

## The contribution of economic sectors to economic growth: The case of COMESA countries

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**Abstract.** This research examines the contribution of the Economic Sector, such as the agriculture, industry, service and FDI to Economic Growth in COMESA countries. A balanced panel data has been used over the period 2000-2019 for 12 COMESA countries such as Burundi, Comoros, the Democratic Republic of Congo, Egypt, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Uganda, Zambia, and Zimbabwe. The ARDL results showed that in the short-run all the economic sector has a positive contribution to the GDP growth. Meanwhile, in the long-term the agriculture sector and FDI do not contribute to the economic growth of those selected countries; but the service and industry sector will have a great influence on the GDP. Therefore, the error correction model was used to analyze the long-term effect of agriculture, industry, service and FDI on GDP. The results suggest that in the short run, the agricultural sector and FDI have a positive effect on growth; in addition, the service and industrial sectors have a long-standing effect on GDP growth in countries of COMESA. Finally, we conclude with some recommendations.

**Keywords.** Economic sectors, Economic growth, ARDL, COMESA.

**JEL.** C23, F62, N17, F43.

### 1. Introduction

The common market of Eastern and Southern Africa “COMESA” regroups together several regions of Africa rich in natural-mineral, agricultural, and energy resources. COMESA, bringing together 19 African states such as Burundi, Comoros, the Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, and Zimbabwe with a total population of almost 617 million according to African Development Bank Group (2020) is the largest market and investment in the African continent. Considering its abilities and assets, it is one of the best African markets and the most coveted by foreign investors who want to invest in Africa. According to the African Development Bank Group (2018), COMESA's GDP per capita in 1970 was less than 1 and it increased to 1640.72 current USD in 2019, with an average annual rate of 4.02 % increase. Economic growth and economic sectors are

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very important elements of the macroeconomics studies of a country or region; it is the combination of economic sectors that gives economic growth. According to FAO (2019), agriculture is one of the main economic activities in COMESA; it accounts for over 32% of its gross domestic product, provides a livelihood to around 80% of the region's labor force, accounts for about 65% of foreign exchange earnings and contributes more than 50% of raw materials to the industrial sector. The service sector accounts for an average of 53% of the gross domestic product (GDP) in the Market for the countries of Eastern and Southern Africa (COMESA), overtaking manufacturing and agriculture sectors in terms of growth, income and employment generation according to International Trade Center (ITC) and COMESA Business Council (CBC) (2016). The tertiary sector as a service is the most robust and provides vital inputs for manufacturing and agriculture and could help increase the overall efficiency of the COMESA economy. Trade-in services in the COMESA region are on the rise, offering enormous opportunities for export diversification, pursuing new dynamic, innovative, and sustainable growth. Trade-in services play a very important role in the region's growth strategy. This study aims to examine the relationship between Economic Sector and Economic Growth to observe the contribution of Economic Sector to Economic Growth in COMESA countries using the panel data approach over the period 2000-2019. For this study, we process with the panel data method, using ARDL. The remainder of the paper is arranged as follows: Section 2 focuses on literature reviews, section 3 Methodology, section 4 Empirical findings, and section 5 conclusion and recommendation.

## 2. Literature review

Anwer *et al.*, (2015) analyzed the role of the agriculture sector share in the Gross Domestic Product (GDP) of Pakistan economy by using time series data from 1975-2012. By using the ordinary least square (OLS) method they estimated the model parameters. For this purpose, several variables are considered by the study such as agriculture, industry, trade, and GDP of Pakistan. The results of the study showed a positive and significant relation between GDP and agriculture in Pakistan. Moreover, variables like trade, industry, and agriculture have a positive relationship with the GDP growth rate. From the result, they conclude that it may be necessary that the country should make stronger efforts to improve the agriculture sector through reliable policy measures.

Jain, Nair, & Jain, (2015) tried to investigate the impact of various macro-economic factors on GDP components using the data from 2000-2001 to 2011-2012. These variables might be FDI, Net FII equity, Net FII debt, Import, and Export. Multiple regression analysis was applied to explain the relationship. In the analysis, they found a significant effect of FDI, Net FII equity, and Import on GDP components. But they could not found a significant effect of Net FII debt on GDP components. And it was also found that there was no significant effect of Export on GDP

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(Manufacturing, Industry) components but service had a significant effect.

Kureski *et al.*, (2015) introduced the estimation and analysis of the agribusiness GDP in the Brazilian state of Paraná between 2006 and 2011 and its comparison with the economic development of the state's agricultural cooperatives in the same period. The aggregate GDP were elaborated in the analysis that allowed evaluation of the distribution of the respective inputs from agriculture, industry, and the distribution and services sectors. Their results indicated the importance of each sector in the growth of Paraná's agribusiness and its share in the state's GDP. Furthermore, from 2007 to 2010 they found an impressive performance of Paraná's agriculture sector, which has increased from 13.1% to 32.4% in 2010. They also argued that the distribution and services sector is the largest contributor to the agribusiness GDP with 13% of share. While the industrial sector was more sensitive to the events that followed the 2008 global economic crisis, which increased from 10.3% in 2006 to 8.6% in 2011, its share in the GDP of agro-industry decreased in the same way. In parallel, the revenue performance of cooperatives and the importance of the economic activity of the state through the use of financial resources and investments in industrialization were highlighted.

Singariya *et al.*, (2015) examined causal relationships among per capita GDP, agriculture, and manufacturing sector output in India by using time series data from 1970 to 2013. They used different methods such as the Vector Error Correction Model (VECM), VAR and Impulse Response Function, and Variance Decomposition Analysis. Their co-integration test confirmed a long-run relationship among the variables; the results revealed a bidirectional causality between the agriculture sector and per capita GDP, while a unidirectional causality between the manufacturing sector to per capita GDP, and from agriculture to manufacturing sector. However, the results based on VECM indicated a weak association between the sectors in the short run. Dynamic causality results demonstrated that the agriculture sector affects the Per Capita GDP and manufacturing sector, while Per Capita GDP affects the manufacturing sector strongly in the long run. In consistence with the above finding, this study argued that shocks originated from the agriculture sector spill over to Per Capita GDP and the Manufacturing sector in the long run in India. Degu, (2019), by analyzing the intersectoral linkages in the Ethiopian economy, and using a time series data from 1975 to 2017, demonstrated that the investigation of structural relationships among the sectors becomes important from the policy angle. A clear perspective on the intersectoral linkage could be useful in formulating a favorable and appropriate development strategy. The study employed a VECM, Granger causality test, impulse response, and variance decomposition functions. He found a stable long-run relationship among agricultural, industrial, and service sectors of the economy. The only industrial sector is found as endogenous to the system implying long-run causality runs from agricultural and service sectors to the industrial sector. However, the short term granger causality results showed a bi-directional

causality between industrial and agricultural sectors, and between industrial and service sectors. While the Impulse Response and Variance decomposition functions suggested that the agricultural sector development plays a role in determining the growth of the economy via its linkages to the rest sectors of the economy. Therefore, development strategies such as Agricultural Development conducted Industrialization (ADLI) of Ethiopia, if correctly implemented can play an encouraging role by soothing the agricultural sector so that the industrial sector would be promoted. Also, the percentage share of the agricultural sector to GDP has been declining during the period analyzed. Still, this doesn't indicate that the role of the agricultural sector is falling. The analysis of intersectoral linkages identified the agricultural sector as the principal economic activity that controls most economic activities in the Ethiopian economy.

Ajmair *et al.*, (2016), studied the factors affecting services sector output growth in Pakistan, and they indicated that the service sector is one of the important factor in nation economies. They also noted that it contributed to more than half of the country's GDP and it has a substantial share in exports and employment. The ARDL technique and annual data from 1975 to 2014 were used. The findings showed that the trade, government expenditures, market size, and population growth are the relevant determinants of service sector output growth in the long-run. While in the short term, the service sector growth is affected by foreign trade and personal remittances.

By analyzing the Convergence and Cointegration of Sectoral Shares and Growth in India, Bhowmik (2016) found that Indian GDP has been steadily declining at the rate of 1.69% per year in the industrial share in GDP, and the country has been catapulting at the rate of 0.93% per year and the service sector share in GDP has slightly increased by 0.747% per year from 1950-51 to 2013-14. The sectoral share has weak co integration but the share showed the bidirectional causality with the growth rate. The VAR model is stable showing significant relation with the previous period but impulse response functions are diverging.

By studying the sustainability of shocks in relevant determinants of sectoral growth in Pakistan, Ajmaira *et al.*, (2018), saw that agriculture sector growth impulse response to its shock and shock to gross national expenditures was positive. However, inflation and remittances shock affected the agriculture sector growth negatively while the effect of permanent cropland shock was both positive and negative. The industrial sector results showed that external debt, industrial sector growth impulse response to the rest of the variables were both positive and negative. External debt shock, however, trained industrial sector growth to rise. The same kind of results is obtained for service sector growth impulse to its shock and shocks to other relevant determinants.

Sayari, Sari, & Hammoudeh, (2018) investigated the possibility of a long-run relationship between the Economic Freedom Index (EFI), Foreign Direct Investment (FDI), and value-added components of GDP in thirty

Eastern, Central and Western European countries. They examined whether FDI and sectoral components of GDP have a significant impact on the economic freedom of these countries, using annual data and the Pedroni and KAO panel co integration analysis to assess long-term relationships. The results indicated that there is a significant long-run relationship between the variables under study. Moreover, the evidence showed that the service and industry value-added components positively affect EFI, while the agriculture value-added component negatively impacts EFI. They observed a marginally significant and negative relationship between EFI and FDI in the random-effects model.

The study of Uddin (2019) showed that Bangladesh, the 15th potential Asian tiger graduated to the group of Least Developed Countries in the year 2018 is way forward aiming to ensure its position as Developed Country by 2041. It consistently achieved the GDP growth rate of over 6% since 2004 and in the last couple of economic years, this was above 7%. More than 83% of total exports of Bangladesh (FY 2017-18) belong to the Ready-Made Garments (RMG) industry which leads the economy. This extensive contribution of a particular sector toward the entire economy, generating potential threat of sectoral dependency for the future of this emerging nation, becomes a great source of systemic risk. Evaluating and addressing the possible extent of this risk with robust analysis is not only demanding but also required. Simplified econometric models based on historical data showed how the exports of Bangladesh depend on the RMG sector as well as the entire economy.

Velonjara & Gondje-Dacka (2019) studied the effect of foreign direct investment (FDI) on economic growth in nine West African countries such as Burkina Faso, Cote d'Ivoire, Ghana, Guinea Bissau, Liberia, Niger, Nigeria, Senegal, and Sierra Leone. Using panel data econometrics, they found empirical evidence suggesting that the effect of FDI on economic growth is negative and statistically significant. The findings showed that neither foreign direct investment nor the primary sector of the economy (PSE) of this region is an adequate mechanism to accelerate economic growth in West African countries. However, the secondary and tertiary sectors of the economy of this region have a positive effect and are statistically significant to explain the growth. In another work, Velonjara & Gondje-Dacka (2019), demonstrated that the contribution of FDI to economic growth through the main sector of the economy in 5 Low-Income economies and 4 Lower-middle-income economies of West Africa. Using the regression model and the Granger causality test, they found that FDI contribution is not significant with positive autocorrelation. Consequently, by studying the case of each country, the majority of FDI is positive except in a few countries with negative autocorrelation. Their results showed that only primary sector is negative and the secondary and tertiary sector are positive but all are not significant for the whole region but, individually they are positive; it is the tertiary sector which influences more the growth before the primary and secondary sectors.

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Mlambo, *et al.*, (2019) investigated the contribution of processed and unprocessed agricultural exports to economic growth in South Africa. They used a Johansen cointegration approach to test for cointegration after the unit root tests had shown that all variables were non-stationary at levels. Cointegration results showed that there was one cointegrating equation. Subsequently, a VECM was used as the estimation technique. They found that processed agricultural exports have a positive relationship with economic growth whereas unprocessed agricultural exports have a negative relationship with economic growth. This suggests that manufactured agricultural exports contribute significantly to economic growth. They recommended that the South African government should promote and stimulate investment in the processed agricultural commodities sector. There should be more production and expansion in the agricultural manufacturing sector as well as processed manufactured goods which should be sold at a higher price to enable South African firms to generate more income.

According to Abebaw (2019), industrialization plays a key role in the process of a nation's economic development. The experience of the advanced world revealed that industrialization significantly enlarged their productivity and changed the economic structure. Principally with the context of reoccurring inconstant macroeconomic performance in Ethiopia, investigating the effect of macroeconomic variables on industry sector output growth is a proper way to design suitable industrial policies. They used Augmented Dickey-Fuller (ADF), and the Phillip-Perron (PP) unit root tests of stationary, ARDL, and bound test of co-integration and error correction model. They confirmed the existence of a long-run relationship between industrial output growth and macroeconomic variables. Macroeconomic variables such as lending rate, inflation rate, and trade balance were found to be affecting the industrial sector output growth negatively, positively, and negatively, respectively in the long run. Therefore, the government has to keep the lending rates to the level that could be amenable for firms and maintaining the trade balance by manipulating exports and imports.

Fang, *et al.*, (2020) analyzed the impact of the diversity of talent distribution on the equilibrium growth rate; they developed an equilibrium growth model with heterogeneous labor. They showed that the growth effect after free trade depends on the diversity effect and the trade effect. They prove also that if talent diversity is great enough then opening trade will stimulate economic growth. On the other hand, if talent diversity is small sufficiently then trade openness is detrimental to economic growth. Similarly, Wiredu, *et al.*, (2020) investigated empirically the relationship between Trade openness and Foreign Direct Investment on the economic growth for a panel of four West African countries (Côte d'Ivoire, Ghana, Nigeria, and Senegal). They used static panel regression techniques to assess the causal link of their regressors, namely, FDI, trade openness, investment, and Inflation to economic growth measured by Gross Domestic

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Product (GDP). They observed that the contribution of trade openness, investment, and inflation to be relatively higher than foreign direct investment.

### 3. Methodology and data

In this work, we have used cross-sectional data for 12 COMESA economies. Data covers the period of twenty years from 2000-2019. All the data have been taken from the world development indicators (WDI) World Bank dataset. The predicted variable is GDP constant 2010; the explanatory variables are agriculture in current USD; the industry is measured by the percentage of GDP. Service is measured in current USD; FDI refers to the direct investment equity flows in the national economy, and it is a share of the percentage of GDP. The Pesaran *et al.*, (2001) Auto-Regressive Distributed Lag (ARDL) is designed for this research. The following equation is our basic model for this study.

$$LGDP_{it} = \delta_0 + \delta_1 LAGR_{it} + \delta_2 LSE_{it} + \delta_3 IND_{it} + \delta_4 FDI_{it} + \mu_{it} \quad (1)$$

Where LGDP is the log form of GDP, LAGR refers to the log of agriculture, LSE denotes the log of services, IND is the industry and FDI;  $\mu_{it}$  are the error term, the subscript  $i$  and  $t$  denote country and time, respectively.

Before we proceed with the regression analysis, we need to conduct the stationarity test of the series as the first step; second, we would check for panel co-integration test to see the existence of long-run relationships of our model, and in case the variables are co-integrated the error correction model (ECM) will be performed and last we will perform a long-run estimation.

#### 3.1. Unit root test or augmented Dickey-Fuller test

Before we proceed with the ARDL specification, it's better to perform the stationarity test. In this case, the Augmented Dickey-Fuller (ADF) and Phillips Perron (PP) test are the most popular tests to support linear regression. Also, it's used in the replacement of correlation since ADF can handle the most complex and bigger models. In another word, by taking a lagged difference this method opposes the auto-correlation issue. Thus, we employ this test in our research. The following equation (1), is the ADF unit root test specification.

$$\Delta Y_t = \alpha + \beta_t + \rho Y_{t-1} + \zeta_i \sum_{i=1}^p \Delta Y_{t-1} + \mu_t \quad (2)$$

#### 3.2. ARDL method

The ARDL approach can be used to test the co-integration procedure to estimate the long-term relationship among the variables of interest. This method was first proposed by Pesaran *et al.*, (2001) to study the co-

integration in the variables. Therefore, the ARDL is good to be used when the variables are in the same order or the mixture order. In other words, when the variables are stationary at level I(0) or in the first difference I(1), but not in the order I(2), we can apply this method. Another advantage of this method is that it can avoid the biased estimate of the long term, Belloumi (2014). Therefore, to research the short- and long-term relationship among the variables, our ARDL model will be specified as follow:

$$\Delta LGDP_t = \beta_0 \sum_{t=1}^p \beta_{1t} \Delta LGDP_{t-1} + \sum_{t=1}^q \beta_{2t} \Delta LAGR_{t-1} + \sum_{t=1}^q \beta_{3t} \Delta LSE_{t-1} + \sum_{t=1}^q \beta_{4t} \Delta IND_{t-1} + \sum_{t=1}^q \beta_{5t} \Delta FDI_{t-1} + \beta_7 LGDP_{t-1} + \beta_8 LAGR_{t-1} + \beta_9 LSE_{t-1} + \beta_{10} IND_{t-1} + \beta_{11} FDI_{t-1} + \varepsilon_t \quad (3)$$

Where,  $\Delta$  refers to the first difference; p and q is the optimal lag length of the predicted and the explanatory variables respectively;  $\beta_1, \dots, \beta_5$  refers to the short-run dynamics and  $\beta_7, \dots, \beta_{11}$  are the long-run elasticity.

### 3.3. Error Correction Model (ECM)

The ECM was introduced in the year 1987 by Engle & Granger (1987), which is applied to find whether there is a long-term association or not in the model and the evidence on the causal factors influencing the variables included in the model. The ECM usually presents negative to show the long-term effect of the model. However, if it shows a positive and significant sign we can accept it, but, if the coefficient is positive and insignificant, it indicates a divergence in the model. The following equation, equation (4) represents the ECM equation.

$$\Delta LGDP_t = \beta_0 \sum_{t=1}^{p-1} \beta_{1t} \Delta LGDP_{t-1} + \sum_{t=1}^{q-1} \beta_{2t} \Delta LAGR_{t-1} + \sum_{t=1}^{q-1} \beta_{3t} \Delta LSE_{t-1} + \sum_{t=1}^{q-1} \beta_{4t} \Delta IND_{t-1} + \sum_{t=1}^{q-1} \beta_{5t} \Delta FDI_{t-1} + \lambda EC_{t-1} + \varepsilon_t \quad (4)$$

Where p-1 and q-1 are the optimal lag length of the predicted and the regressors respectively;  $\lambda$  refers to the speed of adjustment parameter; EC refers to the error correction term.

## 4. Empirical findings

Our findings will be presented as follows:

First, the ADF and PP stationarity tests are presented in the following table, and as the variables of interest are in the mixture order I(0) and I(1), and as we already described the advantages of using ARDL, therefore, we proceed our empirical analysis using this approach.



**Table 1.** Unit root test

Variables	ADF test			PP test		
	Level (trend	1 <sup>st</sup> dif. (trend & intercept)	stationary	Level (trend & intercept)	1 <sup>st</sup> dif. (trend & intercept)	stationary
LGDP	-3.054283(0.0315)	-	I (0)	-3.215921 (0.0203)	-	I (0)
LAGR	-3.124174(0.0261)	-	I (0)	-3.143420 (0.0248)	-	I (0)
LSE	-2.834176(0.0551)	-15.47984(0.0000)	I (1)	-2.888485 (0.0482)	-	I (0)
IND	-2.355152(0.1558)	-13.85355(0.0000)	I (1)	-2.512515 (0.1138)	-13.81474(0.0000)	I (1)
FDI	-2.415205(0.1395)	-5.872461(0.0000)	I (1)	-4.099511 (0.0012)	-	I (0)

After performing the short run ARDL, the F-bound test of co-integration is another procedure to be conducted to test whether we can perform the long-term analysis or not. Thus, the following table shows the F-bound test of co-integration.

**Table 2.** F-Bounds test

Variables	Lag length	F-statistic	Critical Value 1%		Critical Value 5%	
			I (0)	I (1)	I (0)	I (1)
LGDP  LAGR, LSE, IND, FDI	(1, 1, 1, 1, 1)	6.633081	3.74	5.06	2.86	4.01

**Source:** Author's computation using EViews 10.

The next table, table (3) shows the error correction model (ECM) results. Based on the adjustment speed of our model or the ECM(-1) statistical significance, it tells us that we can run the long-term regression since the adjustment speed presents a negative coefficient, and that is one of the main requirements of the ECM. In another word, in the long run we found following results.

**Table 3.** ECM results

Variables	Coefficients	P-value
Constant	0.373417***	0.0000
ΔLAGR	0.237539***	0.0000
ΔLSE	0.402862***	0.0000
ΔIND	0.012825***	0.0008
ΔFDI	1.59E-11***	0.0377
ECM (-1)	-0.125224**	0.0000
R <sup>2</sup> = 0.90		
Adj. R <sup>2</sup> = 0.90		
Akaike info criterion = -1.843987		
Schwarz criterion = -1.750229		

**Note:** \*\*\* and \*\*, denotes significant at 1% and 5% P-values in the parenthesis; Δ represents the first difference.

**Source:** author's computation

The final table, table (4) presents the short- and long-term estimation  
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results. In the short term, all four variables and their respective lags are statistically significant. Our analysis will proceed as follow: First, the agriculture sector exhibits a great influence on the GDP growth in the COMESA countries at a 1% level in the short-term. Meaning that a one percent increase in agriculture brings up the GDP by 23% on average ceteris paribus. Hence, agriculture does have an elastic relation with economic growth in the region. Meanwhile, in the long term, this regressor does not influence GDP growth for the COMESA economies. Second, the regressor service sector also does have a significant impact on growth. In other words, the GDP in this region would go up by 40% when the service increases by 1% at a 1% level on average ceteris paribus. In the long run, it exerts a strong influence on the economic expansion of those countries at a 1% confidential level. It means that service has an elastic association with the GDP in the long run. Last, but not least, the explanatory variable industry proves to be a very important sector of development of those selected countries in the short term with a positive sign at a 1% level, or simply, in every percentage up in leads to a 1.2% increase in the GDP. While in the long term it presented a negative sign but significant. In another word, the negative sign means that if there is a decrease of 1% in the industry sector the GDP of those countries would go down by 4.6% at a one percent level on average ceteris paribus. Hence, the industry does have an inelastic association with the growth in COMESA. Finally, the FDI exerts a positive effect on economic development in the short run at a 5% level; while in the long term this regressor doesn't influence the GDP. Every 1% increase in FDI in the short run leads the GDP up by 1.59%. This clearly shows the importance of it on the GDP growth in the COMESA region.

**Table 4.** Short and long-run estimation

Variable	Short-run	Long-run
LGDP(-1)	0.874776 (0.0000)	
LAGR	0.237539 (0.0000)	-0.020182 (0.7698)
LAGR(-1)	-0.240066 (0.0000)	
LSE	0.402862 (0.0000)	1.013243 (0.0000)
LSE(-1)	-0.275979 (0.0000)	
IND	0.012825 (0.0012)	-0.046354 (0.0004)
IND(-1)	-0.018630 (0.0000)	
FDI	1.59E-11 (0.0468)	-4.35E-11 (0.2974)
FDI(-1)	-2.13E-11 (0.0102)	
CONST	0.373417 (0.0315)	
R-squared	0.99	
ADJ. R-squared	0.99	
F-statistic	5711.336	
Prob(F-statistic)	0.0000	
Akaike info criterion	-1.806949	

To validate the empirical analysis, it is necessary to conduct some tests to check if the results are trusted or not. Therefore, the auto-correlation test has been done and according to the Breusch Godfrey test, our result is free of this problem. The P-value is above the 5% (P-value = 0.2288) critical

value thus, we conclude that this model is good. For heteroskedasticity we got a significant P- value, meaning that is less than 0.05%, but since heteroskedasticity is not an issue in the panel then we can still rely on our results.

## **5. Conclusion**

In this work, we explored the contribution of economic sectors to the economic growth for the COMESA countries. First, we conducted the unit root test, and then the co-integration test was applied. The ADF and PP unit root test demonstrated that the variables are in the mixture order I(0) and I (1). The F-bound test showed a long term association among the variables. Therefore, the error correction model was used to analyze the long-run effect of the agriculture, services, industry, and FDI to GDP. The outcomes suggested that in the short-term the agriculture sector and FDI has a positive effect on growth. However, in the long-run, they are not a significant contributor to growth. Moreover, the services and industry sectors have a long effect on GDP growth in COMESA countries. For future work, we would suggest researchers focus or explore why the agriculture sector does not have any effect or contribution to the COMESA economies in the long-term since this activity is one of the most important sectors to the GDP and for our own sustainability. Second, service and industry have a long-term contribution to GDP; therefore we would suggest more government policies or incentives to these sectors such as an incentive to creating industrial zones, computerization's on the local services.

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