# ROLE OF MACROECONOMIC INDICATORS AND STRATEGIC MANAGEMENT IN AFGHANISTAN'S ECONOMIC GROWTH

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## **ABSTRACT**

Macroeconomic indicators provide valuable insights into the economic trends and health of a nation. This study focuses on assessing the impact of key macroeconomic indicators—foreign direct investment, inflation, industrial output, exchange rate, and money supply—on the economic development of Afghanistan from 2000 to 2021. Additionally, the study evaluates the effects of trade, interest rates, labor force, and inflation on Afghanistan's GDP. The findings indicate that trade (TR) is statistically significant and has a positive impact on GDP, as it creates better job opportunities, reduces poverty, and enhances economic prospects. Interest rates (IR), while statistically significant, show a negative correlation with GDP. Increased interest rates lead to reduced spending by firms and consumers, subsequently lowering profits, stock prices, and overall GDP. The labor force (LF) is also found to be statistically significant and positively influences GDP, highlighting the essential role of labor in the production of goods and services. Conversely, inflation (IF) is statistically insignificant and negatively impacts GDP. Rising labor and raw material costs drive inflation, leading to higher prices for goods and services, which can dampen consumer spending. This study underscores the critical role of macroeconomic indicators in shaping economic development and provides a comprehensive analysis of their impact on Afghanistan's economic growth. The results offer valuable insights for policymakers and economists aiming to foster economic stability and growth in Afghanistan.

Keywords: GDP; International Trade; Interest Rate; Labor Force; Inflation; ARDL.

#### INTRODUCTION

Stable macroeconomic indicators are crucial for achieving sustained economic growth. The majority of nations aim to achieve rapid, sustainable economic development through these

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indicators. Many macroeconomic factors, including trade, interest rates, labor force, inflation, supply, exchange rates, industrial production, foreign direct investment, and interest rates, influence a country's economic development. The economic stability of a country depends on the macroeconomic variables that help to create more job opportunities, generate more revenue and so more tax is collected by a country (Raza et al., 2023).

Trade is the exchange of goods or services between countries and is a fundamental economic notion. Numerous emerging nations have started to liberalize their financial and trade systems (Stirbu & Parikh, 2004). One of the most contentious topics is the impact of the trend toward trade policy openness on per capita income growth, as there is a propensity to increase imports more than exports, resulting in trade deficits and therefore contributing to future low economic development.

The proportion of the principal that the lender charges for using its money is known as the interest rate. The principal is the amount that was lent. The interest rate on a loan affects how much it will cost. Therefore, they have a say in how rapidly or slowly the economy expands. Interest rates are one of the main macroeconomic indicators that immediately impact on economic development. The interest rate is commonly used to refer to the capital costs, or the expense associated with spending money over time. The interest rate, in the borrower's opinion, represents the expense of borrowing money (borrowing rate). In the eyes of a lender, the interest rate is the cost associated with lending cash (lending rate). An efficient market is what a reasonable investor always seeks out. Few individuals can produce above-average profits in an inefficient market, which lowers public confidence (Raza et al., 2023).

There are both working and unemployed people in the labor force. The labor force involvement rate is the proportion of citizen, non-institutional population that is employed. The labor force in emerging nations is anticipated to increase by 39 percent on average over the next 40 years (Zahonogo, 2016). South Asia is home to almost a quarter of the world's good workforce. Over the past two decades, the employment growth rate in such developing nations has outpaced that of industrialized economies. The rapid rise of the population could be the leading cause. However, the average income per person is low, and living standards are lower than in developed countries.

Inflation is the rate of price increases over a specific period. Amounts of inflation are occasionally stated in generic terms, such as an increase in prices generally or the cost of living nationwide. According to reports, one of the most important macroeconomic questions being

discussed by policymakers, central monetary authorities, and macroeconomic economists worldwide is the relationship between inflation and economic growth (Tajudeen et al., 2017). The rate of capital formation, which is mainly reliant on savings and investment rates, determines the economic growth rate. Therefore, some economists believe that there is an affirmative association among inflation and economic development and that inflation promotes economic growth (Tajudeen et al., 2017).

The annual percentage rise in the country's output is known as the economic growth rate. The nation's productivity has grown over time, also indicated by the GDP per capita. The GDP value is calculated adding up all of value the goods and services produced throughout the year (Ashraf et al., 2023). The results are compared to those from the previous year to ascertain where the country stands. To determine whether one's economy is growing more quickly than another's, similar comparisons can be conducted between nations. Positive or negative growth rates are also possible. When the economic growth rate is higher, a company's economy is expanding and improving (Ashraf et al., 2023; Aziz et al., 2023).

The present study is designed to assess and analyze the macroeconomic variables and their impacts on Afghanistan's economic development from 2000 to 2021. The economic development of Afghanistan might be adversely harmed by several indicators identified in this research. Many macroeconomic variables, such as inflation, interest rates, trade, labor force, etc., impact Afghanistan's economy. This study's primary goal is to look at these chosen indicators that will influence Afghanistan's economic development. In other words, how did macroeconomic indicators like trade, interest rate, labor force, and inflation affect Afghanistan's economic growth from 2000 to 2021.

# **RESEARCH OBJECTIVES**

- To examine the impact of trade on economic development of Afghanistan.
- To assess the impact of interest rates on economic development of Afghanistan.
- To analyze the impact of labor force on economic development of Afghanistan.
- To evaluate the impact of inflation on economic development of Afghanistan.

# Research Questions

- Is there any impact of interest rates on economic development?
- Is there any impact of trade on economic development?
- Is there any impact of inflation on economic development?
- Is there any impact of labor force on economic development?

# SIGNIFICANCE OF THE STUDY

This research contributes to Afghanistan's economic development as a case study. Even though it has received a lot of help over the past almost two decades, this country has not been able to improve its economic development or decrease income inequality or poverty. A low capacity for aid absorption, a lack of commitment to institutional transformation, instability, and corruption cause the ineffectiveness of assistance. Afghanistan must implement significant institutional, local government, and rural development policy changes. Since 2001, the government, led by President Karzai and Mr. Ghani, has spent almost \$ 119 billion on economic development, but results have not been as anticipated. Security is getting worse by the day, and Afghanistan remains one of the least developed and poorest countries in terms of economic growth.

## LITERATURE REVIEW

Wani et al., (2017) demonstrate time series data from 2005–2015 to define the key FDI determinants and also to assess the impact of inflation, determinants on the Afghanistan economy in particular. The study concluded that there is a significant beneficial impact on Afghanistan's economic growth from the relationship between trade, gross domestic product, and gross fixed capital formation. Pashtoon, (2017) explored the affiliation between trade and economic growth of Afghanistan by taking sampled data from 2005 to 2016. Trade, Inflation, interest rates, currency rates, foreign direct investment, and the unemployment rate are all regarded as independent variables, while the yearly growth rate of real GDP is treated as a dependent variable. The authors come to the conclusion of that FDI, and trade have statistically significant and positive impact while inflation, interest rate and unemployment has negative impact on the economic growth of Afghanistan.

Wahab (2018) demonstrates how to determine the impact of interest rates, trade and inflation, and economic expansion in 47 Asian nations. From 2000 to 2016, this study explained the unbalanced panel data in 47 Asian countries. Economic growth is the study's dependent variable, and actual interest rates, inflation, trade, and gross domestic savings are the independent variables. The analysis finds an affirmative association among economic development and two macroeconomic variables (real interest rate and inflation) but a nugatory correlation among inflation and the real interest rate and economic development. Additionally, the findings support the claim that trade is not a factor influencing the economic expansion of Asian nations. Azizi and Daqiq (2019) attempts to evaluate the monetary policy of the central bank of Afghanistan concerning addressing significant economic variables, such as inflation,

shifting the exchange rate, and delivering price stability. The data was available between April 2012 and December 2018. Only GDP has a significant impact on economic growth. However, the findings of the correlation analysis of macroeconomic indicators with the exchange rate demonstrate that most indicators correlate with the exchange rate According to the findings, Afghanistan Bank's sales of foreign currency and capital notes were responsible for just 40% of changes in the exchange rate.

Tayeb and Wadhwa (2020) this study sought to determine the impact of several factors, such as inflation, exchange rate, unemployment, government spending, and economic growth, on Afghanistan's ability to attract economic growth. This study uses secondary data from 2005 to 2017 for statistical and econometric analysis. The analytical tools of regression have carried out empirical analysis and estimation. The time series data analysis also uses the WDI-derived Augmented Dickey-Fuller (ADF) and Phillips-Peron (PP) tests. According to the study's findings, Afghanistan's unemployment rate is a significant statistical factor that either favorably influences inflation in Afghanistan or has a good association with it. However, the exchange rate, government spending, and inflation are all statistically insignificant with negative values. Using data from 2005 to 2017, this study contends that the primary factors influencing inflation inflows in Afghanistan are negative government spending, currency exchange, unemployment, and productivity expansion.

Ashrafi and Kalaiah (2020) analyzed the impact of foreign trade on the economic expansion of Afghanistan. The study used the data from 2002 to 2018 and Augmented Dickey-Fuller test was employed to identify the stationary variables. The outcome of this study shows a long-term connection between foreign commerce and Afghanistan's economic expansion. Granger-Causality test results concluded that there is a causal relationship between the importation and exportation of Afghanistan. Similarly, Raza et al. (2023) analyzed the trade and investment played a boosting role in the economic growth and economic development of Pakistan.

Yama and Wani, (2021) looked into the link between Afghanistan's export diversification and economic expansion. The study used data from 2008-2018 and VAR model has been used to assess how export diversification affects economic growth. International commerce has been accelerating, and economic growth has been a significant issue for experts. According to the estimated results, export diversification and economic growth in Afghanistan are positively correlated. Other explanatory factors that support economic growth include trade openness and gross domestic fixed capital formation. Bahr, (2021) determines the primary causes of the gender disparity in Afghanistan's workforce between 2016 and 2019. The Asia Foundation's

Survey of the Afghan People served as the source of the study's data. The results of this study lend credence to the theories that increased levels of education, favorable views about women's employment and education, and higher income levels positively impact women's participation in the labor force in Afghanistan. Rahman, (2021) connected inflation and how it affects Afghanistan's economic development. The primary goal of this essay is to understand how critical economic factors, such as inflation, exchange rates, and interest rates, affect Afghanistan's economic development. Between 2005 and 2016, an astonishing amount of secondary data was utilized. Although inflation rates from abroad, currency exchange rates, and interest rates are considered independent factors, the domestic product is a dependent variable. Except for the inflation rate, which exhibits a negative trend and a nugatory influence on economic development, all variables in the previous investigation that used multiple regression analysis reflect a favorable impact on economic development.

Zohor and Ebad (2021) used the time series data for Afghanistan from 2007 to 2019 and ADF and the Vector Error Correction Model (VECM) were applied. GDP is used as a dependent indicator and a stand-in for economic development, while inflation, trade, and interest rates served as independent factors. The study concludes that inflation significantly and negatively affects Afghanistan's economic development. While inflation has a positive and important effect on Afghanistan's economic development, other factors like trade also have a significant negative impact.

Mariel (2022) examined how women's engagement in school and the work force affected Afghanistan's economic development from 2002 to 2019 is examined. Because the study's data were numerical, it used secondary sources and a descriptive design. To establish the dependent variable's relationship to the independent factors' correlation, multiple linear regression was carried out. The outcome of the regression analysis showed a strong and positive link among the Gross Domestic Product and Upper Secondary Enrollment. There was a substantial negative association between the labor force participation rate and GDP. The Gross Domestic Product, the Women's Business Index, and the Law Index did, however, have a positive and negligible association. The correlation among the unemployment rate and the GDP was unimportant and negatively correlated. Although the unemployment rate has a detrimental effect on economic growth, this data confirms it.

Khan et al., (2022) look at the impact of labor force education on economic development in Pakistan and Afghanistan from 2002 to 2019. The Ordinary Least Squares (OLS) method is used to estimate unknown parameters, depending on the data type. The empirical findings show

that education through enrollment in schools significantly impacts economic growth and consequently contributes to Pakistan's and Afghanistan's economic growth. The other factors, including the labor force have a positive effect on economic development in Pakistan while harming it in Afghanistan. Inflation rate and population growth also harm economic growth in both Pakistan and Afghanistan. In light of the inverse correlation among education and economic development, both countries' policymakers should develop sensible measures to further mitigate the detrimental effects of school enrolment on the economy, thereby promoting economic growth and enhancing social welfare.

Figure 1 shows that all four variables impact on the Afghanistan's Gross Domestic Product (GDP). When in a country, the growth of interest rate and inflation is taken forward, which causes the investor to invest more and the people to encourage investment in that country; as a result of this interest, it causes trade and the increase of the labor force. Increases in the labor force result in higher per capita incomes across the nation. Increases in per capita income have a direct impact on a nation's gross domestic product (GDP), which means that when GDP is built in a nation, economic growth occurs.

# Trade Dependent variable Interest rate GDP Labor force Inflation

Figure 1. Conceptual Framework

# RESEARCH METHODOLOGY

#### Data and Sources

Independent variables

Secondary data was used with the time span from 2000-2021 and is taken from World Development Indicators (WDI, 2023), United Nations Development program (UNDP, 2023) And United Nations Conference on Trade and Development (UNCTAD, 2023). Unit root testing of all variables of the study is checked through Augmented Dickey-Fuller (ADF) test. Final results were analyzed by using Auto Regressive Distributed Lag (ARDL) and Error

Correction Model (ECM) approaches. Similarly diagnostic tests were also used to check the normality and other issues of the data. The economic model of the study is represented as:

$$Y = f$$
 (trade, interest rate, labor force, inflation)  
Equation-1

While the econometric model is:

$$GDP = \alpha_0 + \alpha_1 TR + \alpha_2 IR + \alpha_3 LF + \alpha_4 IF + \mu$$

$$Equation - 2$$

The above mentioned models are the general economic development model, GDP shows the gross domestic product, TR shows the trade, IR shows the interest rate, LF shows the labor force, and IF shows the inflation. The general form of the ARDL model is as follows:

$$K_{t} = \alpha_{0} + \sum_{i=1}^{n} \alpha_{i} K_{t-i} + \sum_{i=1}^{n} \beta_{i} L_{t-i} + \mu_{t}$$
Equation-3

Where  $K_t$  is the dependent variable while  $K_{t-i}$  is the lag of the dependent variable and acts as the independent variable.  $L_{t-i}$  is the other independent variables, including controlled variables, and  $\mu_t$  is the error term.

$$\Delta ED_{t} = \alpha_{0} + \alpha_{I} \sum_{i=1}^{n1} \Delta ED_{t-i} + \alpha_{2} \sum_{i=1}^{n2} \Delta TR_{t-i} + \alpha_{3} \sum_{i=1}^{n3} \Delta IR_{t-i} + \alpha_{4} \sum_{i=1}^{n4} \Delta LF_{t-i} + \alpha_{5} \sum_{i=1}^{n5} \Delta IF_{t-i} + \mu_{t}$$
Equation-4

Where  $\Delta ED_t$  is the economic development while  $\Delta ED_{t-i}$  is the lag of the dependent variable acting as the independent variable. ECM model of this study is:

$$\Delta ED_{t} = \beta_{0} + \gamma \beta_{1}ED_{t-i} + \beta_{2}TR_{t-i} + \beta_{3}IR_{t-i} + \beta_{4}LF_{t-i} + \beta_{5}IF_{t-i} + \beta_{6}\sum_{i=1}^{n1}ED_{t-i} + \beta_{7}\sum_{i=1}^{n2}\Delta TR_{t-i} + \beta_{8}\sum_{i=1}^{n3}\Delta IR_{t-i} + \beta_{9}\sum_{i=1}^{n4}\Delta LF_{t-i} \beta_{10}\sum_{i=1}^{n5}\Delta IF_{t-i} + \mu_{t}$$

$$Equation-5$$

This study used equations 4 and 5 as the final ARDL and ECM model for final outcomes.

#### RESULTS AND DISCUSSION

# Diagnostic Test

It is common practice to employ Diagnostic tests to identify autocorrelation and heteroskedasticity in a model. Pierce and Box's (1970) general test for lack of fit for autoregressive moving average models and Box and Ljung's (1980) measure for lack of fit for time series model are both considered. The bulk of time series suffers from the issue of serial correlation. This study employed the Breusch-Godfrey Serial Correlation LM test to look for

serial correlation in the data and the White test to look for heteroscedasticity in the model. The outcomes of these tests are displayed below.

**Table 1.** Diagnostic Tests for Heteroskedasticity, Autocorrelation, and Normality

Heteroskedasticity		Chi2 = 0.066 P-Value = 0.0024	No Heteroscedasticity in data
Autocori	relation	Chi2 = 21.00 P-Value = 0.002	No Autocorrelation in data
Namality	Skewness	Chi2 = 3.61 P-Value = 0.0034	— Data is normal
Normality	Kurtosis	Chi2 = $1.74$ df = $1$ P-value = $0.001$	Data is normal

Table 1 demonstrates that none of the four models created for estimating the coefficients of the targeted and controlled variables exhibit heteroscedasticity or autocorrelation. The results show that there is no heteroscedasticity and autocorrelation in the model construct for the estimations of coefficients of dependent variable and targeted variable.

# Descriptive Analysis

According to experts, descriptive statistics are specialized techniques for accurately, quickly, and logically measuring, classifying, and summarizing collected study data (Vetter, 2017).

**Table 2.** Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max	Kurtosis	Skewness
GDP	22	2.7838	5.5845	-4.5751	18.5154	4.0559	1.2059
TR	22	461.0986	249.5849	60.0141	875.24	2.0601	0.0893
IR	22	10.6923	4.8617	0.5851	17.5839	4.7691	-1.0941
LF	22	46.4744	1.6374	41.3915	47.4421	8.6393	-2.7105
IF	22	7.8821	6.8251	-6.8112	26.4186	4.1487	0.4151

#### **Correlations**

It is a statistical metric that depicts the link between two variables, is a frequent tool for showing simple interactions without declaring cause and effect. Researchers commonly alter or measure independent and dependent variables in studies to evaluate the causality of correlations. The independent variable is the cause. The other research factors have no impact on its value. The dependent variable is the outcome. There are three possible results from a correlational study: positive, negative, and no correlation. When both variables move in the same direction, a relationship between them is said to have a positive correlation.

**Table 3.** Correlation of Variables

Variables	GDP	TR	IR	LF	IF
GDP	1.0000				
TR	0.3108	1.0000			
IR	-0.0537	0.1566	1.0000		
LF	0.2815	0.2424	-0.1012	1.0000	
IF	-0.2617	-0.4417	-0.2358	-0.0440	1.0000

Table 3 shows the positive, negative and no correlation between dependent and independent of all variables.

#### Unit Root Test

One of the most well-known and frequently used unit root tests is the Augmented-Dickey-Fuller test and the Phillips-Perron. Its foundation is the first-order autoregressive process model. Therefore, for Unit root testing of all variables in this research, ADF and PP tests are used. Waheed et al. (2023) validated that the unit root test make the data clean from all errors and so the final results become authentic.

**Table 4.** Unit Root Testing of all Variables

T 32 4		ADF	P	P
Indicators	Level	1st Diff;	Level	1st Diff;
GDP	-3.787		-3.846	
GDI	(0.0030)		0.0025	
TR	-0.962	-3.364	-0.962	-3.364
1 K	(0.7667)	(0.0122)	(0.7667)	(0.0122)
TD	-3.780		-3.780	
IR	(0.0031)		(0.0031)	
LF	-0.473	-4.330	-0.473	-4.330
Lľ	(0.8972)	(0.0004)	(0.8972)	(0.0004)
TE	-4.121		-4.121	
IF	(0.0009)		(0.0009)	

Table 4 show the stationary and unit root of all variables that the GDP, IR and IF are stationary but the TR and LF are unit root in the test of both ADF and PP at the I(0) which are become stationary in the I(1).

#### Lag Length Selection

It is customary practice to choose lag time using explicit statistical criteria like AIC. The ARDL Lag model may be predicted with ease. A tiny AIC number for the variable is collected from all the tables and entered into one table to produce the lag. The ARDL model is then used for analysis.

**Table 5.** Lag Length Selection based on the AIC model

Variables	AIC
GDP	1
TR	0
IR	0
LF	0
IF	1

Table 5 displays the least AIC found for each variable with the most prolonged potential lag period to do further research. The lag duration that has the lowest AIC for each variable is shown.

# Long-Run and Short-Run Results

This segment investigates the long and short run model estimations grounded on the findings of a bound co-integration test. The estimated test-statistic value in the set test indicates a long-term correlation between the variables if it is outside the upper critical value, and the converse is true if it is below the lower critical value. However, there might not be a long-term association if the estimated value is uncertain since it is between the lower and higher critical values. For the case of short-run, this research used the Auto-Regressive Distributive Lag (ARDL) test. For an autocorrelation, this study employs the serial correlation LM test, and for heteroscedasticity.

Table 6. ARDL Test

Variables	Coef.	Std. Err.	t-statistic	p. value
GDP L1.	0.554688	0.24839	2.23	0.023
TR	0.453811	0.05696	7.96	0.004
IR	-0.517044	0.25273	2.04	0.034
LF	0.499114	0.23534	2.12	0.033
IF	-0.380246	0.19385	-1.96	0.07
IF_L1.	0.369766	0.22868	1.62	0.128
Const	-9.636059	35.4588	-0.27	0.79
R-squ	ared = 0.6711	Adj F	R-squared = $0.530$	1

Table 6 shows the Trade is statistically significant and has a positive impact on the GDP also IR is statistically significant but harms the GDP, as well as LF is statistically substantial and also has a positive effect on the GDP; IF is statistically insignificant and also damages the GDP, and lag is also negligible but has a positive impact on the GDP and also constant statistically insignificant but has a significant influence on the GDP. These outcomes are also inveterate by the study of Tahiri (2017) and Barlas (2020).

**Table 7.** Error Correction Model Results

Variables	Coef.	Std. Err.	t-values	P-values
ECT	0.1264552	0.2726472	0.46	0.681
	L	R		
TR	0.1799694	0.0125752	4.3115	0.005
IR	-0.987624	0.3105142	-3.18	0.012
LF	0.6735182	0.0957563	7.034	0.007
IF	-0.4571526	0.6658724	-0.69	0.507
	Sl	R		
TR _D1	0.0056669	0.0219322	0.26	0.801
IR _D1	0.3308484	0.3522598	0.94	0.368
LF _D1	1.030275	1.391315	0.74	0.475
IF_D1	0.2691165	0.2721235	0.99	0.344
Constant	0.8071	0.46435	0.53	0.606

Table 7 shows a 12% correction designed to converge to equilibrium pathway in a year. Trade (TR) is statistically significant in the long run, but in the short run, it is insignificant and has a positive impact on the economic development of Afghanistan. The outcome of this study is supported by the results of the studies of Mariel (2022) and Ashraf et al. (2023). Because it tells us about an economy's size and health, GDP is important. Real GDP growth is frequently employed as a proxy for the state of the economy as a whole. Real GDP growth is generally regarded as a sign that the economy is growing.

Trade (TR) is statistically significant in the long-run, but in the short-run, it is insignificant and has a significant influence on the economic progress of Afghanistan; this result is also found by Pashtoon et al. (2018). Trade is the basis for economic growth, which has a long history. Even now, many studies in literature support a positive relationship between trade and economic progress. It then compares the effects of three different trade openness measures on economic growth. Export and economic growth appear to have a solid long-run positive association; on the other hand, the overall amount of commerce and imports has a significant detrimental impact on economic growth. And also, exports lead to economic growth. Therefore, trade and import volume growth is a direct cause of the country's entire commerce and import volume. The findings indicate that promoting more business and importing goods that incorporate technology or intermediate inputs that are crucial to the production process could boost economic growth in the long run. Therefore, increasing the volume of exports and imports is vital for economic growth in the short term (Wani, 2019).

Interest rate (IR) is statistically significant in the long run, but in the short run, it is insignificant and hurts economic growth. In the long run, IR has a positive impact on economic growth. These results align with that of Zohor and Ebad (2021). People are often motivated to increase their savings as interest rates rise because the latter improves income. In addition, as interest rates rise, the cost of capital likewise rises, reducing financial investment (Kakar & Wani, 2016).

Labor force (LF) is statistically significant in the long run and has an appositive impact on economic growth. In the short run, it is insignificant but has a positive effect on economic growth; this result is related to the study of Cung and Hung (2020). Therefore, the impact of the labor force and female education participation on Afghanistan's economic development has shown a strong and positive link between the Gross Domestic Product. There was a significant negative association between the labor force participation rate and GDP. The Women Business and the Law Index and Gross Domestic Product have a positive and negligible association. The connection between the GDP and the unemployment rate was unimportant and negatively correlated. However, the unemployment rate has a detrimental effect on economic growth. And also, in the long run, an economy's capacity has an appositive and significant impact on generating more products in the short run; it is insignificant but has a positive effect on economic development. Services are produced with more efficiency as labor productivity grows. In turn, more goods and services may be consumed for the same amount of labor because of this enhanced productivity (Mariel, 2022).

Inflation (IF) is statistically insignificant both in long run and short run, but in the short run, it has a positive impact, and in the long run, it harms economic growth. This result was also examined by the study of Faten (2020). Higher inflation will often result in lower purchasing power of money, a decline in the value of savings, a depreciation in the value of the currency, less predictability for businesses, and the inconvenience of dealing with fluctuating prices. Increased food costs can significantly increase poverty among low-income people, Inflation is never neutral, and it never promotes rapid economic growth. More inflation never raises income levels in the medium and long runs, which they study; therefore, during this period, inflation has trivial effect on the short and long runs (Rahman, 2021).

#### **CONCLUSION**

The study finding shows that trade (TR) is statistically significant and positively impacts the GDP because trade is a way for economic growth that creates better jobs for people, reduces poverty, and increases economic opportunities. As a result, the per capita income of the people

increases, and the people save a certain amount of money and start other businesses. Also, interest rate (IR) is statistically significant but harms the GDP i.e., when interest rates increase, firms and consumers cut back on their spending, lowering profits and stock prices, and reducing GDP. On the other side, when interest rates drastically decrease, firms' and consumers' spending increases, which raises stock values. In general, boosting interest rates is a policy response to growing inflation. Conversely, when inflation and economic growth slowdown, central banks may cut interest rates to stimulate the economy. The study also finds that the labor force (LF) is statistically significant and positively impacts the GDP i.e., the labor force plays a crucial role in producing goods and services. By increasing the number of people in the wage labor force, increasing the productivity of the labor force and so the economy can produce more goods and services. Through this process, faster growth can help improve living standards, directly impacting a country's economic development. An economy produces more goods and services for the same quantity of labor as its labor productivity increases. More goods and services can be consumed at more affordable prices due to this rise in production.

Finally, inflation (IF) is statistically insignificant and harms the GDP i.e. inflation is the process through which prices increase as a result of rising labor and raw material costs. Consumers may be more inclined to pay more for a product if there is an increase in the price of goods and services. The Consumer Price Index (CPI) is a tool for measuring inflation and keeps the economy healthy at a low rate which has a negative effect in the outcome of this study. People are compelled to purchase goods now before they become more expensive by higher pricing. They advise against saving since the money will be worth less in the long run because this study shows a negative relationship between inflation and economic growth.

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