Factors Affecting Unemployment Rate: The Case of Afghanistan

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Abstract

This article aims to analyze the factors that affect the unemployment rate in Afghanistan. The study uses OLS model with time series data from 2005 to 2021 to investigate the effects of macroeconomic factors such as inflation rate, trade balance, GDP, and FDI on unemployment. This article also explores the factors that drive employment in Afghanistan and their potential for decrease. The findings indicate that all factors have a substantial and detrimental influence on unemployment, but that GDP and FDI have more profound impacts and are more crucial for improving employment opportunities in Afghanistan. The result of this study agrees with the theories that suggest that the above-mentioned factors have a huge impact on the rate of unemployment in the case of Afghanistan.

INTRODUCTION

Unemployment has turned into a hefty problem throughout the globe particularly in developing countries. When someone has the qualification, knowledge and skills to obtain a job but they do not get hired is known as unemployed. On the basis of the world labor organization, a person is considered unemployed if they are not already employed, are available for work or actively seeking employment but cannot find a job. In general, most people only comprehend unemployment as a condition when a person has no employment, but unemployment is a more complex and broader concept because recruitment affects how each society is structured and the lower employment level draws the less economic growth and stability that a society might experience. Therefore, unemployment has always been a significant social indicator of how society is being held back from progress.

The unemployment rate measures how many individuals are jobless as a percentage of the workforce, which includes both those who are working for pay and those who are self-employed. The number of jobless persons expressed as a proportion of the labor force is known as the unemployment rate. Both individuals who are hired and those who are self-employed make up the work force. Evidently, unemployment happens when there are inefficiencies in the labor market when there are more qualified applicants than there are open positions. Both developing and developed countries could experience this; but, a continuously high rates of unemployment is a symptom of a more serious issue. In countries with emerging economies and less developed nations like Afghanistan, where it is more prevalent, high unemployment might worsen socio-economic issues such as poverty. Unemployment globally is seen as a crucial macroeconomic concern. This is due to the devastating social and economic implications of rising unemployment on any nation, particularly if a sizable portion of the jobless are young people. Due to how it affects societal structures, it is also seen as a social phenomenon (Alamoudi, 2017).

In general, there are many contradicting theories about the relationship and influence of the above-mentioned macroeconomic factors and unemployment. The Phillips curve theory, is based on the notion that unemployment and inflation are in anticorrelation which has been supported by many researchers. Further, the variation in the rate of inflation has a negative impact on unemployment. In contrast, other quantitative studies have called this a positive correlated relationship. Moreover, significant research has agreed with the Okun's law and argues that GDP and unemployed have a negative relationship while the others have opposing

ideas and some said not only, they are positively related but also GDP can have effects on unemployment thorough its correlation with other indicators such as investment and population. Furthermore, other studies argue that FDI has significant and positive impact on unemployment and overseas investment, which decreases unemployment. While some scientific research in different countries shows an insignificant relationship between FDI and unemployment. Finally, like the other factors, some previous studies explain a positive impact of balance of trade over employment and suggest that the weight of trade creates more job opportunities. On the other hand, some contradicting views suggest that the deficit in the trade balance causes short term unemployment. While some theories argue that on one hand, the weight of export in the balance of trade directly impacts unemployment, and on the other hand, it indirectly decreases unemployment through an increase in the GDP of a country. Considering the above-mentioned theories about the impacts of different macroeconomic variables on unemployment, this study examines which of these factors has an impact on the unemployment rate through examining the case of Afghanistan.

This purpose of this study is to address the gap in existing literature on the causes of unemployment in Afghanistan by adopting a quantitative approach and examining the effects of multiple macroeconomic factors on the unemployment rate. While previous studies have primarily focused on a single macro variable over different time periods, this research seeks to provide a comprehensive analysis of the period from 2005 to 2021. Specifically, the study investigates the impact of key macro variables, namely inflation, foreign direct investment (FDI), gross domestic product (GDP), and balance of trade, on the unemployment rate in Afghanistan. By employing an econometric model, this study aims to uncover the specific relationships and effects of these factors on unemployment, considering their significant influence on the unemployment rates observed in neighboring countries of Afghanistan. The findings of this research will contribute to a deeper understanding of the macroeconomic dynamics affecting unemployment in Afghanistan and provide valuable insights for policymakers and stakeholders aiming to address this critical issue.

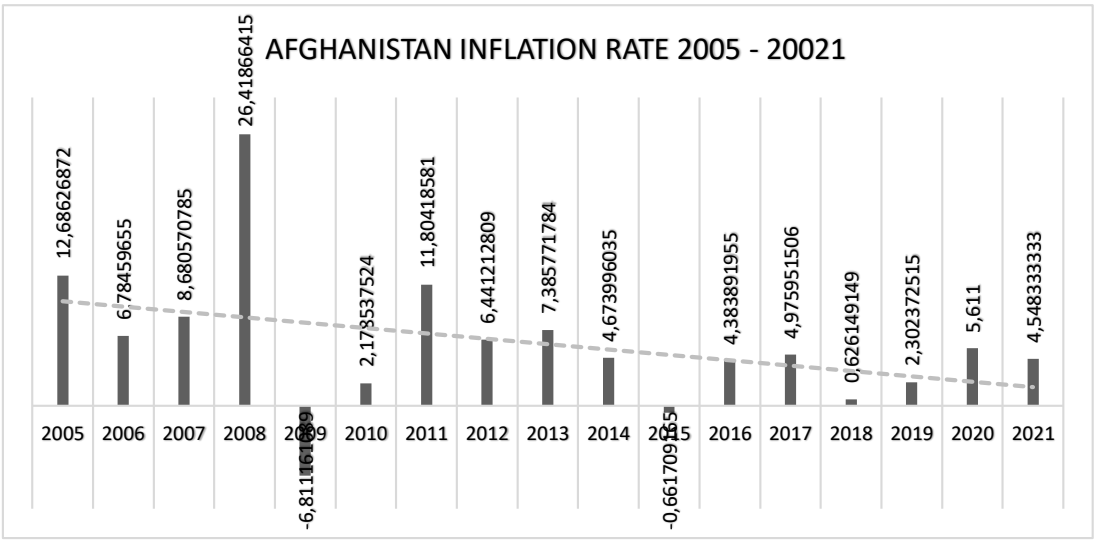
LITERATURE REVIEW

Inflation with Unemployment

Inflation is often understood to occur in an economy when the supply of money is expanding more quickly than new products and services are being produced. The overall increase in prices for services and goods over a certain period of time, typically for a lengthy period, is referred to as inflation. The different definitions of inflation that have developed over time, however, show that the description of inflation, the origin of inflation, and its impact on the economy rely on the economic school to which the economist belongs. Similar disagreements have arisen among economists when attempting to distinguish inflation from an economic event that causes a rise in the cost of services and goods at a certain moment or when there is an increase in the price of economic products and services in a particular small group (Jelilov, Joseph Obasa, & Isik, 2016). A rise in the economy's overall price levels is referred to as inflation. Since greater investments may influence economic growth, social and political issues, and job prospects, this economic event has a significant impact on practically all facets of a nation. The Phillips curve illustrates how inflation and unemployment rates are negatively connected. According to this theory, when the unemployment rate grows, so does the rate of inflation, and vice versa. Nonetheless, the durable Phillips curve and the short-term curve are very different from one another. In the long term, unemployment and inflation do not significantly correlate, according to economists. It is assumed that as a result, the unemployment rate would remain constant independent of the inflation rate.,"(Caligagan, Ching, & Suin, Kristine April, 2022).

Poverty reduction is a government program that is carried out annually. Various efforts were made to reduce poverty levels. One of the efforts that has been taken was to continue to maintain economic growth so that it continued to increase and grow. The existence of economic growth indicates a cycle of economic activity. One of the most important production factors for economic growth is the use of labor absorbed in economic sectors (Widhi and Nur, 2022).

Ademola & Badiru claim that if the unemployment rate exceeds the acceptable threshold, the rate of inflation will be lower than anticipated. Sasongko & Huruta responds that the Central Bank can initiate an exponential monetary policy to decrease the unemployment rate, stimulate the growth of economy, and perfect the status of the labor market. (Caligagan et al., 2022). Significant research has been done for finding the link between inflation and unemployment in different countries. Some scholars view inflation as the primary economic and social disaster that impacts the unemployment rate. It falls under the heading of the core component of the market mechanism. Other research shows a negative correlation between inflation and unemployment. When it comes to the observation of the link between unemployment and inflation, Philip Curve offers essential insight and understanding for decision-makers (Xuen, Bee, Hsien, Yen, & Yee, 2017). Unemployment at the Beginning of a career may have a significant negative influence on future job prospects and the ability to have a self-sufficient and fulfilling life. Additionally, unemployment generates disappointment, pessimism, and discontent, all of which, when pervasive in society, are a primary contributor to civil unrest. Therefore, young unemployment and under-employment are a danger to a nation's social, political, and economic stability as well as a catalyst for discontent and violence, according to literature (Azeng & Yogo, 2017). According to the world bank report, Afghanistan's inflation averaged 6 % from 2005 to 2021, reaching a record of 26.41 % in 2008 and a record of -6.81 % in 2009 ("Inflation, Consumer Prices (Annual %) - Afghanistan | Data," 2023). In the long-term, inflation rate in Afghanistan is predicted to vary from 9.1 % in 2022 to 8.7 % in 2023 , 6.50 % in 2024 and 6.9 % in 2025 ("Afghanistan Inflation Rate - Forecast," 2023). Table (1).



Source: World Bank

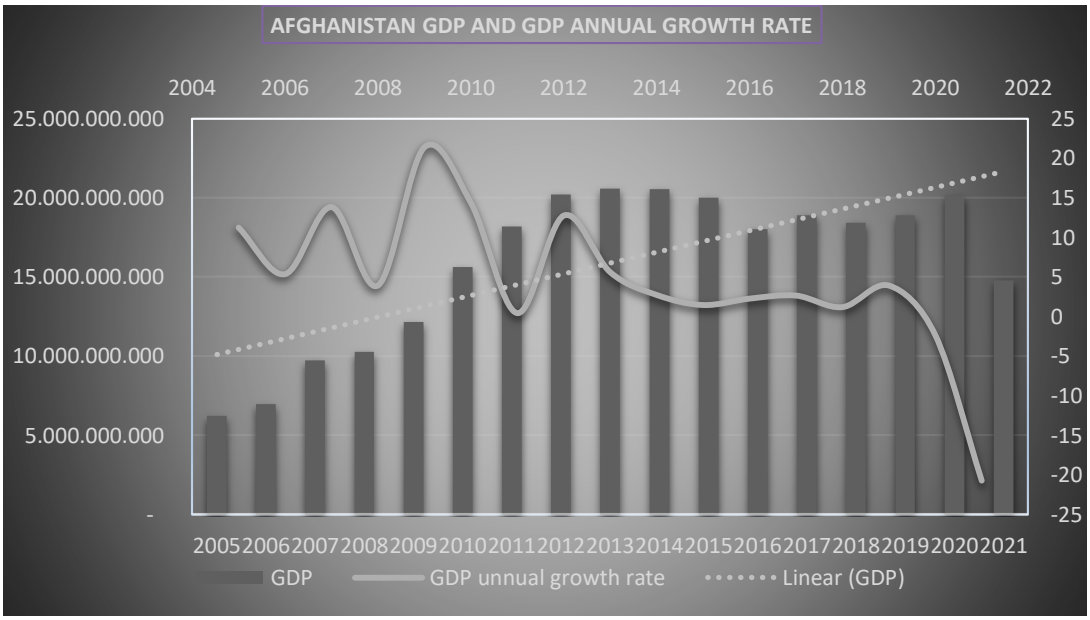
GDP with Unemployment

The GDP of a country is the sum of the value of all the commodities produced there throughout a fiscal year. It has been identified as one of the indicators of economic growth and production rate, and it is extremely important for growth, employment, and the payment balance (Treichel, 2005). Furthermore, scholars in the field of economics believe that there is a strong correlation between GDP growth of an economy and unemployment rate (Xuen et al., 2017). Moreover, several researchers conducted study on the link between unemployment and GDP, on the basis of the empirical findings of their research, they came to a consensus on several theoretical ideas.

These theories include the literature that discusses many assumptions on unemployment, such as the connection between unemployment and GDP. It is often referred to as Arthur Okun's discovery or Okun's law. Okun's Law is based on a US GDP measurement,

and it explains why there is a negative relationship between real GDP and unemployment. Accordingly, Okun's research indicates that there is disagreement over the connection between unemployment and economic progress (scientific evidences). However, Mankiw makes clear his divergent views in the book "Macroeconomics," contending that Okun's Law only holds true in the short run and that other variables, notably technology, have an influence on GDP growth over the long term. Additionally, the quality of life will rise from one generation to the next, and there is no connection at all between the unemployment rate and GDP (Heliati, 2019).

Further, Froyen emphasizes Keynes' theory regarding the link between GDP and unemployment. While he agrees that GDP is among the factors that affects unemployment, he also points to investment as significant variable impact on both GDP and unemployment. He also mentioned that economic growth or GDP is one of the factors that affects a country's fluctuating unemployment rate, and that one factor that can boost economic growth and reduce unemployment is investment. Keynes clarifies the connection between investment and the unemployment rate. The central tenet of Keynes' theory is that an economy reaches its point of equilibrium when total demand and total expenditure are equal. This leads to unemployment if aggregate demand is lower than aggregate expenditure because consumers won't be able to absorb the long-term output, which will lead to unemployment. Demand for investments is one element that drives the total demand (Heliati, 2019). According to official World Bank estimates, The GDP of Afghanistan represents 0.01% of the world economy. Afghanistan's (GDP) saw record highs in 2013 of 20.564 USD billion and record lows of 6.226 USD billion between 2005 and 2021, with an average annual growth rate of 15.860 USD billion. Afghanistan's GDP increased at an average annual rate of 4.7 percent from 2005 to 2021, reaching a high of 21.3 percent in 2009 and a record-breaking -20.70 percent in 2021.(“GDP (Current US$) - Afghanistan | Data,” 2023).Table (2).



Source: World Bank

Foreign Direct Investment with Unemployment

A process known as foreign direct investment involves the movement of significant assets, across nations. Although the definitions of FDI from the standpoints of the foreign investor and the host nation may differ, both viewpoints agree that FDI refers to the transfer of money and control through a substantial equity participant. In addition to the economy of the investor nation, foreign direct investment (FDI) has a considerable impact on the economy and social welfare of the host country. FDI has become increasingly substantial in recent years. Foreign direct investment (FDI), which not only meets the steadily rising demands of many economic

sectors but also fosters growth, has really emerged as a substantial source of outside money for emerging nations via the spread of new technologies, a growth in creativity, and effective marketing linkages in the fiercely competitive worldwide market. As a result, FDI has evolved into a crucial strategy for cross-border economic integration. (B. Sudha, 2012).

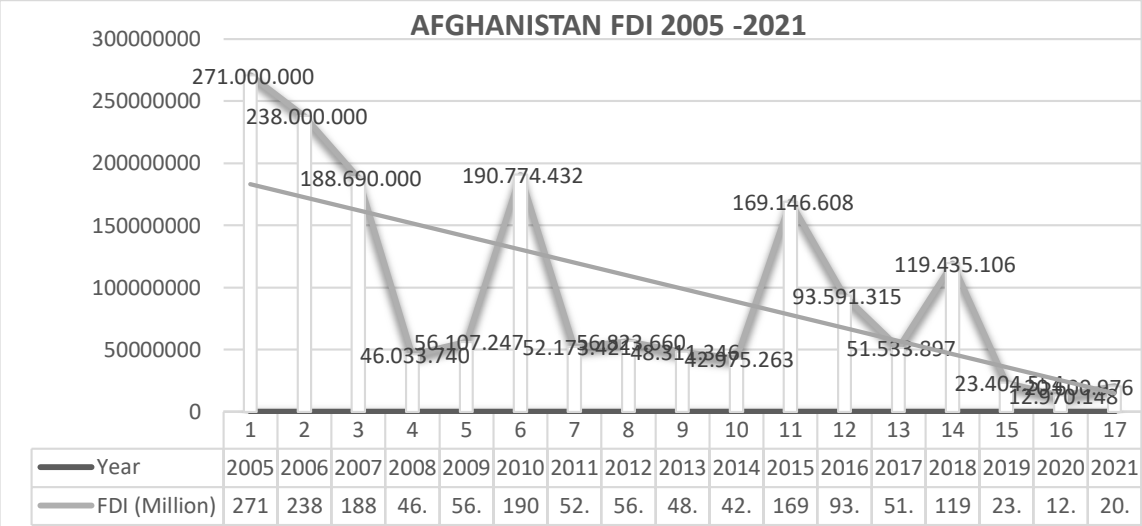
The empirical findings that many writers acquired over the past several years have greatly stimulated arguments on the employment consequences of FDI. A significant area of discussion in the economic literature on the analysis of foreign direct investment and its effects on unemployment is the connection between FDI and components of the labor market. Many theories and presumptions contend that foreign direct investments help an employee's savings by raising their actual earnings and productivity potential, as well as by educating the labor force in cutting-edge methods and tools to boost output efficiency (Azeng & Yogo, 2017).

The study found that annual GDP growth and Foreign direct investment has a significant impact on increasing consumption spending thus annual GDP growth is the most crucial factor for increasingconsumption spending in these countries. Moreover, lagged consumption spending is also found to have a negative significantly effect in reducing current consumption spending while gross capital formation and annual population growth are found to have an insignificant effect in reducing consumption spending in all the estimates except in the Anderson and Hsiao (1982) estimation method which shows a positive relationship with consumption spending (Ismaila, 2022)

Moreover, some other hypotheses suggest that overseas investment significantly reduces the issue of unemployment by directly affecting job opportunities in supplementary front and back enterprises. Nontheless, this is determined by the initiative way of investment: new job vacancies will be created, if it is fundamental. Foreign direct investment, for instance, could not provide job prospects as excellent as in manufacturing in the field of services if it entails acquisitions and mergers, which could lead to a rise in unemployment. equivalent to those in the manufacturing industry, which is seen as a labor-intensive employment, exist in the services sector (Benmamoun & Lehnert, 2013). Furthermore, the assumption of FDI entries may lessen unemployment in the host nation is tested in a research piece in Indonesia, aiming to explore and test macroeconomic factors that may moderate the association between unemployment and FDI in Indonesia. From 36 provinces in Indonesia, Panal data is tested over a period of 17 years, employing route analysis and an integrated alternative model with macroeconomic variables as moderating variable (422 observations). The result shows that FDI and the unemployment rate are not related. Based on findings of this estimation, the notion that FDI has a negative and inverse connection with unemployment, and that FDI cannot account for changes in the rate of unemployment without the need for intermediary factors such as economic development and minimum wages (Tegep, Suratman, & Indra, 2019).

In addition, Pashtoon considers that FDI as an essential component of Afghanistan's economic growth since it brings with it the employment possibilities in job markets, financial resources, and business expertise required for expansion. Moreover, he points that FDI is the key driver of global economy and globalization, technological development, productivity boost, job opportunities, and eventually economic enlargement. In developing nations, it serves crucial responsibilities in ameliorating foreign trade, tax revenue, and investment. The growth of emerging nations is significantly aided by FDI. One explanation is that FDI aids in the transfer of advanced technology know-how and boosts employment levels in the host nations (Pashtoon, 2017). The 2008 World Investment Report indicates that FDI fosters long-term growth in developing countries through transferring knowledge and technology, improving productivity, and generating employment. It also provides an important base for the influx of foreign capital into the host nations. It encourages technological advancement and innovation transfers, promotes global commerce and managerial expertise, and supports economic growth in the host nations. For developing nations, foreign direct investment is becoming increasingly crucial since they frequently operate under the presumption that more FDI inflows would boost their economies in certain ways. For the host countries, FDI has significant social, cultural, economic, and political influences. Based on the World Bank data, FDI of Afghanistan averaged 98.915 million USD from 2005 until 2021, had fluctuation by year, and had the highest amount of 271 million USD in 2005 and a lowest amount of 12.970 million USD in

2020 (“Foreign Direct Investment, Net Inflows (BoP, Current US$) - Afghanistan | Data,” 2021).Table (3).



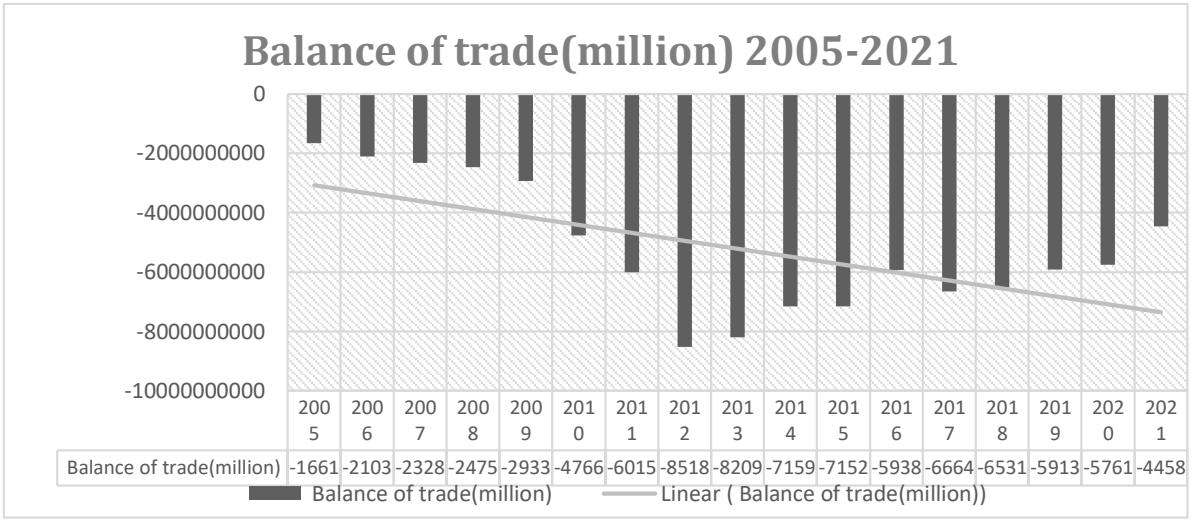
Source: World Bank

Balance of Trade with Unemployment

According to Ruth et al., the commercial balance, sometimes referred to as net exports or the trade balance, is represented by the letter NX. It is the financial difference between an economy's exports and imports during a specific period of time. One can distinguish between the balance of trade for commodities and services (Rath, Dash, & Sharma, 2020) . According to the UN, trade balance of export and import of a country can significantly cause economic growth. One amount of export of a country in its trade and financial balance indicates the country’s economic stability. Second, import weight in the trade balance represents economic independency of a country. The lowest a country’s import weight is the more progressive is the country’s economy, focusing on local production in order to maximize exports and minimize the import and gradually create stable GDP and employment. Undoubtedly, employment is a vital component in defining how broadly trade affects society. A more direct relationship through importing goods and its distribution will be created between the household and the global market. The advantages that households receive from imports are relied on the costs that providers charge on taxes (tariffs), and the efficiency of the distribution system. The second is dependent on factors such as the price of transportation, the severity of operator competition, infrastructure, taxes, and domestic principles. Although importing capital goods, intermediate products, and services might boost businesses' productivity and competitiveness, but it must be kept in mind that it would make a negative aftermath on certain local manufacturers by disabling them to compete with imported items (Fugazza, Carrère, Olarreaga, & Robert-Nicoud, 2014).

The way trade impacts employment have been measured by various studies, with varying results, depending on the country and temporal span. Many researchers investigated how unemployment relates to the balance of trade. Some agreed about their flexible relationships and some had contradicted ideas on the basis of their achieved result in different countries. Increased trade in developed countries is linked to a longer-term decline in unemployment. On the other hand, trade liberalization is linked to a temporary rise in the unemployment numbers that are more compensated over time. Additionally, there are data from specific countries that suggest that there may be a sizable opportunity for employment growth as a result of increased trade integration (Felbermayr, Larch, & Lechthaler, 2012). Other

research examines how the crisis affected commerce and employment and the best strategies that were employed, meantime organizations such as the International Labor Organization (ILO) have devised solutions to meet these challenges (Bárcena, Prado, Rosales, & Pérez, 2014). In addition, according to a Malaysian study, increasing the trade balance has negative Granger non-causality impacts on how flexible the changes in unemployment are. (Loganathan, Sukemi, & Kogid, 2011). This shows that trade liberalization can raise overall productivity across several industries, which will increase labor exploitation because of increased economic effectiveness and efficiency. Another research on the trade balance and unemployment rate was conducted in Jordan using quarterly data from the years 2000 to 2012. The study has proven the absence of any relationship on the long-ran between the two variables (Alawin, 2013). These findings have also proven that there is a mutual causal relationship between the trade balance deficit and unemployment in the short run. According to NSIA, Afghanistan had a trade deficit of 4457.70 million USD in 2021, averaged 5210.8 million USD from 2005 to 2021, having highest deficit 8518 million USD in 2009 and a breaking deficit of 1661 million USD in 2005. In the long run, Afghanistan's trade balance is anticipated to move at -6368.00 USD Million by the end of 2022 and 2023, based on the most recent Trading Economics' global macro models and forecasts ("Afghanistan Trade Statistics Yearbook 2021," 2022). Table (4).



Source: (World Bank & NSIA Afghanistan

METHODS

Population and Sample

This research is conducted with the aim of comprehensively analyzing the factors that influence the unemployment rate in Afghanistan. To achieve this, the study relies on secondary data obtained from the World Bank. The utilization of reliable secondary data from the World Bank ensures the robustness and credibility of the findings of this research. The selected data covers the period from 2005 to 2021, ensuring a comprehensive representation of the entire population of the country.

Among the various factors that contribute to unemployment in Afghanistan, the study focuses on the most influential variables. These variables have been identified based on their significant impact on the unemployment rate, as observed in previous research and neighboring countries. While other factors may also play a role in influencing unemployment, they are incorporated into the error term as their effects are not as consistent.

The choice of the specific time period, from 2005 to 2021, is motivated by the substantial changes and fluctuations in the unemployment rate during this period. These changes are closely associated with significant developments and transformations within the country, as well as the fluctuations in the influential factors affecting unemployment. It is important to note

that the country is the object and focus of the study and the seleted variables are considered the most influential on dependent variable, while the others are captured in error term. Furthermore, the choice of the period or years sampled are determined by the data availability.

Data and variable descriptions

This study uses yearly time series data for the years 2005 to 2021 to analyze the link between outcome and explanatory factors. A dependent variable that is computed as an annual percentage is the unemployment rate. While independent variables, such as balance of trade is measured in large numbers, foreign direct investment (FDI), and GDP, which were also large numeric variables, were measured in their logarithmic form to balance the data. To estimate the model of the influencing factors on Afghanistan's unemployment rate, multiple regression analysis and the Ordinary Least Square Method (OLS) were both conducted. The Augmented Dickey Fuller (ADF) test, also called the unit root test, is employed to determine if the selected variables are stationary. Additionally, this model employs a number of tests and approaches that let us check if the assumptions of multicollinearity, autocorrelation, and heteroscedasticity are available in the context of the model. This study determines the root causes and key contributing aspects of unemployment. Moreover, it measures the impact of independent variables like GDP, FDI, the balance of trade and inflation on the outcome of the dependent variable.

Model specification

Here based on this equation: $Y=\beta 0+\beta 1x1+\beta 2x2+\beta 3\log x3+\beta 4\log x4+\varepsilon$ …….… (1)

Where:

Y= Unemployment rate
$\beta 0$ = Intercept
X1 = Inflation rate
X2 = Balance of trade
X3 = Log of GDI
X4 = Log of FDI
ε = Error term

Hence based on the equation (1) the economic model is:

Unemployment rate = $\boldsymbol{\beta 0}$ + $\boldsymbol{\beta 1}$INF + $\boldsymbol{\beta 2}$Balance of trade + $\boldsymbol{\beta 3}$LGDP +$\boldsymbol{\beta 4}$LFDI + ε …. (2)

Hypothesis

The main hypothesis is as bellow:

a) *H1:* There is an important and long-term relationship between unemployment and inflation rates.
b) *H1:* Balance of trade has significant effect on unemployment.
c) *H1:* There is significant relation between GDP and unemployment.
d) *H1:* FDI has significant effect on unemployment.

Null hypothesis is accepted if PV is > 0.05, null hypothesis is rejected if PV is < 0.05.

RESULTS AND DISCUSSION

Before interpreting the result of our model, it was substantially felt a need to do some tests to know whether this model is a good model or it is suitable for explaining the variables, as well as this study needs to do some tests to know whether the selected variables are fit for this estimation or no. Hence these tests are:

Augmented Dickey Fuller (ADF) test:

Table 5

UNIT ROOT TEST RESULTS TABLE (ADF)						
Null Hypothesis: the variable has a unit root						
At Level						
		UNEMPLOYMENT RATE	INFLATION RATE	BALANCE OF TRADE	GDP	FDI
With Constant	t-Statistic	1.1734	-3.3269	-4.0000	-2.2205	-2.9180
	Prob.	***0.9960***	***0.0321***	***0.0086***	***0.2070***	***0.0652***
		n0	**	***	n0	*
With Constant & Trend	t-Statistic	-1.5209	-5.3807	-4.1464	-0.0162	-3.3493
	Prob.	***0.7779***	***0.0049***	***0.0309***	***0.9914***	***0.0941***
		n0	***	**	n0	*
Without Constant & Trend	t-Statistic	1.4786	-1.1880	-3.8730	0.3801	-2.4975
	Prob.	***0.9581***	***0.2030***	***0.0007***	***0.7818***	***0.0168***
		n0	n0	***	n0	**
At First Difference						
		d(UNEMPLOYMENT RATE)	d(INFLATION RATE)	d(BALANCE OF TRADE	d(GDP)	d(FDI)
With Constant	t-Statistic	-5.2984	-5.6227	-7.3485	-1.5021	-4.2828
	Prob.	***0.0009***	***0.0010***	***0.0001***	***0.5051***	***0.0061***
		***	***	***	n0	***
With Constant & Trend	t-Statistic	-4.7708	-5.2719	-6.0215	-2.9924	-4.2494
	Prob.	***0.0105***	***0.0057***	***0.0012***	***0.1657***	***0.0241***
		**	***	***	n0	**
Without Constant & Trend	t-Statistic	-5.0096	-6.0181	-6.0000	-1.7104	-4.0408
	Prob.	***0.0001***	***0.0000***	***0.0000***	***0.0821***	***0.0006***
		***	***	***	*	***
Notes:						
b: Lag Length based on SIC						
c: Probability based on MacKinnon (1996) one-sided p-values.						

The above table shows all the variables are significant in first difference, it means our variables are stationary.

Autocorrelation test:

Table 6

Breusch-Godfrey Serial Correlation LM Test:
Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.671190	Prob. F (2,10)	0.5327
Obs*R-squared	2.011963	Prob. Chi-Square (2)	0.3657

In auto correlation test, the desired result is nonexistence of serial correlation, hence if the P-value is less than 0.05, it means there is negative serial correlation, if it is between 0.05 to 10 percent , it means there is no autocorrelation or if it is greater than 10 percent, it means there is positive serial correlation in the model. In table (6), the value of F-statistic and Chi-Square is greater than 0.05 percent, this denotes there is not serial correlation problem in this model.

Multicollinearity test:

Table 7

Variance Inflation Factors
Date: 01/18/23 Time13:23
Sample 2005 2021
Include observation 17

Variable	Coeffecient Variance	Uncerntered VIF	Centered VIF
C	880.5767	14798.66	NA
INFLATION RATE	0.002839	3.903271	2.184869
BALANCE OF TRADE	2.27E-19	1.934303	1.820514
LOG (GDP)	1.068082	9853.051	2.551399
LOG (FDI)	0.149098	819.3358	1.890878

The result of Multicollinearity test in the above table shows the VIF values of our independent variables are greater than 0.05 percent, this means there is no multicollinearity in the dependent variable.

Heteroscedasticity test:
Table 8

Heteroskedasticity Test: Breusch-Pagan-Godfrey Null hypothesis: Homoskedasticity			
F-statistic	0.211526	Prob. F(4,12)	0.9270
Obs*R-squared	1.119699	Prob. Chi-Square (4)	0.8911
Scaled explained SS	0.822865	Prob. Chi-Square (4)	0.9354

The above table, the result of Heteroscedasticity, shows that the data are not dispersed from standard line i.e., the variation of the error in this model is constant. Based on the value of Chi-square and F-statistic which are greater than 0.05, it denotes this is a good model because the data are not heteroscedastic.

Table 9: The result of the economic model

Dependent Variable: UNEMPLOYMENT_RATE
Method: Least Squares
Date: 01/16/23 Time: 06:32
Sample: 2005 2021
Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	115.4789	29.67451	3.891517	0.0021
INFLATION_RATE	-0.175176	0.053280	-3.287864	0.0065
BALANCE_OF_TRADE_MILLION_	-2.07E-09	4.77E-10	-4.331647	0.0010
LOG(GDP)	-3.104733	1.033481	-3.004152	0.0110
LOG(FDI)	-1.783236	0.386132	-4.618209	0.0006

R-squared	0.715681	Mean dependent var	9.130588
Adjusted R-squared	0.620909	S.D. dependent var	1.633522
S.E. of regression	1.005766	Akaike info criterion	3.089304
Sum squared resid	12.13878	Schwarz criterion	3.334367
Log likelihood	-21.25909	Hannan-Quinn criter.	3.113664
F-statistic	7.551546	Durbin-Watson stat	2.279830
Prob(F-statistic)	0.002797		

In Table (9), which is the result of the test, shows that all the selected variables have significant and negative relation to the rate of unemployment in Afghanistan for the period 2005 -2021.

First of all, the null hypothesis has to be rejected, which suggests the nonexistence of a relationship between inflation and unemployment, because the P-value of inflation rate which is less than (0.05) shows a significant relationship between these two variables and the coefficient

of inflation which is (-0.175) shows negative impact of this variable on unemployment rate. This means by 1% rise in inflation rate, the rates of unemployment will decrease by 0.175 %.

As well as, the result shows balance of trade has significant and negative effect on unemployment with a probability value of (0.001) which is less than 0.05 percent and the coefficient of (-2). Since the independent variable is in percentage; hence, the significance of this variable is in percentage. Therefore, it means by increasing 1 % in balance of trade the rate of unemployment will decrease by 2 percent, and the null hypothesis can be rejected i.e., there is no relationship between these two variables.

Furthermore, the null hypothesis is rejected i.e., GDP and the rate of unempoyemnt are in a negative relationship. The P-value of GDP is (0.011) less than 0.05, it means it is significant in 5 percent and its coefficient is (-3). This indicates GDP has significant and negative impact on unemployment rate in Afghanistan, by 1% increase in GDP the unemployment rate of Afghanistan will decrease by 3 %. Contrarywise, the result of the test shows that FDI and unemployment are significantly and negatively related. The Probability value of the FDI is (0.0006) and less than 0.05, its coefficient is (-1.783), this means by increasing 1% in FDI the unemployment rate will decrease by 1.78 %. Hence, the null hypothesis can be rejected.

Therefore, the result of this test shows each variable has different level of effect on unemployment and it's relied on the government policy how to set policy in controlling these variables to reduce unemployment in Afghanistan. In terms of the relationship between inflation and unemployment, there are different speculations in the previous studies. Most of the previous studies argue that unemployment and inflation are strongly connected while some of them in case of their countries have contradict ideas. In addition, one piece of Tanzanian research that looked at the relationship between the budget deficit and inflation found that the economy of the nation had both a high inflation rate and a sizable fiscal deficit. A different research, however, found a connection between fiscal policy and unemployment in the Nigerian economy. This study employs an equilibrium model and empirical findings to conclude that fiscal policy affects unemployment and inflation. While inflation has a substantial and negative impact on unemployment (Mehmood & Sadiq, 2012). Furthermore, a survey of factors affecting unemployment in the BRIC countries (Brazil, Russia, India, and China) conducted from 2001 to 2012 found that an increase in GDP and an increase in industrial production contributed to a decline in the unemployment rate. It turned out to be part of the variables. Inflation and population growth are the main drivers of rising unemployment in BRIC countries (Gur, 2015). Additionally, from 1980 to 2017, a study employing the autoregressive distributed lag (ARDL) model examined South Africa's unemployment and inflation rates. According to the study's findings, there is a negative correlation between unemployment and inflation, with each 1% increase in inflation translating into a 0.3245% drop in the jobless rate (Maduku & Kaseeram, 2018).

Nonetheless, a study about the outcomes of inflation in South Africa has evaluated the evidence from the idea of Philip Curve by using Markov switching dynamic regression model. This study demonstrates the absence of any kind of causal relationship between inflation and unemployment (Buthelezi, 2023).There are many contradicting ideas about the relationship between inflation and unemployment; hence, this study ,based on the result of the test, agrees with the above studies over the link and effect of inflation on unemployment. According to this study, high levels of inflation have a negative impact on employment and weaken the value and influence of the national currency. Because of this, demand for goods and services often falls in an environment of high inflation.

The variable of trade balance shows a significant link with unemployment. Previous empirical research supports that trade balance of a country which includes export and import can significantly cause economic growth. One amount of export of a country in its trade and financial balance indicates the country's economic stability. Second, import weight in the trade balance represents economic independency of a country. As much as the country's import weight is lower in trade balance on that much indicating that the country has reached economic progress by focusing on local production in order to maximize exports and minimize import and gradually create stable economic growth and employment. In addition, if we deeply figure out the success stories of developed economies, we can see that having a good balance in trade or

having excess trade has impacted as a key component of their economic growth and has created job possibilities, due to the fact that real trade growth outpaced that of global output during the previous few decades, and trade has become increasingly important to the global economy.

Moreover, based on the results, among the other variables, GPD has the highest impact on the unemployment rate of Afghanistan, Gross Domestic Product is not just about revenue; it also shows a nation's economic expansion. High GDP correlates with more employment and national wealth, as it has been previously shown. Additionally, it results in higher output and more effective resource distribution throughout the nation. Understanding economic growth critically depends on its GDP, and GDP of a country serves as a gauge of its economic output and prosperity. Additionally, it aids in forecasting a nation's present and future economic conditions. To make rational choices regarding the economy, businesses, governments, and people all depend on GDP. In the long run, government policies that stimulate free trade, lessen regulation, lessen wealth transfer, foster competitiveness, and refrain from wasteful, inefficient expenditure will raise a country's GDP.

In addition, the result of this study shows that FDI has also significant impact on generating job opportunities. The result of our estimation through the above-mentioned period of time shows that while Afghanistan had higher overseas investments, it had higher job opportunities domestically. This agrees with the theory that FDI has long and significant impact on unemployment and the result suggests that FDI has been boosting economic growth and has increased domestic employment through enhancing the growth of economy.

CONCLUSIONS AND SUGGESTIONS

Conclusion

The most significant issue in Afghanistan is unemployment. In this context, efforts have been made to comprehend the factors that contribute to higher rates of unemployment as well as ways to create effective unemployment solutions. In order to do this, data from 2005 to 2021 are used to examine the factors that determine unemployment. Specifically, this study focuses on macroeconomic aspects and identify key factors like the inflation rate, trade balance, GDP, and foreign direct investment. After data analysis, the study has shown that the chosen macro factors had a significant negative link with unemployment using multiple regression analysis to evaluate the importance of the chosen variables. Notably, we selected some macroeconomic factors that may have impact on unemployment including inflation rate, trade balance, GDP, and foreign direct investment. Using multiple regression analysis with a times series data the result of the analysis show that the chosen macro factors had a negative, statistically significant relationship with unemployment.

Suggestion

The findings primarily suggest that policymakers should make proactive efforts to raise Afghanistan's economic productivity in order to guarantee the establishment of more job possibilities and economic activity, which would afterwards result in a decline in the country's unemployment rate and commodity prices. As a result, this project will improve and increase economic activity across the board in the country. In order to lower the rising rate of unemployment, efforts should also be made to apply labor-intensive production processes rather than capital-intensive ones, which would eliminate jobs that may still be filled by people.

Last but not least, real action must be taken to secure and implement a long-term strategy for raising the level of domestic production rather than depending on imported commodities, which is crucial for the decline in both unemployment and inflation. Most significantly, the results of our study have significant implications for how policies are implemented. The FDI and GDP that may strengthen economic growth and boost the Afghan economy by generating more local jobs must be more under concentration of the government.

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