). Impact of Stock Market on Economic Growth of Pakistan. *International Journal of economics and Empirical Research*, 4(10), 562-570.
- Sikiru, A. O., & Yusuf, S. (2020). Stock Market Activities and Economic Growth in Nigeria: A Cointegration Approach,. *American Economic & Social Review*, 6(1), 1-7.
- Touny, M. A. (2012). Stock Market Development and Economic Growth: Empirical Evidence from Some Arab Countries. *Arab Journal of Administration*, 32(1), 1-28.
- Tsaurai, K. (2018). What are the Determinants of Stock Market Development in Emerging Markets? *Academy of Accounting and Financial Studies Journal*, Vol 22, Issue 2, pp. 1-11.