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Analyzing the Impact of the Labor Force on Economic Growth in Somalia (1991-2022)

Dr. Abdiaziz Ahmed Ibrahim

Assistant Professor of Economics

Email: cabdicasis@gmail.com

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ABSTRACT

This study examines the impact of labor force dynamics on economic growth in Somalia, focusing on labor force participation and unemployment rates from 1991 to 2022 using regression analysis of secondary data from World Bank indicators and SESRIC. It analyzes key economic variables—Gross Domestic Product (GDP), Labor Force (LF), Labor Force Participation Rate (LFP), and Unemployment Rate (UN)—using descriptive statistics, unit root tests, co-integration analysis, and regression modeling. The results indicate stable distributions for variables, with non-stationarity at levels but stationarity at first differences for most. Co-integration tests reveal a long-term equilibrium relationship among these variables, showing that while the labor force positively influences GDP, higher unemployment and lower participation

negatively affect it. Short-run analyses corroborate these findings, highlighting significant adverse effects of unemployment and participation on GDP. The Error Correction Model (ECM) indicates a rapid adjustment towards equilibrium, with around 87.78% correction of deviations. Diagnostic and stability tests confirm the model's reliability, emphasizing the importance of labor market dynamics in influencing economic output in the short and long term.

Keywords: Labor Force, Economic Growth, Somalia

1. Introduction

Economic growth refers to an economy's increasing ability to produce goods and services over time. It is typically measured as the growth rate of a nation's gross domestic product (GDP), which represents the total value of all goods and services produced within a country over a specific period, usually quarterly or annually. The long-term growth rates of different nations can vary significantly, especially when considering their sustainability over time. Achieving a certain level of economic growth, particularly in developing countries, indicates potential for progress and reflects the economic power trend. Sustained high economic growth is often seen as a key achievement in both developed and emerging economies. (Anh et al., 2020).

The labor force plays a crucial role in driving economic growth. A larger labor force contributes to faster economic growth and development. Public labor force involvement in essential infrastructure projects can be a key factor in enabling capital accumulation in the private sector. Additionally, public labor force contributions to education, healthcare, and other public goods that benefit society—where private investment may be insufficient—can enhance human capital and create a favorable environment for private sector growth, ultimately fostering economic expansion. Understanding shifts in the labor force participation rate is critical for several reasons. The size of the labor force is important for estimating potential GDP and projecting future growth, as it is determined by the share of the adult population that is either employed or actively seeking work. Moreover, the labor force participation rate helps assess the amount of slack in the labor market, as the unemployment rate alone has become a less reliable measure of labor market conditions without considering participation trends. (Juhn & Potter, 2006).

The labor force participation rate (LFPR) measures the percentage of a country's working-age population that is either employed or actively seeking employment. According to the Bangladesh Bureau of Statistics (BBS), individuals aged 15 or older, whether working or not, are included in the labor force. This participation rate is crucial for sustaining the upward trend in GDP growth. In the last five fiscal years, Bangladesh has experienced an average annual GDP growth rate of 6.86%, with a growth rate of 7.4% in 2017–18, and a projected increase to 8.13% in 2018–19. Furthermore, it has been observed that 58.2% of the labor force consists of 80.5% men and 36.3% women. (Ul Haque et al., 2019).

The rising number of workers indicates that the growth of the labor force in the industry has positively contributed to the overall economic output. The labor force is a key factor in Vietnam's strong annual economic growth. Both economic theory and practice in developed and developing nations have shown a positive link between the labor force and economic growth. However, as the labor force continues to expand over time, the marginal benefit to economic growth tends to decrease, assuming other factors remain constant. Nevertheless, the labor force remains a vital contributor to Vietnam's impressive annual growth rate. (Anh et al., 2020).

The labor force consists of non-institutionalized individuals who are actively engaged in the economy. This includes both employed (EMP) and unemployed (UE) individuals, with the total labor force (LF) being the sum of the two. To calculate the unemployment rate, divide the number of unemployed people by the total labor force. The labor participation rate (LPR) represents the percentage of the non-institutionalized population that is economically active. According to statistics, the economically active population, or those of working age, is made up of individuals aged 16 and older. (Kargi, 2014).

In Africa, the labor force participation rate refers to the percentage of the working-age population that is either employed or actively seeking work. This rate is highest in East Africa and lowest in North Africa. For example, only 44% of Algeria's working-age population is employed, while in Madagascar, 86% are engaged in the labor market. Employment-to-population ratios vary significantly: in Algeria and South Africa, it's 39%, while in countries like Burkina Faso, Burundi, Madagascar, Rwanda, and Uganda, it exceeds 80%. The gap between labor force participation and employment ratios is largely explained by unemployment. Most African countries have relatively low unemployment rates, with a median of 7.3%, and 33 out of 52 nations reporting rates below 10%. However, countries in Southern Africa, such as Lesotho, Mozambique, Namibia, and South Africa, have much higher unemployment rates, ranging from 24% to 28%. (Wijaya et al., 2021).

A strong labor force is often considered a valuable asset for a country, highlighting the significance of labor force participation rates, especially in many developing nations. However, there are notable disparities between men and women in various areas, such as political representation, household decision-making power, education, income, job types, access to formal employment, managerial roles, and productive resources. (Yakubu & Akanegbu, 2020).

Labor force participation in Somalia is relatively low compared to many other Sub-Saharan African (SSA) countries. Just 55% of the working-age population (ages 15–64) is employed or actively seeking work, while the remaining portion is economically "inactive" and not participating in the labor market. Only 43% of Somali women engage in the labor market, compared to 67% of men, giving Somalia the lowest female labor force participation (FLFP) rate in SSA and the widest gender gap. Somali youth are also more likely to be economically

inactive, with just 39% of those aged 15–24 participating in the labor force, compared to 62% of adults aged 25–64. While lower youth labor participation is common globally, few countries have rates as low as Somalia. Additionally, labor force participation increases only modestly with age, as only 2 in 5 Somali youth work, compared to 3 in 5 young adults aged 25–35.(Karamba, 2021).

The labor force is essential in promoting economic growth in Somalia. A skilled and efficient workforce can boost output, foster innovation, and enhance competitiveness. Given Somalia's largely informal and agriculture-based economy, the labor force plays a particularly important role in driving economic progress. (World Bank, 2022).

A robust labor force is vital for economic growth in Somalia. The World Bank has reported that a 1% rise in the labor force participation rate can result in a 0.25% increase in GDP per capita. This is due to a larger workforce providing more individuals to produce goods and services. However, Somalia's economy is significantly affected by recurrent droughts impacting the agricultural sector. According to a World Bank report, Somalia's nominal GDP grew by 5% in 2015 and 6% in 2016. (World Bank, 2017).

In Somalia, there are several sectors with potential business opportunities for the labor force. While this list is not exhaustive, it highlights some of the most promising areas. These sectors include energy, telecommunications, agriculture, real estate, education, fisheries, manufacturing, services, and finance. Additionally, Somalia has a thriving livestock market, primarily exporting to Gulf countries. Given that the labor force is crucial for economic growth, placing greater emphasis on empowering the private sector labor force and mobilizing

domestic revenue could reduce Somalia's long-term reliance on aid and contribute to the expected growth of its economy. (World Bank, 2019).

General objective of this research is to examine the effect of labor force on economic growth in Somali, specifically:

1. To examine the impact of labor force participation on economic growth in Somalia.
2. To determine the relationship between unemployment and economic growth in Somalia

2. Literature Review

The purpose of this study is to find the impact of labor force participation on economic growth in Pakistan, the time series data is used from the time period of 1980 to 2012 which is collected from Pakistan Bureau of Statistic, State Bank of Pakistan and World Bank, this study found the short run and long run relationship between the economic growth, and labor force participation (Shahid, 2014).

This paper has examined empirically the effect of labor force participation on economic growth in Nigeria, used Time series data for both the dependent and independent variables were sourced from World Bank Development Indicators 2018 database for the period 1990-2017. Johannsen's Cointegration and Vector Error Correction model (VECM) econometric tools were used, the findings of the study the OLS model shows that the coefficient of labor force participation has a negative but significant effect on economic growth in Nigeria. Finding shows that the variables have long-run relationship and also long-run causality was found running from LFPR and GFCF to RGDP (Yakubu et al., 2020).

This research paper aims to study the relationship between Gross Domestic Product and labor force participation of South Asian countries

such as Bangladesh, India, Pakistan, and Sri Lanka, A long panel data model have been conducted to carry out this research paper. Secondary sources (internet), World Bank database, articles, books were used to collect data and information. The data used in this study are panel data for the time period of 1990 to 2017. The data for all variables were collected from World Data Bank published by World Bank; this research it is found that the simultaneous increase in labor force participation has a direct impact on countries" GDP (Name et al., n.d.).

This study seeks to analyze the effect of Labor Force and unemployment on GDP in Malaysia, the data was collected and retrieved from the World Development indicator and World Bank from the year 1990 until 2021, been analyzed and has employed multiple regression model, The findings show that Labor Force and unemployment has positive significant impact on GDP in Malaysia (Ramlan, 2022).

The study Investigates the relationship between the labor force participation rate for both male and female, gross fixed capital formation, and economic growth in Bangladesh, The study uses annual time series data from the World Development Indicators (WDI) over the period of 1991 to 2017 to investigate the relationship between labor force participation and economic development in Bangladesh, the study finds Both total labor force participation and female labor force participation have negative effects on economic development in the long run. On the contrary, gross fixed capital formation has an explicit positive considerable impact on the economic development of Bangladesh (Haque, 2019).

the study aims to explore the relationship between labor force participation, population growth, and economic growth in Turkey. The study seeks to explain the paradox of jobless growth and unskilled

growth, and to identify the factors that contribute to the stagnation or slow increase in the labor force participation rate in Turkey. The study also aims to provide insights into the implications of these findings for policymakers and businesses in Turkey, this study employed a combination of quantitative analysis and empirical research methods to analyze the relationship between labor force participation, population growth, and economic growth in Turkey, the results shows that Correlations and statistical relationships between economic growth, labor force variables (such as employment, unemployment, and labor participation rate), and non-institutional population, providing evidence for the "jobless growth" phenomenon (Bilal Ka'g, 2014).

This study aims to find out correlation between Labor Force and GDP. by analyzing the data from 2002 to 2009 of Bangladesh, Data on Labor Force and Gross Domestic Product of Bangladesh from the year 2002-2009 are collected from Data Bank of World Bank. All data are secondary Data and collected from reliable sources. Analyze like Correlation of coefficient (On overall volume and Growth Rate) are calculated on the formula of Pearson correlation coefficient, the results indicate a strong positive relationship and positive relationship accordingly between Labor Force and GDP and so after the analyzed the Data in 2002-2009 of Bangladesh (Personal et al., 2012).

3. Research Methodology

3.1 Data Source

This study employed time-series data of Somalia over the period 1991–2021. The data of the study were extracted from the Organization of Islamic Cooperation Statistical, Economic, and Social Research and Training Centre for Islamic Countries (SESRIC) and World Bank. The variables incorporated in the model are real gross domestic product, labor

force, labor force participation, and unemployment. Table 1 summarizes the data description and sources.

Table 1: Description of the Variable, measurements, and Sources

Variables	Measurement	Sources
GDP	Gross domestic product (Current US\$)	SESRIC
LF	Labor force	World Bank
LFP	Labor force participation rate	SESRIC
UN	Unemployment, total (% of total labor force)	World Bank

3.2 Model Specification

Econometrics Modeling

To assess empirically the impact of labor force on economic growth of Somalia period 1991–2021. This paper employs and follows the endogenous growth model known as the "AK model" developed by (Pagano, 1993) and its expanded version by (Bailliu, 2000) which implemented to labor force in order to capture the relationship between productivity growth and foreign capital flows. Therefore, the basic specification of the model is presented as:

$$GDP_{it} = C_0 + \alpha_1 LF_{it} + \alpha_2 LFP_{it} + \alpha_3 UN_{it} + \varepsilon_{it}$$

Where: GDP is real gross domestic product, LF is labor force, LFP is labor force participation, UN unemployment, and ε error term. ARDL methodology includes the bound F-test for cointegration. The ARDL method is a technique involving two steps. To examine the long term cointegration presence, equation (1) is re-arranged in the ARDL framework as an unrestricted error correction model (ECM) as an equation (2):

$$\Delta GDP_{it} = C_0 + \alpha_1 GDP_{i,t-1} + \alpha_2 LF_{i,t-1} + \alpha_3 LFP_{i,t-1} + \alpha_4 UN_{i,t-1} + \sum_{i=1}^n \alpha_1 \Delta GDP_{it-1} + \sum_{i=1}^n \alpha_2 \Delta LF_{it-1} + \sum_{i=1}^n \alpha_3 \Delta LFP_{it-1} + \sum_{i=1}^n \alpha_4 \Delta UN_{it-1} + \varepsilon_{i2}$$

Where delta Δ is the operator of the difference and represents the dynamics of the short term. Long term relationships are measured by the parameters attached along with variables. The short-run error correction model is used to determine short-run dynamics and to check the robustness of the long-run coefficient to equation (2). It is stipulated as show in equation (3):

$$\Delta GDP_{it} = C_0 \sum_{i=1}^n \alpha_1 \Delta GDP_{it} + C_0 \sum_{i=1}^n \alpha_2 \Delta LF_{it-1} + \sum_{i=1}^n \alpha_3 \Delta LFP_{it-1} + \sum_{i=1}^n \alpha_4 \Delta UN_{it-1} + \sum_{i=1}^n \alpha_6 \Delta REM_{it-1} + ECM_{it-1} + \varepsilon_{i3}$$

Where GDP is gross domestic product current price; LF is labor force; LFP is labor force participation; UN unemployment. The study based on the annual data of times data over the full sample period of 1991-2021 of Somalia. The study will apply the Autoregressive Distributed Lag (ARDL) structural break to test cointegration to examine the long-run and error correction model to determine whether existing short run relationship between the variables. Moreover, the Schwarz Bayesian Criterion is used as the lag selection criteria, since we are regressing small sample observations. The hypothesis is formulated as follows: -

$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ | the null hypothesis (H_0): the variables are co-integrated.

$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$ | The alternative hypothesis (H_1): the variables are not co-integrated.

4. Descriptive Statistics

	LGDP	LLF	LLFP	LUN
Mean	21.99043	14.46566	3.531967	2.962124
Median	21.92575	14.48875	3.533978	2.961011
Maximum	22.95530	14.96708	3.546163	2.998080
Minimum	21.14602	13.95889	3.508256	2.935345
Std. Dev.	0.613730	0.301183	0.011780	0.016299
Skewness	0.289557	-0.099808	-0.543754	0.341919
Kurtosis	1.715856	1.896709	2.049131	2.505039
Jarque-Bera	2.645864	1.676129	2.782435	0.950160
Probability	0.266353	0.432547	0.248772	0.621835
Sum	703.6937	462.9013	113.0229	94.78797
Sum Sq. Dev.	11.67661	2.812042	0.004302	0.008235
Observations	32	32	32	32

Figure 4. 1 Descriptive Statistics

The table presents descriptive statistics for four key economic variables derived from 32 observations: gross domestic product (GDP), labor force (LF), labor force participation rate (LFP), and unemployment rate (UN). GDP is measured in dollars, LF accounts for the total number of individuals available for work, LFP indicates the percentage of the working-age population engaged in the labor force, and UN reflects the proportion of the labor force that is unemployed. The mean GDP is noted as \$21.99, with a maximum of \$22.95 and a minimum of \$21.14 and the standard deviation of 0.61. The mean Labor Force is noted as 14.46, with a maximum of 14.96 and a minimum of 13.95 with a standard deviation of 0.30. The mean labor force participation rate is noted as 3.53, with a maximum of 3.54 and a minimum of 3.50 with a standard deviation of

0.01. We note the mean unemployment rate as 2.96, with a maximum of 2.96 and a minimum of 2.93, all within a standard deviation of 0.01.

Table 4. 1 Unit root

UNIT ROOT TEST RESULTS TABLE (ADF)					
Null Hypothesis: the variable has a unit root					
<u>At Level</u>					
		GDP	LF	LFP	UN
With Constant	t-Statistic	0.2016	3.1280	-2.6591	-1.6780
	Prob.	0.9681	1.0000	0.0937	0.4318
		n0	n0	*	n0
With Constant & Trend	t-Statistic	-1.9902	2.7378	-0.9173	0.1505
	Prob.	0.5829	1.0000	0.9403	0.9964
		n0	n0	n0	n0
Without Constant & Trend	t-Statistic	1.5252	5.9518	-0.3894	0.1818
	Prob.	0.9655	1.0000	0.5345	0.7319
		n0	n0	n0	n0
<u>At First Difference</u>					
		d(GDP)	d(LF)	d(LFP)	d(UN)
With Constant	t-Statistic	-2.8075	-4.0131	-0.9062	-4.5812
	Prob.	0.0692	0.0043	0.7712	0.0010
		*	***	n0	***
With Constant & Trend	t-Statistic	-2.9616	-5.0869	-3.6180	-5.2381
	Prob.	0.1590	0.0015	0.0457	0.0010
		n0	***	**	***
Without Constant & Trend	t-Statistic	-2.0486	0.1818	-1.0807	-4.6543
	Prob.	0.0406	0.7319	0.2464	0.0000
		**	n0	n0	***

The analysis indicates that at the level, several economic indicators—GDP, Labor Force (LF), Labor Force Participation (LFP), and Unemployment (UN)—exhibit non-stationarity, as indicated by their respective p-value. However, when examining the first differences of these variables, all show signs of stationarity, particularly LF and UN, which present significant p-values.

Table 4. 2 Co-integration test

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	9.651448	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

The F-statistic is a value used in statistical tests to determine if there is a significant relationship between variables. In this case, since the F-statistic (9.651448) exceeds the critical value at the 5% significance levels, it suggests that there is a long-term relationship among the variables in your model. This means that the variables tend to change together over time, indicating that when one variable changes, it can cause long-term changes in the others.

Table 4. 3 Long Run Coefficient Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LLF	1.680812	0.204775	8.208077	0.0000
LLFP	-7.470448	1.850631	-4.036703	0.0016
LUN	-13.55823	3.177729	-4.266641	0.0011
C	64.24291	12.25048	5.244113	0.0002

The analysis presents coefficients from a regression model examining three independent variables: Log of Labor Force (LLF), Log of Labor Force Participation (LLFP), and Log of Unemployment (LUN), alongside a constant (C). LLF shows a positive relationship with the dependent variable, with a coefficient of approximately 1.68, indicating a significant positive impact ($p < 0.05$). Conversely, LLFP has a negative coefficient of around -7.47, suggesting that higher labor force participation is associated with a decrease in the dependent variable ($p < 0.05$). LUN also negatively affects the dependent variable, with a coefficient of about -13.56, consistent with economic theory that increasing unemployment correlates with declining GDP ($p < 0.05$). Finally, the constant indicates the expected value of the dependent variable when independent variables are zero, also statistically significant ($p < 0.05$).

Table 4. 4 ECM and Short Run Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LLF)	1.843860	0.956601	1.927512	0.0649
D(LLFP)	-7.935759	3.789154	-2.094335	0.0461
D(LUN)	-3.828141	1.268431	-3.018013	0.0056
ECM	-0.877803	0.109433	-8.021408	0.0000
C	0.000939	0.031435	0.029871	0.9764

The analysis presents the impact of various factors on economic output, likely GDP, using a regression model. A 1-unit rise in labor force participation results in a substantial decrease of about 7.93 units in GDP ($p < 0.05$). Additionally, a 1-unit increase in unemployment correlates with a reduction of approximately 3.82 units in GDP ($p < 0.05$), reinforcing the negative effects of rising unemployment on economic performance. The constant term lacks statistical significance, while the error correction term indicates a robust mechanism, with approximately 87.78% of deviations from long-run equilibrium corrected in the current period ($p < 0.05$).

Diagnosis Test

Breusch-Godfrey Serial Correlation LM Test

The Breusch-Godfrey Serial Correlation LM Test is a statistical method used to determine if there is serial correlation, or autocorrelation, in the residuals (the differences between observed and predicted values) of a regression model. Autocorrelation happens when the residuals from different periods are related to each other. This correlation can lead to inefficiencies in the regression estimates, potentially distorting the results and conclusions of the analysis.

Table 4. 5 Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.224854	Prob. F(2,10)	0.8026
Obs*R-squared	1.204992	Prob. Chi-Square(2)	0.5474

Since the p-value is higher than 0.05, we fail to reject the null hypothesis. This means that there is no statistically significant evidence of serial correlation in the residuals.

The **Breusch-Pagan-Godfrey Heteroscedasticity Test** is used to detect the presence of heteroscedasticity in the residuals of a regression model. Heteroscedasticity occurs when the variance of the error terms is not constant across observations, which can lead to inefficient estimators and incorrect standard errors.

Table 4. 6 Heteroscedasticity Test

Heteroscedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.455233	Prob. F(15,12)	0.9241
Obs*R-squared	10.15470	Prob. Chi-Square(15)	0.8099

The p-value of **0.8099** is much larger than 0.05, meaning we fail to reject the null hypothesis, confirming that there is no significant heteroscedasticity.

Jarque-Bera Test

The Jarque-Bera test is a statistical test used to determine if the residuals (the differences between observed and predicted values) of a model are normally distributed. A normal distribution is important in many statistical analyses, and this test assesses whether the residuals deviate from normality based on skewness (asymmetry) and kurtosis (the sharpness of the peak). If the test indicates that the residuals are not normally distributed, it may suggest that the model's assumptions are violated.

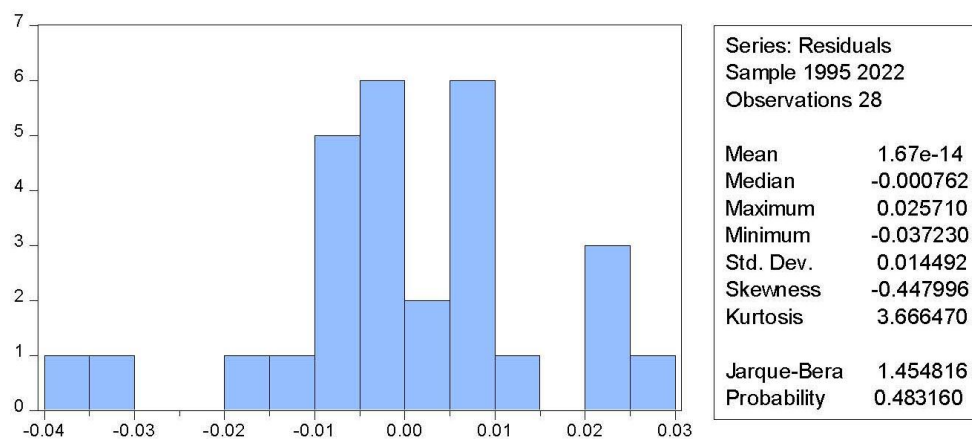
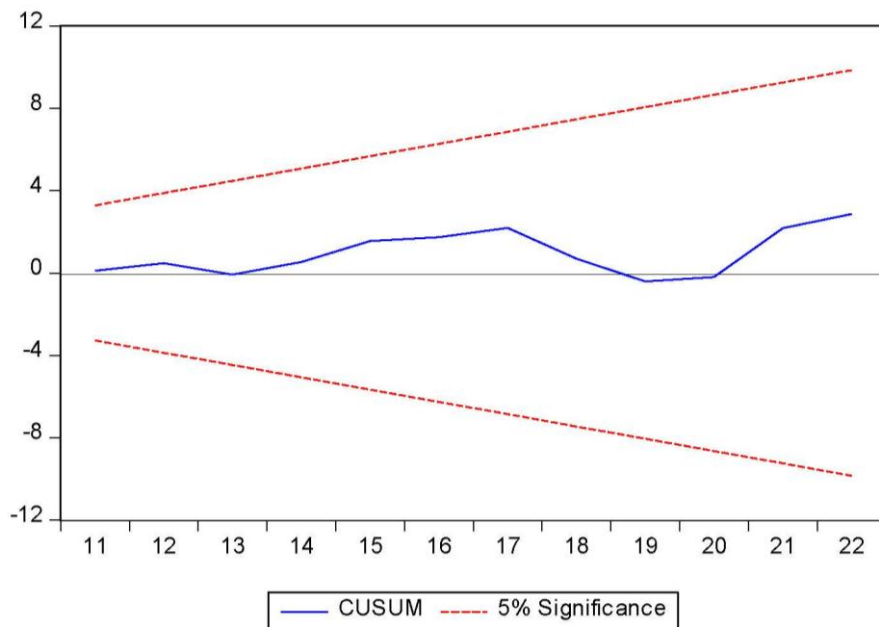
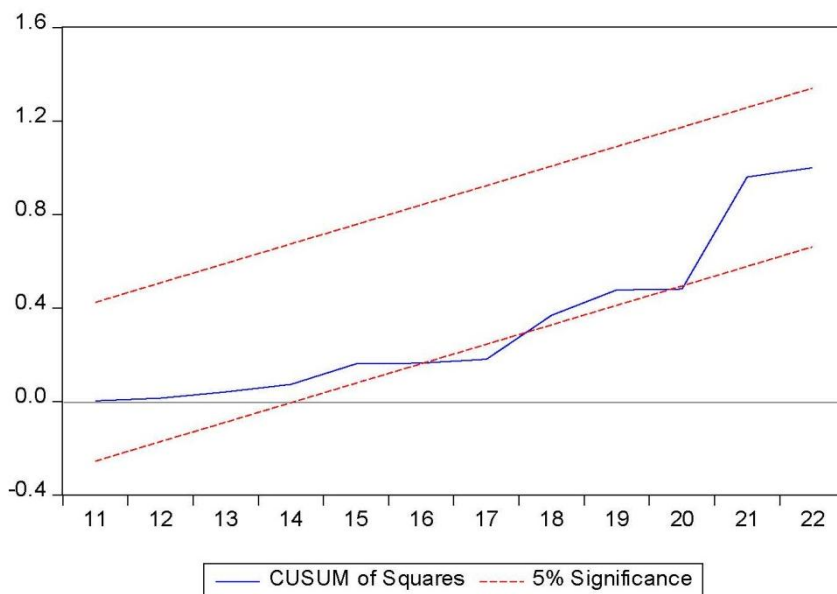


Figure 4. 2 Jarque-Bera Test

Since the p-value is 0.483160, which is greater than 0.05, we fail to reject the null hypothesis of normality. This suggests that the residuals are approximately normally distributed.

Stability Test

The CUSUM test is used to assess the stability of regression coefficients over time and identify any structural breaks in the model. The blue line shows the cumulative sum of recursive residuals, while the red dotted lines indicate the 5% significance boundaries (confidence intervals). If the blue line remains within the red lines, the coefficients are stable; if it crosses the red boundaries, it suggests potential instability or structural breaks.

**Figure 4. 3 CUSUM Test****Figure 4. 4 CUSUM of Squares Test**

The results from the CUSUM and CUSUM of Squares tests indicate that your model is stable, meaning that there are no major changes or instability in its parameters. However, we should keep an eye on the small increase in variance that appears towards the end of the CUSUM of Squares test, as this could suggest potential issues in the future.

5. Conclusion

The main objective of this study was to Investigate the effect of trade balance on economic growth in Somalia. The study utilizes secondary data extracted from the World Bank, IMF, and SESRIC and begins from 1991 to 2022. A classical linear regression model based on the ARDL estimation method was used on the basis of this study to determine the nature and strength of the labor force and economic growth relationships. The descriptive statistics provide an overview of the key economic variables: GDP, Labor Force (LF), Labor Force Participation (LFP), and Unemployment (UN). These variables exhibit limited variation, with small standard deviations and minimal skewness, suggesting a relatively stable dataset. The Jarque-Bera test confirms the normality of the data distribution. The unit root test indicates non-stationarity at the level for all variables but shows that GDP, LF, and UN become stationary at their first differences. The co-integration test confirms a long-term equilibrium relationship among the variables, with the F-statistic surpassing the critical values.

In the long-run analysis, LLF has a positive effect on GDP, while both LLFP and LUN negatively impact GDP, consistent with economic expectations. The short-run analysis reveals a significant negative impact of both labor force participation and unemployment on GDP. The ECM shows a high error correction rate, indicating quick adjustment toward long-run equilibrium.

Diagnostic tests show no issues with serial correlation or heteroscedasticity. The residuals are normally distributed according to the Jarque-Bera test, and the CUSUM test confirms model stability. Overall, the analysis indicates a robust model with significant long-term and short-term dynamics, particularly highlighting the negative effects of rising unemployment and declining labor force participation on economic output.

The finding of the study indicated the presence of long run cointegration between economic growth and labor force. Both the long and short run indicated that LF has a positive and significant effect of economic growth of Somalia. Interpretively, a one-unit increase in LF is associated with a 1.680812-unit increase in GDP, on average. This means LF helps Somalia's economy by permitting foreign investors to fill investment gaps in manufacturing and infrastructure, which plays a crucial part in Somalia's economic growth. While labor force participation LFP and unemployment UN have a negative significant effect economic growth of Somalia. Interpretively, a one-unit increase in LFP and UN is associated with a -7.470448- and -13.55823unit decrease in GDP respectively.

6. Policy Recommendation

1. **Increase Labor Force Participation and Reduce Unemployment:** Implement vocational training, flexible work policies, and support for entrepreneurship to boost workforce engagement and job creation, particularly targeting underrepresented groups and youth.
2. **Strengthen Social Safety Nets and Job Transition Support:** Expand unemployment benefits and introduce active labor market policies (ALMPs) to help displaced workers re-enter the job market through retraining and job matching programs.

3. Promote Economic Diversification and Skills Alignment: Encourage investment in non-traditional sectors like technology and green energy, while reforming education and upskilling programs to address skill mismatches and align the workforce with market needs.

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