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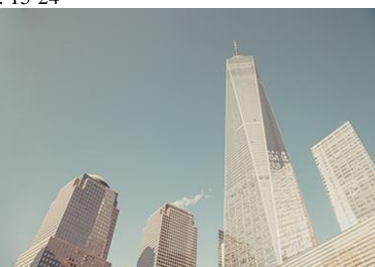
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Monetary policy and poverty: An empirical study-Iran as a model

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Abstract
The goal of this research was to find out what the relationship is between monetary policy and poverty rates. It also wants to find ways to promote sustainable economic growth and create more jobs so that poverty rates can be lowered by using the right economic policy. The study is based on the hypothesis that monetary policy has a positive effect on fixing economic problems in Iran and helping with growth and poverty reduction. The study used the inductive scientific method to test the hypothesis and found that monetary policy has a positive effect in both the short and long term, as the adjusted coefficient of determination reached 0.61%. All of the study variables were found to be significant and have an impact that makes sense from an economic point of view.

Keywords: Poverty rates, interest rate, domestic credit, broad money supply, exchange rate

Introduction

Poverty has gotten a lot of attention lately, especially from international organizations like the International Monetary Fund and the World Bank. They are focusing on making sure that the right economic and monetary policies are used to reduce poverty, which is a very complicated issue. Twenty-three percent of people in the world still live on less than two dollars a day. Most of these people live in developing countries, like Iran, which has had to deal with tough economic conditions like international bans and wars. Monetary policy is linked to strategies that aim to boost production and lower poverty rates, especially in the short term when an expansionary approach is taken. This is because monetary policy has a clear effect on the economy and is objectively good at controlling it. When the economy hits a state of full employment, on the other hand, it tends to be bad in the long run. It is also possible for monetary policy to lower inflation and improve the long-term well-being of the poor by taking a contractionary approach and paying close attention to the issue of income inequality. There is a clear and significant link between the rise in wage inequality and the rise in poverty rates. It is possible to see how monetary factors affect unemployment by looking at real output, inflation, and so on. As prices go up, incomes are redistributed in favor of the wealthy. This makes poverty worse through both direct and indirect channels, such as changes in interest rates, asset prices, job rates, and housing availability. All of these things help fix imbalances in the economy, boost real output, create more jobs, raise living standards, and lower poverty rates in Iran and other emerging countries.

Research Importance

Reducing poverty rates within the framework of monetary policy depends on key channels that contribute to the development of real output, such as interest rates and their impact on investment, inflation and deflation levels, and income distribution disparities, all of which work to reduce income gaps and lower poverty levels in Iran.

Research Problem

Iran suffers from high poverty rates under the prevailing conditions and the sanctions imposed on it by the United Nations, as a large number of its population still lives on less than two dollars a day. This poses a significant crisis in light of the continuous increase in population growth rates experienced by Iran.

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Research Objective
The research aims to develop policies that reduce poverty rates in Iran by achieving sustainable economic growth, creating additional job opportunities, and maintaining price stability through the adoption of a monetary policy that aligns with the Iranian economic situation.

Research Hypothesis
The study is founded on the hypothesis that monetary policy, as one of the primary macroeconomic policies, helps to correct the imbalances and deformations in the Iranian economy, leading to growth, which in turn raises average incomes and decreases poverty rates.

Research Methodology
Utilizing descriptive and analytical methodologies, this study used an inductive strategy to validate the research hypothesis while accomplishing its purpose of determining the impact of monetary policy on tackling poverty in Iran. Accordingly, the research comprised a literature review, a theoretical part detailing the relationship between monetary policy and poverty rates, an analytical part, and an empirical component.

Literature Review
In the literature review, we examine two previous studies that are closely related to our research. The first study was conducted by Al-Khafaji in 2023 [8], titled "The Role of Coordination Between Fiscal and Monetary Policies in Reducing Poverty - Experiences of Selected Countries with Reference to Iraq." The study aimed to explore the impact of fiscal and monetary policies on poverty in a group of Arab countries such as Algeria, Egypt, and Iraq. The researcher employed statistical and econometric methods to validate his hypothesis, relying on the inductive approach. The study concluded that an integrated mix of fiscal and monetary policies is essential to enhance economic growth and reduce poverty rates. It emphasized the need to design fiscal and trade policies through government spending and exchange rate policies to maintain a certain level of inflation and achieve price stability, in addition to increasing the share of investment expenditures, particularly in Iraq, to create job opportunities for the unemployed and thus reduce poverty in the sample countries.

The second study was conducted by Nur Ain in 2015, titled "The Impact of Monetary and Fiscal Policies on the Poverty Rate Using the Financial Computable General Equilibrium Model (FCGE): A Case Study of Thailand." According to the poverty line and income distribution, this study sought to analyze how monetary and fiscal policies affected the bottom 20% and the top 20% in order to find out if poverty levels got worse or better for these groups. Using an inductive strategy, the researcher integrated the financial and real sectors in Thailand and utilized the Financial Computable General Equilibrium (FCGE) model. According to the research, monetary policy's function in stabilizing prices made it more effective over the long run, whereas expansionary fiscal policy was more effective in the short run at reducing poverty rates. A balanced policy for income distribution should be adopted, according to the report.

It is evident from the previous studies that both monetary and fiscal policies have a clear impact on poverty rates. Notably, monetary policy exhibited a greater positive effect in the long term, which aligns with our study's conclusion regarding the positive impact of monetary policy in both the short and long term.

Section One: Theoretical Framework of Monetary Policy and Poverty: Particularly in rentier economies, where monetary policy helps achieve sustainable growth while decreasing poverty, there are several subfields that examine the link between monetary variables and poverty rates. Reason being, monetary policies are conditional on national economic conditions and market structures (Romer & Romer, 1998, pp. 174-175) [3]. Monetary policy's primary goal is to alleviate poverty through the use of expansionary monetary policy measures, which in turn lower unemployment rates below their natural level and boost production levels, ultimately leading to higher incomes for the poor and a temporary reduction in poverty rates. But this is just a short-term perspective; in the long run, things differ; for example, when the economy uses all of its resources, efforts to lower unemployment could lead to higher inflation, which would bring poverty levels back up to where they were before (Hoeven, 2000, p. 6).

Thus, expansionary monetary policy achieves a reduction in poverty rates in the short term at the cost of permanently higher inflation. Consequently, the central bank resorts to adopting a contractionary monetary policy to eliminate high inflation rates, but this reduces production and increases unemployment rates, leading the economy into a stagflation problem where both unemployment and poverty levels rise. Managing the macroeconomy, one of the channels through which monetary policy can exert its influence to reduce income gaps and lower poverty in the short term, remains a subject of debate between monetarists and Keynesians regarding which policy is more effective, without disregarding the importance of the other. Keynesians argue that fiscal policy plays a broader role than monetary policy in stimulating real growth, creating new job opportunities, and reducing inequality, which inversely affects poverty reduction. Fiscal policy should therefore play its role in developing countries within the framework of comprehensive reform measures (Faria & Carneiro, 2001, p. 14) [5].

Moreover, the disparity in income distribution resulting from increased unemployment rates due to the decline in real output and investment, which subsequently raises the poverty rate directly depends on the responsiveness to interest rates. Along with this, aggregate demand falls as a result of rising interest rates, which in turn reduces production and employment, particularly in highly flexible production systems. Since tight monetary policy raises real earnings for workers without lowering nominal wages owing to downward wage rigidity, unemployment rates may rise even while inflation rates fall. As a result, poverty rates rise and unemployment rates rise, with low-skilled workers being hit the worst (Yousif Abdullah, 2020, p. 12) [2].

The rise in prices resulting from the expansion of monetary policy leads to an increase in workers' nominal wages, and these increases in wages and prices depend on the level of resources utilized in the economy. Furthermore, the rise in prices and wages affects the demand for money, raising interest rates, decreasing investment, and subsequently reducing real output in the short term. The economy, on the other hand, eventually gets back to where it started in terms of production and employment. Finally, the deceleration of

inflation in the short term helps reduce the losses incurred from the depreciation of financial assets held by individuals, such as pensions, savings, and transfers, leading to income convergence, as the poor receive a significant portion of these transfers, considering that they are the primary recipients (Simon & Fouda, 2014, p. 9) [7].

From the above, it is evident that contractionary monetary policy provides benefits to the poor in one particular aspect: reducing inflation rates and preserving their purchasing power. Inflation adversely affects the poor through its impact on income distribution. Moreover, monetary policy influences income distribution in the long term through several channels. The first channel is the volatility of unexpected inflation, which redistributes income. Additionally, expectations play a crucial role in causing stagnation in financial markets, reducing investment, returns, and wages. Moreover, the tax burden is often disproportionately borne by the poor (Chipote & Palesa, 2014, pp. 33-34) [1]. Accordingly, the primary goal of contractionary monetary policy is to lower inflation rates, achieve price stability, reduce income disparities, and decrease poverty rates in Iran. Exchange rates also have a significant impact, which Iran relies on to address imbalances in the trade balance and the balance of payments and to influence poverty rates. Many economists believe that structural imbalances are linked to exchange rates and their distortions (Romer & Romer, 1998, pp. 179-182) [3]. The exchange rate refers to the relative relationship between two currencies and is determined by the money supply in one country compared to another. If the domestic money supply increases relative to its foreign counterpart, this will lead to a depreciation of the local currency's exchange rate and a rise in the prices of goods and services in the local

currency, although they become relatively cheaper in global markets (in foreign currencies). The exchange rate also affects production costs. Consequently, devaluing the local currency will increase the cost of imported goods but improve the competitiveness of domestic products in foreign markets, allowing exporters to achieve significant gains. Thus, exchange rate policy becomes a tool for redistributing wealth and income, especially given the declining profitability opportunities associated with devaluation. This, in turn, leads to an increase in real output and higher demand for labor linked to economic activity, resulting in higher wage levels and lower poverty rates (Hoeven, 2000, pp. 9-11).

Section Two: Historical Analysis of the Development of Selected Monetary Variables

A set of monetary variables considered to have the most significant impact on poverty rates was selected for analysis. Their historical development was studied by plotting their general trend lines and analyzing the study period to identify the reasons for increases and decreases, as follows:

Historical Development of the Numerical Poverty Index

This index was used in comparison with the poverty line of $2.15 per day per person, based on the 2017 purchasing power parity standard, and expressed as a percentage of the total population. Figure (1) illustrates a continuous decline in poverty rates in Iran throughout the study period. Among the many causes of this decline, the Iranian government's emphasis on citizens' quality of life sometimes called a comfortable life and its determination to create employment opportunities in the face of many obstacles, most notably the country's rapidly increasing population, stand out.
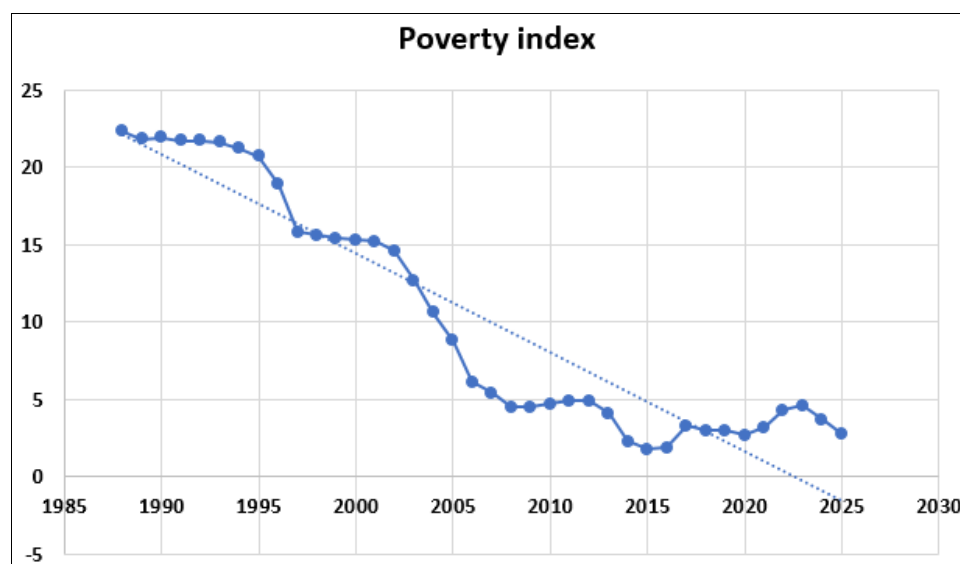
Source: Figure prepared by the researcher based on the outputs of the Excel statistical program.

**Fig 1:** The Development of the Poverty Index in Iran during the Period (1988-2025)

However, Iran was able to develop several economic sectors, most notably the agricultural sector, which contributed to reducing poverty rates by absorbing large numbers of the labor force, adopting the principle of "land to the one who cultivates it." As a result, Iran was able to achieve self-sufficiency in agricultural commodities and reduce poverty rates. In addition, the Iranian government provided essential goods at symbolic prices and subsidized

basic necessities such as water, electricity, gas, gasoline, education, and healthcare. Fixing the prices of these essential goods makes them relatively cheaper as the local currency depreciates. In other words, inflation plays a major role in reducing poverty rates in the Iranian economy. This is evident from the general trend line, which confirms the decline in poverty over time.

Historical Development of the Broad Money Supply Index and Its Relationship with Poverty
As shown in Figure (2), the broad money supply in Iran witnessed a continuous increase throughout the study period and experienced further development after 2003. This growth is attributed to several factors, including the imposition of strict sanctions by the United Nations, which led to a reduction in imports from abroad.
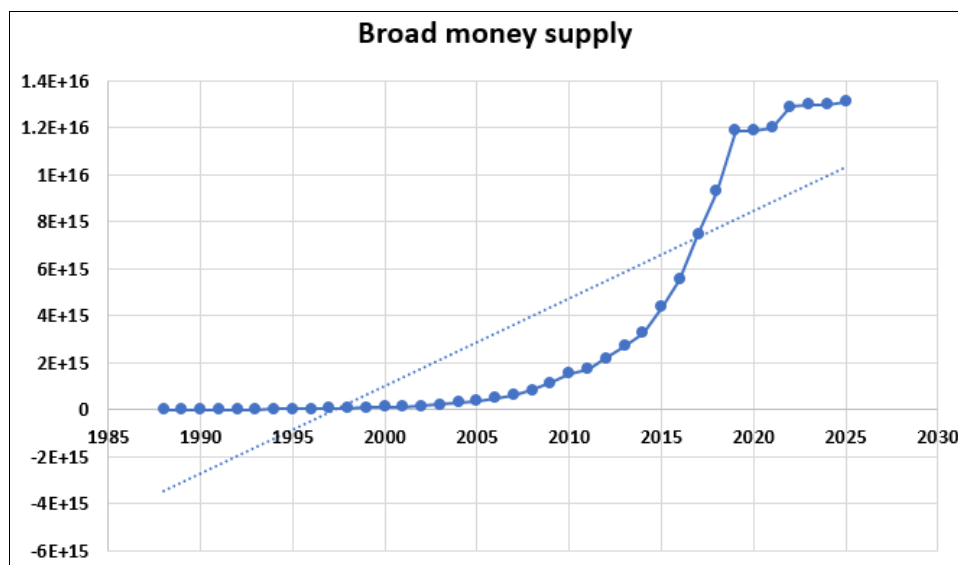
Source: A researcher-made figure derived from data entered into the Excel statistics tool.

Fig 2: The Development of Broad Money Supply in Iran during the Period (1988-2025)

In addition, the reduction of oil exports and the restriction of imports from abroad made local goods relatively more expensive, thereby encouraging an increase in the money supply through new currency issuance. This, in turn, contributed to economic growth and the reduction of poverty rates due to the flexibility of the production system. Furthermore, the development of the banking sector in Iran expanded the forms of money, including stocks, bonds, treasury bills, and various types of deposits. All of these represent different forms of wealth that help increase investment, boost output, and reduce poverty rates.

Economic advancement in Iran, coupled with population growth, also contributed to the expansion of the money supply and the reduction of poverty rates. This is confirmed by the general trend line shown in the figure above. Additionally, the recent war with the Zionist entity required massive financial resources, further influencing the monetary expansion.

Historical Development of the Lending Interest Rate Index
The lending interest rate in Iran recorded a remarkable development, as confirmed by Figure (3), where the general trend line illustrates a continuous increase over time. The rate ranged from 4.5% in 1988 to exceed 20% in 2025. During this period, it reached its highest level in 2023, when it stood at 23%.
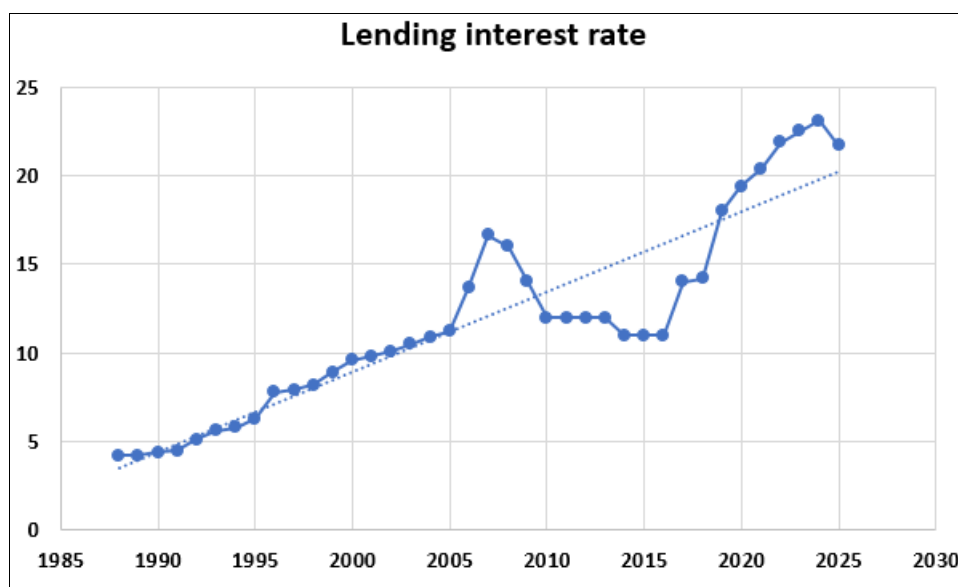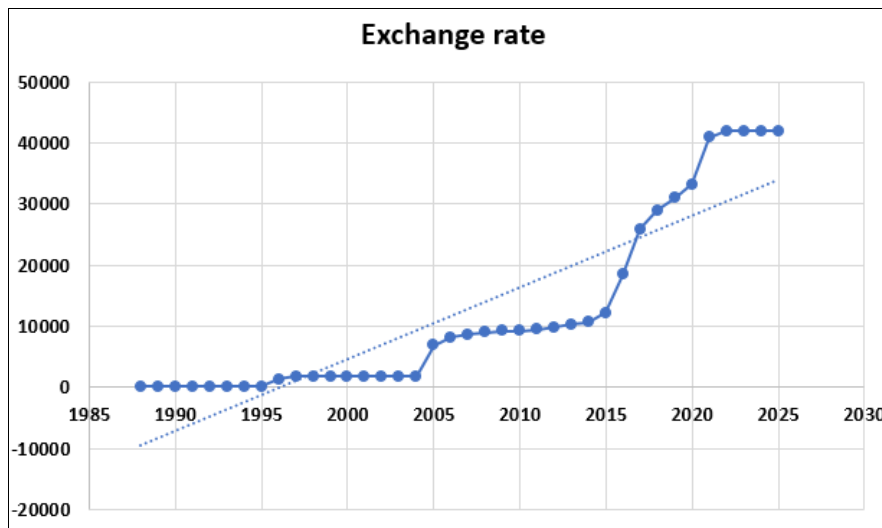

Source: A researcher-made figure derived from data entered into the Excel statistics tool.

Fig 3: The Evolution of the Iranian Interest Rate from 1988 to 2025

Iran's attempts to draw in foreign exchange by boosting interest rates to entice investment into the nation are the reason for the interest rate increase. Increased investment is encouraged since the expected return on investment in Iran is higher than the interest rate. This lowers unemployment and poverty rates and increases Iran's economic growth and output. The chart above provides a good illustration of this, as the overall trend line exhibits a consistent increasing trajectory throughout time.

Historical Development of the Iranian Toman Exchange Rate: The amount of local currency units needed to buy one unit of a foreign currency is called the exchange rate. The overall trend of the Iranian rial exchange rate, as seen in Figure (4), is a persistent drop compared to the US dollar. This depreciation may be deliberately managed by the Iranian government to achieve significant economic gains that benefit the country. Devaluing the currency encourages an increase in exports relative to imports, leading to a surplus in Iran's trade balance and balance of payments. This, in turn, promotes the creation of additional job opportunities, reduces poverty rates, increases output, and stimulates economic activity.

**Source:** A researcher-made figure derived from data entered into the Excel statistics tool.

Fig 4: The Evolution of the Exchange Rate in Iran from 1988 to 2025

Iran has been able to achieve a comparative advantage in the global market, especially with neighboring countries. When comparing Iranian goods with those from other countries, they are relatively cheaper, which encourages Iranian exports and supports a policy of market dominance abroad. This leads to economic growth and a reduction in poverty rates. This is clearly reflected in Figure (4), which shows a clear and continuous decline in the value of the Iranian rial. Figure (1) clearly illustrates a persistent decrease in poverty rates, signifying an inverse correlation between the exchange rate and poverty rates in Iran.

Chronological Evolution of Credit Extended to the Private Sector

The development of credit provided to the private sector is illustrated in Figure (5), showing a continuous increase. This reflects the banking development witnessed in Iran, particularly after the Iranian Revolution.
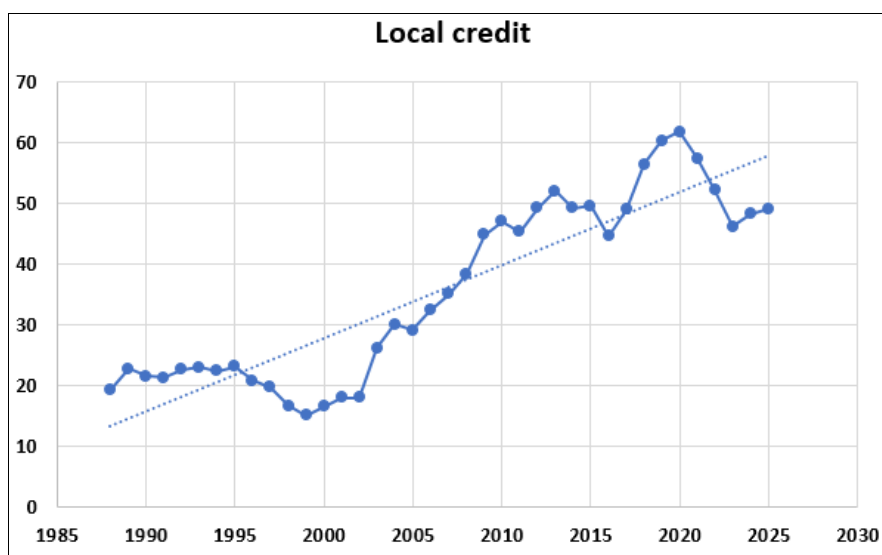
Source: Figure generated by the researcher utilizing the findings of the Excel statistical software.

Fig 5: The Development of Credit Provided to the Private Sector in Iran during the Period (1988-2025)

Most banks adopted the principle of Murabaha and moved away from interest-based transactions starting in 2010. Iranian banking assets accounted for more than one-third of the estimated total Islamic banking assets worldwide. Moreover, the Iranian government worked on liberalizing the banking sector and attempting to privatize many state-owned banks, which had been characterized by poor performance. During the study period, Iranian banks provided significant amounts of credit to encourage investment, increase output, and reduce poverty rates. Iran also worked on increasing the capital of banks, as illustrated in Figure (5), where the general trend line clearly shows the development of Iranian banks.

Section Three: Assessing the Influence of Monetary Policy on Poverty Rates in Iran

The stage of model specification is one of the most important stages in econometrics, as it forms the foundation upon which the entire econometric model is built. In this stage, the researcher identifies the independent variables that have the most significant impact on the studied phenomenon, according to the logic of economic theory (Gengenbach, 2004, p. 120) [10].

In this research, we identify the monetary variables that influence poverty rates in Iran and formulate them into a model, which can be expressed as follows:

$$Yi = \beta 0 + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \beta 4 X4 + \mu i$$

Where:
- **Yi** = Poverty rate
- **X1** - The broad money supply in Iran is directly

correlated with poverty rates, provided the economy exhibits significant flexibility in its production system and has not attained full resource employment.

X2: Lending interest rate, which has an inverse relationship with poverty rates, according to economic theory. As the interest rate rises, investment decreases, leading to higher unemployment and poverty rates. Conversely, when the interest rate decreases, investment and output increase, resulting in lower unemployment and poverty rates.

X3: The exchange rate of the Iranian rial relative to the US dollar exhibits an inverse correlation with poverty rates. Decreasing the local currency exchange rate enhances the competitiveness of the nation's exports internationally, results in a trade surplus, and boosts production. This leads to growth in per capita output and a reduction in poverty rates.

X4: Domestic credit extended to the private sector exhibits a negative correlation with poverty rates. As domestic credit increases, poverty rates decrease, and conversely, as credit decreases, poverty rates increase.

Subjecting the study variables to a unit root test, also known as a stationarity test, is considered the fundamental step preceding the estimation of the econometric model. The time series of the investigated variables must be stationary at the same level. However, if the variables are stationary at different levels, a model suitable for such a case is used, namely the Autoregressive Distributed Lag (ARDL) model, which has become widely used in recent times.

Table 1: Summary of the Dickey-Fuller Expanded Test Results for the Stationarity of the Time Series of the Study Variables

	Stationarity of the Iranian Model for the Period 1988-2025					
	Level			First Difference		
	Without Constant	With Constant	With Constant and Trend	Without Constant	With Constant	With Constant and Trend
Poverty Index (poverty line of $2.15/day)	-2.0839 (0.0373)	-1.2506 (0.6415)	-1.6248 (0.7630)	-2.7695 (0.0070)	-3.2618 (0.0244)	-3.3211 (0.0790)
Broad Money Supply (Local Currency)	-5.1501 (0.0000)	-4.4895 (0.0014)	-3.0516 (0.01369)	0.4642 (0.8083)	0.7045 (0.9900)	2.8778 (1.0000)
Lending Interest Rate	2.0669 (0.9893)	-0.8701 (0.7862)	-2.4262 (0.3607)	-3.7232 (0.0005)	-4.0674 (0.0032)	-3.9670 (0.0191)
Official Exchange Rate (Local Currency per USD)	1.1111 (0.9277)	0.3361 (0.9771)	-1.6182 (0.7658)	-2.9313 (0.0045)	-3.4389 (0.0159)	-3.7215 (0.0336)
Domestic Credit to the Private Sector as % of GDP	0.4251 (0.8002)	-0.8960 (0.7780)	-2.3664 (0.3899)	-4.1557 (0.0001)	-4.2224 (0.0021)	-4.1531 (0.0122)

Source: Developed by the researcher using data collected using the Eviews 13 statistical software.

The lack of stationarity in time series leads to the problem of spurious regression, where estimating the model produces misleading results that cannot be relied upon for decision-making or forecasting the studied phenomenon. The research variables, with the exception of the broad money supply variable (X1), which is stationary at the level, were determined to be stationary at the first difference after the Dickey-Fuller test was applied. This indicates that the

investigated variables' time series exhibit level-dependent stationary behavior. Since the ARDL model is well-suited to this scenario, it is utilized for estimating purposes. In Table (2), we can see the preliminary estimate of the monetary variables and how they affect Iran's poverty rates. The adjusted coefficient of determination (R² adj) reached roughly 0.50%, indicating that the model passed the statistical and econometric tests. In other words, the

coefficient of determination specifies the amount by which the explanatory monetary factors impact the phenomenon under study. The remaining percentage is explained by factors that were not considered in the model. The F-statistic also showed statistical significance at an acceptable level, confirming the model's validity. According to the Durbin-Watson test (D.W.), which came to 2.07, there was no indication of an autocorrelation problem among the random variables. This means that the model is free from the problem of autocorrelation.

Table 2: Preliminary Assessment of the Model Regarding the Influence of Study Variables on Poverty Rates in Iran

Dependent Variable: UNEM Method: ARDL			
R-squar.	0.766254	Mean dependent var	-0.572727
Adjusted R-squar.	0.501343	S.D. dependent var	1.004450
S.E. of regres.	0.709299	Akaike info criterion	2.453373
Sum squa.	7.546582	Schwarz criterion	3.269650
Log Likelih.	-22.48066	Hannan-Quinn criter	2.728026
F-statis.	2.892490	Durbin-Watson stat	2.071147
Prob. (F-Statistic)	0.022188		

Source: Table constructed by the researcher utilizing the outputs of the Eviews 13 statistical software.

Table (3) confirms the model's significance through the Bound Test. Following the preliminary estimation, we conduct the cointegration test to ascertain the long-term correlations between the independent variables and the dependent variable.

Table 3: Bound Test Results

Critical values	F. Statistic	
	5.108996	
	I(0)	I(1)
10%	2.2	3.09
5%	2.56	3.49
2.5%	2.88	3.87
1%	3.29	4.37

Source: The researcher created a table using the results of the Eviews 13 statistics tool.

In the context of the Wald Test, the Bound Test is used to determine whether a long-term equilibrium relationship between the research variables based on the F-test exists. This test looks at the model's long-term equilibrium relationship's coefficients. At statistically acceptable significance levels, the computed F-value was 5.108996, which is higher than the tabular value. This indicates that there is a long-term equilibrium relationship between the dependent and independent variables during the study period, supporting the acceptance of the alternative hypothesis. The estimation of the long-term equilibrium connection using the t-test is shown in Table (4), which also shows that all of the estimated variables were statistically significant. The probability values (prob.) verified that the computed t-values exceeded the tabular values at statistically acceptable levels. The findings showed that the variable X1 (Broad Money Supply) is negatively signed and statistically significant, indicating that there is an elasticity of -0.0223 between a 1% rise in the broad money supply and a decrease in poverty rates. Since the Iranian economy has not yet reached maximum resource utilization, this is explained by the system's flexibility. Consequently, a rise in the money supply boosts output and investment, which lowers poverty rates over time when it occurs. Conversely, the loan interest rate (X2) had a positive sign and, based on the t-test, was statistically significant, with the computed value (3.78) being higher than the tabulated number. The statistically acceptable probability value and an elasticity of 0.0378 provide additional support for this. Because decreasing interest rates promotes investment and output, lowers unemployment rates, and raises workers' income levels over time, a 1% decrease in the lending interest rate results in a reduction in poverty according to the given elasticity. Each of these elements helps to lower the rate of poverty.

Table 4: Assessment of the Prolonged Equilibrium Association

Variable	Coefficient	Std-Error	T-Statistic	Prob.
X1	0.022314-	0.007899	3.63520-	0.0032
X2	0.037823	0.002019	2.78271	0.0056
X3	0.041980	0.003115	3.91178	0.0048
X4	0.027381-	0.076933	-4.195462	0.0443
C	-13.45765	11.45432	-1.16523	0.2346

Source: The researcher generated a table according to the results of the Eviews 13 statistical program.

The statistical results also demonstrated the significance of the variable X3 (Exchange Rate) with a positive sign, suggesting a direct relationship between the exchange rate and poverty rates. This implies that a surplus in the balance of payments is the result of a depreciation of the local currency against the dollar, which stimulates an increase in exports by making local commodities relatively more affordable in the international market. In the long term, this process reduces unemployment, increases output, and decreases destitution rates. The statistically significant

probability value of 0.0048 and the calculated t-value of 2.91, which is greater than the tabulated value, both corroborate this discovery. The poverty rates are reduced by the stated elasticity when the exchange rate depreciates by 1%, as indicated by the elasticity coefficient of 0.0419. The variable X4 (Domestic Credit) exhibited a negative sign, suggesting an inverse relationship between credit and poverty rates, with an elasticity of -0.0273. This implies that a 1% increase in domestic credit leads to a long-term decrease in poverty rates based on the elasticity previously mentioned. This outcome is in accordance with economic theory. The significance of all monetary variables is illustrated in Table (5) with respect to the short-term equilibrium relationship. The quantity by which the monetary variables influence the studied phenomenon was indicated by the adjusted coefficient of determination (R^2 adj) of 0.61%. Variables that were not incorporated into the model are responsible for the remaining portion. The model's overall significance was also confirmed by the calculated F-statistic value of 5.1, which is statistically significant at an acceptable level of significance. Additionally, the Durbin-Watson (D.W.) test verified that the model did not demonstrate the issue of autocorrelation among the random variables.

Table 5: Estimation of the Short-Term Equilibrium Relationship

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	0.035988-	0.003105	5.732557-	0.0000
X2	0.018221	0.003161	2.110141	0.0000
X3	0.040763	0.004116	2.742640	0.0004
X4	0.072750-	0.037171	3.957179-	0.00692
R-squar.	0.758320	CointEq(-1)	-6.393119	0.0000
Adjusted R-squar.	0.613311	Akaike info criterion	2.150343	-
F-statistic	5.108996	Schwarz criterion	2.739876	-
Prob. (F-Statistic)	0.00213	Hannan-Quinn criter	2.348703	-
Durbin-Watson stat	2.071147			

Source: Table prepared by the researcher based on the outputs of the Eviews 13 statistical program.

The results demonstrated that variable X1 (Broad Money Supply) exerts a strong negative impact in the near term, with an elasticity of -0.0359, indicating that a 1% rise in broad money supply results in a decrease in poverty levels by the specified elasticity. Increasing the money supply in the Iranian economy, characterized by a flexible production system, results in elevated investment and output, thereby diminishing unemployment and poverty rates in the short run. Conversely, the interest rate variable (X2) exhibited a large positive effect, consistent with economic principles, demonstrating a clear correlation. Reducing the interest rate stimulates investment, decreases unemployment, and alleviates poverty levels in the Iranian economy in the short term, illustrating the impact of monetary policy. The elasticity coefficient was -0.0182, indicating that a 1% fall in the interest rate results in a reduction in poverty rates by the specified elasticity. The findings further validated the importance of X3 (the exchange rate of the Iranian Rial relative to the US Dollar), exhibiting a positive correlation aligned with economic rationale. This indicates that a depreciation of the local currency against the dollar renders domestic goods comparatively less expensive in the global market, thereby enhancing Iran's exports, creating trade surpluses, attracting foreign currency, and alleviating poverty levels. The elasticity was 0.0407, indicating that a 1% depreciation of the exchange currency results in a decrease in poverty rates by the specified elasticity in the short run, attributable to heightened investment, output, and the generation of new employment possibilities. The results for X4 (Domestic Credit) revealed a substantial negative impact, signifying an inverse correlation between domestic credit and poverty. A 1% rise in credit decreases poverty rates by an elasticity of -0.072, since heightened investment fosters economic growth across several sectors, elevates average individual income, and diminishes poverty rates in Iran, especially in the short term.

All of this points to the fact that monetary policy has a major role in lowering Iran's poverty rates, both now and in the future. This lends credence to the study's central theory, which holds that monetary policy can alleviate poverty in Iran by resolving economic imbalances. Table 6 shows the results of diagnostic tests that identify autocorrelation issues using the Lagrange Multiplier (LM) test. The absence of serial correlation in the residuals was confirmed by using the Breusch-Godfrey test to test the null hypothesis. According to Table (6), there is no evidence of autocorrelation in the residuals because the probability value is not significant at the 5% level.

Table 6: Lagrange Multiplier Test for Detecting Serial Autocorrelation among Random Variables

F-Statistic	1.073754	Porb.F(2,13)	0.3702
Obs*R-squared	4.678508	Prob.Chi-Square(2)	0.0964

Source: Data table generated by the researcher using Eviews 13 as a statistical tool.

There are several tests used to detect the problem of heteroskedasticity in order to determine whether the residuals are homoscedastic or not. Among these tests is the ARCH test, which showed that the model is free from the problem of heteroskedasticity. This is illustrated in Table (7).

Table 7: Heteroskedasticity Test Using the ARCH Test

F-Statistic	0.819458	Prob,F(17,15)	0.6563
Obs* R-squared	15.89020	Prob.Chi-Square(17)	0.5316

Source: Data table generated by the researcher using Eviews 13 as a statistical tool.

The computed residuals are homoscedastic, as the probability value is not statistically significant at the 5% level. The preceding proves the study methodology's hypothesis, since the independent variables make sense from an economic perspective.
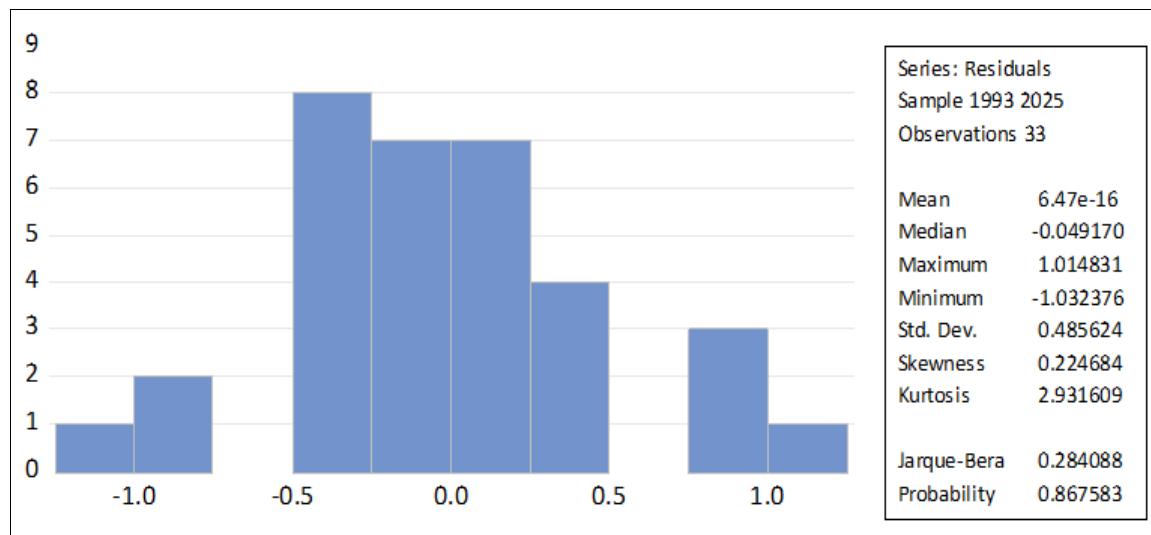
Source: Data table generated by the researcher using Eviews 13 as a statistical tool.

Fig 6: Displays the Normality Test

One of the basic assumptions upon which model estimation is founded is that the residuals of the model will follow a normal distribution. Among the many tests used in this area is the Jarque-Bera test. The null hypothesis states that the data follow a normal distribution, but the alternative hypothesis states that the residuals do not. Figure (6) shows that the test was statistically significant since the Jarque-Bera statistic, which was 0.284088, is higher than the 5% probability threshold. The results show that the residuals are normally distributed, thus we accept the null hypothesis.

Conclusions and Recommendations
First: Conclusions
1. The study variables were discovered to significantly affect Iran's poverty rates, which aligns with both short- and long-term economic reasoning.
2. Compared to the initial model, the short-term model's adjusted coefficient of determination (R^2 adj) was more significant and provided more explanatory power. In the short-term model, the adjusted coefficient of determination reached 0.60%, up from 0.50% in the initial model.
3. The study variables exhibited level and first difference stationary time series, respectively. The wide money supply variable (X1) exhibited level stationarity in its time series, whereas the other variables exhibited first difference stationarity. Hence, the ARDL model was employed since it is well-suited for situations like these..
4. No problem of autocorrelation appeared in either the short-term or long-term models, as confirmed by the diagnostic tests and the Durbin-Watson (D.W.) test.
5. It was also confirmed that the model had overall statistical significance. The tabular value of the F-statistic was 4.0, whereas the computed value was 5.1. The likelihood value, which was lower than 0.05, provided further evidence of this.

Second: Recommendations
1. Adopting a balanced monetary policy is crucial for attaining sustainable economic growth, which lowers unemployment and poverty rates.
2. There is a need to rely on lowering the exchange rate of the Iranian rial to continuously increase Iranian exports and achieve trade balance surpluses, which would help reduce poverty rates and increase output.
3. Efforts should be made to increase the money supply in a manner consistent with the flexibility of the production system, in order to boost production and create additional job opportunities that contribute to reducing poverty rates in Iran.
4. Work should focus on diversifying and developing the production system in line with the increasing population growth, while providing the necessary financial support for medium and small economic projects that offer sufficient employment opportunities to achieve growth and reduce poverty rates in Iran.
5. Future studies should consider other monetary variables to further explore their impact on poverty in Iran.

References
1. Chipote P, Makhethakose P. Impact of monetary policy on economic growth: a case study of South Africa. Mediterr J Soc Sci. 2014;5(15):76-84.
2. Yousif A. The impact of monetary policy on economic growth in Turkey [Master's thesis]. Nicosia: Near East University; 2020.
3. Romer CD, Romer DH. Monetary policy and the well-being of the poor. Cambridge (MA): National Bureau of Economic Research; 1998. (NBER Working Paper No. 6793).
4. van der Hoeven R. Poverty and structural adjustment: some remarks on tradeoffs between equity and growth. Geneva: International Monetary Fund; 2000. (Employment Paper No. 4).

5. Faria JR, Carneiro FG. Does high inflation affect growth in the long and short run? J Appl Econ. 2001;4(1):89-105.
6. Shahrier NA. The impact of monetary & fiscal policies on poverty incidence using financial computable general equilibrium (FCGE): case evidence of Thailand [Dissertation]. Selangor: Sunway University Business School; 2015.
7. Simon Y, Fouda E. Does monetary policy really affect poverty? Yaoundé: University of Yaoundé II, Faculty of Economics & Management; 2014.
8. Al-Khafaji ASM. The role of coordination between fiscal & monetary policies in reducing the phenomenon of poverty: the experiences of selected countries, with special reference to Iraq [Introduction Letter]. Karbala: University of Karbala, College of Administration & Economics; 2023.
9. World Bank Group. About World Bank data [Internet]. Washington (DC): World Bank; [cited 2025 Jul 17]. Available from: https://data.albankaldawli.org/about/get-started
10. Gengenbach C, Palm FC, Urbain JP. Panel unit root tests in the presence of cross-sectional dependencies: comparison & implications for modelling. Econom Rev. 2004;29(2):111-145.

Appendix 1: Data Used in the Study

Years	Poverty index	Broad money supply	Lending interest rate	Exchange rate	Local credit
1988	22.3	9.85E+12	4.2	91.07359	19.25917
1989	21.8	9.85E+12	4.2	78.77878	22.78181
1990	21.9	1.17E+13	4.4	71.47744	21.54548
1991	21.7	1.41E+13	4.5	68.69976	21.33046
1992	21.7	1.73E+13	5.1	72.03224	22.70843
1993	21.6	2.04E+13	5.6	68.11237	22.97866
1994	21.2	2.56E+13	5.8	67.52173	22.42038
1995	20.7	3.19E+13	6.3	65.56784	23.19095
1996	18.9	4.15E+13	7.8	1268.079	20.85202
1997	15.8	5.53E+13	7.9	1749.174	19.7057
1998	15.6	7.19E+13	8.2	1748.35	16.68824
1999	15.4	9.53E+13	8.9	1751.186	15.17698
2000	15.3	1.18E+14	9.6	1753.345	16.60541
2001	15.2	1.42E+14	9.8	1752.286	18.02192
2002	14.6	1.72E+14	10.1	1753.355	18.04328
2003	12.7	2.33E+14	10.5	1764.856	26.24978
2004	10.6	3.02E+14	10.9	1753.986	30.07958
2005	8.8	3.88E+14	11.2	6907.034	29.10088
2006	6.1	4.93E+14	13.7	8193.888	32.43325
2007	5.4	6.35E+14	16.65	8613.989	35.0711
2008	4.5	8.43E+14	16	8963.959	38.34815
2009	4.5	1.15E+15	14	9170.943	44.7948
2010	4.7	1.54E+15	12	9281.152	47.04728
2011	4.9	1.72E+15	12	9428.528	45.31507
2012	4.9	2.19E+15	12	9864.302	49.21223
2013	4.1	2.73E+15	12	10254.18	52.02295
2014	2.3	3.27E+15	11	10616.31	49.24751
2015	1.8	4.39E+15	11	12175.55	49.61732
2016	1.9	5.53E+15	11	18414.45	44.5965
2017	3.3	7.47E+15	14	25941.66	48.98448
2018	3	9.29E+15	14.21	29011.49	56.37196
2019	3	1.19E+16	18	30914.85	60.29749
2020	2.7	1.19E+16	19.4	33226.3	61.71923
2021	3.2	1.2E+16	20.4	40864.33	57.29183
2022	4.3	1.29E+16	21.9	42000	52.10982
2023	4.6	1.3E+16	22.5	42000	46.13981
2024	3.7	1.3E+16	23.1	42000	48.24619
2025	2.8	1.31E+16	21.7	42000	49.11882