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## A CHRONOLOGICAL ANALYSIS OF INFLATION DYNAMICS IN KENYA

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## A CHRONOLOGICAL ANALYSIS OF INFLATION DYNAMICS IN KENYA

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### **Abstract**

*This paper undertakes an exploratory examination of inflation dynamics in Kenya between 1970 and 2021, employing a descriptive research design and secondary data from various sources, coupled with qualitative analysis of the literature. The paper comprehensively analyzes the impact of diverse policy changes, including monetary and fiscal policies. Overall, this paper provides a beneficial resource for anyone interested in comprehending the intricacies of inflation dynamics in Kenya and the relevant measures employed to manage rising prices. The government implemented various measures to fight inflation over the years, including tight monetary policy and fiscal policy measures. The Central Bank of Kenya implemented various monetary policies to control inflation, such as increasing interest rates and tightening credit. Factors such as rising food and fuel prices, droughts, and political instability have driven inflation in Kenya over the years. Despite Kenya's implementation of several reforms aiming to promote stable inflation over time, challenges regarding inflation persist. To achieve long-term economic growth and stability, it may be wise for the government to consider implementing policies that promote fiscal discipline, strengthen institutional frameworks, and encourage private sector development. By doing so, the government can ensure sustainable economic growth and stability.*

**Keywords:** Price Level; Inflation; Deflation; Kenya

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## 1. Introduction

Understanding the dynamics of inflation is important because high inflation rates can have a detrimental effect on economic growth, leading to reduced investment, lower productivity, and increased unemployment rates (Barro, 1995). Moreover, inflation can erode the purchasing power of consumers, especially those on fixed incomes, leading to a decline in their standard of living (Machlup, 2020).

Kenya has experienced inflation challenges over the years, with fluctuations in inflation rates affecting various sectors of the economy (Youse & Debebe, 2021; Killick & Mwege, 1990; Mwege & Ndung'u, 2004; Kinyua, 2001; Durevall, 2012). The impact of inflation on the economy has been significant, with adverse effects on economic growth, investment, and poverty reduction efforts (Kinyua, 2001).

Despite various policy changes that have been implemented over the years, inflation has remained a persistent challenge in the country, with far-reaching effects on the country's economy (Youse & Debebe, 2021; Mwege & Ndung'u, 2004). For example, inflation was high during the 1970s due to macroeconomic shocks, and the government implemented price control policies that had some impacts on economic growth (Mwege & Ndung'u, 2004). In the 1980s, the government executed structural adjustment programs to promote market-oriented policies and reduce inflationary pressures. In the 1990s, inflation remained a major challenge, but the government implemented measures such as a tight monetary policy to bring it under control by the end of the decade (Youse & Debebe, 2021; Kinyua, 2001). In the early 2000s, inflation was relatively low before rising in late 2000 due to multiple factors, and the Central Bank of Kenya implemented various monetary policies to control it (Kiganda, 2014). During the 2010s, inflation continued to fluctuate, and the Central Bank of Kenya implemented monetary policies while the government implemented fiscal policies to address it (Okumu, 2021).

Given the observed changes in trends and policies, a detailed chronological analysis of the inflation dynamics in Kenya is needed because it can help identify the factors that have contributed to inflation in the country over the past few decades and the effectiveness of the various policies implemented to address this issue over time. Additionally, a chronological analysis can help identify areas where policy interventions may be needed to address current and future inflationary pressures.

Kenya's unique characteristics, including its regional context, distinct economic structure, diverse policy landscape, socio-political factors, and rich dataset, set it apart from other

contexts worldwide facing long-standing inflation issues. Studying inflation dynamics in Kenya offers valuable insights into regional factors, policy responses, and the interplay of economic and socio-political dynamics, contributing to a comprehensive understanding of inflation management and providing lessons applicable to similar contexts globally.

Therefore, this paper provides a detailed review of the inflation dynamics in Kenya from 1970 to 2021, highlighting the various policy changes implemented during each period and their impact on the inflation trends in the country. By doing so, one can gain a better understanding of the factors that have contributed to inflation in Kenya and the effectiveness of the various policies that have been implemented to address this issue. Kenya was chosen as the subject of this study because of its long-standing issues with inflation.

The study aims to fill a gap in the literature by providing a comprehensive and detailed chronological review of the inflation dynamics in Kenya from 1970 to 2021, including the various policy changes implemented during each period and their impact on the inflation trends in the country.

By shedding light on the complex and dynamic nature of inflation in Kenya, the paper provides policymakers with valuable insights on how to design and implement effective policies to mitigate inflation and promote sustainable economic growth. Furthermore, the paper contributes to the existing literature on inflation dynamics, providing a valuable resource for stakeholders interested in the subject.

Some of research questions that could be addressed based on the analysis of the study include the following: What are the key factors that have contributed to inflation dynamics in Kenya between 1970 and 2021? How have monetary and fiscal policies been employed in Kenya to manage inflation over time, and what has been their effectiveness? What role have external factors, such as macroeconomic shocks, rising food and fuel prices, and political instability, played in driving inflation in Kenya? What are the key challenges and persistent issues related to inflation management in Kenya? How have policy changes and interventions evolved over different periods, and what have been their impacts on inflation trends? What lessons can be learned from the historical inflation dynamics in Kenya to inform policy interventions and strategies for sustainable economic growth?

The rest of the paper is structured as follows: Section 2 presents the inflation dynamics in Kenya during the 1970s, including the policy landscape and inflation trends, and policy responses. Section 3 examines the inflation dynamics in Kenya during the 1980s, including the

policy landscape and inflation trends. Section 4 reviews the inflation dynamics in Kenya during the 1990s, including the landscape and inflation trends. Section 5 analyses the inflation dynamics in Kenya during the 2000s, including the landscape and inflation trends. Section 6 explores the inflation dynamics in Kenya during the 2010s, including the policy landscape and inflation trends. Finally, in Section 7, the study is concluded.

## **2. Inflation Dynamics in Kenya during the 1970s**

### **2.1. Policy Landscape during the 1970s**

The 1970s was a decade of significant policy changes, aimed at maintaining macroeconomic stability and promoting economic growth and development in Kenya (see for example Killick & Mwega, 1990; Kinyua, 2001; Kabubo-Mariara & Kiriti, 2002; Swamy, 1994). The policy changes during the period were a response to several macroeconomic imbalances, including escalating inflation, which had far-reaching effects on the economy (Bigsten, Kimuyu & Söderbom, 2010; Kabubo-Mariara & Kiriti, 2002).

In the 1970s, inflation was predominantly propelled by macroeconomic disturbances such as the disintegration of the Bretton Woods framework of fixed exchange rates in 1971, the deterioration in the terms of trade which resulted in the balance of payment crisis in 1971, the first oil shock in 1973/74, a more than fourfold increase in coffee prices from 1975 to 1977, the drought of 1979, and the second oil shock of 1979/80 (Legovini, 2002; Kinyua, 2001; Bevan, Collier, & Gunning, 1999). The collapse of the East African Community in 1977 also had a significant impact on inflation in Kenya due to the loss of a major export market, disruption of trade flows, decline in foreign investment, and a reduction in foreign exchange reserves, which led to higher import costs and inflationary pressures (Bigsten, Kimuyu & Söderbom (2010); Kabubo-Mariara & Kiriti, 2002).

To address the challenge, the Kenyan government continued with the implementation of a direct price control policy which was motivated by Session Paper No 10 on African Socialism and its Application to Planning in Kenya (Killick & Mwega, 1990). The institutionalisation of the price control policy was effectuated through the enactment of the Price Control Ordinance of 1956, which was subsequently renamed the Price Control Act of 1956 and underwent revision in 1972 (Killick & Mwega, 1990). According to Mwega & Ndung'u (2004), price controls in Kenya were exercised in most of the final agricultural and manufactured commodities via the General or Specific Price Control Orders (GPCO and SPCO).

The purpose of price controls was to act as a more effective tool in achieving macroeconomic stability, with a particular emphasis on curbing inflationary pressures and protecting against potential external shocks to the balance of payments (Ndung'u, 1997). However, Mwega & Ndung'u (2004) argue that the price controls did not achieve macroeconomic stability and instead caused distortions and the emergence of rent-seeking behaviour in the public sector. Furthermore, the controls also constrained efficient resource allocation thus hindering market development and ultimately the growth of the Kenyan economy (Mwega & Ndung'u, 2004).

During the 1970s, the monetary policy was largely ineffective and subservient to the fiscal pressures, but it was subject to several changes in response to the shocks (Killick & Mwega, 1990; Kinyua, 2001). According to Kinyua (2001), efforts were made to reduce lending to the import sector and foreign-owned firms by commercial banks by changing the liquidity ratio requirement and using moral suasion as an instrument. Interest rates remained under control, and moderate financial repression persisted (Killick & Mwega, 1990).

In 1975, Kenya made a significant policy shift regarding the alignment of its currency, the Kenyan shilling. The country transitioned from aligning the exchange rate of the Kenyan shilling with the US dollar to the Special Drawing Rights (SDR) (Killick & Mwega, 1990; Kinyua, 2001). This policy shift marked the outset of Kenya's engagement with the International Monetary Fund (IMF) in mitigating domestic and external shocks and reversing the economic trend (Kiganda, 2014).

The government also implemented various structural policies to promote local production and reduce dependence on imports (Swamy, 1994; Killick & Mwega, 1990). This included import substitution policies aimed at promoting local production, as well as policies to promote agricultural production and rural development, to improve the livelihoods of the rural population (Kinyua, 2001). However, these policies were not entirely successful in addressing inflation (Killick & Mwega, 1990).

The promotion of export-oriented industries in Kenya during the 1970s was a structural policy reform that also aimed at reducing inflation (Swamy, 1994). By promoting these industries, the government could earn foreign exchange, which would help to address the balance of payment challenges (Swamy, 1994). This, in turn, would reduce the pressure on the Kenyan shilling and lower inflation rates. Additionally, the establishment of export processing zones and tax incentives for exporters would lead to increased investment in the export sector, higher

production, and increased foreign exchange earnings, all of which would help reduce inflation rates in the country (Swamy, 1994; Killick & Mwege, 1990).

The policy reforms aimed at controlling inflation in Kenya during the 1970s also encompassed fiscal policies (Killick & Mwege, 1990; Swamy, 1994). These included the rationalisation of expenditure (Swamy, 1994). By rationalizing expenditure, the government could reduce its spending, which would help reduce the budget deficit and the pressure on inflation rates (Swamy, 1994).

In 1979, a structural adjustment loan was agreed upon between Kenya and the International Monetary Fund (IMF), which introduced structural reforms aimed at restoring macroeconomic stability (Killick & Mwege, 1990). The reforms were also aimed at removing the controls on prices, trade, and credit while driving structural reforms to address the supply-side shocks (Killick & Mwege, 1990; Kinyua, 2001).

Therefore, the policy landscape in Kenya during the 1970s was marked by challenges related to inflation, which led to various policy changes aimed at promoting economic growth and development. Table 1 shows a summary of some key inflation-related policy reforms that have been implemented by Kenya during the 1970s.

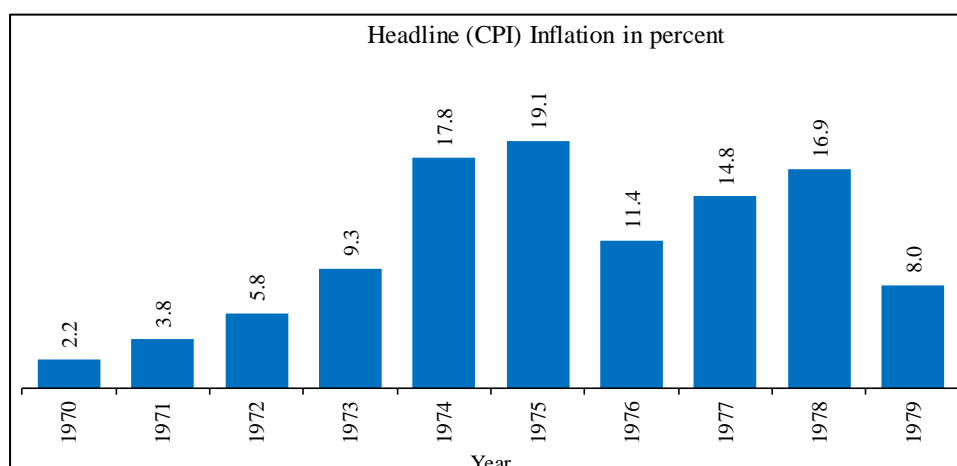
**Table 1. The summary of key inflation-related policy reforms in Kenya during the 1970s.**

Year	Type of Reform
1971	The inception of the General Price Control Order
1971	The Kenya shilling was pegged to the US dollar
1972	The Price Control Act of 1956 was revised
1972	The Price Control Advisory Committee was set up to advise on prices
1973	Wage Guidelines were introduced
1975	The Kenya Shilling was pegged to the SDR
1979	First structural adjustment loan with the IMF

*Source: Author's review of literature.*

## **2.2. Inflation Trends during the 1970s**

The policy reforms implemented in Kenya between 1971 and 1979, including structural, fiscal, and monetary policy reforms as discussed in the previous section, were aimed at addressing inflation and maintaining macroeconomic stability. These policy reforms (apart from other domestic and external shocks that are likely to have affected inflation) had a direct impact on inflation trends in Kenya, which varied significantly during the period averaging 10.9 percent (World Bank, 2022). Figure 1 depicts the trends of the overall inflation rates in Kenya over the period 1970–1979.

**Figure 1. Trends in Headline Inflation in Kenya from 1970 to 1979**

Source: World Bank Development Indicators (2022)

As displayed in Figure 1, Kenya experienced low inflation rates during 1970, 1971 and 1972 (2.2 percent, 3.8 percent and 5.8 percent, respectively) (World Bank, 2022).

Subsequently, inflation maintained an increasing trend afterwards, reaching 9.3 percent in 1973, 17.8 percent in 1974 and a peak of 19.1 percent recorded in 1975. As alluded to in the previous section, the increase in inflation in Kenya during the period was fueled by the first global oil crisis that hit the world economies in 1973/74, poor rainfall and global recession (The Republic of Kenya, 1975; Kinyua, 2000; and Ndung'u, 2004).

The government of the time had to implement policies to mitigate the inflation rate. This was done by increasing import tariffs and sales taxes on luxury goods and petroleum products to curb consumption (Republic of Kenya, 1975). The government also raised the liquidity ratio requirement and implemented moral suasion as an instrument to guide commercial banks to reduce their lending (Republic of Kenya, 1977).

Following the implementation of the policies, inflation decreased to 11.4 percent in 1976. The decrease in inflation in 1976 is also attributed to increasing incomes in rural areas following a good rise in the value of coffee exports as a result of an increase in yield in the Agricultural sector (Republic of Kenya, 1977).

Inflation continued to remain at double digits levels of 14.8 percent and 16.9 percent in 1977 and 1978 respectively, before decreasing to a single-digit level of 8.0 percent at the end of the decade (World Bank, 2022).



As alluded to by Ndungú & Durevall (1999), the commodity boom in the major export crops, coffee and tea that occurred in 1976/77 also helped to ease some of the economic difficulties experienced in the early 1970s.

### **3. Inflation Dynamics in Kenya during the 1980s**

#### **3.1. Policy Landscape during the 1980s**

During the 1980s, the Kenyan government continued to face challenges related to inflation and macroeconomic instability, which were inherited from the 1970s (Ndung'u, 1998; Kinyua, 2001; Killick & Mwege, 1990). The country suffered also from the effects of a global recession, decreased external capital inflows, and the aftermath of the 1982 debt crisis (Bigsten, Kimuyu & Söderbom, 2010). These factors combined to create a challenging economic environment, which required innovative policy solutions to promote growth and stability.

The inflation-related policies implemented during the 1980s in Kenya were characterized by stabilisation and structural adjustment programs aimed at promoting macroeconomic stability through market-oriented policies and reducing government intervention in the economy (Bigsten, Kimuyu & Söderbom, 2010). These policies were implemented under the guidance of the International Financial Institutions (IFIs), namely the World Bank and the International Monetary Fund (IMF) (Ndung'u, 1998). The import substitution development strategy that predominated during the 1970s was also gradually dismantled in the 1980s in favour of an export-oriented industrial policy (Ndung'u, 1998).

In 1980, Kenya secured its first Structural Adjustment Loan from the World Bank, which came with conditions that included the implementation of more liberal trade and interest rate regimes and the adoption of a more outward-oriented industrial policy (Ndung'u, 1998). Although government documents outlined a new direction towards openness and liberalisation in Kenya's trade policy, few of these changes were adopted in practice (Kinyua, 2001; Ndung'u, 1998).

In 1982, the Kenyan government sought additional funding from the International Monetary Fund (IMF) and pledged to continue pursuing greater liberalisation. However, the government failed to fully implement the reforms it had promised (Kinyua, 2001; Ndung'u, 1998).

In 1982, Kenya revised its exchange rate strategy by implementing a crawling peg system using a composite basket of currencies from its major trading partners (Ndung'u, 1998). This change followed the previous shift from a fixed exchange rate to a crawling peg, which was a real exchange rate rule in effect (Ndung'u, 1998). The crawling peg regime made the exchange rate

more flexible, which had implications for the inflation profile. Without a nominal anchor to tie prices down, the fixed exchange rate was lost, leading to changes in inflation trends (Kinyua, 2001).

During the initial half of the 1980s, notwithstanding the liberalisation rhetoric, the administration made only circumscribed endeavours to restructure the Kenyan economy (Kinyua, 2001; Killick & Mwegu, 1990). The government's failure to meet the IMF credit ceilings and borrowing conditionalities resulted in the cancellation of several programs. The government was unable to fully disburse an IMF program until 1983.

Insufficient dedication to the reform process during the initial stage of economic restructuring from 1980 to 1984 led to the discontinuation of financial support from donors (Kinyua, 2001).

To demonstrate its commitment to policy reform and a clear long-term development strategy, the government drafted the Sessional Paper of 1986 on Economic Management for Renewed Growth (Kinyua, 2001). This policy document represented a significant milestone in Kenya's economic policy, as it acknowledged the government's limited role in the development process and paved the way for increased private sector participation (Bigsten, Kimuyu and Söderbom, 2010). The Sessional Paper's release resulted in a notable decrease in the number of goods subject to both general and specific orders.

The government took a further step towards promoting competition by enacting a competition law and the Restrictive Trade Practices, Monopolies and Price Control Act (Chapter 504 of the Laws of Kenya of 1988), which was published in 1988 and became operational in 1989 (Ontiti, 2012). According to this legislation, the government committed to reducing its reliance on direct price controls, and instead placed greater emphasis on competitive dynamics in the economy (Ontiti, 2012).

The Monetary policy in Kenya during the period under review relied mainly on direct measures such as credit restrictions, fixed cash and liquid asset ratios, and the establishment of minimum deposit and maximum lending rates (Swamy, 1994).

In 1989, the government implemented a wide-ranging overhaul of the financial sector, encompassing institutional and policy reforms designed to fortify the central bank's regulatory authority and liberalize interest rates (Kinyua, 2001; Killick and Mwegu, 1990; Otieno, et al., 2019).

Therefore, the policy landscape in Kenya during the 1980s was marked by challenges related to inflation and macroeconomic instability inherited from the 1970s, which led to various policy changes aimed at promoting economic growth and development as pointed out by Kinyua (2001) as well as Killick & Mwege, (1990). Table 2 shows a summary of some key inflation-related policy reforms that have been implemented by Kenya during the 1980s.

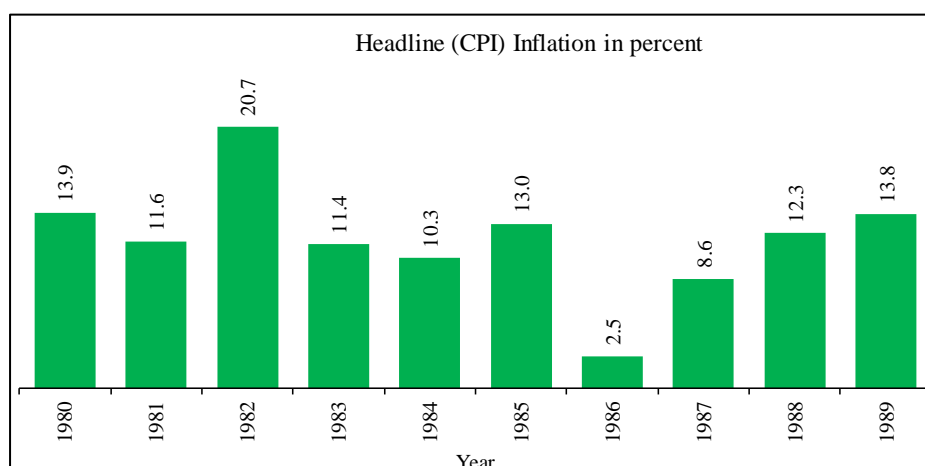
**Table 2. The summary of key inflation-related policy reforms in Kenya during the 1980s**

<b>Year</b>	<b>Type of Reform</b>
1980	First Structural Adjustment Program (1980-1984) under the auspice of the World Bank
1980	Session Paper No 4 of 1980 on Economic Prospects and Policies
1982	A crawling exchange rate was adopted, the shilling pegged to a basket of currencies
1982	Import licences introduced
1985	Budget Rationalisation Program (BRP) was introduced aimed at cutting government expenditure and introducing the forward budgeting exercise.
1986	The new Structural Adjustment Programs (SAPs) (1985-1991) are integrated into the macroeconomic management policies.
1988	Introduction of competition law and the Restrictive Trade Practices, Monopolies and Price Control Act
1989	The government enacted a comprehensive reform of the financial sector, addressing both institutional and policy reforms aimed at strengthening the regulatory powers of the central bank and liberalizing interest rates.

*Source: Author's review of literature*

### **3.2. Inflation Trends during the 1980s**

The policy reforms implemented between 1980 and 1989, in addition to other internal and external perturbations that may have influenced inflation, had a direct bearing on inflation trends in Kenya during this period, which fluctuated markedly, averaging at a rate of 11.8 percent which is higher than an average of 10.9 attained during the 1970s (World Bank, 2022). Figure 2 depicts the trends of the overall inflation rates in Kenya over the period 1980–1999.

**Figure 2. Trends in Headline Inflation in Kenya from 1980 to 1989**

Source: World Bank Development Indicators (2022)

As can be seen in Figure 2, the rate of inflation slowed from 13.9 percent in 1980 to 11.6 percent in 1981 (World Bank, 2022).

In 1982, inflation accelerated to 20.7 percent which was attributed to an increase in sales tax introduced during 1982, a sharp increase in food prices caused by high transportation costs and an increase in fuel prices following the oil price shock coupled with an attempted military coup in the country. Killick & Mwege (1990) posit that the high inflation experienced in 1982 resulted in a decline in investor confidence, leading to a reduction in investment and some capital flight. This, in turn, led to a worsening in terms of trade.

The government responded by introducing a deflationary monetary policy in 1983 which saw the inflation decline steadily to 10.3 percent in 1984 from 11.4 percent recorded in 1983 (World Bank, 2022).

Inflation declined significantly to 2.5 percent in 1986 in response to the Budget rationalisation that was introduced in 1985 aimed at cutting government expenditure (Kinyua, 2001). Low inflation in 1986 was also a result of the second coffee price boom of 1986 which led to an appreciation of the exchange rate (Kinyua, 2001).

The period between 1986 and 1989 saw inflation maintaining an upward trajectory, reaching 13.8 percent in 1989 (World Bank, 2022). The trend was attributable to the expansion of the domestic credit and the money supply as well as the widening fiscal deficit as alluded to by Kinyua (2001).

## **4. Inflation Dynamics in Kenya during the 1990s**

### **4.1. Policy Landscape during the 1990s**

In the 1990s, Kenya continued with the implementation of market-based policies to tackle inflation whereby the government deregulated the prices of goods, liberalized interest rates, and gradually relaxed foreign exchange controls.

Reforms during this period were mainly guided by Sessional Paper No. 1 of 1992 on development and employment in Kenya. The paper laid out a comprehensive economic and social development strategy for the 1990s, which included policies aimed at controlling inflation (Mwega & Ndung'u, 2004). The paper emphasized the need for market-oriented policies and private sector development, which were intended to create a competitive environment that would help to control inflation (Mwega & Ndung'u, 2004). Additionally, the paper called for reforms in the public sector, including improving efficiency, reducing corruption, and enhancing accountability, which was also aimed at reducing inflationary pressures (Mwega & Ndung'u, 2004).

However, the country failed to meet the basic requirements for successful economic reforms due to the increasing inflationary pressures and worsening economic conditions (Ngugi, 2001). Kenya was caught in a stagnation-instability trap in the early 1990s, which many other African countries had already experienced (Ngugi, 2001). The poor performance of the agricultural sector, which was a significant component of the Kenyan economy, led to a slowdown in the manufacturing sector's performance, macroeconomic imbalances, and urban unemployment that persisted since the 1980s (Mwega & Ndung'u, 2004). These challenges obstructed Kenya's efforts to control inflation through policy reforms as highlighted by Ngugi (2001) and Otieno, et al., 2019.

To address the challenges, Kenya implemented major economic and public sector (financial and expenditure) reforms throughout the 1990s. However, as pointed out earlier, the country failed to meet the basic prerequisites for successful economic reforms due to increasing inflationary pressures and deteriorating economic conditions (IMF, 2021; 2010; Bigsten et al., 2010).

The government introduced Export Processing Zones (EPZs) in 1990, followed by a change in the exchange rate regime to a dual exchange rate policy that tracked both the official exchange rate and the rate available in the market (IMF, 2021; 2010; Bigsten et al., 2010). Under the dual

exchange rate policy, the market rate was operated based on Foreign Exchange Bearer Certificates. During the same year, Kenya deregulated lending-related fees, and interest rates were deregulated afterwards in 1991.

In 1991, foreign donors cut off program aid to Kenya due to their dissatisfaction with the country's economic reform program and the government's anti-democratic stance, leading to a major economic and political crisis in the early 1990s (Ngugi & Kabubo, 1998). This crisis was a significant setback in Kenya's efforts to stabilize the economy and reduce inflation through policy reforms (IMF, 2021; 2010; Bigsten et al., 2010).

In the context of Kenya's inflation policy, it is worth noting that ethnic conflicts broke out in rural areas in 1991 and 1992, which were primarily focused on land issues in the Rift Valley (Ngugi & Kabubo, 1998). The conflicts escalated into serious violence, and similar incidents occurred both before and after the multi-party elections of 1997 (Ngugi & Kabubo, 1998). These conflicts in rural areas further complicated the challenges faced by the government in implementing successful inflation control measures, highlighting the need for a holistic approach to economic and social development that considers the underlying causes of conflict (IMF, 2021; 2010; Bigsten et al., 2010). The political transition from a single party to a multi-party system in 1992 also destabilized the economy by creating uncertainties (Ngugi & Kabubo, 1998).

Leading up to the general elections in late 1992, the regulatory environment relaxed considerably, leading to an influx of money and inflation rising considerably in 1993 (Mwega & Ndung'u, 2004). The government responded by issuing large quantities of Treasury bills, which eased inflationary pressures but resulted in high-interest rates that discouraged private investment and restrained consumer spending, limiting the expansion of the economy (Mwega & Ndung'u, 2004).

In 1993, Kenya's efforts to control inflation included the adoption of a floating exchange rate system that allowed its currency to move freely (Mwega & Ndung'u, 2004). Before implementing this measure, Kenya had significantly devalued its shilling. The move to a floating exchange rate system was intended to help stabilize the economy and reduce inflation (Bigsten, Kimuyu & Söderbom, 2010).

As a result of policy reversal guided by the Sessional Paper No. 1 of 1992, only petroleum products and some pharmaceutical products were administered under the general order whereas, in the specific order, only 3 items remained administered by September 1993. The

price and movement of maize, as well as petroleum/oil products, were entirely liberalized by 1995.

As part of Kenya's inflation control policy reforms, the Central Bank of Kenya (CBK) Act underwent significant amendments in 1996 to improve the effectiveness of the monetary policy in terms of independence on the use of instruments, operational autonomy as well as the clear provision of accountability and transparency (Ndung'u, 1997). These amendments also expanded the scope of the central bank's ability to mobilize funds, making it a primary source of monetary reserves (Mwega & Ndung'u, 2004). The CBK operates within a Monetary Policy Programming Framework (MPF) which includes setting an upper limit and floor for net foreign assets (NFA) reserves (Ndung'u, 1997). This framework served as a cornerstone of Kenya's monetary strategy for controlling inflation until the introduction of the Central Bank Rate (CBR). In 1993, Kenya also introduced repurchase agreements (repos) for implementing monetary policy (Central Bank of Kenya, 1994).

After 1996, according to Bigsten, Kimuyu & Söderbom (2010), Kenya underwent major economic and public sector reforms aimed at stabilizing the economy and reducing inflation. According to Bigsten, Kimuyu, & Söderbom (2010), the structural reforms were implemented as a result of the international creditor community's efforts to ease debt repayment responsibilities and the government's attempt to revive the economy. The reforms included an enhanced international balance of payment support, improved financial management and accountability in the public sector through the establishment of the medium-term expenditure framework, and productivity improvements in most economic sectors (Bigsten, Kimuyu & Söderbom, 2010). As a result, the country achieved a significant economic recovery and a decrease in inflation rates. This final phase of inflation control policy reforms in Kenya has laid a strong foundation for further economic growth and development in the country (IMF, 2021; 2010; Bigsten et al., 2010).

Thus, Kenya's inflation-related policy reforms in the 1990s were aimed at stabilizing the economy, reducing inflation, and promoting growth in a market-based policy landscape. Despite the challenges faced in policy implementation during this period, Kenya made significant progress in reducing inflation levels and stabilizing the economy towards the end of the decade, paving the way for further economic growth and development. Table 3 shows a chronology of some key inflation-related policy reforms that have been implemented by Kenya since the 1990s.

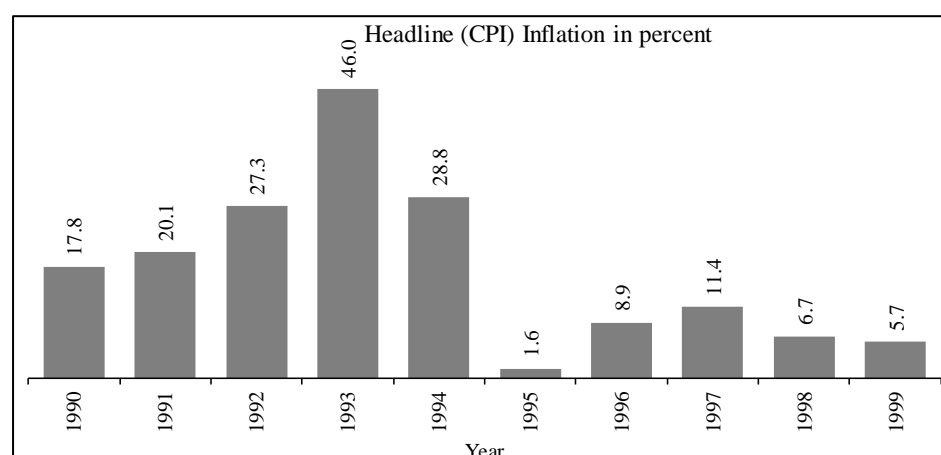
**Table 3. The summary of key inflation-related policy reforms in Kenya during the 1990s**

Year	Type of Reform
1990	Introduction of Export processing zones (EPZs).
	Removal of controls over the lending-related fees
	Introduction of dual exchange rate policy
	Introduction of VAT which replaced sales tax
1991	Interest rates deregulation
	Tax exemption abolished
	The first step in the liberalisation of the Foreign Exchange Market by the introduction of Foreign Exchange Bearer Certificates, known as Forex Cs
1992	Sessional Paper No. 1 of 1992 on development and employment in Kenya.
1993	Export taxes abolished
	Liberalisation of the exchange rate and decontrol of imports and foreign exchange transactions
1995	Foreign exchange bureau de Change permitted
	Exchange Control Act abolished
	Kenya Revenue Authority (KRA) was established
	Devaluation of the Kenyan Shilling
1996	Restrictions on capital flows were abolished
	Full liberalisation of interest rates
	CBK Act was amended in 1996 to allow the CBK greater operational autonomy in the conduct of monetary policy.
1998	Medium-Term Expenditure Framework (MTEF) introduced

Source: Author's review of literature

#### 4.2. Inflation Trends during the 1990s

Kenya's inflation performance deteriorated considerably during the period from 1990 to 1999 compared with the period from 1980 to 1989. Inflation increased to an average of 17.4 percent compared with an average of 11.8 percent attained in the previous decade (World Bank, 2022). Figures 3 depict the trends of the overall inflation rates in Kenya over the period 1990–1999.

**Figure 3. Trends in Headline Inflation in Kenya from 1990 to 1999**

Source: World Bank Development Indicators (2022)

As depicted in Figure 3, inflation in Kenya maintained an increased trend from 1990 towards 1993 reaching a record high of 46.0 percent during 1993 (Word Bank, 2022).



According to The Republic of Kenya (1994), the high rate of inflation in 1993 was a result of economic mismanagement and other factors such as the excessive money supply in 1992 and early 1993, depreciation of the Kenyan shilling, low aggregate demand, and low investor confidence due to turbulence surrounding the shift to plural politics. In addition, supply shocks, such as prolonged drought that negatively affected agricultural output, further contributed to the problem. The prolonged drought also forced the government to divert a large chunk of funds to famine relief imports to achieve food security (The Republic of Kenya, 1993).

The inflationary pressures experienced by Kenya in 1993 were also attributed to ethnic conflicts in rural areas that were centred on land issues in the Rift Valley (The Republic of Kenya, 1993). This challenge persisted both before and after the multi-party elections of 1997, underscoring the deep-seated problems that arose as a result of the country's economic struggles during this time (The Republic of Kenya, 1993).

There was a significant reduction in inflation from 46.0 percent in 1993 to 28.8 percent in 1994 and 1.6 percent, the lowest level achieved in 1995 (World Bank, 2022). Several factors were responsible for this development, including an appreciation of the Kenya shilling, favourable climatic conditions, a decrease in import duty, and a surge of foreign exchange arising from substantial private capital inflows (The Republic of Kenya, 1996).

In 1996, the inflation rate experienced a surge to 8.9 percent, which was followed by a further increase to 11.4 percent in 1997 (World Bank, 2022). This development was primarily caused by El-Nino rains in 1997 that adversely impacted food production and the erosion of business confidence (The Republic of Kenya, 1998). These factors were further exacerbated by the resurgence of political violence in the lead-up to the 1997 elections, which contributed to the overall instability in the economy (The Republic of Kenya, 1998).

## **5. Inflation Dynamics in Kenya during the 2000s**

### **5.1. Policy Landscape during the 2000s**

Between 2000 and 2009, Kenya executed a series of policy reforms that aimed to counteract macroeconomic challenges experienced over the preceding thirty years, including high inflation. The policy landscape during this period was affected by the ratification of the East African Community (EAC) in 2000 and the launching of the customs union in 2005 (Sseruyange, 2022). The EAC was designed to address inflation through monetary policy

coordination and harmonisation of fiscal policies among the member states, while at the same time promoting regional integration and cooperation (Sseruyange, 2022).

The Government that has been elected in December 2002 made economic recovery a top priority on its policy agenda to turn around decades of sluggish and stagnant economic growth that has caused harm to the quality of life for Kenyans (Tyce, 2020).

Following a largely unsuccessful structural adjustment reform process in the previous regimes, the Government launched in June 2003 its Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) for 2003-07 (Alia & Njeru, 2005; Ondieki 2005). The ERSWEC focused on tackling the key macroeconomic challenges facing Kenya (including inflation) and establishing a foundation for robust economic growth, job creation, and reduction of poverty (Alia & Njeru, 2005; Ondieki 2005).

The Medium-Term Plan (MTP) was implemented as a continuation of the ERSWEC and constitutes the first phase of the implementation of Kenya Vision 2030 (Ong'era, & Musili, 2019). The plan includes policies and strategies aimed at addressing inflation and macroeconomic vulnerabilities, as well as laying the groundwork for strong economic and employment growth and poverty reduction (Ong'era, & Musili, 2019).

The Financial Management Information Systems (FMIS) that was introduced in 2003 has several benefits in inflation control, including effective planning and budget allocation, reduction in wasteful expenditures, and enhanced financial reporting and accountability (Diamond & Khemani, 2005).

The removal of controls on lending rates in 2004 allowed market forces to determine the lending rates, leading to increased competition among banks and improved access to credit. This move also had implications for inflation control, as it allowed for interest rates to fluctuate in response to market conditions, potentially leading to higher or lower inflation rates depending on the prevailing economic conditions.

During this era, Kenya's policy environment also witnessed the implementation of the Central Bank Rate (CBR) in 2006, which was mandated by Section 36(4) of the CBK Act. The CBR was utilized to convey the position of monetary policy. The CBR is for example defined as the lowest rate at which the CBK charges on loans it extends to commercial banks as the lender of last resort. Before the introduction of the CBR, the bank rate was 3 percent above the Treasury bill rate which was in use since 2000.

As part of efforts to control inflation, the government launched a comprehensive Public Financial Management Reform Program in 2006 (Ong'era, & Musili, 2019; Tyce, 2020). By improving financial management and accountability, the government was able to reduce wasteful spending and ensure that budgetary allocations were directed towards priority areas, thereby contributing to inflation control (Tyce, 2020).

Table 4 shows a chronology of some key inflation-related policy reforms that have been implemented by Kenya since the 2000s.

**Table 4. The summary of key inflation-related policy reforms in Kenya during the 2000s**

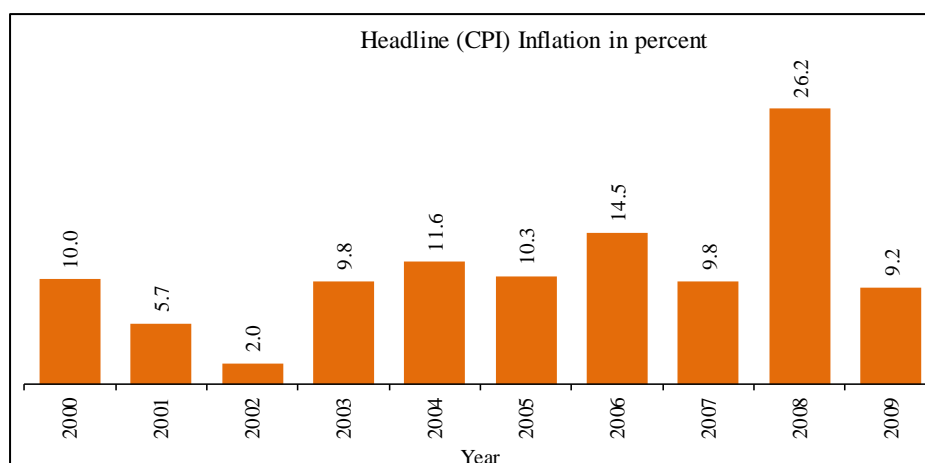
<b>Year</b>	<b>Type of Reform</b>
2000	The Treaty for the establishment of the East African Community enters into force
2001	Issuance of Poverty Reduction Strategy Paper (PRSP)
2001/02	Implementation of MTEF
2003	Poverty Reduction and Growth Facility (PRGF) approved by an IMF Executive Board
	Financial Management Information Systems (FMIS) was introduced
	Formulation of the Medium-term Debt Management Strategy (MTDS)
	Economic Recovery Plan
2004	Introduction of the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) which covers (2003-2007)
	Revenue Administration Reform and Modernisation Programme (RARMP)
2005	The launch of the EAC Custom Union
2006	The government launched a comprehensive Public Financial Management Reform Program (PFMR)
	Central Bank Rate (CBR), was introduced, under Section 36(4) of the CBK Act, to signal the stance of monetary policy.
2007	The formation of the Monetary Policy Committee (MPC).
	Vision 2030 launched as the successor to the ERSWEC
2008	First Medium-Term Plan (2008-2012)

*Source: Author's review of literature*

## **5.2. Inflation Trends during the 2000s**

Kenya's inflation performance improved considerably during the period from 2000 to 2009 compared with the period from 1990 to 1999. Inflation averaged 10.9 percent compared with an average of 17.4 percent attained in the previous decade (World Bank, 2022). Figure 4 depicts the trends of the overall inflation rates in Kenya over the period 2000–2009.

**Figure 4. Trends in Headline Inflation in Kenya from 2000 to 2009**



Source: World Bank Development Indicators (2022)

As illustrated in Figure 4, inflation rose to 10.0 percent in 2000 from the 5.7 percent recorded in 1999 (World Bank, 2022). The primary factors that contributed significantly to the high inflation rate in 2000 were the elevated fuel and power costs resulting from the substantial hike in international crude oil prices, the depreciation of the shilling, and the escalation in food prices due to scarcities generated by severe drought conditions (Central Bank of Kenya, 2000).

Afterwards, headline inflation decreased significantly and reached 5.7 percent in 2001 (World Bank, 2022). This was credited to the sustained implementation of a suitable monetary policy, an adequate food supply resulting from increased food crop production and favourable weather conditions, a substantial decrease in the international prices of crude oil, and the relative stability of the shilling exchange rate (Central Bank of Kenya, 2002).

In 2002, the inflation rate declined to its lowest of 2.0 percent during the 2000s (World Bank, 2022). This was credited to the continued implementation of monetary policy, stability of the shilling exchange rate, decline in food prices, decreased demand for imports, stable international oil prices, and investor confidence resulting from a new government that took office through a peaceful and democratic transition (Central Bank of Kenya, 2003).

According to data from the World Bank (2022), inflation surged to 9.8 percent in 2003. In response, the Government undertook a fiscal consolidation program to curb the budget deficit by minimizing government expenditure and augmenting revenue collection (Central Bank of Kenya, 2004).

The trajectory of inflation persisted in an upward trajectory, culminating in a peak of 14.5 percent in 2006 (World Bank, 2022). This was caused by a significant surge in food and fuel

prices attributable to the negative impact of drought and subsequent floods on food production and a sharp rise in world oil prices (Central Bank of Kenya, 2007).

After favourable weather conditions and the appreciation of the Kenyan shilling in 2007, the inflation rate experienced a reduction to 9.8 percent (World Bank, 2022). Nevertheless, this was a transient phenomenon as the post-election violence and high international oil prices amidst global economic turbulence that transpired in 2008 resulted in an inflation rate escalation to 26.2 percent in the same year. High inflation in 2008 resulted also from the depreciation of the Kenya shilling due to the post-election violence that rocked the country during that period (Central Bank of Kenya, 2008).

After the post-election crisis, the country underwent a gradual recovery that led to a reduction in inflation rates to 9.2 percent in 2009 (World Bank, 2022).

## **6. Inflation Dynamics in Kenya from the 2010s to 2021**

### **6.1. Policy Landscape from 2010 to 2021**

Kenya has experienced a series of overlapping domestic, regional and global economic events that shaped the policy landscape and trends of macroeconomic variables from 2010 to 2021. These include the enactment of the new constitution in 2010, the agreement on East African Monetary Union Protocol agreed upon in 2013, the Covid-19 pandemic of 2019, uncertainty attributed to British exit from EU membership, effects of escalation of the US-China trade tensions and the ongoing Russia-Ukraine conflict (Sseruyange, 2022).

The 2010 constitution of Kenya introduced various provisions to promote good governance and accountability, which are deemed essential for maintaining macroeconomic stability (Tyce, 2020). The Commission on Revenue Allocation (CRA) and the Office of the Controller of Budget was established to allocate revenue between national and county governments and ensure that public funds are utilized per the law, promoting transparency and fiscal responsibility (Tyce, 2020). Despite not directly contributing to inflation control, these institutions play a pivotal role in maintaining macroeconomic stability.

The Public Financial Management Act of 2012, which was signed into law on July 23rd of that year, aims to enhance transparency and accountability in the management of public finances at both the national and county government levels (Ong'era, & Musili, 2019). This legislation is an essential component of the government's efforts to maintain macroeconomic stability and control inflation, as it helps to ensure that public resources are allocated efficiently and

effectively (Ong'era, & Musili, 2019). By promoting good governance and fiscal responsibility, the PFM Act 2012 plays a critical role in reducing inflationary pressures and maintaining macroeconomic stability in Kenya (Tyce, 2020).

The establishment of the National Treasury as the sole custodian of public funds in 2013, aimed to enhance transparency and accountability in financial management in Kenya (Tyce, 2020). This provided a framework for effective management of public resources, which was essential for reducing inflationary pressures and maintaining macroeconomic stability (Tyce, 2020). By promoting good governance and fiscal responsibility, the National Treasury played a critical role in the government's efforts to control inflation and maintain macroeconomic stability (Tyce, 2020).

In 2015, the Kenyan government engaged in negotiations with the International Monetary Fund (IMF) to secure precautionary program support aimed at mitigating the potential impact of exogenous shocks. The SBA/SCF Performance Criteria for the monetary program are monitored via the observance of the Monetary Policy Consultation Clause (MPCC), which defines an inflation band of  $\pm 2.5$  percent from the medium-term inflation target of 5 percent and a profile for the accumulation of Net International Reserves (NIR) (Central Bank of Kenya, 2016).

In 2016, the Kenyan government's commitment to a market-based economy was weakened by the introduction of the interest rate capping law. The law aimed to decrease the cost of borrowing, increase access to credit, and enhance savings returns. However, it had the opposite effect (Ng'ang'a, 2017). The law led to reduced credit growth, hindered financial inclusion, weakened bank profitability and tax revenues, and increased the risks related to financial stability (Ng'ang'a, 2017). As a result, it weakened the effectiveness of monetary policy and eventually harmed the economy. Interest rate caps have also harmed the signaling effects of monetary policy (Ng'ang'a, 2017).

The year 2019/20 in Kenya commenced with optimistic domestic economic growth prospects, supported by macroeconomic stability, recovery in agriculture, the resilient performance of service-oriented sectors, and a resurgent manufacturing sector. However, during the second half of the year, the global economy was dealt a severe shock due to the coronavirus (COVID-19) pandemic. As countries implemented stringent measures to control the spread of the pandemic, businesses were forced to shut down, trade and supply chains were severely disrupted, and global travel came to a standstill.

The Kenyan government acted quickly to prevent the pandemic from becoming a health and economic crisis by establishing five committees to deal with the pandemic before the first COVID-19 case was reported in Kenya. To mitigate the adverse effects of the pandemic, fiscal policy measures were implemented to cushion households and businesses, and the Central Bank of Kenya (CBK) adopted an accommodative monetary policy to support economic activity (Central Bank of Kenya, 2022). Emergency banking sector measures were also introduced by the CBK to mitigate the adverse impact of the pandemic on the sector and businesses (Central Bank of Kenya, 2022). Additional measures were agreed upon with money transfer service operators and commercial banks to promote the use of digital transactions instead of cash. Internally, protocols were rolled out to protect staff, including alternative working arrangements (Central Bank of Kenya, 2022). Table 5 shows a chronology of some key inflation-related policy reforms that have been implemented by Kenya from 2010 to 2021.

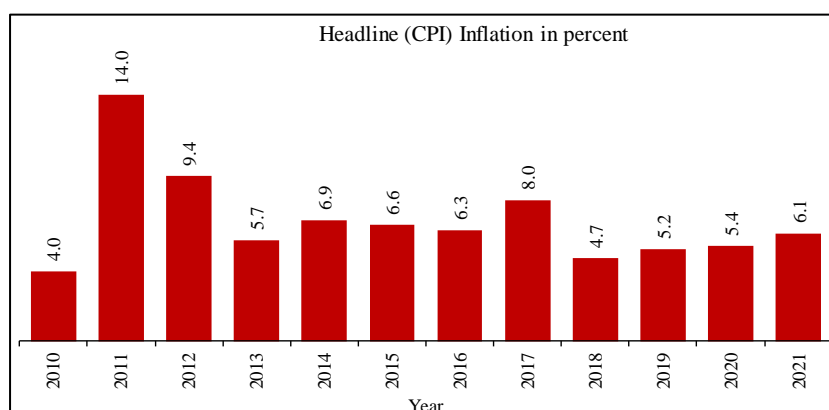
**Table 5. The summary of key inflation-related policy reforms in Kenya from 2010 to 2021.**

<b>Year</b>	<b>Type of Reform</b>
2010	The new Constitution of Kenya
2011	Kenya moved to adopt short-term interest rates as the main operational target while retaining the monetary targeting framework.
2012	The Public Financial Management Act 2012 was signed into law
2013	Protocol for the Establishment of the EAC Monetary Union signed
2014	To facilitate safe and efficient cross-border payments, the Central Bank of Kenya jointly with other East African Community (EAC) Partner States Central Banks launched the East African Payments System (EAPS)
2015	Stand-By Arrangement (SBA) and the Stand-By Credit Facility (SCF), became effective
2016	The implementation of the Interest Rate Capping Law
2017	The Development of the Big Four Agenda
2018	Second Medium-Term Plan (MTP II) was developed

*Source: Author's review of literature*

## **6.2. Inflation Trends from 2010 to 2021**

Inflation and inflationary pressures remained largely contained below the EAC convergence criteria of 8 percent since 2010, with rates consistently hovering around the single digits except in 2011. Between 2010 and 2021, Kenya experienced an average inflation rate of 6.9 percent compared with an average of 10.9 percent attained during the 2000-2010 period (World Bank, 2022). This stability can be attributed to a combination of domestic and external factors. Figure 5 depicts the trends of the overall inflation rates in Kenya over the period 2010–2021.

**Figure 5. Trends in Headline Inflation in Kenya from 2010 to 2021**

Source: World Bank Development Indicators (2022)

As illustrated in Figure 5, in 2011, inflation rates spiked to 14.0 percent from 4.0 percent recorded in 2010 mostly due to supply-side factors related to food and fuel (World Bank, 2022). The overall increase in food prices can be attributed to limited food production during the year up to June 2011, resulting from drought conditions and unfavourable distribution of rainfall. Similarly, domestic fuel prices increased in line with the rise in global oil prices (Central Bank of Kenya, 2012; Okumu, 2021).

After the inflation spike in 2011, the Central Bank of Kenya (CBK) adopted a tight monetary policy stance (Central Bank of Kenya, 2012). This involved raising the Central Bank Rate (CBR) and increasing the cash reserve ratio (CRR) for commercial banks (Central Bank of Kenya, 2012). Additionally, the CBK collaborated with the government to address supply-side factors that were exacerbating inflation, such as investing in infrastructure to improve transportation and distribution and increasing food production (Central Bank of Kenya, 2012).

The Central Bank of Kenya's (CBK) efforts proved effective as inflation rates declined to 9.4 percent in 2012 (World Bank, 2022). During the period between 2012 and 2016, inflation remained below the government's target of 7.5 percent.

In 2017, inflation rose to 8.0 percent due to political instability following the general election and a prolonged drought that adversely affected the agricultural sector, as reported by the Central Bank of Kenya (2018) and the World Bank (2022).

According to Okumu (2021), World Bank (2022) and Central Bank of Kenya (2022), inflation between 2018 and 2021 was mostly contained below the East African Community's (EAC)



convergence criteria of 8 percent, due to sluggish global demand caused by the Covid-19 pandemic, low energy and fuel prices, and a relatively stable exchange rate.

## **7. Conclusion**

The study was undertaken to provide a thorough analysis of the dynamics of inflation in the Kenyan economy over a 50-year period, contributing to ongoing discussions and providing valuable insights for policymakers, researchers, and the general public. Kenya was deemed an interesting case due to significant fluctuations in inflation rates over the years, along with a variety of policy reforms that were implemented to address inflation, providing an opportunity to study the effectiveness of these measures in managing inflation. To achieve this objective, a comprehensive analysis of the Kenyan inflation regime was conducted, which involved a critical examination of inflation-related policy reforms and trends.

The Kenyan economy has faced numerous challenges in terms of inflation over the past few decades. The country has implemented a series of reforms aimed at addressing macroeconomic challenges and promoting sustainable growth, including improvements in public financial management, the introduction of monetary policy tools, and the promotion of regional integration. These reforms have contributed significantly to the stabilisation of the economy and the reduction of inflationary pressures. However, despite some success in inflation management and macroeconomic stability, the country continues to face challenges related to food security, political instability, and external shocks, which have the potential to undermine its macroeconomic stability. As such, the government may consider implementing policies that promote fiscal discipline, strengthen institutions, and encourage private sector development to ensure sustainable economic growth and stability.

The historical analysis underscores the persistent nature of inflation challenges in Kenya, indicating that inflation management will remain a crucial concern in the future. To address future inflation challenges, policymakers should adopt proactive measures. This could involve maintaining a vigilant monetary policy that adjusts interest rates and credit availability in response to inflationary pressures. Additionally, fiscal discipline should be prioritized to prevent excessive spending and budget deficits, which can contribute to inflationary pressures. Strengthening resilience and diversifying the economy are also important steps to mitigate the impact of external factors on inflation. This may include investing in agricultural productivity, promoting energy diversification, and implementing measures to enhance political stability. By

reducing dependency on specific sectors and addressing vulnerabilities, the economy can better withstand external shocks and minimize inflationary pressures.

## References

- Barro, R.J. (1997). *Determinants of economic growth: A cross-country empirical study*. The MIT Press, Massachusetts Institute of Technology.
- Bigsten, A., Kimuyu, P. and Söderbom, M. (2010). *The manufacturing sector. Kenya: Policies for Prosperity*. Oxford. Oxford University Press.
- Central Bank of Kenya. (2000). *Annual report 1999/00*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. (2002). *Annual report 2001/02*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. (2003). *Annual report 2002/03*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. (2004). *Annual report 2003/04*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. (2007). *Annual report 2006/07*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. (2008). *Annual report 2007/08*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. (2012). *Annual report 2011/12*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. (2016). *Annual report 2015/16*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. (2018). *Annual report 2017/18*, Nairobi. Central Bank of Kenya.
- Central Bank of Kenya. 2022. *Annual report 2021/22*, Nairobi. Central Bank of Kenya.
- Diamond, J. and Khemani, P. (2005). *Introducing financial management information systems in developing countries*. Available at SSRN 888065.
- Durevall, D. & Ndung'u, NS. (1999). *A dynamic model of inflation for Kenya, 1974–1996*. IMF Working Paper 99/77. International Monetary Fund, Washington, D.C.
- Durevall, D. & Sjö, B. (2012). *The dynamics of inflation in Ethiopia and Kenya*. African Development Bank Group.
- Kabubo-Mariara, J. & Kiriti, TW., (2002). *Structural Adjustment. Poverty and Economic Growth: An Analysis for Kenya*.
- Kiganda, E. O. (2014). *Relationship between inflation and money supply in Kenya*. *Journal of Social Economics*, 2(2), 63-83.
- Kinyua, JK. (2001). *Monetary Policy in Kenya: Evolution and Current Framework*. Central Bank of Kenya Papers.
- Legovini, A. (2002). *Kenya: Macro Economic Evolution Since Independence*. Retrieved on 2011-4-12 at <http://ebookbrowse.com/kenya-macro-economic-evolution-since-independence-doc-d28496277>
- Machlup, F. (2020). *Another view of cost-push and demand-pull inflation*. In *Economic Semantics* (pp. 241-268). Routledge.

- Mwega, F. M., & Killick, T. (1990). Monetary Policy in Kenya, 1967-88. *Eastern Africa Economic Review*, 6(2), 117-142.
- Mwega, FM. & Ndung'u, NS. 2004. Explaining African economic growth performance: The case of Kenya.
- Ndung'u, N. (1998). Dynamic impact of external debt accumulation on private investment and growth in Africa. Economic Commission for Africa.
- Ndung'u, N. S. (1997). Price and exchange rate dynamics in Kenya: an empirical investigation (1970-1993). Research paper/African Economic Research Consortium; 58.
- Ng'ang'a, AK. (2017). The impact of interest rate capping on the financial performance of commercial banks in Kenya (Doctoral dissertation, University of Nairobi).
- Ngugi, R. W. (2001). An empirical analysis of interest rate spread in Kenya.
- Ngugi, R. W., & Kabubo, J. W. (1998). Financial sector reforms and interest rate liberalisation: The Kenya experience. AERC, Nairobi, KE.
- Okumu, I. M. (2021). Macro-Economic Effects of COVID-19 on the EAC Economies.
- Ong'era, A., & Musili, B. M. (2019). Public Sector Reforms in Kenya: Challenges and Opportunities. Kenya Institute for Public Policy Research and Analysis.
- Ontiti, KM. (2012). Legal regulation of the prices of petroleum products (Doctoral dissertation, University of Nairobi).
- Otieno, D. A., Ngugi, R. W., & Muriu, P. W. (2019). The impact of inflation rate on stock market returns: evidence from Kenya. *Journal of Economics and Finance*, 43, 73-90. <https://doi.org/10.1007/s12197-018-9430-5>
- Republic of Kenya (1975) Economic Survey. Nairobi. The Republic of Kenya.
- Republic of Kenya (1977) Economic Survey. Nairobi. The Republic of Kenya.
- Republic of Kenya (1993) Economic Survey. Nairobi. The Republic of Kenya.
- Republic of Kenya (1994) Economic Survey. Nairobi. The Republic of Kenya.
- Republic of Kenya (1996) Economic Survey. Nairobi. The Republic of Kenya.
- Republic of Kenya (1998) Economic Survey. Nairobi. The Republic of Kenya.
- Sseruyange, J. (2022). Facts and Prospects of Monetary Union in East Africa. In *Monetary and Financial Systems in Africa: Integration and Economic Performance* (pp. 169-184). Cham: Springer International Publishing.
- Swamy, G. (1994). Kenya: structural adjustment in the 1980s (Vol. 1238). World Bank Publications.

Tyce, M. (2020). The Kenyan National Treasury: A 'pocket of effectiveness' curtailed. Pockets of Effectiveness Working Paper No. 8. Manchester, UK: The University of Manchester. Available at [www.effective-states.org](http://www.effective-states.org)

World Bank. (2022). World Development Indicators (WDI). Washington: The World Bank Group.

Youse, A. & Debebe, S. (2021). Dynamics of inflation and its impact on economic growth in selected East African Countries: Ethiopia, Sudan and Kenya. *Journal of African Studies and Development*, 13(1), 1-8. <https://doi.org/10.5897/JASD2020.0596>