

Economic Stability and Its Role in Achieving Inclusive Growth in Iraq

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This research aims to investigate and analyze the most pressing issues facing the Iraqi economy, namely economic stability and inclusive growth. Consequently, the present study investigates the effect of inflation and unemployment, which are significant contributors to economic instability, on inclusive growth dimensions such as GDP, education, health, governance, poverty, income inequality, and environmental performance. From 1991 to 2021, secondary data were collected using World Bank Indicators (WDI) and Organization for Economic Cooperation and Development (OECD) databases. The researchers also employed the autoregressive distributed lag (ARDL) model to determine the relationship between variables. The study revealed that fluctuations in inflation and unemployment rates have had a negative impact on inclusive growth in the Iraqi economy. Therefore, it is necessary to take all measures to achieve economic stability to meet the most crucial conditions for fostering inclusive growth in Iraq.

Key words: Economic stability, inclusive growth, inflation, unemployment, GDP, education, health, governance, poverty, income inequality, environmental performance.

1. INTRODUCTION

The ultimate goal of every nation on earth is to improve the living conditions of its citizens. The countries guarantee optimal utilization of their resources to raise their living standards. In the process of improving the living standard, economic stability is crucial. Economic stability is all about providing the populace with a high standard of living. Whether the issue is micro or macro, economics is essential in ensuring sustainability. Any nation's economy comprises multiple sectors, such as the manufacturing and services sectors. All of these sectors contribute significantly to the sustainability of the economy. Economic stability plays a crucial role in attaining inclusive growth by controlling inflation, reducing unemployment, and achieving a balanced balance of payments. Economic stability encompasses internal and external economic stability, exemplified by addressing financial problems such as inflation and unemployment. All factors associated with inclusive growth, such as inflation, employment, education, and governance, directly affect people's lives.

Similarly, inflation is one of the factors that affect all aspects of societal activity. Increases and decreases in inflation directly impact commodity prices, which in turn influence the purchasing power of the average person. Consequently, the disparity between a society's income and expenditures widens. This increase in the contrast affects their way of life. Employment, another factor of inclusive growth, is the key to a better existence. Employment is among the most significant differences between developed and developing economies (Panigrahi et al., 2020). Many people from developing economies migrate to developed economies for improved employment opportunities each year. Al-Sawaiea, 2020, asserts that there is a significant relationship between

employment and economic stability.

Additionally, education is a fundamental requirement of every society. Countries that fail to provide their citizens with a superior education system typically fail to produce a skilled labor force. The globe has evolved into a global commune. This globalization has increased the rate of development. In this process, countries that failed to develop are severely stifled by competition. A nation's education system elevates it from developing to developed status. According to the literature (Tchamyu et al., 2019), there is a significant correlation between economic stability and inclusive growth in terms of education. Climate is one of the factors that has garnered global attention and is a source of global concern. The global temperature is rising at an accelerated rate. This leads to global warming. Global warming has detrimental effects on human life and future generations.

Similarly, global warming causes the depletion of natural resources, such as the thawing of mountain glaciers, which leads to the depletion of water resources. To safeguard future generations' future and defend human health, it is imperative to take immediate action for environmental stability. Literature suggests a close relationship between economic and environmental stability (Kihombo et al., 2021).

Iraq has one of the world's most significant economies. The country's primary source of income is hydrocarbon production. In this context, the nation has experienced numerous conflicts. The nation is in a developmental period. Despite confronting the most severe security and economic issues, the nation is resilient. The nation is exerting maximum effort for financial stability. In 2022, the country's GDP was recorded at 7%. In 2023, the government will lose momentum (Mohammed, 2022).

On the other hand, even though the nation's oil production

increased by 3% in the first quarter of 2023, it is significantly lower than in prior years (Dhaireb & Fadl, 2022). This is an additional sign of economic instability. In March 2023, the country faced an inflation rate of 6.9%. The country's economic direction is not in the correct direction. The unemployment rate in Iraq increased to 14.2% from 14.0 in 2022 (Obaid and Jassid, 2022). Keeping in mind the economic condition of Iraq, we will discuss the role of internal and external economic instability in preventing inclusive growth in Iraq, where the economy has experienced economic instability, such as high unemployment rates and fluctuating inflation. All of these instances affected Iraq's inclusive growth. The balance of payments deficit caused by high imports, low exports, the flight of capital for investment abroad, and the decline in capital inflows for investment in Iraq had a negative impact on external economic stability, which in turn had a negative impact on inclusive growth in Iraq (Zaki & Rasheed, 2022). The research concern is the decline of inclusive growth rates in Iraq. It is necessary, therefore, to diagnose the causes of the deterioration by analyzing the impact of internal and external economic instability and their role in impeding inclusive development in Iraq. The significance of this study rests in the importance of economic stability in Iraq and its role in fostering inclusive growth in Iraq. The relationship between high inflation and unemployment rates and inclusive growth in Iraq is inverse. This research aims to examine indicators of Iraq's internal and external economic stability and inclusive growth. In addition, the impact of internal and external economic stability on attaining inclusive growth in Iraq must be studied and analyzed. This study discusses previous research and studies that have examined the relationship between economic stability and inclusive growth in specific countries.

2. LITERATURE REVIEW

Before delving into its effects, the theoretical framework for the impact of economic stability on inclusive growth must be defined. (Ozpençe, 2017) The absence of extreme fluctuations or changes in macroeconomic variables characterizes economic stability. There may be an acceptable level of inflation and unemployment that does not impede inclusive economic growth. In some instances, moderate inflation can stimulate investment and production. However, the accumulation of high inflation and unemployment rates inhibits economic activity and expansion. In inclusive growth, the income of the poor increases at a faster rate than the income of the entire population. Therefore, it is essential, when discussing inclusive growth, to emphasize equality and the reduction of income disparities.

The impact of inflation on the components of inclusive growth (economic development, income inequality, poverty, health and education, governance, and the environment) is examined in this study. Diverse economic theories have debated inflation's effect on economic development. Others, such as Sidrauski (1967) and

Wallich (1969), have suggested that inflation is detrimental to economic growth (Hoang et al., 2020). Different studies have determined inflation's positive and negative effects on economic expansion. Structuralists emphasize inflation's significance and significance for economic growth, whereas monetarists emphasize inflation's negative impact on economic growth. Other studies, such as Friedman's (1973), have found a non-deterministic relationship between inflation and economic growth. Friedman noted that some countries have experienced inflation with and without growth, and the converse is also true.

Similarly, Wai (1959) discovered that in some countries, growth was conceivable without inflation, while in others, there was inflation without increase. Similarly, Johanson et al. (1967) assumes no clear evidence of a positive or negative correlation between inflation and economic growth rates. He asserts that inflation does not determine economic growth but rather the application of knowledge through technical and administrative changes and improving human capabilities (Doguwa, 2012). Others have discovered that low inflation rates stimulate economic growth. Other studies, however, have shown that the impact of inflation on economic growth varies between the short and long term (Belmega & Boiangiu, 2018).

Similarly, Tien (2021) investigated whether there is a relationship between inflation and economic growth. The investigation was conducted on the Vietnamese populace. The investigation used the 45-year data set as a sample. The sample tenure spans the years 1975 through 2020. For purposes of analysis, the study utilized the DF test analysis method. According to the analysis outcomes, there is a significant relationship between inflation and economic growth in Vietnam. Therefore, studies have emphasized the inflation threshold, wherein inflation becomes detrimental to economic growth once it surpasses a certain threshold. Therefore, studies have highlighted the inflation threshold, wherein inflation becomes detrimental to economic growth once it surpasses a certain threshold. Fischer (1993) was among the first to identify this relationship, and numerous researchers have attempted to estimate the inflation rate at which it becomes detrimental to economic growth. In his cross-country study, Sarel (1996) evaluated a threshold of 8%, while Ghosh et al. (1999) reported a lower threshold of 2.5% using a larger sample of countries. In addition, Adaramola and Dada (2020) investigated whether or not there is a correlation between inflation and economic growth. The investigation was conducted on the Nigerian populace. The investigation used the 38-year data set as a sample. The sample tenure spans the years 1980 to 2008. The study employed the ARDL analysis method for analysis. According to the analysis outcomes, there is a significant relationship between inflation and economic growth in Nigeria.

The study also investigates inflation's effect on income inequality. When inflation rates increase, the real value of fixed-income groups' income decreases, lowering their

standard of living. In contrast, the revenue of employers who rely on speculation and short-term business grows, resulting in greater income inequality. As a result, most of the population experiences a significant decline in income. At the same time, a small number of individuals control most of the income, leading to feelings of injustice, poverty, and deprivation.

Similarly, [Siami-Namini and Hudson \(2019\)](#) investigated whether or not inflation and income inequality are associated. The research was conducted on the populace of 44 developing economies. The investigation utilized the 24-year data set as a sample. The sample tenure spans the years 1990 through 2014. For analysis, the study employed the VECM method. According to the analysis's findings, a significant relationship exists between inflation and income inequality.

The study also analyzes inflation's effect on poverty. Inflation has a negative impact on poverty because it affects the intermediate channels (economic growth, real income reduction for those on fixed incomes, and widening income inequality). High inflation rates contribute to a decline in real economic growth by producing an unfavorable environment for investment. Additionally, inflation has a negative effect on investment and, by extension, economic growth. Inflation also affects the actual value of business owners' profits. In this context, [Azhar \(2020\)](#) investigated the possibility of a relationship between inflation and poverty. The research was conducted on the populations of ASEAN economies. The investigation used the 19-year data set as a sample. The sample tenure extends from 1999 to 2018. The PLS analysis method was employed for analysis in this study. According to the research, there is a significant relationship between inflation and poverty. Individuals tend to speculate and purchase real estate and durable products instead of making productive investments when inflation rates are high. This has a negative impact on economic growth and, consequently, on poverty. Inflation also has a negative effect on the real value of fixed-income earners, who do not respond to income increases when the general price level rises, causing them to fall into the cycle of poverty. Additionally, inflation exacerbates income inequality in favor of classes with variable incomes. Consequently, as inflation rates rise, income inequality widens, and poverty levels rise.

Additionally, the study examines the effects of inflation on health and education. Health and education expenditures are negatively impacted by inflation, particularly long-term investment expenditures. The uncertainty induced by high inflation rates also affects health and education expenditures on capital expenditures. In addition, when inflation rates are high, the real value of spending on education and health declines due to the general rise in prices. Moreover, in the case of high inflation rates and a reduction in living standards, school leavers increase, leading to a decline in educational and health standards due to children leaving school and exhausting their physical

energy at a young age.

In the context of inflation and health, [Turgut et al. \(2017\)](#) investigated whether an association exists between inflation and health expenditures. The investigation was conducted on the Turkish populace. The investigation used the 13-year data set as a sample. The sample tenure extends from 2003 to 2016. The study employed the SPSS analysis method for analysis purposes. According to the analysis results, there is a significant relationship between inflation and health expenditures. In the context of inflation and education, [Sequeira \(2021\)](#) examined whether or not there is a relationship between inflation and education costs. The investigation was conducted on the Portuguese populace. According to the findings, there is a significant relationship between inflation and education expenditures.

Additionally, the research investigates the impact of inflation on governance. Governance is also affected by inflation. In the case of high inflation rates and a decline in the real value of wages and salaries, corruption such as bribery, favoritism, blackmail, forgery, and obstructing investments in key sectors increases, leading to a diversion of funds to projects and industries that do not contribute to economic growth. In this context, [Ho et al. \(2021\)](#) investigated the possibility of a relationship between inflation and governance. The research was conducted on the populations of 34 developed and developing economies. The investigation used the 17-year data set as a sample. The sample tenure extends from 2002 to 2017. For analysis, the study employed the GMM method. According to the research, there is a significant relationship between inflation and governance.

The study also investigates the environmental effects of inflation. The rising rate of inflation is having an immediate impact on the environment. In response to rising prices and a decline in the purchasing power of salaries and wages, people prioritize meeting their basic requirements over environmental preservation, resulting in environmental degradation. [Ullah et al. \(2020\)](#) investigated whether there is a correlation between inflation and the environment in this context. The investigation was conducted on the Pakistani populace. The investigation used the 43-year data set as a sample. The sample tenure spans the years 1985 through 2018. The study employed the ARDL analysis method for analysis. According to the analysis's findings, there is a significant relationship between inflation and the environment. Inflation has a negative impact on various aspects of inclusive development, including economic growth, poverty, income distribution, education, health, governance, and the environment, as demonstrated above.

This study also examines the effects of unemployment on the components of inclusive growth (economic growth, inequality in income distribution, poverty, health and education, governance, and the environment). First, the study investigates the impact of unemployment on economic development: - The relationship between unemployment and economic growth has been the subject

of extensive debate. Some economists have argued that there is no relationship between the two economic variables (Solow, 1956), presuming full utilization of production factors, while others, such as Gruchelski and Niemczyk (2012) and Okun (1983), have demonstrated a negative relationship between them.

The study also investigates the impact of unemployment on income distribution inequality. There is a positive correlation between unemployment and income distribution inequality. The disparity in income distribution will inevitably widen if the unemployment rate rises and a small portion of the population earns excessively high wages that are not commensurate with their labor. In this context, Suhendra et al. (2020) investigated whether unemployment in terms of human capital is associated with income inequality. The investigation was conducted on the Indonesian populace. The investigation utilized a six-year data sample. The sample duration ranges from 2013 to 2019. For purposes of analysis, the study used the PDM analysis method. According to the analysis results, there is a significant relationship between unemployment in terms of human capital and income inequality.

The study also analyzes the relationship between unemployment and poverty. Numerous studies have demonstrated that unemployment has a positive impact on poverty. As the unemployment rate rises, so does the number of people live below the poverty line. This is because those unemployed lack a source of income, rendering them indigent. The situation becomes even more dire when the state reduces social assistance for the unemployed, exacerbating poverty. Adelowokan et al. (2019) investigated whether there is a correlation between unemployment and poverty in this context. The investigation was conducted on the Nigerian populace. The study utilized the 30-year data set as a sample. The sample tenure spans the years 1985 through 2015. The research employed the ADF analysis method for purposes of analysis. According to the analysis results, there is a significant relationship between unemployment in terms of human capital and income inequality.

Additionally, the research investigates the effects of unemployment on health and education. Additionally, unemployment has negative effects on health and education. Due to high unemployment rates and a decline in the quality of life, interest in health and education declines, and school dropout rates rise. Norstrom et al. (2019) investigated the possibility of a relationship between unemployment and health in this context. The investigation was conducted on the Swedish populace. The research utilized a data set of 2500 individuals. The study employed the ARDL analysis method for analysis. According to the analysis's findings, unemployment and health have a significant relationship.

The study also investigates the environmental effects of unemployment. Unemployment contributes to the deterioration of the environment because unemployed

individuals are not concerned with procuring a healthy environment but rather a job and a minimum standard of living. In this context, Degirmenci and Aydin (2021) investigated whether a relationship exists between unemployment and the environment. The investigation was conducted on the inhabitants of five economies. The investigation used the 23-year data set as a sample. The tenure sample spans the years 1994 to 2017. The research employed the ADF analysis method for purposes of analysis. According to the analysis's findings, there is a significant connection between unemployment and the environment.

Additionally, the research investigates the impact of unemployment on governance. The high rates of unemployment, particularly the unemployment of college graduates and the employment of incompetent individuals, encourage corruption manifestations. Unemployment can be both a cause and effect of corruption. In this context, Meo et al. (2020) investigated whether unemployment and governance are associated in any way. The investigation was conducted on the Pakistani populace. The research used the 32-year data set as a sample. The sample tenure extends from 1984 to 2016. The study employed the ARDL analysis method for analysis. According to the analysis's findings, unemployment and governance have a significant connection.

3. RESEARCH METHODOLOGY

This study investigates the impact of inflation and unemployment on inclusive growth dimensions, including GDP, education, health, governance, poverty, income inequality, and environmental performance. The investigation collected secondary data from 1991 to 2021 using WDI and OECD databases. The research equations are listed below:

$$EG_t = \alpha_0 + \beta_1 INF_t + \beta_2 UEM_t + e_t \quad (1)$$

$$IIE_t = \alpha_0 + \beta_1 INF_t + \beta_2 UEM_t + e_t \quad (2)$$

$$POV_t = \alpha_0 + \beta_1 INF_t + \beta_2 UEM_t + e_t \quad (3)$$

$$HL_t = \alpha_0 + \beta_1 INF_t + \beta_2 UEM_t + e_t \quad (4)$$

$$ED_t = \alpha_0 + \beta_1 INF_t + \beta_2 UEM_t + e_t \quad (5)$$

$$GOV_t = \alpha_0 + \beta_1 INF_t + \beta_2 UEM_t + e_t \quad (6)$$

$$ENV_t = \alpha_0 + \beta_1 INF_t + \beta_2 UEM_t + e_t \quad (7)$$

Where;

EG	=	Economic Growth
IIE	=	Income Inequality
POV	=	Poverty
HL	=	Health
ED	=	Education
GOV	=	Governance
ENV	=	Environment
t	=	Time Period
INF	=	Inflation
UEM	=	Unemployment

The study used inclusive growth as the dependent variable, with GDP as the proxy for GDP growth (annual percentage), income inequality as the proxy for the Gini

Index, poverty as the proxy for the poverty headcount ratio (percent of the total population), education as the proxy for government expenditures on education (percent of GDP), health as the proxy for current health expenditures (percent of GDP), governance as the proxy for the global governance index, and environment as the proxy for CO2 emissions (metric tons per capita). In addition, the study

used economic stability as a predictor, using inflation proxies as the consumer price index (annual percentage) and unemployment proxies as the unemployment total (percentage of the total labor force) as measurements. Table 1 are listed these measurements.

Table 1: Variables with Measurements

S#	Variables	Measurement	Sources
01	Economic Growth	GDP growth (annual percentage)	WDI
02	Income inequality	Gini Index	WDI
03	Poverty	Poverty headcount ratio (% of the total population)	WDI
04	Education	Government expenditures on education (% of GDP)	WDI
05	Health	Current health expenditures (% of GDP)	WDI
06	Governance	Global governance index	OECD
07	Environment	CO2 emissions (metric tons per capita)	WDI
08	Inflation	Consumer price index (annual percentage)	WDI
09	Unemployment	Unemployment total (% of the total labor force)	WDI

This study uses descriptive statistics to examine the specifics of the understudy's constructs. In addition, the correlation between the constructs is reviewed using a correlation matrix. In addition, the unit root is studied using the augmentedDickey–Fuller test (ADF). The equation is given as follows:

$$d(Y_t) = \alpha_0 + \beta t + \gamma Y_{t-1} + d(Y_t(-1)) + \epsilon_t \quad (8)$$

The researchers also employed the autoregressive distributed lag (ARDL) model to determine the relationship between variables. It regulates all factors that influence estimations, including autocorrelation and heteroscedasticity. In addition, it is appropriate when the level and first difference of the constructs are stationary. It is also appropriate when the sample size is modest (Sharif, Baris-Tuzemen, Uzuner, Ozturk, and Sinha, 2020), as this article contains 31 observations. The following equations are given:

$$\Delta GDP_t = \alpha_0 + \sum \delta_1 \Delta GDP_{t-1} + \sum \delta_2 \Delta INF_{t-1} + \sum \delta_3 \Delta UEM_{t-1} + \epsilon_1 \quad (9)$$

$$\Delta IIE_t = \alpha_0 + \sum \delta_1 \Delta IIE_{t-1} + \sum \delta_2 \Delta INF_{t-1} + \sum \delta_3 \Delta UEM_{t-1} + \epsilon_1 \quad (10)$$

$$\Delta POV_t = \alpha_0 + \sum \delta_1 \Delta POV_{t-1} + \sum \delta_2 \Delta INF_{t-1} + \sum \delta_3 \Delta UEM_{t-1} + \epsilon_1 \quad (11)$$

$$\Delta HL_t = \alpha_0 + \sum \delta_1 \Delta HL_{t-1} + \sum \delta_2 \Delta INF_{t-1} + \sum \delta_3 \Delta UEM_{t-1} + \epsilon_1 \quad (12)$$

$$\Delta ED_t = \alpha_0 + \sum \delta_1 \Delta ED_{t-1} + \sum \delta_2 \Delta INF_{t-1} + \sum \delta_3 \Delta UEM_{t-1} + \epsilon_1 \quad (13)$$

$$\Delta GOV_t = \alpha_0 + \sum \delta_1 \Delta GOV_{t-1} + \sum \delta_2 \Delta INF_{t-1} + \sum \delta_3 \Delta UEM_{t-1} + \epsilon_1 \quad (14)$$

$$\Delta ENV_t = \alpha_0 + \sum \delta_1 \Delta ENV_{t-1} + \sum \delta_2 \Delta INF_{t-1} + \sum \delta_3 \Delta UEM_{t-1} + \epsilon_1 \quad (15)$$

In equation above equations, $\delta_1, \delta_2, \delta_3, \delta_4, \& \delta_5$ shows the short-term coefficients; while, $\varphi_1, \varphi_2, \varphi_3, \varphi_4, \varphi_5, \& \epsilon_1$ show

the long-term coefficients and error term. Moreover, the ECM equation is given below for short-run relationships.

$$\Delta GDP_t = \alpha_0 + \sum \delta_1 \Delta GDP_{t-1} + \sum \varphi_2 \Delta INF_{t-1} + \sum \omega_3 \Delta UEM_{t-1} + \delta ECM_t + v_t \quad (16)$$

$$\Delta IIE_t = \alpha_0 + \sum \delta_1 \Delta IIE_{t-1} + \sum \varphi_2 \Delta INF_{t-1} + \sum \omega_3 \Delta UEM_{t-1} + \delta ECM_t + v_t \quad (17)$$

$$\Delta POV_t = \alpha_0 + \sum \delta_1 \Delta POV_{t-1} + \sum \varphi_2 \Delta INF_{t-1} + \sum \omega_3 \Delta UEM_{t-1} + \delta ECM_t + v_t \quad (18)$$

$$\Delta ED_t = \alpha_0 + \sum \delta_1 \Delta ED_{t-1} + \sum \varphi_2 \Delta INF_{t-1} + \sum \omega_3 \Delta UEM_{t-1} + \delta ECM_t + v_t \quad (19)$$

$$\Delta HL_t = \alpha_0 + \sum \delta_1 \Delta HL_{t-1} + \sum \varphi_2 \Delta INF_{t-1} + \sum \omega_3 \Delta UEM_{t-1} + \delta ECM_t + v_t \quad (20)$$

$$\Delta GOV_t = \alpha_0 + \sum \delta_1 \Delta GOV_{t-1} + \sum \varphi_2 \Delta INF_{t-1} + \sum \omega_3 \Delta UEM_{t-1} + \delta ECM_t + v_t \quad (21)$$

$$\Delta ENV_t = \alpha_0 + \sum \delta_1 \Delta ENV_{t-1} + \sum \varphi_2 \Delta INF_{t-1} + \sum \omega_3 \Delta UEM_{t-1} + \delta ECM_t + v_t \quad (22)$$

4. RESEARCH FINDINGS

This study uses descriptive statistics to examine the specifics of the understudy's constructs. The results revealed that the average GDP value was 6.114 percent, IIE was 28.538%, POV was 4.196 percent, ED was 4.55%, and HL was 2.945%. In addition, the results revealed that the average GOV value was 113.719%, the average ENV value was 3.718% per capita, the average INF value was 50.680%, and the average UEM value was 9.924%. These results are shown in Table 2.

In addition, the correlation between the constructs is examined using a correlation matrix. The study revealed that fluctuations in inflation and unemployment rates have had a negative impact on inclusive growth in the Iraqi economy. Therefore, it is necessary to take all measures to achieve economic stability to meet the most crucial conditions for fostering inclusive growth in Iraq. These results are shown in Table 3.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
GDP	31	6.114	20.368	-64.047	53.382
IIE	31	28.538	1.112	26.706	30.370
POV	31	4.196	0.632	3.103	5.239
ED	31	4.555	0.393	4.282	5.810
HL	31	2.945	0.804	1.823	5.085
GOV	31	113.719	18.864	77.350	149.039
ENV	31	3.718	0.684	2.552	5.325
INF	31	50.680	109.96	-16.117	448.500
UEM	31	9.924	2.374	7.960	16.230

Table 3: Matrix of Correlations

Variables	GDP	IIE	POV	ED	HL	GOV	ENV	INF	UEM
GDP	1.000								
IIE	-0.063	1.000							
POV	-0.050	0.998	1.000						
ED	0.126	0.751	0.752	1.000					
HL	0.040	0.840	0.846	0.813	1.000				
GOV	0.036	0.081	0.078	0.076	0.013	1.000			
ENV	0.304	-0.098	-0.098	0.191	-0.080	0.110	1.000		
INF	-0.116	-0.552	-0.561	-0.278	-0.467	-0.102	0.391	1.000	
UEM	-0.172	0.666	0.666	0.958	0.746	-0.035	0.264	-0.182	1.000

Moreover, the study also checks the unit root with the help of the ADF test. The outcomes exposed that the IIE, ED, and INF are stationary at a level while GDP, POV, HL, GOV,

ENV, and UEM are stationary at first difference. These outcomes are given in [Table 4](#).

Table 4: Unit Root Test

Augmented Dickey-Fuller Test (ADF)	Level	t-statistics	p-values
GDP	I(1)	-5.635	0.000
EII	I(0)	2.342	0.022
POV	I(1)	-3.021	0.011
ED	I(0)	-2.101	0.043
HL	I(1)	-4.301	0.000
GOV	I(1)	-5.261	0.000
ENV	I(1)	-4.675	0.000
INF	I(0)	-2.188	0.037
UEM	I(1)	5.019	0.000

The co-integration is also examined using the ARDL bound test, and the results indicate that the f-statistic values exceed

the critical values. These values revealed co-integration departures. These results are shown in [Table 5](#).

Table 5: ARDL Bound Test

Model	F-statistics	Lag	Level Significance	Bound test critical values	
				I(0)	I(1)
GDP/ (INF, UEM)	5.452	4	1%	6.32	6.45
EII/ (INF, UEM)	6.101				
POV/ (INF, UEM)	5.091				
ED/ (INF, UEM)	5.001		5%	5.54	5.98
HL/ (INF, UEM)	6.098				
GOV/ (INF, UEM)	5.998				
ENV/ (INF, UEM)	5.463		10%	4.13	4.45

The study revealed that fluctuations in inflation and unemployment rates have a negative impact on inclusive growth in the short term for the Iraqi economy. Therefore, it is necessary to take all measures necessary to achieve economic stability to meet the most crucial conditions for fostering inclusive growth in Iraq. These results are shown in [Table 6](#).

The study revealed that fluctuations in inflation and unemployment rates have a negative impact on inclusive growth over the long term for the Iraqi economy. Therefore, it is necessary to take all measures necessary to achieve economic stability to meet the most crucial conditions for fostering inclusive growth in Iraq. These results are shown in [Table 7](#).

Table 6: Short-Run Coefficients

Variable		Coefficient	t-Statistic	Prob.
GDP	D(INF)	-0.610	-3.866	0.008
	D(UEM)	-0.787	-5.243	0.000
EII	D(INF)	1.203	7.436	0.000
	D(UEM)	1.534	5.870	0.000
POV	D(INF)	2.912	3.201	0.014
	D(UEM)	0.463	2.101	0.043
ED	D(INF)	-1.292	-3.291	0.011
	D(UEM)	-3.271	-5.473	0.000
HL	D(INF)	-2.261	-4.389	0.000
	D(UEM)	-2.160	-4.382	0.000
GOV	D(INF)	-2.372	-2.191	0.044
	D(UEM)	-1.292	-5.474	0.000
ENV	D(INF)	0.564	3.281	0.011
	D(UEM)	0.463	5.478	0.000
	CointEq(-1)*	-1.432	-8.702	0.000
R-squared		0.651		
Adjusted R-squared		0.615		

Table 7: Long-Term Coefficients

Variable		Coefficient	t-Statistic	Prob.
GDP	INF	-1.327	-3.203	0.012
UEM		-3.982	-3.268	0.010
EII	INF	1.332	4.367	0.000
		2.545	3.031	0.016
POV	INF	3.101	3.271	0.009
		0.765	6.646	0.000
ED	INF	-4.376	-3.353	0.004
		-5.482	-2.181	0.021
HL	INF	-1.282	-4.372	0.000
		-4.573	-3.278	0.011
GOV	INF	-0.857	-5.472	0.000
		-0.564	-4.372	0.000
ENV	INF	0.454	3.261	0.007
UEM		1.383	2.181	0.019
C		0.923	3.491	0.006

5. DISCUSSIONS

The results indicated that inflation has a negative effect on the country's economic growth. [Karahana and Olak \(2020\)](#) supported this theory as well. According to them, inflation causes an increase in the price of goods and services, resulting in a decline in the purchasing power of individuals as they require more money to purchase the same goods and services. This decline will reduce investment and consumption, thereby impeding the development of the economy. A rise in the inflation rate can cause economic uncertainty. Due to future uncertainty and low returns, the business community hesitates to invest in capital. This resulted in a decline in investment levels necessary for economic expansion. In addition, inflation leads to erroneous economic decisions due to price fluctuations; as prices rise, it becomes impossible for individuals to distinguish between changes in overall and relative price levels.

The findings demonstrated that unemployment hinders economic development. Past research by [Pasara and Garidzirai \(2020\)](#) also lends credence to this theory. According to them, due to unemployment, people's incomes will decrease, resulting in reduced product

demand and a consequent slowing of economic development. Due to unemployment, individuals will be unable to pay taxes, which reduces the government's revenue and makes it difficult to finance initiatives that promote economic growth. Additionally, unemployment negatively affects society by increasing poverty, crime, and social unrest, which negatively affects the nation's economy. Moreover, due to prolonged unemployment, individuals will be unable to acquire new and innovative market skills, preventing them from being able to compete in the market due to a lack of market requirements.

The findings demonstrated that inflation exacerbates income inequality. [Law and Soon \(2020\)](#) supported this hypothesis in a previous study. According to them, inflation causes difficulties for those with fixed incomes, such as those who rely on fixed salaries or pensions, because the price of their products rises while their income remains constant. Individuals with limited access to resources or finances are adversely affected by inflation because, as prices rise, they will no longer be able to afford the goods, particularly those confronting inequality. Moreover, inflation causes the redistribution of wealth, thereby favoring certain groups, such as those whose businesses or asset prices rise, increasing wealth. Those

with fixed incomes, however, struggle to cope with these escalating prices.

According to the findings, unemployment increases income inequality. In prior research, [Heathcote et al. \(2020\)](#) also supported this hypothesis. According to them, unemployment causes income loss, particularly for those who cannot find employment. The failure of income may result in income inequality, as unemployed individuals suffer economically. Prolonged unemployment will lead to a decline in skills, contributing to income inequality because a shortage of skills will reduce their earning potential. Additionally, the period of unemployment will make it difficult for individuals to re-enter the business community or obtain new employment opportunities. In addition, it impedes promotions and the acquisition of the highest-paying positions compared to those with continuous employment.

The findings demonstrated that inflation exacerbates destitution. [Ha et al. \(2019\)](#) supported this hypothesis in prior research. According to them, inflation worsens destitution by driving up the cost of essential goods. When the cost-of-living rises, it becomes more difficult for low-income individuals to manage essentials such as healthcare, education, and food, making it more difficult to afford their requirements. These circumstances push individuals deeper into poverty, making their lives more difficult. In addition, if salaries cannot keep up with inflation, the income of salaried individuals will decrease, making it more difficult for them to meet their basic requirements. A rise in the inflation rate may result in economic uncertainty, reducing business initiatives or investments as well as job creation, thereby aggravating poverty.

The findings indicated that unemployment increases poverty in the nation. [Prasetyo and Cahynai \(2022\)](#) supported this hypothesis in a previous study. According to them, unemployment results in a loss of income, rendering the individual unable to work. These individuals will fall into poverty as they can no longer meet their basic needs. Lack of unemployment makes it difficult for people to earn a living and contributes to an increase in the country's crime rate and economic instability. Additionally, unemployment restricts individuals' access to essential services or resources, making it difficult for unemployed individuals with limited incomes to obtain an education, food, or housing.

The results demonstrated that inflation can result in serious health problems. In a previous investigation, [Gomez-González \(2021\)](#) also supported this theory. The cost of healthcare, such as remedies, medical consultations, and medications, has increased due to inflation. As prices rise, low-income individuals may struggle to afford the essentials of healthcare, resulting in various health problems. Inflation also affects the accessibility and affordability of pharmaceuticals necessary to treat various diseases. Inflation also raises the cost of pharmaceuticals, making them prohibitively expensive for the middle class

and the poor.

The findings indicated that unemployment negatively affects people's health. [Parola and Marcionetti \(2021\)](#) supported this hypothesis in a previous study. According to them, unemployment increases an individual's anxiety, tension, or depression. Loss of employment degrades the mental health of individuals, lowering their self-esteem and causing emotional distress or hopelessness. Due to financial constraints, unemployed individuals may have difficulty accessing healthcare facilities. Unemployment also encourages hazardous behaviors such as poor nutrition, smoking, and inactivity. These behaviors increase the risk of chronic diseases such as obesity, mental illness, and others that have a negative impact on individuals' health.

The findings indicated that inflation has a negative effect on people's education. [Mandeya and Ho's](#) investigation from 2022 also supported this hypothesis. According to them, inflation will increase educational expenses such as textbooks, tuition, and other costs. As prices rise, it becomes increasingly difficult for individuals to afford an education. Particularly for individuals from low-income backgrounds, inflation reduces the cost of education.

The findings revealed that unemployment has a negative impact on the education of individuals. [Hogberg et al.'s \(2019\)](#) previous study supported this hypothesis. According to them, unemployment creates financial constraints that make it difficult for individuals to afford a fundamental education. People are deprived of education due to their limited access to educational programs and institutions due to financial constraints. Unemployment restricts a person's access to educational support systems because, without employment, they cannot afford training programs, practical experience, software, or tools to investigate a particular field.

The results demonstrated that a rise in inflation has negative effects on governance. [Asongu and Nnanna \(2019\)](#) supported this hypothesis in a previous study. According to them, the inflation rate causes economic instability, making it difficult for the government to develop or initiate new initiatives or infrastructure for the nation's betterment. As the value of money erodes, inflation causes volatility and uncertainty.

The results demonstrated that unemployment has a negative effect on governance. In a previous study, [Evans and Kelikume \(2019\)](#) also supported this hypothesis. According to them, unemployment reduces the number of individuals who pay taxes, thereby decreasing tax revenue. This restricts the government's ability to fund new initiatives or public services, particularly in education, infrastructure, healthcare, and social welfare. This also contributes to reduced service provision, lowering the quality of government services.

The findings indicated that inflation has a negative impact on the environment. As inflation rises, governments encounter a variety of challenges that have an effect on

energy conservation budgets. Reduced financial resources disrupt conservation programs, hindering efforts to manage and protect natural resources and mitigate climate change. The results demonstrated that unemployment has an adverse effect on the environment. Unemployment causes poverty and financial difficulties as individuals struggle to meet their basic needs and may engage in illegal activities, such as unlawful logging or poaching, with negative repercussions. It is crucial to address unemployment to mitigate the negative impact on the environment.

6. CONCLUSIONS

Internal economic stability, represented by inflation and unemployment, and external economic stability, characterized by the balance of payments, play an important role in stimulating inclusive growth. The decrease in inclusive growth rates in Iraq is due to a decline in its components, indicating that inclusive growth in Iraq is close to the threshold for inclusive growth. Throughout the study period, the fluctuating unemployment and inflation rates in Iraq and the fluctuating balance of payments demonstrated the absence of seriousness of the economic policies pursued to achieve internal and external economic stability. Inflation and unemployment rates have a negative effect on inclusive growth in Iraq. As a result of a decline in the unemployment rate to 10.82%, inclusive growth attained its highest point during the study period, reaching 1.433% in 2016. The lowest inclusive growth rate was recorded in 2003, when the inflation rate increased relative to the following year, reaching 32.57 percent. The imbalance in the balance of payments has a distinct and negative effect on inclusive growth in Iraq. The balance of payments deficit reached 3.36, with a negative rate of change of 138.62 in 2020, negatively impacting inclusive growth. In the same year, the most negative rate of change was recorded at 9.94%.

7. RECOMMENDATIONS

The components of inclusive growth in Iraq must be improved by focusing on health and education, governance, improving the environment, boosting economic growth rates, increasing employment and the labor force, and reducing poverty and income inequality while adhering to all necessary procedures and measures. Increasing government investments and encouraging the private sector to invest can increase employment and reduce unemployment in Iraq to absorb the expanding labor force and prevent unemployment from becoming an impediment to achieving inclusive growth. To achieve the objective of stimulating inclusive growth in Iraq, fiscal, monetary, and trade policies must be coordinated to combat inflation and preserve the value of the Iraqi dinar. The imbalance in Iraq's balance of payments can be addressed by revitalizing other economic sectors to increase exports providing facilities and support for foreign investments, and thereby preventing the imbalance from becoming an impediment to inclusive growth.

8. LIMITATIONS

The limitations of this paper can be addressed in the future. This paper examines the impact of inflation and unemployment on economic growth, income inequality, poverty, health, education, government, and the environment. In the future, additional factors of government instability, government policies, or lack of infrastructure can be used to analyze their impact on economic growth, income inequality, poverty, health, education, and governance. No moderator was used in this article. Future researchers can also use illiteracy or financial issues as moderators to examine the relationship between inflation, unemployment, economic growth, income inequality, poverty, health, education, and governance.

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