



Examining the Causes and Nature of Inflation in Afghanistan During 2001–2015

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Abstract

Inflation is one of the economic phenomena that affects various countries differently, with each facing unique challenges. Afghanistan, having experienced significant social and economic fluctuations and grappling with numerous economic challenges, has been particularly vulnerable to frequent price changes and fluctuations, incurring substantial costs as a result. Economic experts have attributed the causes and emergence of inflation to various factors, such as structural barriers, low productivity, uncontrolled growth of liquidity, improper monetary and fiscal policies, exchange rate fluctuations and trade shocks, consumerism, instability and uncertainty, and high population growth. Given the impacts and consequences of inflation on areas such as production, distribution, and overall societal welfare, it has consistently drawn the attention of policymakers. This study, utilizing fuzzy causality method, examines the causes and nature of inflation in Afghanistan during the years 2001–2015. The results indicate that factors such as the rise in the price index of imported goods, instability and uncertainty, monopolization, the increase in exchange rates, dollarization of the economy, and rising housing demand have played the most significant roles in driving inflation in the country.

Keywords: *Inflation; Afghanistan; Imports; Political Instability; Exchange Rate*

I. Introduction

Inflation, particularly in developing economies, is a fundamental issue with numerous far-reaching consequences. It leads to increased uncertainty, reduced investment, disruptions in the optimal allocation of economic resources, and a widening gap between social classes. For this reason, governments, especially monetary policymakers, strive to curb the excessive rise in prices using various techniques and tools.

Economists often believe that inflation in developing countries results from a range of factors. Both economic and non-economic elements, through different mechanisms, can contribute to inflation.

Structural challenges, low productivity, uncontrolled liquidity growth, currency fluctuations and limitations, instability and uncertainty, and demand pressures due to rapid population growth are some of the factors that often combine to create inflationary conditions in these countries. This complex interplay of factors complicates the issue and renders conventional solutions less effective.

Traditional approaches usually attempt to address inflation in developing countries by applying the experiences of developed economies. However, in some cases, such policies have exacerbated the crises, leading to stagflation. Consequently, newer economic theories emphasize the importance of tailoring solutions to the specific characteristics and economic conditions of each country to effectively address inflation. Such solutions require a thorough and comprehensive understanding of the nature and origins of inflation while being aligned with the realities of the society in question. Considering the unique economic conditions of Afghanistan, this research aims to identify the causes and nature of inflation in the country.

Thus, the primary objective of this study is to uncover the origins and underlying causes of inflation in Afghanistan.

II. Theoretical Background

Various economic schools of thought and theorists have offered differing perspectives on the causes and mechanisms of inflation. For instance, classical economists such as David Hume, Adam Smith, Jean-Baptiste Say, David Ricardo, and John Stuart Mill argued that inflation is a monetary phenomenon, entirely explainable by changes in the money supply. Their approach became known as the Quantity Theory of Money.

In the 19th century, this theory was further developed by neoclassical scholars like Irving Fisher and Alfred Marshall. Fisher used his equation of exchange to explain inflation from a monetary perspective, while Alfred Marshall provided a Cambridge school interpretation of the Quantity Theory of Money. In the 20th century, John Maynard Keynes and his followers introduced a different perspective, asserting that inflation is a real issue arising from excess aggregate demand over aggregate supply under conditions of full employment. Post-Keynesian economics saw the revival of the Quantity Theory of Money through Milton Friedman's contributions. Friedman, a prominent neoclassical economist, advanced the monetary explanation of inflation by focusing on his theory of money demand.

Alongside the monetary perspective—which claims that increased money supply stimulates demand, thereby causing inflation—other explanations such as cost-push inflation and structural inflation were also introduced by economic theorists. Moreover, economic literature identifies external factors such as drought, war, economic sanctions, and budget deficits as potential causes of inflation. Up to the 1940s, most theories emphasized monetary factors as the primary drivers of inflation. According to these views, inflation typically occurs when the economy is at full employment and production cannot meet the additional demand caused by money supply growth.

However, despite the widespread acceptance of these monetary views, the simultaneous occurrence of inflation and stagnation (stagflation) in the 1970s prompted economists to explore new arguments regarding the causes of inflation. The Quantity Theory of Money was insufficient to address the realities of the evolving economic landscape. Consequently, new theories emerged, highlighting factors such as increased production costs and structural constraints on the supply side, particularly in developing economies. Over time and in response to various economic events, diverse theories have been

proposed to explain the causes and dynamics of inflation. The following sections will delve into some of the most significant perspectives on inflation.

1. The Monetary Theory of Inflation

The monetary theory of inflation, which is generally expressed through the quantity theory of money, is one of the earliest perspectives proposed by some economic schools and theorists. The basic and simple form of this theory suggests that, in general, the prices of goods and services are determined by changes in the amount of money in circulation. The historical origins of this theory date back to the mid-16th century, and after repeated revisions and adjustments, it has become the central framework for classical monetary analysis in the 19th century, offering the conceptual foundation for scientific policies designed to maintain the gold standard.

The quantity theory is essentially a hypothesis about the cause of changes in the purchasing power of money. It asserts that purchasing power is primarily influenced by changes in the money supply, such that when the amount of money increases, its purchasing power decreases, leading to higher prices. In this sense, the quantity theory can be considered as a form of inflation theory. (Shakeri, 2022) This theory was later formulated by neoclassical economists in mathematical equations, the two main forms of which are:

1. Irving Fisher's Famous Equation of Exchange: $MV=PY$. where: M is the money supply, V is the velocity of money or the number of times a unit of currency is used in transactions in a year, P is the general price level, Y is the real output or volume of market transactions.

The right-hand side of the equation represents nominal GDP, meaning the quantity of goods and services purchased in the economy at current prices. The left-hand side reflects the money supply multiplied by the frequency of money exchange throughout the year. Therefore, the quantity theory of money states that nominal GDP is equal to the effective money supply, MV. Since the velocity of money (V) and real output (Y) are assumed to be constant, any change in the money supply will, in the long run, manifest as a change in prices. If the central bank decides to increase the money supply, the quantity theory suggests that an equivalent increase in the price level is inevitable. (Irving Jones, 2015)

2. Cambridge Cash Balance Equation: $M=kPY$. where: M is the money supply, k is the desired cash balance ratio, P is the price level, Y is the real national income. Economists of the Cambridge school, in their interpretation of the quantity theory, distinguish clearly between money demand (M_d) and money supply (M). In their view, money demand is fundamentally tied to the necessity of conducting transactions, which has a positive relationship with the monetary value of total expenditures. Neoclassical analysts, using these equations, could precisely explain the conditions necessary to establish the proportional relationship between M and P, assuming the velocity of money and real output remain constant. (Tafazoli, 2014)

According to classical and monetarist views, inflation arises through demand-pull factors and is caused by the growth of nominal money. In this analytical framework, inflation occurs solely through changes in the money supply and the increase in demand. This view, emphasizing the assumption of a constant velocity of money and the economy's tendency toward full employment, considers inflation as inherently a monetary phenomenon. (Shakeri, 2022)

Monetarist proponents generally believe that inflation, in the long run, is a monetary phenomenon, meaning it originates from the growth of nominal money supply. The higher the growth rate of nominal money supply, the higher the rate of inflation. According to this theory, changes in the money supply have no effect on real variables such as production, employment, or real wages, and only affect

nominal variables in proportion. For instance, if the nominal money supply doubles, real variables like consumption, investment, employment, interest rates, and real income will remain unchanged, but nominal variables such as money wages, the general price level, and nominal income will exactly double. (Shakeri, 2022)

In general, the monetary view based on the quantity theory of money considers the money supply as the determining factor and argues that with an increase in money supply, its real value decreases, leading people to rationally hold less money. In such a scenario, the inflation rate gradually exceeds the rate of monetary expansion. According to the theory, since changes in the velocity of money are negligible and real national income is unaffected by the amount of money in the economy, any increase in the money supply will result in an increase in the general price level. In other words, according to the quantity theory of money, the percentage change in the money supply will be equal to the percentage change in the general price level. (Mehragan, 2022)

2. Demand-Pull Theory

Another common theory related to inflation is the demand-pull theory. The core of this theory is based on Keynesian economics. According to this theory, inflation results from the excess of aggregate demand over aggregate supply in a situation of full employment. In such a case, an increase in the general price level becomes inevitable. The cause of this increase can be traced to both the real and monetary sectors of the economy. In the real sector, factors such as an increase in consumer spending, an increase in investment expenditures, a rise in exports, and a decrease in imports can increase aggregate demand or, in other words, shift the aggregate demand curve upward. On the other hand, increased demand can be the result of monetary factors. For example, an increase in the money supply due to the implementation of inappropriate expansionary monetary policies can increase aggregate demand and raise the general price level. In other words, an increase in the money supply, regardless of the economy's production capacity, leads to higher general prices. Meanwhile, an increase in the money supply results in a decrease in interest rates, and this reduction, through increased investment levels, leads to an excess of aggregate demand over aggregate supply in a situation of full employment, ultimately driving prices up. (Tafazoli, 2020)

In Keynesian economics, an increase in effective demand leads to higher real output as long as there are idle production factors. However, when labor and capital equipment are relatively fully employed, any further increase in demand can lead to rising prices. This phenomenon is what Keynes referred to as "pure inflation." Generally, the cause of demand exceeding supply can be examined in two parts:

Real Sector: In the real sector of the economy, the following factors can influence excess demand:

- a. An increase in consumer spending, i.e., higher household expenditure.
- b. An increase in investment rates by investors at the existing interest rates.
- c. An increase in independent exports and a reduction in independent imports.
- d. A reduction in taxes by the government.
- e. The sale of government bonds or printing money by the government, leading to increased government spending and aggregate demand for production.

Each of these five factors can significantly contribute to the increase in aggregate demand, resulting in inflation.

Monetary Sector: In the monetary sector, inflation can sometimes result from the implementation of inappropriate expansionary monetary policies. For example, if an increase in the money supply is

financed by borrowing from the central bank during a budget deficit, it leads to an increase in the community's purchasing power, which raises aggregate demand and, consequently, increases prices. The expansion of bank credit for importing goods, domestic commerce, and production can also have inflationary effects. For example, if the credit granted for imports is used to import luxury goods, inflationary pressure will be higher. However, if this credit is spent on essential goods, the economy will experience less inflationary pressure. Similarly, production credits may lead to inflation in the short term, but if they are spent in sectors with economic justification, they will increase the future production and supply of goods, which can help control inflation in the long term. (Yousefi, 2002)

Although this theory explains a significant portion of inflation in various periods in mainly industrial countries and somewhat in developing nations, the validity of this idea on such a broad scale cannot be completely denied. However, whether this idea universally explains inflation in all countries and at all times is another matter that cannot be definitively confirmed.

3. Cost-Push Theory

The cost-push theory traces the root of inflation to an increase in production costs and the prices of production inputs. Unlike the demand-pull theory, this theory can explain the phenomenon of stagflation, attributing it to rising production costs that shift the aggregate supply curve upwards, leading to higher prices. In this analytical framework, it is assumed that exogenous shocks, changes in technology and productivity, and the influence of political and social factors on determining and altering wages or production costs lead to an increase in production costs, which then shifts the aggregate supply curve upward and causes price inflation. (Shakeri, 2022)

Proponents of this theory point to the inflation of the 1970s as an example, where production costs increased by 30 to 40 percent, but product prices did not increase immediately. In fact, increases in production costs are often caused by rising prices of raw materials, such as oil, or other basic materials, which lead to an increase in the general price level. Other factors, such as the power of workers and employers in labor and employer unions, can also raise wages or profits, contributing to inflation. The most well-known instances of cost-push inflation include the oil shocks of 1974 and 1979. In early 1974, the decision by OPEC led to an almost fourfold increase in oil prices, reaching around \$12 per barrel. In 1979, the Islamic Revolution in Iran led to another price increase, pushing oil prices up to around \$30 per barrel. (Akhavi, 2004) Generally, three main factors are cited in relation to cost-push inflation:

1. **Monopoly Power of Labor Unions:** If the influence and power of labor unions result in wage increases in certain sectors of the economy, this can be seen as an increase in the costs for firms and industries. As a response, firms will raise the prices of their products to compensate for the lost profits. This may also lead to layoffs, increasing the unemployment rate.

Since an increase in labor wages translates to higher marginal costs for firms, and optimal market conditions in competitive markets require production scale adjustments at $P = MC$ (Price = Marginal Cost), producers will raise prices to restore equilibrium. It is noteworthy that this price increase can happen even without an increase in demand for goods and services, and in situations where the economy is operating below its production capacity.

2. **Monopoly Power of Large Firms:** Another type of cost-push inflation occurs when large, monopolistic firms increase the prices of their products. These firms, given their monopoly power, may raise the prices of their products to increase their profits. Since this action by monopolistic firms impacts the cost of living and reduces the purchasing power of workers, labor will demand higher nominal wages, which in turn leads to further price increases from monopolistic firms. This creates a wage-price spiral. (Faraji, 2018)

3. Increase in Raw Material Prices: Increases in the prices of oil and other energy sources, particularly between 1973 and 1978, led to price increases in many industrialized countries. A significant portion of these price increases was attributed to the cost-push factors of production, specifically rising prices of raw materials. In 1974, the implicit price index rose by 8.7%, while the unemployment rate increased from 4.8% in December 1973 to 7.2% in December 1974. Experts argue that a major part of the price increases and rising unemployment were due to the fourfold increase in crude oil prices in 1973, caused by the oil embargo imposed on industrialized countries from October 1973 to March 1974. (Faraji, 2018)

It is important to note that while the cost-push theory attributes inflation to rising production costs and claims that an increase in the prices of production inputs leads to a reduction in supply (shifting the supply curve to the left), it does not negate the role of money supply in inflation. Rather, proponents of this theory believe that money and inflation have a positive correlation. However, they disagree on the interaction and causality between these two factors, making it difficult to definitively state which is the cause and which is the effect. Essentially, when inflation is linked to cost-push factors, production cost increases must be accompanied by either an increase in the velocity of money or an exogenous increase in money supply for inflation to occur.

4. Structural Inflation Theory

Some economists argue that the demand-pull and cost-push inflation theories are primarily applicable to the inflationary phenomena observed in developed industrial countries and are not necessarily compatible with the conditions and structural characteristics of developing countries, which have agricultural and semi-industrial economies. Therefore, in these countries, greater emphasis is placed on the role of structural factors. According to the structuralist theory of inflation, the main sources of inflation must be sought within the economic structure of society. According to this theory, the primary source of inflationary pressures is the growth of the economy's pressure on the underdeveloped social and economic structures, a process or chain of processes that makes inflation inevitable.

In the process of economic growth, economic constraints expand because demand growth, arising from higher income levels, does not accompany adequate growth in the supply side. Economic constraints are defined as a shortage of a factor that, although not necessarily important in its value, is essential for carrying out a particular activity. The most significant economic constraints include the inelasticity of food supply, foreign exchange shortages, rigidity in the structure of tax revenues and government spending, inability to increase domestic savings, and limitations in the supply of various intermediate inputs, with their relative scarcity differing across countries depending on natural resource conditions and the degree of national development. (Tayebnia, 1994)

In addition, lack of competitiveness, low production technology, and basic supply-side issues are also considered structural constraints that contribute to the complexity and intensification of inflationary dynamics. Structuralists, within their methodology, believe that the dominant money supply is endogenous and passive, adjusting according to the level of economic activities and the inflation rate. While this view acknowledges that inflation can sometimes decrease in response to a severe monetary contraction, in many cases and in many sectors, reduced demand and monetary contraction lead more to a reduction in production than a reduction in price levels. From a structuralist perspective, inflation is a dual process that inevitably has a monetary dimension. The second dimension involves social conflicts related to the value of inputs, such as the immobility of resources, market segmentation, and the imbalance between supply and demand in sectors, along with the lack of abundant growth capacity in the economy, which are considered structural factors contributing to inflation.

Proponents of the structuralist school of inflation argue that economic schools of thought focus only on one aspect of inflation, namely its monetary dimension, while a complete understanding of inflation in any economy requires attention to both aspects. Therefore, in controlling inflation, attention must be paid not only to the monetary aspect but also to the structural barriers. Structuralists acknowledge the role of money in generating inflation and the contribution of cost-push factors to inflation formation, but they also propose other important causes of inflation that can greatly help us understand the complexities of inflation. They believe that to understand inflation accurately, attention must be paid to structural and institutional factors, and the interaction between these factors with monetary and cost-related factors must be considered.

From their perspective, inflation can result from distributional conflicts. This means that economic agents who sell goods or services in the economy, if they have pricing power, try to raise the price of their products in the hope that others will not do the same, allowing them to capture a larger share of national output. However, since all sellers and economic agents are exposed to similar incentives, others also raise their prices, causing the general price level to continuously rise over time, and inflation dynamically persists. (Shakeri, 2022)

In general, structural inflation may be related to one of the following factors:

1. Inequitable distribution of income
2. Lack of transportation infrastructure
3. The shadow of legal monopolies
4. Administrative bureaucracy
5. Imported inflation
6. Development of non-productive service sectors
7. Selection of inappropriate development strategies
8. Cultural issues of these countries

As can be seen, different perspectives regarding the causes and factors of inflation have been proposed by economic schools of thought. Therefore, regarding the question of what the nature of inflation is and where it originates, it cannot be definitively stated, and a single answer cannot be reached. Instead, it must be studied within the context of each economy individually to uncover its nature, causes, and contributing factors.

In fact, understanding the nature of inflation or any other economic phenomenon primarily requires understanding the economic environment and the imperatives and conditions it entails. It is the economic environment and the mechanisms defined within it that determine the direction of decisions and choices of individuals and shape their preferences. Moreover, at a higher level, it is the economic environment that determines the structure of production and distribution systems and defines the weight and significance of each economic issue.

In any case, the factors and causes affecting the culture and consumption behavior of individuals in each society, as well as the extent to which its production and distribution system meets the needs of the society, are issues that impact economic performance and contribute to the emergence of various economic phenomena, including inflation. Therefore, understanding the nature of economic phenomena, including inflation, requires first and foremost understanding the underlying conditions and circumstances in which the actions of individuals, institutions, and entities are determined and their orientations are shaped.

5. Inflation within the Expectations Theory Framework

One of the key elements in analyzing the behavior of economic agents is the element of expectations. The role of expectations has been a focus for economists for a long time. In early Keynesian macroeconomic investment analysis, expectations were widely utilized. For example, since the implementation of an economic plan or the establishment of a production line takes time, producers and employers need to form accurate expectations about future demand for their products. Based on these expectations, they must make decisions about future conditions. Without proper expectation management, they would be unable to properly separate the benefits of the present and the future and incorporate this in cost-benefit analyses.

Moreover, in the context of wage-price behavior, expectations play a vital role. In wage negotiations, if future changes in the value of money, which shape expectations, are not taken into account, it would be impossible to have a proper understanding of how to determine wages and reach a favorable agreement.

Traditionally, expectations were modeled using adaptive expectations. In this model, past behavior of a variable serves as the basis for expectations. In other words, given the historical trend of a variable, it is assumed that such a trend will continue. This mechanism implies that the current forecast of a variable's future value is simply a revision of the previous forecast. Generally, adaptive expectations focus only on past information and assume that other information does not contribute to the formation of expectations (Chrystal, 1983).

In contrast to the adaptive expectations model, the rational expectations model emerged, primarily developed by Robert Lucas and Thomas Sargent. The rational expectations approach is based on the assumption that individuals form their expectations about inflation (or any other economic variable) based on all available information regarding future behavior of the variable, where past information is just part of this broader information set (Tafazoli, 2020). In other words, the rational expectations hypothesis implies that predictions are made consciously and insightfully. People form their expectations based on a full understanding of economic outcomes and the relationships among various phenomena (Faraji, 2014).

This form of expectations modeling represents a clear development in the framework of intertemporal coordination, in which equilibrium is defined as a situation where no one has an incentive to act differently. Collective behavior is determined by a correct understanding of the environment in which agents operate, and this is at the core of modern economic theory (Taghavi, 2014). The rational expectations revolution marked a significant milestone and is widely integrated into standardized educational frameworks. Through rational expectations, it is possible to incorporate a time-based perspective, directly addressing past, present, and future dimensions. As a result, this form of expectations is called "rational expectations" or "model-consistent expectations," since the model reflects a state where individuals have a complete understanding and make full use of their knowledge (Derek Leslie, 1993).

As mentioned earlier, according to the adaptive expectations view, individuals form expectations about the future behavior of an economic variable based solely on the past values of that variable. Accordingly, Friedman often assumes that expected inflation equals the average of past inflation rates, which is rational under normal circumstances. However, this assumption cannot always be considered rational. For instance, during abnormal times, such as when a new government with a new inflationary policy comes to power, expected inflation will inevitably rise due to changes in economic policy, even if the rate of past inflation remains constant.

On the contrary, the rational expectations logic implies that if people fail to correctly predict the outcomes of monetary policy changes, they will be surprised by inflation. Prices will rise faster than production costs, and unemployment will fall. A decrease in unemployment will be accompanied by higher inflation rates. However, if economic agents can accurately predict changes in monetary policy and reasonably anticipate rising inflation, they will immediately adjust their inflation expectations upward. Since firms recognize that their actual conditions have not changed, no reduction in unemployment will occur (Tafazoli, 2020).

Based on rational expectations, a group of economists rejects the short-run Phillips curve, which indicates a negative relationship between inflation and unemployment, and they argue that the Phillips curve is vertical at the natural rate of unemployment. This group believes that the government cannot manage demand and control inflation using fiscal tools because any policy implemented will be anticipated by people, and they will quickly adjust their behavior accordingly, unless the government implements policies that are unpredictable, preventing people from forming expectations.

In other words, the government must attempt to implement demand-side policies in such a way that there is a discrepancy between actual inflation and expected inflation. In this case, expectations will not be rational, and through these policies, expected inflation can be equal to actual inflation. Under such conditions, demand-side policies will have no effect on output and employment (Bakhtiari, 2005).

Overall, as rational expectations consider all relevant information for determining real prices, errors in expectations will not be random or uniform. Therefore, expected inflation and actual inflation will only differ when unexpected shocks or irregular phenomena affect inflation rates (Faraji, 2014).

In the New Classical school, which is the primary advocate of rational expectations, any inflation can be stopped abruptly. However, the reality is that suddenly halting inflation may not necessarily be a wise policy. Governments with good reputations are likely to have good inflation performance, and a sudden stop to inflation may be difficult under these circumstances. Poor inflation performance is often associated with weak reputations, and it is not immediately clear that adopting a fundamental policy in such a situation would be appropriate (Derek Leslie, 1993).

In the New Classical model, similar to the Keynesian and Monetarist models, an increase in the money supply leads to an increase in aggregate demand. This increase in aggregate demand leads to higher production and general price levels. If economic agents cannot predict the monetary expansion and its results, Keynesian demand management policies will reduce unemployment at the cost of higher inflation. Since economic agents cannot be deceived for long, advocates of rational expectations argue that demand management policies will only influence inflation.

Reasons for Price Increases and Types of Inflation

Row	Dimensions of Inflation	Explanation	Reasons for Price Increase
1	Demand-Pull Inflation	This occurs when, for any reason, demand growth exceeds supply growth. This type is also called demand-pull inflation, where the purchasing power of people is high, and the goods in demand are limited. The increasing demand causes price chaos, and sometimes leads to the emergence of black markets, where greed and panic buying increase daily.	Budget Deficits and Government Spending Growth, Monetary Expansion
2	Cost-Push Inflation	This type of inflation is caused by rising production costs for goods.	Decreased Productivity, Increased Raw Material Prices, Increased Wages

3	Imported Inflation	Due to the connection between domestic prices and global prices, an increase in global prices has both direct effects (through rising prices of imported goods and services) and indirect effects (through the spillover effect on the prices of similar goods domestically).	Increased Risk, Transportation, and Insurance Costs
4	Structural Inflation	This type of inflation arises from structural disruptions and barriers, preventing rapid production growth in response to demand, even in the presence of unemployment of production factors.	Limited Production Capacity, Low Elasticity of Supply, Lack of Technological Advancement, Financial Constraints of Producers, Low Human Capital, Market Monopolies
5	Expected Inflation	If inflation expectations form in society, it leads to increased demand and decreased supply, which intensifies price increases.	Based on Inflation Expectations, Inflation Trends Increase

III. Literature Review

Previous Research on Inflation Causes and Factors in Afghanistan and Beyond Limited research has been conducted on the causes and factors of inflation in Afghanistan. However, broader studies on inflation in developing countries, of which Afghanistan is a part, have been conducted extensively. Some of these studies are summarized below:

- **Olin Liu et al. (2000)**: In a study examining the determinants of inflation in Iran from 1989 to 1999, it was found that a sudden shock to the nominal money equation leads to an upward trend in prices.
- **Kazerooni and Asghari (2002)**: This study tested the consistency of the monetarist inflation model with Iran's economic characteristics and found that inflation and money supply grow in tandem. A 1% increase in money supply led to a 0.9% increase in inflation.
- **Abbasi-Nejad and Tashkini (2004)**: This study focused on the factors affecting inflation and tested the monetary nature of inflation in Iran. It found that a 10% increase in money supply raised prices by 3%, showing that the relationship between money and inflation is not one-to-one.
- **Emadzadeh et al. (2005)**: This research examined the factors influencing inflation and determined the contribution of each factor to inflation formation in Iran. It found that although inflation is not solely a monetary phenomenon in Iran, liquidity growth accounted for 58.3% of inflation.
- **Hadian and Parsa (2008)**: Using the ARDL technique, this study estimated the lagged effects of changes in liquidity on inflation levels in Iran. It concluded that changes in liquidity affect inflation for at least three consecutive periods.
- **Alves and Ferreira (2023)**: This study investigated the relationship between exchange rates and inflation in Brazil using continuous wavelet transform. It found that the causal relationship between inflation and exchange rates is weak in the short and long run, though it intensifies in the long run.
- **Al-Banassawy and Ellis (2022)**: Their research examined the effects of economic and political structures on inflation in selected countries, revealing that higher inflation is associated with a larger natural resources sector, more political instability, and less democratic political systems.
- **Kanidi and Darwanto (2020)**: This study focused on the impact of financial development and institutional quality on the relationship between central bank independence and inflation across

20 Asian countries. It found that central bank independence alone does not lead to lower inflation; it is influenced by financial development and institutional quality.

- **Torosoï and Mari (2020)**: This study examined the relationship between money supply and inflation in Turkey using wavelet analysis. It confirmed the hypothesis of the quantity theory of money, showing a long-term relationship between money supply and inflation.
- **Hamza et al. (2019)**: The study investigated the effect of budget deficits on inflation in Pakistan between 1985 and 2017, finding that budget deficits have a significant positive effect on inflation.
- **Asorio and Ansal (2013)**: This study analyzed inflation dynamics in Asia from 1986 to 2010, showing that inflation in Asia is mainly driven by domestic supply shocks. It also found that the share of demand factors has increased over the years, while the share of monetary shocks has decreased.
- **Joya Omar (2011)**: In a study on macroeconomic instability in Afghanistan, it was concluded that external shocks, supply-side shocks due to climatic conditions, low production diversity, institutional weaknesses, and political instability are key factors contributing to economic volatility.
- **Lal Khazari and Ashna (2023)**: This study explored the dynamic relationship between global economic policy uncertainty, inflation, and inflation uncertainty in Iran. It found that global uncertainty had a meaningful relationship with inflation and inflation uncertainty in Iran.
- **Shakari and Eskoi (2023)**: Their research examined the nature of inflation in Iran, finding that liquidity does not have a long-term impact on inflation, and that there is an inverse causal relationship between inflation and liquidity in the long run.
- **Maboodi et al. (2022)**: This research analyzed the factors affecting inflation in selected developing countries using the TVPVAR model for the period 1990-2020. It found that exchange rate fluctuations significantly affected inflation, with positive shocks leading to negative impacts on inflation and vice versa.
- **Hervani et al. (2020)**: This research explored the effect of expected inflation on actual inflation in Iran using quantile regression. It found that in lower inflation quantiles, inflation expectations had a stronger statistical significance, whereas in higher inflation quantiles, past inflation trends provided better model predictions.
- **Haj Amini (2018)**: This study investigated the relationship between imported inflation and macroeconomic indicators across 34 developed and developing countries from 1988 to 2013, finding that factors like the added value of manufacturing goods, trade openness, and market setups significantly influenced vulnerability to imported inflation.

These studies highlight the diverse causes of inflation across different countries, including structural issues, monetary factors, exchange rates, fiscal policies, and global economic conditions.

IV. Research Methodology

The Fuzzy Causality method is one of the modern and effective tools for analyzing complex and multifaceted issues in social and economic sciences. This method is based on Fuzzy Logic, introduced by Lotfi Zadeh in 1965, which allows researchers to analyze causal relationships between variables under conditions of uncertainty and with incomplete data. Fuzzy Logic is a novel approach to data analysis that, unlike classical logic, allows variables to be defined as degrees of truth and falsity (ranging from 0 to 1). In recent decades, this method has been proposed as an efficient tool for analyzing complex issues. Fuzzy causality, as one of the applications of Fuzzy Logic, enables researchers to examine causal relationships between variables while considering different degrees of influence.

Fuzzy Logic is based on the principle that phenomena in the real world are often not certain and contain degrees of uncertainty (Lotfi Zadeh, 1965). Therefore, modeling these phenomena requires a

flexible and non-deterministic approach. The main steps in the Fuzzy Causality method include the following:

1. **Defining Key Variables:** First, the main variables that might influence inflation are identified. In the case of Afghanistan, these variables include exchange rate, imports, political instability, and aggregate demand.
2. **Determining Membership Functions:** Each variable is defined as a fuzzy set with varying degrees of membership. For example, the exchange rate can be categorized into three groups: "low," "medium," and "high" with different membership degrees (Kosko, 1994).
3. **Creating Fuzzy Rules:** The relationships between the variables are defined in the form of fuzzy rules (If-Then Rules). For example: If political instability is high and the exchange rate increases, then inflation will be high.
4. **Using a Fuzzy Inference System:** This system, combining the available data and fuzzy rules, analyzes the causal relationships between variables and provides results.
5. **Evaluating and Interpreting Results:** The results obtained from the analysis serve as a basis for decision-making and offering practical solutions.

Importance of Fuzzy Causality Method in Analyzing Inflation in Afghanistan

Inflation, as a fundamental issue in Afghanistan's economy, is the result of the complex interaction of various economic and non-economic factors. The Fuzzy Causality method is particularly suitable for this study for the following reasons:

Multifaceted Interactions and Economic Complexities: One of the prominent features of the Fuzzy Causality method is its ability to analyze multifaceted and nonlinear interactions. Inflation in Afghanistan is directly influenced by a set of internal and external factors, and the interactions between them cause significant changes in the general price level. These factors include economic issues such as reliance on imports, exchange rate fluctuations, and monetary policies. Additionally, non-economic factors such as political instability, changes in government policies, and reduced investment play a crucial role in inflation formation. For example, Afghanistan's dependence on imports of essential goods like food and fuel causes global price changes to directly affect domestic price levels. Exchange rate fluctuations also have a significant impact on imported prices and, ultimately, inflation. In this context, the Fuzzy Causality method can help analyze these interactions in greater detail and demonstrate how these various factors simultaneously affect inflation.

Managing Uncertainty in Data: Economic data in Afghanistan is often incomplete, scattered, and affected by unstable conditions. For example, economic reports are often not sufficiently accurate or transparent, and especially during critical situations, it is difficult to access reliable and accurate data. These uncertainties can present serious challenges for economic analysis. The Fuzzy Causality method is particularly suitable for such conditions because it can simulate relationships between variables despite missing or scattered data and provide more reliable results. This method processes vague or incomplete data logically and allows analysts to make economic decisions based on more accurate and trustworthy predictions. For example, if precise data on inflation rates, exchange rates, or other economic variables is unavailable, the Fuzzy Causality method can simulate patterns using partial and vague information that reflect the relationships between these variables. This capability is especially vital in countries like Afghanistan, which face significant challenges in data collection.

Flexibility in Defining Variables: Another advantage of using the Fuzzy Causality method is its flexibility in defining variables. Many factors influencing inflation, such as exchange rate, imports, and global oil price changes, have uncertain and variable impacts. This means that the relationships between these variables are not fixed and can change with economic or political conditions. The Fuzzy method

allows variables to be analyzed with varying degrees of importance. For example, in one period, exchange rate changes may have a more significant impact on inflation, while in another period, changes in imports or global oil prices might have a greater effect. This flexibility in analysis makes the Fuzzy Causality method capable of modeling and predicting inflation changes in changing conditions.

Analyzing Indirect Relationships: The factors affecting inflation typically influence each other through indirect and complex relationships. For example, political instability in Afghanistan may lead to decreased investment, reduced domestic production, and increased inflation expectations. These changes can indirectly increase the general price level. The Fuzzy Causality method can simulate these indirect and complex relationships and show the multiple and chain effects of these factors on each other. Specifically, it can simulate effects that are not directly observable, thereby providing more comprehensive analyses of the country's economic situation.

Providing Practical Solutions: One of the important advantages of the Fuzzy Causality method is its ability to translate results into policies and practical solutions. After analyzing the relationships between variables and simulating the effects of various factors on inflation, the results can help economic policymakers make better decisions to reduce inflation and increase economic stability. For example, based on the results of fuzzy analysis, it may be found that controlling the exchange rate, strengthening domestic production, or increasing foreign investment can be effective solutions to reduce inflation. These solutions can be directly applied in the country's economic policymaking to improve the economic conditions.

V. Data Analysis

Regarding the nature of inflation in Afghanistan and the causes and factors that have led to the increase in the general price level during the specified time period, experts and economists have expressed differing views. While some emphasize the increase in global prices as an external factor and, given the high degree of Afghanistan's economy dependence on the import of goods and services, view the rise in the price index of imported goods as the main cause of inflation in the domestic economy, others point to political instability and the uncertainty arising from it, believing that price fluctuations in the markets are largely a result of such conditions. According to this group of experts, decades of war, insecurity, and successive political upheavals have significantly disrupted Afghanistan's economy, creating substantial economic disturbances, severely reducing the country's production capacity, and consequently causing an imbalance in the economy, which led to an increase in the general price level.

Although this set of statements partially reflects the realities of Afghanistan's economy, and the mentioned factors each explain part of the inflation in the country, it seems that the price increases during the specified time period resulted from various internal and external causes, each contributing to inflation in some way. Below are some of the most important factors involved.

A) Internal Factors

The formation of Afghanistan's new political system in the years 2001-2002, followed by the drafting of the constitution and the establishment of the country's economic system, created the foundation for economic and social development in Afghanistan after years of insecurity and chaos. However, due to the lack of adequate will to achieve political stability and the absence of a defined economic framework compatible with the country's realities, not only were the intended goals not achieved, but in the absence of a clear vision for the future and the lack of effective institutions, the country's economic and social development faced serious challenges. The resulting unstable political environment and the uncertainty that arose from it contributed to the expansion of monopolistic practices, the development of informal and illegal activities, increased inequality, capital flight, and both internal

and external migration. These issues each played a role in the market's deviation from equilibrium, causing price fluctuations and increases.

Given the conditions and realities in Afghanistan during the specified period, it seems that the following factors played a significant role in causing inflation.

1. Instability and Uncertainty

Uncertainty is important because it connects with many economic variables. It refers to a situation where either the possible outcomes of an event are unknown, or even if they are known, the likelihood of their occurrence is uncertain (Reza Zadeh et al., 2017). In other words, uncertainty occurs when an individual cannot appropriately organize their information to describe, predict, and make judgments in a clear and measurable way.

Economic uncertainty refers to a condition where decisions made by economic agents—such as households, businesses, and the government—are accompanied by uncertainty, making it impossible to predict or estimate outcomes accurately. Various factors create uncertainty in an economy, one of which is political instability. Political instability refers to a situation where the government faces challenges related to managing society, preserving sovereignty, or territorial integrity.

In such a situation, governments often lose the ability to manage society effectively and adopt policies that would enhance productivity and economic growth. Therefore, political instability, as the most significant internal exogenous economic factor, has the closest and most meaningful interaction with the concept of economic security. Achieving economic security cannot be pursued independently from political, social, and national security (Zarei Shahi, 2000).

Developing countries, in general, suffer from political instability. Afghanistan, which has been grappling with invasion, internal conflict, terrorism, extremism, and drug production and trafficking for years, has increasingly become vulnerable to political instability and social crises, bearing significant costs as a result. Massive displacement, destruction of infrastructure, capital flight, increasing dependency on foreign countries, weakening the monetary and financial system, and the continuous devaluation of the national currency and recurring inflation are just some of the damages and losses caused by instability and the uncertainty that accompanies it. In fact, the large volume of internal tensions and conflicts, combined with external interference, has led to an economic environment characterized by chaos and instability, which continuously devalues the national currency. A look at the recent decades of Afghanistan's economy shows that increasing insecurity and political transformations have constantly exposed the country's economy to uncertainty, leading to periods where, due to the lack of a unified government and the printing of currency by various factions, the economic system completely disintegrated, causing prices to soar.

Economists believe that the lack of the necessary political stability and the resulting doubts about the political system's future created an environment of uncertainty in both society and the economy. The effects of this uncertainty on the mentality and behavior of economic agents contributed to economic disorder and disruptions in the timely supply of goods in markets, which led to a continuous rise in prices. They argue that the political conflicts within the government, despite the opportunities created after 2001 and the influx of significant foreign aid, prevented Afghanistan's economy from realizing its immense potential and achieving sustainable growth. Consequently, the production sector continued to face significant challenges, which caused markets to fluctuate and inflation to occur intermittently.

In any case, instability and uncertainty pose numerous barriers and constraints on a country's production system, ultimately leading to price increases (Reza Zadeh et al., 2017). Uncertainty can impact the general price level and inflation in the following ways:

a) **Reduction in Investment:** In a situation of instability and uncertainty, investment risks increase, reducing decision-making ability and cost estimation. At the same time, access to financial resources becomes limited due to reduced trust in the banking system and capital flight, creating financing difficulties that ultimately lead to higher production costs. Meanwhile, uncertainty encourages speculative activities aimed at short-term profits, especially in nominal sectors, limiting investments in the real economy. In fact, in an unstable and volatile economic environment, few will be willing to make long-term investments, waiting for returns.

In such an environment, individuals and economic actors are more likely to invest in short-term, often non-productive schemes to make profits. Evidence shows that despite initial optimism leading to increased investments, the spread of insecurity and rising political conflicts among government officials weakened the political system and the efficiency of government institutions, resulting in a significant reduction in investment, particularly in the production sector. Furthermore, a large portion of investments was diverted abroad. Reports from Afghanistan's Investment Support Agency (AISA) show that despite improvements in investment during the early years after the establishment of the interim government, political issues and rising insecurity significantly reduced investment, at times by as much as 30%, slowing economic growth and pushing up prices (World Bank Report). Therefore, it can be concluded that in conditions of instability and uncertainty, the incentive to invest in productive sectors diminishes, ultimately leading to reduced production capacity, a shortage of goods and services in the market, and higher prices.

b) **Increased Inflationary Expectations:** Inflationary expectations refer to the outlook economic agents have about future prices. The perception individuals have about future market conditions and prices is influenced by various factors. One such factor is the instability and uncertainty within the economy. In fact, uncertainty creates a pessimistic view about the future and the continuous rise in prices, leading to inflationary expectations.

Inflationary expectations play a crucial role in exacerbating inflation. Studies show that when economic actors anticipate future price increases, they incorporate these expectations into wage negotiations and contract adjustments, which influences the inflation rate in subsequent periods. Hence, uncertainty through inflationary expectations can also contribute to inflation.

In general, political instability and the uncertainty arising from it in Afghanistan, by imposing barriers and constraints on supply and increasing inflationary expectations, have contributed to the inflation witnessed in the country during the specified period.

2. Increase in Exchange Rates and Dollarization of the Economy

The exchange rate is one of the variables that has significant effects on the economy. It is especially important in the economic and financial interactions between countries. As such, fluctuations in the exchange rate and their impacts on the broader economy are highly sensitive. The increase in the exchange rate can be caused by multiple factors. One of the factors that lead to an increase in exchange rates in countries is instability and uncertainty. When uncertainty arises, the exchange rate naturally increases, while the value of the national currency declines.

In fact, the growing tendency of individuals in a country to buy foreign assets due to instability and uncertainty causes an increase in demand for foreign currencies and a decrease in demand for the national currency. If the trend of substituting foreign currency for the national currency continues, this ultimately weakens the position of the national currency and strengthens the position of the foreign currency, making foreign currency the basis for transactions, particularly large transactions. This phenomenon is referred to as "jumping from the domestic currency" or *dollarization*. Dollarization occurs when the national currency fails to properly fulfill its essential functions (Esfandiari et al., 2018).

On the other hand, the increase in exchange rates due to rising demand leads to an increase in the prices of imported goods, including capital goods, intermediate goods, and consumer goods. This price increase, either directly or indirectly, affects domestic prices (Broomand, 2008). The direct effect refers to the impact of changes in the exchange rate on the prices of imported goods, including final goods and intermediate goods, which ultimately leads to positive changes in the consumer price index. The extent to which these changes are transmitted largely depends on the share of imported goods in the household consumption basket. Therefore, the higher the share of imports in consumer goods, the greater the transmission of price changes.

The indirect effect of exchange rate changes relates to the competitiveness of goods in international markets. That is, with an increase in the exchange rate and a decrease in the value of the national currency, domestic goods become cheaper for foreign buyers, leading to an increase in exports and overall demand. As a result, despite the excess demand in the domestic market, the level of domestic prices rises (Tayebi et al., 2015). In fact, with the increase in the exchange rate and assuming the Marshall-Lerner condition, the aggregate demand curve shifts to the right, and given that aggregate supply remains constant in the short run, real output and price levels increase. Over the medium and long term, the increase in prices leads to higher consumption costs and higher nominal wages (Rodri, 2023).

Studies show that despite the significant inflow of dollars through aid and commitments from the international community in Afghanistan, the exchange rate (dollar) has continued to rise steadily in the country. According to the Central Bank's report, the exchange rate has increased significantly, with the value of the dollar rising from 32 Afghanis in 2001-2002 to 67 Afghanis in 2015, more than doubling. Experts and economic analysts attribute the main reason for the rise in the exchange rate during this period to the unstable political conditions and the uncertainty resulting from them. They argue that the uncertain future and lack of a clear economic outlook in the country caused the Afghan currency to lose much of its value against the dollar, which not only increased prices but also led to the relative dollarization of the Afghan economy.

It should also be noted that various factors such as currency smuggling out of Afghanistan, money laundering activities, and the growing presence of currency speculation in the foreign exchange markets, which are rooted in the instability and uncertainty of the country's economic environment, have contributed to the rise in exchange rates. Overall, the increase in exchange rates in the country, often resulting from political instability and uncertainty in the economic environment, has also led to price increases and inflation.

3. Monopolism

One of the issues that plays a significant role in the behavior of economic variables is the type of economic system and structure. In general, economic systems are categorized into three types: planned economies, market economies, and mixed economies. A centralized or planned economy is typically based on principles such as collective welfare, shared (state) ownership, and planning. In this type of economic system, resource allocation and the distribution of goods and services are carried out through state planning.

On the opposite side, the capitalist or market economy is based on principles such as individualism, economic liberalism, and competition. In this system, the mechanisms of supply and demand govern the allocation of resources, pricing, and the distribution of goods and services within the society. Proponents of the market system believe that economic freedom, in the context of competition, simultaneously ensures both individual and social benefits. Therefore, they argue that the government should work to create an environment that facilitates such conditions. Finally, mixed systems represent a modified form of the previous economic systems. In these systems, ownership is mainly in the hands of the private sector, and resource allocation is carried out through government policies (Dadgar, 2019).

With the advent of the new political system in the country and the formulation of the constitution, Afghanistan's economic system was also influenced by the views of international institutions such as the International Monetary Fund (IMF) and the World Bank, along with the conditions and requirements they set, leading to the establishment of a market-based system. Advocates of the market view believed that creating an environment for private sector competition and supporting their economic freedoms could improve production and employment, thus fostering the country's economic growth. They also believed that the implementation of privatization would increase investment and boost economic activities, ultimately accelerating economic growth.

However, despite several years of the market system's establishment and the implementation of some adjustment policies, what was observed in practice was the emergence and expansion of monopolistic activities across the country, which led to significant price increases, particularly in essential sectors such as energy, fuel, and food. In fact, despite the economic and social realities of Afghanistan, hundreds of domestic and foreign commercial companies entered Afghanistan's economic arena under the guise of free competition.

The government also assumed that increased competition among institutions and economic entities would improve the quality and quantity of businesses, boost creativity and productivity within the production system, and ultimately offer consumers more choices. However, it soon became clear that due to the government's inability to oversee the economic performance of these entities, the lack of necessary security, weak quality control systems, and the concentration of political, economic, and sometimes military power in the hands of a small group of individuals, the country's economy became controlled by mafia syndicates, fostering corruption, hoarding, and market monopolization on a large scale. Furthermore, due to corruption and weak supervision, many companies engaged in collusion rather than competition. In the best-case scenario, both foreign and domestic investments were diverted toward sectors offering higher profits and fewer public benefits, driven by insecurity and a lack of trust in the future (Ramyar, 2018).

Studies show that between 2002 and 2015, various sectors of Afghanistan's economy increasingly moved toward monopolization, resulting in rising prices. For example, at the beginning of the transitional period, many traders were involved in importing oil and gas, but over the following years, the number of these traders decreased, and only a few fuel importers remained, leading to the effective monopolization of the market, with prices being set monopolistically.

Additionally, Farzam, an economic researcher, identifies both external and structural factors in the rise of prices in the country, noting that corruption and monopolization in the import market have created conditions in which monopolists can manipulate market conditions to serve their own profit-driven goals. He further asserts that Afghanistan's oil and gas markets are practically not competitive, as they are managed by powerful monopolies and cartels. This researcher also identifies the legal vacuum and the lack of a clear mechanism to combat monopolies and hoarding as key factors contributing to the rise of monopolies in the country.

Furthermore, the government's lack of access to large areas of the country has created space for the informal economy and the presence of mafia and local strongmen, further contributing to economic monopolization. In addition, exclusive dealerships for foreign products have taken advantage of the situation by reducing supply and charging higher prices. Ultimately, it is the government, either knowingly or unknowingly, through its biased actions, that has created the conditions for monopolies to flourish. Political and economic support based on familial and friendship ties, the unequal distribution of resources and opportunities, and the sale and transfer of government-owned enterprises without transparency or merit have disrupted the competitive market environment and led to the emergence of monopolies in the country.

What is certain is that the specific conditions of the post-war economy in the country, along with institutional weaknesses and the traditional structure of society, not only failed to create an appropriate environment for private sector participation in the economy but also, conversely, led to the monopolization of key economic activities. In fact, the shift in the economic direction toward a market model, especially in a context where years of war and insecurity had utterly destroyed the country's economic foundation and left society facing numerous challenges, was a key factor in the emergence of many problems, including monopolies. This ultimately led to market disruption, rising prices, and additional pressure on society and consumers.

4. Urbanization and Increased Demand for Housing

The trend toward urbanization and the migration to major cities is one of the phenomena that developing countries, in general, face. In these countries, various social groups, particularly younger generations, show a strong tendency toward urbanization and experiencing life in urban environments. Access to higher-paying jobs, better social services, new technologies, stronger social, cultural, and political relationships among citizens, and overall better comfort and well-being are some of the factors that make urban living more desirable for different social groups.

Essentially, the general mindset, particularly in third-world countries, is that urbanization is considered part of the development process. Therefore, urbanization development and large-scale investments in urban housing are among the main agendas of most governments in these societies. In Afghanistan, a country that has experienced decades of war, conflict, and political crises, and has been deprived of many opportunities and modern life amenities, the emergence of a new political system and the resulting economic and social transformations led to a significant increase in urban living and urbanization. According to some statistics, from 2000 to 2015, Afghanistan ranked 13th, 9th, 5th, 7th, 9th, 16th, 21st, 30th, 37th, 32nd, 29th, 22nd, 16th, 17th, 16th, and 14th out of 214 countries worldwide, making it one of the top countries in terms of urban population growth.

According to the report, during the mentioned years, Afghanistan's urban population grew by about 4% annually, which is one of the highest urban population growth rates globally. This rate for Kabul, as the largest population center in Afghanistan, was around 10%. As a result, the capital's population grew from approximately 1.5 million in 2001 to over 3.5 million in 2015 (World Bank report). Many experts believe that issues such as poverty, unemployment, the lack of basic living facilities in rural areas, improved job opportunities in cities (especially large cities), better access to educational and health services in urban areas, and the return of a significant number of Afghan migrants from neighboring countries have led to such high urbanization growth in the country.

This level of urbanization, coupled with high population growth rates, has significantly increased the demand for housing, especially in large cities. According to some reports, during 2002-2003, the demand for housing units was estimated at over one million, and this figure has increased in subsequent years due to population growth and the return of migrants. However, due to the challenges and problems

left over from the war and Afghanistan's heavy dependence on foreign assistance, the production and supply of sufficient housing have faced numerous obstacles and limitations. As a result, the housing market in the country has always been in a state of imbalance.

In fact, legal barriers, limited land availability in urban areas, and the high cost of construction due to currency fluctuations have created significant challenges in housing supply, resulting in serious disruptions in the housing market and a significant increase in prices. According to the report on the status of Afghanistan's cities, despite the high demand for housing, successive governments have not been able to provide sufficient and suitable housing and have allocated only a small percentage of their annual budget for this purpose. The report also indicates that the few apartment units built by the private sector are mainly for the wealthy minority, leaving a significant portion of the demand unmet (World Bank report).

The excess demand over supply led to a sharp increase in housing prices in cities, particularly in the first few years following the transformation. According to some data, the average growth rate of housing prices during 2002-2006 reached about 20%. Between 2007 and 2012, inflation rates in the housing sector were recorded as 6.4%, 7.2%, 2.4%, 11.5%, 12.1%, and 4.4%, respectively (Central Statistics Office of Afghanistan, 2016). The report from the Ministry of Housing and Urban Development of Afghanistan shows that the average price of housing during 2006-2015 in urban centers was \$785 per square meter, while the average price outside the city was \$373 per square meter, reflecting the high cost of land and housing and inflation in this sector (Ministry of Urban Development of Afghanistan).

Economic experts believe that because the housing industry has the widest connection with other economic sectors, an increase in housing prices affects a broad range of related industries, thus contributing to inflation and increasing the general price level. On the other hand, housing prices can also be influenced by inflationary expectations or impact them. In fact, wealth increase through rising prices may lead to inflationary expectations, meaning that households, feeling wealthier due to rising housing prices, may increase their consumption. In such situations, if supply cannot meet the increased demand due to economic constraints, the resulting demand pressures will lead to increased inflationary pressures, thus driving prices higher (Qalizadeh & Kamiab, 2009).

Moreover, today, land and housing, as part of capital assets, attract a broad spectrum of private sector investors. This has caused the behavior of market participants to fluctuate, leading to market instability and influencing general price levels. As land and housing are seen as income-generating assets with speculative and transactional goals, housing prices often increase in a bubble-like manner. Given their significant share and position in the economy, these price fluctuations can cause inflation in other sectors as well. Therefore, it can be concluded that a portion of the inflation in the country during the specified period is likely due to the expansion of urbanization and the increased demand for housing, particularly in the country's major cities.

5. Money Laundering and Liquidity from Informal and Illegal Activities

One of the key factors exacerbating inflation in Afghanistan is the issue of money laundering and the liquidity generated from illegal and informal activities. The extensive illegal production and trafficking of narcotics, coupled with weak governance and the presence of foreign organizations, has created an environment conducive to money laundering. The illicit profits from these activities find their way into the formal economy, distorting markets and contributing to inflation.

The increased presence of foreign entities, coupled with widespread corruption and insecurity, has further facilitated the expansion of illegal activities. These include drug trafficking, with Afghanistan being one of the world's largest producers of opium, contributing significantly to the informal economy.

According to reports, a significant portion of Afghanistan's financial activities remains outside the formal economy, making it challenging to control inflation and ensure economic stability.

Money laundering, in particular, disrupts the financial system by causing instability in currency and interest rates. The illicit funds often get invested in real estate, precious metals, and luxury goods, further driving up prices and exacerbating inflation. The money laundering process increases liquidity, which, when coupled with a lack of adequate supply, fuels demand-driven price increases, thereby contributing to broader inflationary pressures.

In conclusion, the rapid urbanization and the growing demand for housing, alongside illegal economic activities such as money laundering, have contributed to significant inflationary pressures in Afghanistan, highlighting the complexities of managing an economy in transition.

B) External Factors

In addition to internal factors, there are several external factors that influence the increase in prices and the occurrence of inflation in the country. These factors are outlined below.

1. Increase in the Price Index of Imported Goods

One of the commonly discussed theories related to inflation is the theory of imported inflation. According to this theory, when the prices of final goods or intermediary goods required for production rise in foreign markets, domestic prices also tend to increase, leading to inflation. For instance, the rise in oil prices during the 1970s and 1980s, known as the first and second oil shocks, resulted in increased prices of petroleum products, raw materials, food items, and consequently, the final goods in many countries.

Imported inflation is often observed in countries that rely heavily on imports for goods and services. Studies show that Afghanistan's economy, due to a lack of sufficient production infrastructure and a high degree of trade openness, is extremely dependent on imports. This dependence makes its domestic markets highly susceptible to foreign price shocks. According to data from the World Bank, between 2001 and 2015, Afghanistan experienced a persistent trade deficit, where the total value of exports was less than a tenth of imports at its best. This heavy reliance on imports naturally exposes domestic markets to various external price shocks, leading to fluctuations in the economy. In an analysis of the impact of trade shocks on Afghanistan's inflation, Omar Joya utilized a log-log structural model and average price data for global crude oil and grain prices. He found that shocks from global oil and grain prices explained about a quarter of domestic price fluctuations. His research further suggests that a 1% shock in global grain prices led to an 18.4% fluctuation in domestic prices.

Additionally, Joya's study employed a third variable called the ratio of prices of non-tradable goods to tradable goods, demonstrating the effect of trade shocks on domestic inflation. When inflation originates internally, there is a positive correlation between tradable goods prices and overall inflation. However, if the shocks are external, the prices of tradable goods are expected to increase or decrease faster than non-tradable goods, leading to a negative correlation between overall inflation and the aforementioned price ratio. The findings suggest that inflation is largely influenced by the movement of prices for tradable goods, meaning that a significant portion of Afghanistan's internal inflation is driven by external trade shocks.

Haj Amini (1397) also conducted a study titled "The Relationship Between Imported Inflation and Macroeconomic Indicators: Observations from 34 Developed and Developing Countries." He showed

that most countries exhibit a notable sensitivity to external inflation. However, the extent of vulnerability to imported inflation differs across nations. Developing countries, compared to developed industrial nations, are more susceptible to external inflation shocks. The study identified Argentina, Iran, Brazil, Peru, Turkey, and Chile as the most vulnerable developing countries to price shocks, particularly in food items. Interestingly, among these six countries, only Peru and Iran are net food importers.

In conclusion, it can be said that the increase in global prices, particularly oil and food prices, generally leads to higher domestic prices and inflation. However, the extent to which domestic inflation is influenced by external shocks depends on various factors, such as the level of development, income per capita, population size, food production capacity, degree of trade openness, trade balance, energy consumption, and the development of financial markets. For example, in developing countries, where food items account for a significant portion of the consumer basket, the direct effects of food price shocks are likely to be more pronounced compared to developed nations. Furthermore, energy use and dependency on various energy sources determine the cost of production in a country, influencing its vulnerability to inflation. Given Afghanistan's high dependence on imports, a part of its internal price increase is likely due to imported inflation.

2. Delays in Clearing Goods at Some Import Entry Points

As previously mentioned, Afghanistan's economy is heavily reliant on imports, with a significant volume of goods and services entering the country annually. According to the Ministry of Commerce, Industry, and Mines, Afghanistan's foreign trade volume exceeds \$10 billion, with 80-85% of this figure being imports. Afghanistan's major trading partners are India, China, Pakistan, Iran, the UAE, Turkey, and Kazakhstan, with Pakistan holding the largest share of Afghanistan's trade due to historical and geographical ties. Studies show that despite relatively stable exports to Pakistan, imports have been subject to fluctuations due to various reasons, such as repeated border closures by Pakistan, leading to Afghan consumers sometimes facing inflated prices for imported goods from Pakistan.

Many analysts argue that the political situation in Afghanistan and the involvement of the international community, along with the growing trade relations, have allowed Pakistan to use trade as a leverage to exert pressure on the Afghan government to meet its demands. Consequently, Pakistan has periodically closed its borders, creating disruptions in the Afghan market. For example, between 2006 and 2010, Pakistan's borders were closed over ten times to Afghan traders.

Although Afghan Chamber of Commerce officials claim that these interruptions do not affect prices, many experts contend that the barriers and restrictions in the country's trade routes, which prevent timely responses from Afghan authorities, combined with the significant volume of imports from Pakistan, have led to price increases in domestic markets. Moreover, the procedural requirements for obtaining import clearance documents, restrictions on smaller shipments requiring the presence of all trucks before crossing into Afghanistan, and heavy security deposits, insurance, and tracking costs, all contribute to rising transportation costs, further influencing price increases.

It seems that Pakistan's repeated border closures have contributed to the rise in prices and inflation in Afghanistan during the specified period. Political conflicts and territorial disputes between the two nations have always impacted their economic and trade relations, preventing the full realization of trade capacity. For example, in 1965, the two countries signed a trade and transit agreement, but this agreement never reached its full potential. In 2017, despite estimates that bilateral trade could reach \$5 billion annually, the actual trade volume was only \$1.27 billion.

VI. Conclusion

This study aimed to examine the nature and causes of inflation in Afghanistan from 2001 to 2015. Inflation during this period, as one of the most significant economic challenges, resulted from a combination of internal and external factors. The results indicated that these factors interacted and had significant effects on the national economy. Afghanistan's inflation was primarily driven by political instability, reliance on imports, inadequate monetary and fiscal policies, and structural problems. Political instability and economic uncertainty led to reduced investments, capital flight, and weakened public confidence, thereby increasing inflationary pressures. Afghanistan's heavy reliance on imports and susceptibility to exchange rate fluctuations made its economy vulnerable to global price changes. Monetary and fiscal policies, focused on increasing the money supply without considering production capacities, led to higher general price levels. Moreover, Afghanistan's weak economic structure, including low productivity, lack of sufficient production infrastructure, and resource management issues, constrained the supply side of the economy, exacerbating inflation.

The research findings suggest that various economic theories, including monetary theory, demand-pull inflation, cost-push inflation, and structural inflation, each explain part of the inflationary causes in Afghanistan. Excessive money supply growth, imbalances between supply and demand, rising production costs, and structural bottlenecks were all emphasized in these theories.

In conclusion, inflation in Afghanistan is a multifaceted phenomenon that requires a comprehensive approach to manage it. Reforms in monetary and fiscal policies, reducing dependence on imports, strengthening production infrastructure, and ensuring political stability are essential measures that can help reduce inflation and enhance economic stability. Additionally, understanding Afghanistan's unique economic characteristics and adopting solutions based on the country's economic and social realities will play a crucial role in reducing vulnerabilities.

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