**Investigating Monetary and Non-Monetary Factors Affecting Inflation in the Economy (Case Study: Iran)**

Mozhgan bahmani

E-mail: [mghn.bahmani@gmail.com](mailto:mghn.bahmani@gmail.com)

Taghi Ebrahimi Salari

E-mail : ebrahimi@um.ac.ir

**Abstract**

This article analyzes the monetary and non-monetary factors affecting inflation in the Iranian economy. The findings show that the growth of liquidity resulting from the government budget deficit and borrowing from the central bank is the main monetary factor of structural inflation. On the other hand, currency shocks, sanctions, and disruptions in the supply chain as non-monetary factors, especially during crisis periods (such as 2018-2022), have had a dominant contribution to the intensification of inflation. A review of historical data (1959-2023) indicates a dynamic interaction between these factors: liquidity growth, with a share of about 32.58 percent, has the largest monetary impact, while the jump in the exchange rate (a 300 percent increase over the last four years) and import restrictions resulting from sanctions have pushed inflation to unprecedented levels. Institutionalized inflation expectations also intensify the inflationary cycle by increasing the speed of money circulation and speculation in asset markets. This study emphasizes that controlling sustainable inflation requires combining contractionary monetary policies (such as inflation targeting and central bank independence) with structural reforms in the tax system, reducing dependence on oil, and managing inflation expectations.

***Keywords***: inflation; liquidity growth; exchange rate; sanctions; inflation expectations

**1. Introduction**

Inflation, as one of the most important economic challenges, has widespread effects on the social and economic lives of individuals in society. In Iran, inflation is not only an economic phenomenon but also a social issue that has increased poverty and inequality. This phenomenon has been continuously accompanied by high rates and severe fluctuations over the past decades and requires a detailed examination of the factors affecting it.

Generally, a situation in which the general level of prices increases excessively or disproportionately and continuously over time is called an inflationary situation. The meaning of disproportionateness is the disproportion of price growth on economic productivity, and the meaning of continuity is the emphasis on the time element in defining an inflationary situation; so that in the movement of the economy from one equilibrium state to another, in addition to the increase in prices at a certain time, the rate of its increase also gradually rises. A study of price trends in our country also indicates an increasing and continuous growth in the general level of prices. (Emadzadeh *et al*., 2005)

Factors affecting inflation in the Iranian economy can be divided into two general categories: monetary and non-monetary. Monetary factors include monetary policies, liquidity growth, exchange rates, and interest rates, which directly affect prices. On the other hand, non-monetary factors such as sanctions, government budget deficits, global energy and food prices, and domestic economic structures also play an important role in increasing inflation.

Iran faces specific challenges in controlling inflation due to its dependence on oil revenues and the effects of international sanctions. The depreciation of the national currency, import restrictions, and increased production costs are among the factors that have exacerbated inflation. In addition, the government's expansionary fiscal and monetary policies to compensate for the budget deficit have also increased liquidity and inflationary pressures.

This article attempts to identify monetary and non-monetary factors affecting inflation in Iran using historical data and econometric models. In addition, strategies for reducing inflation will be presented that can help policymakers in making appropriate decisions. The main goal of this study is to provide a comprehensive picture of the causes of inflation and suggest strategies to control it in the Iranian economy.

**1.1. Definition of inflation and the importance of studying it in the Iranian economy**

Inflation is defined as a continuous and general increase in the price level that leads to a decrease in the purchasing power of the national currency. This phenomenon occurs when the growth of the money supply exceeds economic growth or the demand for goods and services exceeds its supply. In Iran, inflation is not only an economic indicator, but also a structural issue that has direct effects on household livelihoods, income distribution, and economic stability. Controlling this phenomenon requires accurate identification of monetary and non-monetary factors that are highly intertwined in the context of the Iranian economy.

The importance of studying inflation in Iran stems from the fact that high inflation rates in recent decades have become a key factor in exacerbating social inequalities and reducing sustainable economic growth. The country's economy's dependence on oil revenues, international sanctions, and currency fluctuations have created unique conditions that necessitate separate examination of monetary (such as liquidity growth) and non-monetary (such as external shocks) factors. These conditions have presented economic policymaking with complex challenges that require comprehensive analysis.

In the context of the Iranian economy, inflation acts as an “indirect tax” that exerts the greatest pressure on low-income groups. Rising prices of basic goods, falling real wages, and market instability are direct consequences of high inflation that threaten the economic security of households. On the other hand, double- or triple-digit inflation rates disrupt long-term planning of enterprises and the government and make it difficult to attract foreign investment.

Investigating the factors of inflation in Iran is crucial because control strategies must be designed in accordance with the country's specific economic structure. The combination of domestic factors (such as the government's budget deficit) and external factors (such as sanctions) has made traditional monetary policies have limited effectiveness. This study aims to provide a detailed analysis of the mechanisms affecting inflation, providing a basis for designing combined monetary-fiscal policies and structural reforms that are necessary to achieve economic stability.

**1.2. Overview of the inflation situation in Iran in recent decades**

The Iranian economy has witnessed severe inflationary fluctuations in the past decades. In the 1990s, monetary expansionary policies and price liberalization led to a spike in inflation, with the inflation rate reaching 35.2 and 49.4 percent in 1994 and 1995, respectively. This period is considered one of the most critical inflationary stages after the revolution, resulting from a combination of structural factors and incorrect economic policies. After that, in the 1980s, the inflation rate fluctuated and increased to 30.5 percent in 1992.

In the 2000s, the Iranian economy witnessed two opposing trends. In 2014 to 2018, with the implementation of the JCPOA and the relative reduction of sanctions, inflation decreased to 9 percent, which was the lowest rate after the war. However, the US withdrawal from the JCPOA in 2018 and the intensification of sanctions caused the inflation rate to jump to 31.2 percent in the same year and reach 41.2 percent in 2019. This upward trend continued until 2022, and for the first time in its contemporary history, Iran experienced four consecutive years of inflation above 40 percent.

The structure of the Iranian economy, dependent on oil revenues and vulnerable to external shocks, has always acted as a factor exacerbating inflation. The devaluation of the national currency, resulting from sanctions and inappropriate exchange rate policies, has put additional pressure on the prices of imported goods and domestic products. In addition, the government budget deficit and fiscal expansionary policies to compensate for it have brought liquidity growth to a level that is not consistent with the productive capacity of the economy.

In a study conducted by Olin Liu *et al*. (2000), a framework was presented to examine the determinants of inflation in the Iranian economy during the period 1989-1999. The results of this study show that the sudden introduction of a shock to the nominal money equation causes a positive trend in the price level.

The study by Kazerouni and Asghari (2002) was created with the aim of testing the compatibility of the monetarist inflation model with the characteristics of the Iranian economy and finding the relationship between the variables of money supply growth and inflation. According to the results of this research, inflation and money growth are convergent and in the end, a one percent increase in money growth leads to an inflation growth of 0.9 percent. On the other hand, a one-to-one relationship between the variables cannot be rejected.

In the 1400s, inflation has become one of the most persistent challenges for the Iranian economy. According to forecasts, the inflation rate will continue to fluctuate between 28 and 33 percent in 2025 and 2027. This inflationary stability is due to the continuation of sanctions, ineffective monetary policies, and flawed economic structures that limit the possibility of implementing effective solutions.

Historically, the Iranian economy has only experienced single-digit inflation in two short periods (1985 and 1990). These statistics indicate the depth of the inflation challenge in Iran, which requires structural reforms in the areas of monetary policies, budget management, and reducing dependence on oil revenues. A study of Iran’s inflationary trend indicates that controlling this phenomenon requires a combined approach that simultaneously considers both domestic and external factors.

**2. Theoretical Framework of the Research**

This study forms its analytical framework by relying on monetary and structuralist theories of inflation; on the one hand, the monetary school, emphasizing the role of liquidity growth, expansionary monetary policies, and the exchange rate, and on the other hand, the structural approach, focusing on supply shocks, sanctions, government budget deficits, and dependence on oil revenues, explains the factors affecting inflation in Iran. This framework, by combining conventional macroeconomic models (such as the Phillips curve) and institutional approaches specific to the Iranian economy, examines the complex interaction of domestic and external factors in creating structural inflation.

**2.1. Economic theories related to inflation (monetary and non-monetary)**

Inflation theories can be classified into two categories: monetary and non-monetary. From the perspective of the monetary school, inflation is always and everywhere a monetary phenomenon that results from the disproportionate growth of the volume of liquidity relative to production. This view, emphasizing the role of expansionary monetary policies and increasing the money supply, believes that controlling liquidity is the key to controlling inflation. The quantity theory of money (MV=PY) as the basis of this analysis shows a direct relationship between the growth of money and the price level.

To present his monetary theory, Fischer (1911) starts from the exchange relationship MV=PT, where T is the size of transactions, P is the average prices of goods exchanged, V is the transaction velocity of money circulation, and M is the money stock. Based on this relationship, he stated that the price level naturally changes with the amount of money (including deposits that are directly related to the amount of money and the volume of transactions) and this is the case if the velocity of money circulation and the volume of transactions are constant and the banking structure and the state of expansion of deposit banking dominate the economy.

On the other hand, non-monetary theories include structural approaches and cost pressure. Cost pressure inflation is caused by rising prices of production inputs such as wages and energy, which leads to an increase in production costs and, consequently, the price of goods. This type of inflation is often accompanied by the phenomenon of “stagflation”, in which rising prices and falling output occur simultaneously. The structural theory of inflation also emphasizes inefficient economic institutions, dependence on oil revenues, and supply constraints in developing countries.

In the Iranian economy, a combination of these theories is used. Sanctions and external shocks, as non-monetary factors, create cost pressure inflation by reducing the supply of intermediate goods and increasing the cost of exchange. At the same time, the government’s expansionary monetary policies to compensate for the budget deficit cause liquidity growth and intensify inflation from a monetary perspective. This complex interaction requires multidimensional analysis.

Modern perspectives such as the theory of rational expectations (Lucas and Sargent) also highlight the role of economic agents’ expectations in perpetuating inflation. This theory suggests that institutionalized inflationary expectations, even if monetary policies are reformed, can turn inflation into a self-reinforcing phenomenon. In Iran, the persistence of high inflation has led to the formation of adaptive expectations, the correction of which requires structural changes in addition to monetary policies.

**2.2. Analytical models of inflation in developing countries**

The analysis of inflation in developing countries is often based on nonlinear and multivariate models. The Panel Smooth Transition Regression (PSTR) model, as one of the new approaches, allows for the examination of the threshold effect of variables. For example, studies show that inflation in these countries has a stronger negative effect on economic growth after crossing a certain threshold (such as 12.11%), while at lower levels neutral or even positive effects may be observed. This model, by taking into account the gradual transition between economic regimes, is an efficient tool for analyzing inflation dynamics in economies with structural fluctuations.

Panel data models are also widely used to examine institutional and policy factors affecting inflation. Studies based on this method show that government size (the share of government spending in GDP) has a significant negative effect on inflation, while liquidity growth and the import price index act as exacerbating factors. These findings suggest that fiscal contractionary policies can be an effective tool for containing inflation, alongside monetary control.

In addition, structural models focus on dependence on single-product revenues (such as oil) and external shocks. These models show that in economies dependent on raw material exports, global price fluctuations and sanctions turn inflation into a chronic phenomenon through channels such as currency depreciation and supply chain disruptions. Such an approach is particularly useful in analyzing the Iranian economy, which faces a combination of external shocks and domestic inefficiencies.

Dynamic stochastic general equilibrium (DSGE) models have also recently been developed to simulate the impact of monetary and fiscal policies on inflation in these countries. These models provide more accurate policy implications by taking into account the specific characteristics of developing economies, such as imperfect financial markets. However, the main challenge in using these models is the lack of high-quality data and unstable institutions in these economies, which necessitates methodological adjustments. Combining these approaches can provide a more comprehensive analysis of the inflation phenomenon in developing countries.

**3. Monetary Factors Affecting Inflation**

**3.1. The role of money supply: Liquidity growth and the imbalance between money supply and demand**

Liquidity growth, as one of the key factors of inflation in Iran, plays a decisive role in creating an imbalance between money supply and demand. According to the quantity theory of money, an increase in the volume of liquidity without a corresponding increase in GDP leads to an increase in the general level of prices. In the Iranian economy, liquidity growth has averaged more than 20 percent annually in recent decades, while economic growth has often remained below 3 percent. This wide gap has created persistent inflationary pressure and turned inflation into a structural phenomenon.

The origin of liquidity growth in Iran is mainly related to the government budget deficit and the expansionary policies of the Central Bank. To compensate for the budget deficit, the government expands the monetary base by borrowing from the Central Bank and the banking system. This process, together with the increasing liquidity coefficient, leads to an expansion of the money supply. On the other hand, banks' expansionary credit policies and negative real interest rates push money demand towards speculative activities and disrupt the balance between money supply and demand.

The consequence of this imbalance is the depreciation of the national currency and the formation of rising inflationary expectations. The increase in liquidity without productive support concentrates effective demand in non-productive sectors and intensifies inflationary pressure by creating bubbles in asset markets (such as housing and foreign exchange). In such circumstances, even contractionary monetary policies have limited effectiveness in controlling inflation due to the institutionalization of inflationary expectations and defective economic structures.

**3.2. Monetary policies: The impact of expansionary and contractionary policies on the inflation rate**

Expansionary monetary policies in Iran, including increasing the money supply by reducing interest rates and expanding bank credit, have historically been implemented with the aim of compensating for the government's budget deficit and stimulating economic growth. However, due to the mismatch between liquidity growth and the economy's productive capacity, these policies have led to a sustained increase in inflation. Studies based on SVAR models show that money supply shocks have an immediate and significant impact on inflation and play a major role in exacerbating high inflation rates. Instruments such as government borrowing from the central bank and preferential currency injections create excess liquidity, increase speculative demand in parallel markets, and inflate prices manifold.

Contractionary policies, including reducing liquidity and increasing interest rates, have faced structural challenges in practice. Restrictions on indirect instruments (such as bonds) and the banking system’s dependence on mandated interest rates have reduced the effectiveness of these policies. Even in cases such as 2012-2013, the simultaneous implementation of monetary contractionary policies with currency shocks resulting from sanctions led to stagflation, which created a dangerous combination of high inflation and negative economic growth. These conditions indicate that traditional monetary policies in Iran, without structural reforms in the government budget and the banking system, are unable to control sustainable inflation.

Tayebnia (1992) in his study examined the appropriate evaluation of the monetary model to explain Iranian inflation and estimated the contribution of monetary factors in the formation of inflationary pressures and concluded that in the Iranian economy there is a direct and significant relationship between the volume of money and inflation, but a one-to-one relationship cannot be accepted, and also in Iran the test of the causal relationship between the volume of money and prices indicates the absence of a cause-and-effect relationship between these two economic variables.

Iran's experience indicates that the effect of monetary policies on inflation, due to the institutionalization of inflationary expectations and dependence on oil revenues, often acts asymmetrically and nonlinearly. Based on Markov switching analyses, the Iranian economy experiences long periods of high inflation (the second regime) in which indirect channels such as housing and stock prices play a dominant role in transmitting monetary effects. These findings emphasize that containing inflation requires combining smart monetary policies with institutional reforms in the areas of taxes, subsidies, and budget transparency to increase the productive capacity of the economy while controlling liquidity.

**3.3. Exchange rate: The relationship between devaluation of the national currency and price increases**

The devaluation of the national currency as a currency shock, through an increase in import costs, has a direct impact on the prices of intermediate and final goods in the Iranian economy. Given the high dependence of domestic production on imported inputs (such as chicken feed, medicine and industrial parts), the devaluation of the rial increases the final price of production and this increase is passed on to the consumer. This mechanism is especially intensified in basic goods such as food and medicine, which have a low self-sufficiency coefficient, and turns sectoral inflation into general inflation.

On the other hand, the devaluation of the national currency stimulates speculative behavior in parallel markets (currency, housing and gold) by creating inflationary expectations. An increase in the exchange rate as an "anchor of inflationary expectations" causes economic actors to preemptively increase prices in order to maintain the value of their assets. This phenomenon was particularly evident after the 2018 exchange rate shock, when the share of housing inflation in total inflation jumped from 2 percent to more than 12 percent.

Empirical studies using nonlinear models (such as threshold vector autoregression) show that the effect of exchange rate shocks on inflation is asymmetric at different levels of inflation. At inflation rates below 48.5 percent, an increase in the exchange rate has a smaller impact on inflation, but in high inflation conditions, this effect is exacerbated due to the institutionalization of expectations and the ineffectiveness of monetary policies. This finding suggests that controlling the exchange rate in the early stages of an inflation spike prevents it from becoming a self-reinforcing phenomenon.

Finally, the depreciation of the national currency also affects the price of domestically exported goods through the shadow price mechanism. For example, an increase in the world price of pistachios due to the depreciation of the rial forces domestic producers to increase the domestic price of this commodity in proportion to the world price. This phenomenon not only fuels sectoral inflation, but also affects other economic sectors through spillover effects, turning general inflation into a structural challenge.

**4. Non-Monetary Factors Affecting Inflation**

Non-monetary factors affecting inflation in the Iranian economy include external shocks, inefficient economic structures, and production cost pressures. International sanctions, by disrupting the supply chain of intermediate and imported goods, exacerbate prices by reducing supply and increasing the cost of foreign exchange transactions. Moreover, the economy's dependence on oil revenues and fluctuations in the world price of oil destabilize foreign exchange revenues and pave the way for inflationary shocks. On the other hand, government budget deficits and expansionary fiscal policies are fueling price increases by putting pressure on the real sector of the economy.

Defective economic structures, such as inefficient pricing systems, unjustified subsidies, and rent-seeking in monopolistic markets, increase production costs and fuel cost-push inflation. Studies show that imported inflation, resulting from the depreciation of the national currency and the increase in the prices of intermediate goods, has contributed about 22.6 percent to Iran’s inflation. In addition, institutionalized inflation expectations, which stem from the experience of high inflation in previous decades, lead to the formation of a self-reinforcing cycle of inflation. This phenomenon poses a challenge to monetary policies and requires institutional reforms to rebuild confidence in price stability.

**4.1. Energy and imported goods prices: The impact of rising energy and import prices on inflation**

Increasing prices of energy carriers such as gasoline and diesel affect inflation through two direct and indirect channels. On the one hand, energy, as a major input in production and transportation, increases production costs, which are directly transferred to the prices of goods and services. Studies show that a one percent increase in gasoline and diesel prices increases the inflation rate by 1.112 percent and 0.748 percent, respectively. On the other hand, increasing energy prices by creating inflationary expectations intensifies speculative behavior and puts additional pressure on prices. In the case of imported goods, devaluation of the national currency and sanctions increase the cost of imports and create imported inflation by transmitting global prices to the interior. This phenomenon has aggravating effects, especially in intermediate goods and raw materials on which domestic production depends.

The Iranian economy’s dependence on imports of intermediate goods and production inputs has caused the increase in the global price of these goods and exchange rate fluctuations to be quickly transmitted to domestic inflation. Since the bulk of Iran’s inflation is supply-side (such as supply chain disruptions and increased production costs), energy and import price shocks turn inflation into a structural phenomenon. Studies based on input-output models show that a sudden increase in energy prices could increase the consumer price index by 48.6 percent, while its indirect effects perpetuate the inflationary cycle by reducing household purchasing power and exacerbating government budget imbalances.

**4.2. The impact of sanctions: The role of external restrictions on the supply chain and inflation rate**

International sanctions disrupt the supply chain of domestic production and increase production costs by disrupting the import of intermediate and capital goods. These restrictions, especially in vital sectors such as medicine, industrial equipment and technology, reduce the supply of goods and services and directly affect prices through the cost-push inflation mechanism. Studies based on ARDL models show that sanctions have had a significant impact on the intensification of inflation in Iran through two channels: the exchange rate and the government budget deficit, so that currency shocks resulting from sanctions directly increase imported inflation.

On the other hand, sanctions institutionalize inflation expectations by limiting access to foreign exchange resources. Economic activists, anticipating a devaluation of the national currency and a shortage of basic goods, intensify speculative behavior in parallel markets (currency, gold, and housing). This phenomenon, especially after the intensification of sanctions in 2018 and 2019, caused the inflation rate to jump above 40 percent. Fuzzy-based studies also confirm the strong impact of sanctions on inflation and show that liquidity and adaptive expectations have contributed the most to the increase in inflation after the sanctions.

Finally, sanctions, by reducing oil revenues, lead the government to adopt expansionary monetary policies to compensate for the budget deficit. By increasing liquidity and growing the monetary base, these policies disproportionately increase aggregate demand and exacerbate the inflation gap. Empirical evidence from VECM models shows that under sanctions conditions, the causal relationship from liquidity to inflation is strengthened and inflation becomes a self-perpetuating phenomenon. This vicious cycle makes structural reforms in the tax and budget areas a prerequisite for containing inflation.

**4.3. Fiscal Policies: Government Budget Deficit and Its Impact on Inflation**

The government budget deficit in Iran is mainly financed through borrowing from the central bank and the banking system, which leads to the growth of the monetary base and liquidity. This mechanism, according to the quantity theory of money, has a direct relationship with the increase in the general level of prices. Studies based on vector autoregression (VAR) models show that every 10 trillion tomans of budget deficit adds about 2 percent to the annual inflation rate, so that a deficit of 131 trillion tomans in 1400 had a 26 percent contribution to inflation the following year. This effect intensifies the inflationary gap by increasing aggregate demand without accompanying supply growth.

The origin of the budget deficit in Iran is a combination of a decrease in oil revenues due to sanctions, an increase in current expenses, and an inefficient tax system. The budget's dependence on unstable oil revenues makes the economy vulnerable to external shocks and increases the need for domestic borrowing. Continuous wavelet analyses over the period 1991-2021 confirm that high inflation significantly increases the budget deficit, because the government, as the largest consumer, increases its compensatory spending in inflationary conditions. This vicious cycle puts inflation and budget deficit in a two-way relationship.

Strategies to curb this phenomenon require structural reforms in fiscal policies. Reducing dependence on oil revenues, improving the tax system and budget transparency are among the expert proposals to break the inflation-budget deficit cycle. Empirical studies emphasize that financing the deficit through the issuance of bonds (instead of direct borrowing from the central bank) and controlling liquidity growth can reduce the effects of inflation. However, the institutionalization of inflationary expectations and flawed economic structures have made the implementation of these strategies challenging.

**5. Review of Historical Inflation Data in Iran**

Inflation in Iran, as a structural phenomenon, has its roots in the political and economic developments of the last few decades. Official statistics from the Central Bank show that the long-term average inflation from 2020 to 2021 was about 16 percent, but severe fluctuations have created a consistent pattern in different decades. In the years before the revolution, the highest inflation rate dates back to 1941 with 49.5 percent, while in the 1960s, the Iranian economy also experienced periods of negative inflation. After the revolution, inflation reached a level of 23.5 percent in 1980 due to the imposed war and economic adjustment policies, and in the 1980s, an annual average of 19 percent was recorded.

The 1990s were the most critical period of inflation in Iran after the revolution. In 1995, inflation reached 49.4 percent, which was due to monetary expansionary policies, price liberalization, and currency shocks. This period reflects the simultaneous impact of monetary (liquidity growth) and non-monetary (external tensions) factors on the intensification of inflation. The decrease in inflation to 9.6 percent in 2017 after the implementation of the JCPOA confirmed the role of sanctions and oil revenues in inflationary fluctuations.

Since 2018, with the US withdrawal from the JCPOA, inflation has entered a new phase. The point-by-point inflation rate rose from 8.1 percent in Farvardin 2018 to 48.7 percent in March 2021, and for the first time in modern history, inflation above 40 percent was recorded for four consecutive years (2019-2022). This upward trend indicated the intensification of the effects of sanctions on the supply chain and increased inflationary expectations.

The structure of Iran’s economy, its dependence on oil, and the ineffectiveness of monetary policies have made inflation a self-reinforcing phenomenon. Liquidity growth rose from 25 percent in 2017 to over 40 percent in 2019, and the government’s budget deficit was the main driver of this growth. Historical data shows that the two-way causal relationship between inflation and budget deficit has created a vicious cycle that requires structural reforms to curb.

A review of Iran’s inflationary trend suggests that controlling this phenomenon requires a combination of contractionary monetary policies with tax reform, reduced dependence on oil, and budget transparency. Historical experience shows that ad hoc policies without addressing structural roots only lead to greater volatility.

**6. Discussion and Conclusion**

A study of monetary and non-monetary factors affecting inflation in the Iranian economy shows that this phenomenon is rooted in a combination of incorrect domestic policies and external shocks. Excessive liquidity growth resulting from the government budget deficit and borrowing from the Central Bank is the most important monetary factor exacerbating inflation, so that the average liquidity growth of 20 percent in the last decade is not consistent with economic growth of less than 3 percent. On the other hand, sanctions and dependence on oil revenues have turned cost-push inflation into a structural phenomenon by disrupting the supply chain and increasing transaction costs. These findings indicate that inflation in Iran is multidimensional in nature and requires systemic analysis.

A comparison of the effects of monetary and non-monetary factors shows that during periods of increased sanctions (such as 2018-2022), the share of non-monetary factors in inflation reaches more than 60 percent. This is while in periods of relative stability (such as 2014–2017), monetary factors play a dominant role in inflationary fluctuations. Such a pattern indicates that monetary policies are only effective in the absence of external shocks and that in crisis conditions, mixed approaches are required. Furthermore, institutionalized inflation expectations as an accelerating factor intensify the impact of both groups of factors.

To control inflation, it is suggested that targeted contractionary monetary policies be implemented along with structural reforms in the budgeting system. Reducing dependence on oil revenues by expanding the tax base, transparency in current government spending, and curbing liquidity growth are key steps in this direction. In addition, stabilizing the foreign exchange market by using foreign exchange reserves and coordinated monetary-exchange policies can moderate inflationary expectations. These solutions should be accompanied by institutional reforms in the area of ​​deregulation and improving the business environment to increase the productive capacity of the economy.

Finally, Iran’s historical experience shows that containing sustainable inflation requires political will to limit the budget deficit and break the link between oil revenues and liquidity. Adopting an inflation targeting framework, rather than focusing solely on liquidity growth, can be a suitable tool for coordinating monetary and fiscal policies. This study emphasizes that without reforming the flawed economic structures, even seemingly contractionary policies may lead to stagflation rather than controlling inflation. Therefore, coordination between macroeconomic policies and institutional reforms is key to achieving price stability in the end.

**6.1. Comparing the impact of monetary and non-monetary factors on Iranian inflation**

Monetary factors such as liquidity growth and the expansionary policies of the Central Bank have a dominant share in the formation of Iran's structural inflation. Studies show that liquidity growth, with a share of about 32.58 percent, is the most important factor in inflation and is exacerbated by the government budget deficit and borrowing from the banking system. Meanwhile, non-monetary factors such as sanctions, imported inflation (with a share of 22.6 percent) and inflation expectations (7.3 percent) play a more decisive role in conditions of external shocks. In particular, the currency shock caused by sanctions and disruptions in the supply chain increased cost-push inflation to more than 40 percent in periods such as 2018-2022.

Studies indicate a dynamic interaction between these two categories of factors: in periods of stability, monetary factors have a greater impact, but in crisis conditions (such as the intensification of sanctions), the share of non-monetary factors reaches more than 60 percent. This pattern shows that controlling inflation in Iran requires a combination of contractionary monetary policies with structural reforms in the area of ​​foreign trade, budget transparency, and containing inflation expectations.

**6.2. Policy Recommendations for Controlling Inflation**

The first essential step is to reform the monetary system through inflation targeting and operational independence of the central bank. This requires replacing direct government borrowing from the central bank with the issuance of participation bonds and controlling liquidity growth within the range of 15–20 percent per year. Implementing a positive real interest rate policy (taking into account expected inflation) can increase the incentive for savings and productive investment and reduce speculation in parallel markets. At the same time, close supervision of the banking system is necessary to prevent the creation of unproductive credit.

The second axis is structural reforms in fiscal policy, including reducing the budget's dependence on oil revenues, broadening the tax base, and transparency in current government spending. Implementing a comprehensive value-added tax system and targeting subsidies can reduce the budget deficit to below 3 percent of GDP. In addition, creating a foreign exchange stabilization fund using inaccessible oil reserves will control exchange rate fluctuations and limit the effects of external shocks on imported inflation.

The third strategy is to manage inflation expectations through policy transparency and improved economic governance. Establishing a “nominal anchor” by publicly announcing short- and medium-term inflation targets, along with strengthening independent oversight institutions, will increase confidence in monetary policy. At the same time, reforming the command pricing system, eliminating monopolies, and improving the business environment will strengthen the economy’s supply capacity and reduce the inflationary gap caused by supply-demand imbalances.

**References**

Amiri, H., & Cheshmi, M. (2014). The effect of oil revenues and public spending on inflation in Iran. *Iranian Economic Research, 19* (58), 123-145. [In Persian]

Civilica Database. (1402). A study of the factors (monetary and non-monetary) affecting inflation in Iran (1382-138). Retrieved from *https://civilica.com/doc/1853399*[In Persian]

Civilica Database. (1403). A study of the factors affecting the inflation rate. Retrieved from *https://civilica.com/doc/1992968*[In Persian]

Emadzadeh, M., Samadi, S., & Hafezi, B. (2005). A study of factors (monetary and non-monetary) affecting inflation in Iran (2003-2004). *Iranian Economic Research, 7* (24), 1-28. [In Persian]

Fischer, B., M. Lenza, H. Pill, & L. Reichlin. 2008. Money and Monetary Policy: The ECB Experience 1999-2006, in *The Role of Money and Monetary Policy in the Twenty-First Century*, ed. by A. Beyer, and L. Reichlin, pp. 102.175. European Central Bank.

Iranian Economic Scientific & Student Organization. (2011). A second look at inflation in Iran: a structural and monetary approach. *https://aes.basu.ac.ir/article* [In Persian]

Journal of Economy and Society. (2014). Modeling Factors Affecting the Inflation Rate in Iran. Retrieved from [https://ecoj.tabrizu.ac.ir/article](https://ecoj.tabrizu.ac.ir/article_6741_45de67d94d73869a2410ce31fd0bb5cc.pdf)

Kazerouni, A. & Asghari, B. (2002). Testing the Classical Inflation Model in Iran: Convergence Method. *Journal of Business Research*, No. 23, pp. 139-97. [In Persian]

Khandan, A., & Hosseini, S. (2012). The role of money supply and budget deficit in inflation in Iran. Journal of Monetary and Banking Research, 6 (15), 71-94. [In Persian]

Mehrara, M., & Mojab, F. (2009). The Relationship between Inflation and Economic Uncertainty in Iran. *Quarterly Journal of Iranian Economic Research*, 14 (43), 89-111. [In Persian]

Olin Liu *et al*. (2000). Determinant of inflation in the Islamic Republic of Iran, a macroeconomic analysis. *IMF Working Paper*, No. 127.

Sahabi, B. et al. (2013). The effects of liquidity growth on inflation in the Iranian economy: Regime change models. *Economic Strategy, 2*(4), 121-146. SID. https://sid.ir/paper/233805/fa[In Persian]

Scientific Information Center of the Academic Jihad (SID). (2011). *A study of factors affecting inflation in Iran with a nonlinear regression model*. Retrieved from <https://www.sid.ir/paper/11830/fa> [In Persian]

Tayebnia, A. (1992). *Inflation theories with respect to inflation process in Iran*. University of Tehran. [In Persian]