

## SECURITIES MARKET DEVELOPMENT AND ECONOMIC GROWTH IN THE COMMON MARKET FOR EASTERN AND SOUTHERN AFRICA MEMBER STATES

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### **Abstract**

**Purpose:** *The purpose of this paper is to investigate the effect of securities markets development on the economic growth of the Common Markets for Eastern and Southern Africa (COMESA) member states.*

**Design/Methodology:** *The study was structured as a longitudinal study using a causal research design focusing on the study period from 2005 to 2020. The study subjected panel data from nine (9) COMESA member states to pooled OLS as our estimator.*

**Findings:** *The study findings show that securities market development positively influenced the economic growth of COMESA member states. The study conclude that securities markets development is a strong macroeconomic factor that can be used by the member states to directly determine the level of economic growth.*

**Originality/Value:** *The study contributes to knowledge in providing evidence on the influence of securities markets development on the economic growth of COMESA member states considering that there is limited empirical evidence in the finance literature in this area.*

**Implication to Policy:** *The study recommends that COMESA member states should put more focus and measures in place aimed at making the securities market more efficient and attractive to investors to augment economic growth within the trading bloc.*

**Key Words:** *Securities Market Development, Economic Growth, and Pooled OLS.*

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## 1. Introduction

This study investigates the securities markets development -economic growth nexus in COMESA with annual panel data spanning from 2005-2020. It addresses two concerns: country-specific and low-evidence-in-COMESA concerns. The choice of the COMESA trading bloc has been motivated by the fact that the bloc received much emphasis in terms of driving the economy to have a competitive edge in world markets.

The role of financial markets and institutions as drivers of economic growth of nations is a contentious matter. The initial thinking was that stock market development as a component of financial development is a requisite to economic growth because it makes capital available to firms operating in an economy (Smith, 1776; Schumpeter, 1912). Some studies found a positive relationship between financial development and economic growth (Tran, Grafton and Kompas (2008)., Hondroyianniset et al., 2004; Levine et. al, 2000; King and Levine, 1993a and 1993b). However, Adusei (2014); Loayza and Rancie're (2006); Gourinchas et al. (2001) and Demerguc-Kunt and Detragiache (2000) found that financial development negatively affected economic growth. Adusei (2014) was categorical that Schumpeter may not be right in theorizing that financial development promotes economic growth. Empirical research has yet to conclude as to whether financial institutions and markets boost or impede economic development (Beck and Levine, 2002; Maksimovic, Beck & Demirgüç-Kun, 2002). The preceding findings suggest that the theory that financial institutions and market's impact on economic growth require extensive examination. An aspect of the analysis requires an understanding of the impact of securities development across nations.

Security's market development (SMD) is about creating the right environment for economic growth. The security's market is a significant component of the financial sector that is required to support the economy. Demigurc Kunt and Levine (1996) assert that securities market development facilitates the access to financial resources by investors and ensures efficient allocation of resources. In efficient security's markets, assets are correctly priced (Fama, 1965). Schumpeter (1912) while emphasizing the importance of stock market's development stated that economic growth requires massive long term resources, which are only obtainable from the securities market.

The assumption is that huge financial resources required by large firms and government can be effectively and efficiently mobilized through the securities market.

Enhancing the efficiency and effectiveness of the stock market is important to those who provide capital required by both government and private sector. This explains why countries have put concerted efforts in the development of financial markets and institutions (Okereke-Onyiuke, 2000; Levine and Zervos, 1996; Obadan, 1995; McKinnon, 1973; Adjasi and Biekpe, 2006; Ushad and Ruwaydah 2015). Furthermore, such institutions provide a conducive environment for cross-border and domestic investments required in stimulating economic growth.

Economic growth is characterized by an increase of the national income or total volume of production of goods and services of a country. It is important for improvements in standard of living of the people (Osamwony, 2005). Economic growth is a result of the efficient and economical utilization of factors of production that include labour and capital. Capital is what is traded in security's markets (Smith, 1976).

Economic growth comes with the benefits of general improvement in the quality of life of citizens (Naik and Padhi, 2015). Romer (2018) on his part explains that economic growth is only meaningful if it brings about equitable sharing of resources among citizens.

## **2. Research Problem**

The search for factors that drive economic growth in nations and the justification of capital markets is not yet over. Some studies found that securities market development (SMD) enhances economic growth. The evidence that securities market development negates economic growth (EG) have been presented as well. Researchers have reported the absence of a relationship between security's market development and economic growth. However, others postulate that economic growth promotes security's market development, not the other way around. Studies that support the view that securities market development promotes economic growth include, Saunders and Allen (2007), Adjasi and Biekpe, (2006) and Shahbaz, Tiwari and Leitão (2013). They reason that SMD economically channels funds from savers to borrowers. Popoola, Ejemeyovwi, Omobola and Onabote (2017) established that securities market development harms EG. Rashid, Ouyang, Abeid and Pacific (2016) conclusion is that there is no causality running from SMD to EG. Demirguc-

Kunt and Levine (2001) advance the argument that banks and securities markets develop as economies grow and that security's markets tend to develop more rapidly than banks. When economies grow, both the banking industry and SM develop, and as such it is economic growth that predicts SMD and not the other way round (World Bank, 2011).

There is some considerable measure of evidence on the SMD-economic growth nexus in other parts of the world economies, especially the developed world, but the same cannot be said about COMESA trading bloc. The studies that have been done within COMESA member states have produced mixed results. In Mauritius, Rashid, Ouyang, Abeid and Pacific (2016) using Co-integration and VEM reports a lack of long-run causality running from security's market development to economic growth although short-run causality existed for stock turnover. In Kenya, Ikikii and Nzomoi (2013) using a regression model in the period between 2000-2011 established that stock market traded volume and capitalization affect economic growth positively. Osamwonyi and Kasimu (2013) conducted their studies in Ghana, Kenya and Nigeria between 1989 – 2009 using Johansen cointegration and Granger causality and they found no causality between stock market development and economic growth in Ghana and Nigeria, while there was bidirectional causality between stock market development and economic growth in Kenya. However, Kagochi, Al Nasser, and Kebede (2013) in a study over the period 1991 to 2007, report two-way causality between stock market development and economic growth.

The proposition in this study is that banks and securities markets influence economic growth. It is not certain that within COMESA, economic growth requires bank capital and long-term capital sourced through securities markets (Beck and Levine, 2002; Demirguc-Kunt and Maksimovic, 2002; Levine, 2002). The current study differs from Rashid, Ouyang, Abeid and Pacific (2016) and Ikikii and Nzomoi (2013) in Mauritius and Kenya respectively in three distinct respects. One, it uses more comprehensive measures of SMD (market capitalization and stock traded value). Two, it uses panel data from COMESA member states rather than one or just two countries within COMESA. Three, whereas Odhiambo (2010) uses Co-integration and VEM, Regression and Panel Granger causality tests, the current study uses the pooled OLS panel data models. The study seeks an answer to the question: Does SMD stimulate the economic growth of COMESA member states?

The remainder of the paper is structured as follows. Section 2 reviews the recent empirical studies on securities market development and economic growth. Section 3 provides a brief discussion on the data and methodology used in this study and presents empirical findings. Finally, the conclusion of this study will be presented in Section 4.

### **3. Literature Review**

In Nigeria, Ananwude and Osakwe (2017) investigated the link between securities market development and economic growth, using Autoregressive Distributed Lag (ARDL) and Granger causality. The measures of depth of security's market development were market capitalization and turnover ratios and that of economic growth (EG) was the gross domestic product (GDP). They found that securities market development to be correlated with EG. Karim and Chaudhary (2017) conducted a comparative analysis of South Asia and East Asia countries to ascertain any link between security's market development and EG; they compared the country's GDP rates against security's market development and found that securities market development played a crucial role in the EG of the countries within the Southern region but not in the East Asian region. In Kenya, Ikikii and Nzomoi (2013) over the period between 2000 and mid-2011, using the regression model, found a positive relationship between the stock market and economic growth. Tang (2013) used Cointegration and Granger's causality tests undertook a study in Australia from 1960-2008. He found a unidirectional causality from stock prices to economic growth. Enisan and Olufisayo (2009) used data from Cote D'Ivoire, Egypt, Kenya, Morocco, Nigeria, South Africa, and Zimbabwe (1980-2004) using ARDL bounds test found that stock market development has a significant positive effect on economic growth.

Some hold the view that there is no causality effect in the relationship between SMD and EG. In Mauritius, Rashid, Ouyang, Abeid and Pacific (2016) investigated the influence of the stock exchange on the EG over the period 1993 to 2015. They subjected time series secondary data to Cointegration and VECM, and the results indicated no long-run causality running from SMD to EG. However, a short-run causality existed for stock turnover. Haque (2013) used data from Bangladesh, India, Pakistan, and Sri Lanka from 1980-2005 and dynamic panel models to establish that the stock market did not have any effect on the growth of GDP per capita. Ake and Ognaligui

(2010) used data from Cameroon (2006-2010) and applied Granger's causality tests. The study found that the Stock market did not affect economic growth. Levine and Zervos (1998) studied using the least square regression method, studied 47 countries over the period 1976 to 1993. They concluded that stock market size was not a generally robust predictor of output growth, capital stock growth, and productivity growth. They recognized that stock market liquidity had a statistically significant relationship with output growth, capital stock growth, and productivity growth.

There are also contrasting views of the inverse relationship between SMD and EG. Popoola, Ejemeyowwi, Omobola and Onabote (2017) tested the link between SMD and EG in Nigeria. By use of ADF, OLS and Johansen Cointegration tests, the OLS result indicated a negative relationship; Johansen Co-integration established the existence of the long relationship between SMD and EG while granger causality test found stock market performance not to granger cause EG. This suggests that the statistical method matters.

Kagochi, Al Nasser and Kebede (2013) found that there was two-way causality between stock market development and economic growth. Ho and Odhiambo (2012) used data from Hong Kong (1980-2010), and using Autoregressive Distributed Lag (ARDL) bounds test, established that a unidirectional causal flow from the stock market capitalization to economic growth. They report a causal flow from economic growth to stock market turnover in the short and long run. Osamwonyi and Kasimu (2013) carried out a study in Ghana, Kenya and Nigeria from 1989 to 2009. They used Johansen Cointegration and Granger's causality model and found no causality between stock market development and economic growth in Ghana and Nigeria, but report a bidirectional causality between stock market development and economic growth in Kenya. World Bank (2011) indicates that when economies grow, both the banking industry and Securities Markets develop. Demirguc-Kunt and Levine (2001) point out that banks and security's markets tend to become more developed as economies grow and that security's markets tend to develop more rapidly than banks. Apart from the fact that the results of these studies are mixed, most of these studies are not COMESA member states, and their findings may not apply to COMESA member states. This is because this trading bloc differs from those countries in terms of levels of technological advancement, market capitalization, market size, liquidity, structure and economic growth. Since

the studies established mixed findings, the contention is whether it is the bank and securities market that propel the economy or vice versa.

#### **4 Data and Methodology**

The data on the variables were collected annually, over the period 2005-2020 from the World Bank database. SMD as a variable in this study is a composite index of market capitalization and stock traded value. These were panel data.

There was a need to select the appropriate panel data analysis model. First, we used the Hausman Test to choose between the Fixed Effect and Random Effect models (Hartono, Sari, Tinungki, Jakaria & Hartono, 2021; Saragih, Raya & Hendrawan, 2021). Secondly, the Lagrange Multiplier Test or commonly referred to as Lagrangian Multiplier (LM) is applied to choose the most appropriate model between the pooled OLS (common effect) or random effect (Zulfikar & Rizka, 2018; Karaye & Büyükkara June, 2021). From the results of the tests, we chose the pooled OLS model.

### **5. Results and Discussions**

#### **5.1 Descriptive Statistics**

In Table.1, the descriptive statistics of the study variables are presented. The maximum stock market capitalization rate of change was 21.75 while the minimum was -.99 (Mean=.2281, median=.06, standard deviation=1.90). The rate of change of stock market capitalization is positively distributed with skewness of 10.96 respectively, meaning that the distribution has a long right tail. Negative skewness indicates a distribution with a long left tail. This indicator has a kurtosis that is above the value of 3 (124.68) implying the distribution is peaked or leptokurtic relative to the normal distribution.

**Table 1: Summary of Descriptive Statistics**

	N	Minimum	Maximum	Mean	Median	Std. Deviation	Skewness		Kurtosis	
							Statistic	Std. Error	Statistic	Std. Error
Market Capitalization Rate of Change (MC)	135	-.99	21.75	.228	.06	1.90	10.96	.209	124.68	.414
Stock Market Value Rate of Change (STV)	135	-1.00	19.79	.54	.08	2.29	5.81	.209	41.13	.414
Economic growth (EG): The rate of change of real GDP	135	-17.67	19.68	4.36	4.39	4.30	-.999	.209	6.91	.414

**Source: Researcher’s Computations (2021)**

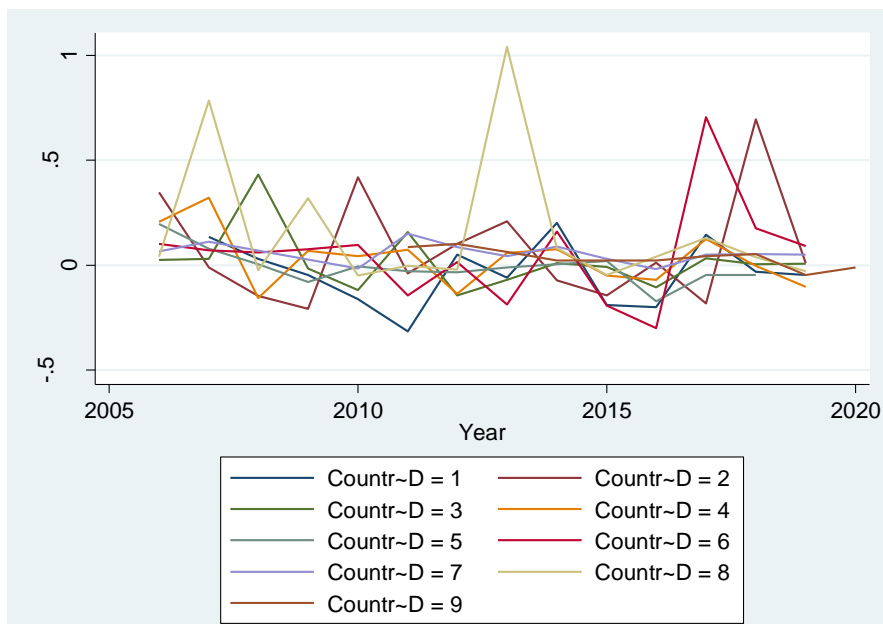
The maximum stock traded value rate of change was 19.79 and the minimum was -1.00 (mean= .54, (Median=.080, SD=2.29) and is positively distributed with a skewness of 5.81. The kurtosis of 3 (41.13) implied the distribution is peaked or leptokurtic relative to the normal distribution. The percentage of interest-bearing assets has a kurtosis that is above the value of 3, which is 22.638 meaning that the distribution is high peaked relative to the normal distribution. Log of total assets and the ratio of private to public sector credit has a kurtosis that is below the value of 3, which is -.279 and -.263 respectively, which implies the distribution is low peaked relative to the normal distribution.

The rate of change of real GDP ranged from -17.67 to 19.68 (Mean = 4.37, Median=4.3900, SD = 4.30) GDP is negatively distributed with skewness of -.999. Negative skewness indicates a distribution with a long left tail. The results also GDP, has a kurtosis that is above the value of 3, that is 6.908 with

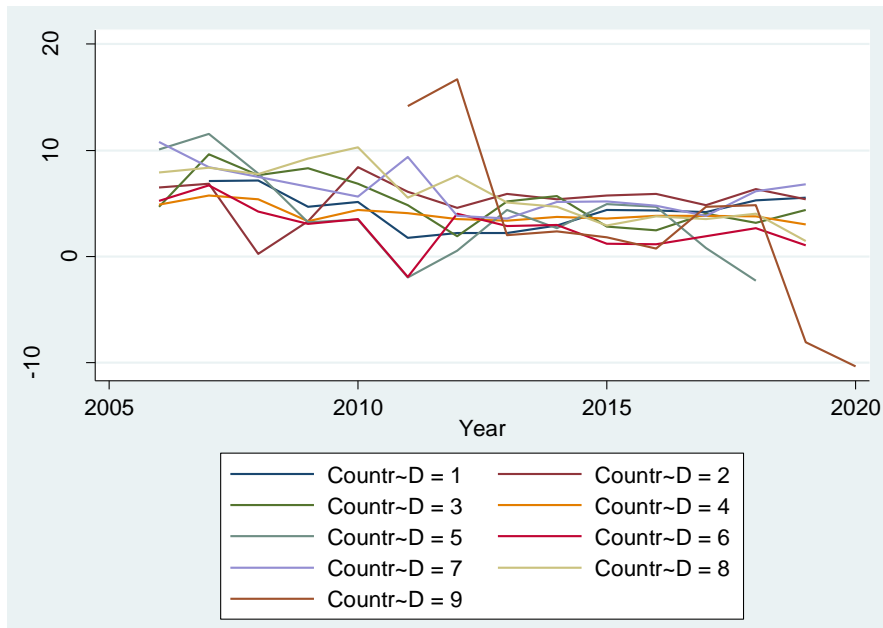


a standard error of .414. This shows that the distribution is high peaked relative to the normal distribution.

The shapes in Figures 1 and 2 indicate an erratic development of stock market development and economic growth in the trading bloc. The two variables appear erratic across the countries in the study. This may imply that SMD in COMESA member states is not fully developed and unsteady. The economic growth of COMESA member states has been registering an unstable growth, and over the years has been slowly declining. The decline can be attributed to the macroeconomic factors like inflation, political instabilities, monetary and fiscal policies prevailing in this trading bloc. Mauritius recorded the highest economic shock in 2020.



**Figure1: Securities Market Development**



**Figure 2: Economic Growth**

**5.2 Effect of Securities Market Development on Economic Growth of COMESA Member States.**

In Table 2 are the results of pooled OLS regression analysis done to test the effect of Securities market development on the economic growth of COMESA member states. The F-test is statistically significant  $F(1,116) = 7.58, p < 0.05$ . The model applied tells us that securities market development positively predicts economic growth. It shows that for every unit increase in SMD, there is a 4.386 units increase in economic growth. The t-test for SMD, tell us that the beta 2.75 is significantly different from zero. We, therefore, reject the null hypothesis and conclude that SMD significantly influences the economic growth of COMESA member states.

**Table 2: Pooled OLS Regression model, Dependent variable: Economic Growth, predictors: SMD**

EG	Coefficient.	Std. Err.	t	P>t
SMD	4.386***	1.593	2.75	0.007

_cons	4.326***	0.313	13.83	0.000
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Model Summary

Observations	118
R-squared	0.061
F(1, 116)	7.58
Prob > F	0.0069

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\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Where:

EG is Economic Growth

SMD is Securities Market Development

The resulting regression equation is:

$$EG_{it} = 4.326 + 4.386SMD_{it} + \varepsilon_{it}$$

## **6. Discussion of Findings**

This study established that securities market development predicted the economic growth of COMESA member states. The low economic growth in COMESA countries, compared to those of developed countries, indicate a need to invest in the security's market as a means of propelling economic growth. These findings are consistent with the findings of Ananwude and Osakwe (2017) and Karim and Chaudhary (2017) but are inconsistent with those of Rashid, et al (2016) and Popoola et al. (2017). The findings support the neoclassical growth theory (Solow & Swan, 1956), which emphasize that capital accumulation in an economy, and how people make use of it, is important for determining the economic growth of nations. In supporting these theorists, Schumpeter (1912) states that economic growth requires huge long-term resources which are only obtainable from the stock market based on the premise that huge resources can be effectively and efficiently mobilized by the mechanism of the stock market. The securities market is a channel through which capital moves from surpluses (savers) to economic (borrowers/investors) to promote economic growth (Smith, 1976). The finding appears to support the efficient market hypothesis, that new information is fully and quickly incorporated in the securities' prices to enable investors to make informed economic decisions that promote economic growth.

Studies on the relationship between the financial service's development and the growth of economies of nations date back to the early years of (Schumpeter, 1911). The first studies majorly focused on the effects of financial development on economic growth and disregard the possible specific effects of security's market development. The relationship between security's market development and economic growth has attracted a great focus with the rapidly expanding stock market during the past three decades. This study examined the relationship between security's market development and economic growth of COMESA member states during the period 2005-2020 the pooled OLS test. The study found that there was a long-run relationship between economic growth and stock market capitalization and the total value of the stock. The finding was consistent with the general trend in the literature. Therefore, the study determined that there was a long-run relationship between security's market development and economic growth of the COMESA trading bloc, and the security's market development influenced economic growth positively. So stable expansion of SMD is essential for the sustainability of economic growth of COMESA member states. Thus, policies for the development of securities markets will significantly contribute to the economic growth of COMESA member states. Furthermore, other developing countries, which want to increase their economic growth, should consider developing their security's markets.

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