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**Political Economy of High and Volatile Inflation and
the Role of Economic and Political Institutions in
Sustaining Price Stability**

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Political Economy of High and Volatile Inflation and the Role of Economic and Political Institutions in Sustaining Price Stability

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Abstract

This paper reviews the political economy of high and volatile inflation in developing countries and highlights the role of economic and political institutions in sustaining price stability for steady economic growth. The paper highlights that high and volatile inflation, often policy-induced, generates economic uncertainty, which lowers investment and economic growth. This theme is consistent with the modern monetary literature stating that high and volatile inflation, symptomising sustained macroeconomic imbalances, originates when discretionary monetary policy is conducted to achieve multiple, sometimes conflicting, objectives in the midst of an unstable socio-political environment. This is evident in developing countries where many central banks have limited autonomy in the formulation of monetary policy for price stability. As these central banks often operate under fixed-or pegged exchange rates systems and maintain administrative controls over interest rates, bank credits and capital flows, monetary policy cannot be separated from exchange rate and credit policies. In addition, economic growth is often highlighted in the monetary-policy discussion with such vigour that it cannot be ignored even when price stability should take priority over any other objectives of monetary policy, such as economic growth and the stability of the balance of payments. It is significant to note that as a legacy of the Phillips-curve relationship, policymakers in many developing countries, including Bangladesh, maintain pro-inflation stance stemming from the belief that inflation promotes economic growth and lowers unemployment. Following modern monetary literature, both theoretical and empirical, this paper maintains that there is no significant long-term relationship between inflation and economic growth. Any connection between them is transitory and episodic depending on how inflation evolves in the country concerned and how citizens respond to inflation surprises, including those caused by unanticipated monetary expansion. Finally, the paper concludes that price stability should remain the primary, if not the sole, objective of monetary policy under a floating exchange rate system. To achieve this objective, the paper argues for strengthening the role of economic and political institutions in conducting rules-based monetary and fiscal policies. Rules-based monetary and fiscal policies are especially suitable for countries that are inflation-prone and remain socially and politically unstable. One remaining question that is currently being debated in the literature is whether the key components of a rules-based monetary policy should be institutionalised through a central bank charter or be enshrined in a monetary-fiscal constitution.

KEY WORDS: High and volatile inflation; discretionary monetary policy; economic uncertainty; political instability; economic and political institutions; central bank independence; rule-based monetary and fiscal policies; monetary policy credibility; price stability

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1. Introduction

Price stability² is essential for sustaining macroeconomic stability and steady economic growth (Fischer, 1993; Hossain, 2009, 2015a, 2015b). When inflation reaches the level of ‘very high’, or ‘hyperinflation’³, it becomes extremely costly to domestic society (Sachs and Larrain, 1993). One key lesson from the experience of Latin American and East Asian countries since the 1970s is that price stability, which keeps the real interest and exchange rates stable, promotes economic growth and sustains social and political stability.⁴ In contrast, any economic and political crises which originate from ‘macroeconomic populism’⁵ can stall socio-economic-political developments even for decades (Dornbusch, 1993; Dornbusch and Edwards, 1990; Hossain, 1996). Khan and Senhadji (2001) suggest that inflation becomes costly when it exceeds a critical level, say between two and three percent annually for developed countries, and seven and 11 percent for developing countries.⁶

² Price stability, in a practical sense, means a low and stable rate of inflation between three and five percent per annum over the medium term, as defined in the context of a rules-based monetary-policy horizon of three to five years if not longer (Hossain, 20015a,2015b, Poole and Wheelock, 2008)

³ Following Cagan’s (1956) classic study, in which he defined ‘hyperinflation’ as an inflation rate of 50 percent per month, compounding to almost 13,000 per annum per year. For economists, high- and hyperinflation provides a laboratory environment for understanding the economics of inflation and its economic and political implications. For a list of major references, see Bruno and Easterly (1996,1998), Judson and Orphanides (1999), Fischer, Sahay and Vegh (2002), Sachs and Larrain (1993), and Hossain (2009, 2015a, 2015b).

⁴ Section three of this paper reviews the literature on the relation between inflation and economic growth. Maintaining the proposition that inflation is *causally* related to money growth, the paper suggests that the relation between inflation (or money growth) and economic growth is at most transitory and episodic. This is consistent with the theory of monetary policy that monetary policy cannot be deployed directly to promote economic growth. Long-run economic growth is a supply side phenomenon where monetary policy plays at most a secondary role by sustaining price stability. Monetary policy does not have the comparative advantage in achieving economic growth and/or solving the balance-of-payments problems. Furthermore, the policy ineffectiveness hypothesis, as developed within the rational expectations paradigm, challenges the role of monetary policy in stabilisation (Barro, 1977, Lucas, 1972).

⁵ Dornbusch and Edwards (1990) have defined macroeconomic populism as a policy perspective on economic management which emphasises economic growth (for job creation) and income redistribution while deemphasising the risks posed by high and volatile inflation, deficit financing via monetisation of budget deficits, external constraints and the (defensive) reactions of economic agents to aggressive non-market-oriented government policies. Macroeconomic populism creates an environment that leads to high-and hyperinflation. It takes major efforts to control hyperinflation, as the standard stabilisation programs are not successful in any single attempt (Dornbusch and Fischer, 1986).

⁶ There is considerable debate on whether the seven to 11% inflation range is acceptable to many developing countries even if that range of inflation could be growth enhancing if not optimal from other considerations (Hossain, 2009). For a developing country like Bangladesh, the acceptable rate of inflation should be between three and four percent per annum. This is the rate of inflation that would not let consumers and businesses to make major changes in their asset portfolios. Such a rate of inflation would also keep the real deposit rate of interest positive, needed for steady deposit accumulation and a healthy liquidity balance for smooth operation of banks. It is also significant to note that price stability is essential for the operations of Islamic banks under *Shariah* principles (Khan and Mirakhor, 1993, 1994; Hossain, 2016).

One key question often discussed in the inflation literature is why inflation varies so much across developing countries (Sachs and Larrain, 1993; Fischer, Sahay and Vegh, 2002). Some major studies⁷ suggest that inflation variability across countries can be explained by differences in monetary and fiscal policies designed within unique political-economy frameworks. One political economy question addressed by these studies is why monetary and fiscal policies vary across countries at similar stages of development. These studies identify varied economic, social and political institutions behind the differences in budget deficits, money growth and inflation in countries at similar stages of development. In particular, Cukierman, Edwards and Tabellini (1992) show that political instability and polarisation determine the equilibrium efficiency of the tax system, as well as the resulting combination of tax revenues and seigniorage that governments use to finance budget deficits.

Paldam (1987) examined the relationship between inflation and political instability in eight Latin American countries over the period 1946-83. He suggested that the relationship between inflation and political instability works in both directions. Inflation fuels political instability because it is costly and that citizens hold the government responsible for high inflation. Political instability in turn fuels inflation because of the inability of weak governments to exercise budgetary discipline (Sachs and Larrain, 1993). The resulting budget deficits are then financed by money creation.⁸ Another explanation for the feedback loop between inflation and political instability is economic uncertainty caused by political instability. The diminished confidence of citizens in the government's ability to establish political stability lowers investment sharply. The resulting slow economic growth lowers the supply of goods and services. At the same time, there could be a surge in demand for current goods and services over their uncertain supplies in the future. High inflation then becomes persistent irrespective of the introduction of price stabilisation measures as they fail to diminish inflationary expectations.

Cukierman and Webb (1995) explain how political instability undermines the authority of a central bank in formulating and conducting monetary policy for price stability. They explain that political instability initially raises inflation and increases its volatility. Inflation volatility is then transmitted to the real interest rate, the real exchange rate and output growth.⁹ The private sector in general remains reluctant to invest, and policymakers find it difficult to develop long-term growth-oriented policies, especially for countries in the midst of political and economic crises. Although political authorities remain eager to introduce heterodox measures to achieve macroeconomic stability, only a few stabilisation programs succeed in the first instance (Hossain, 2009). Alesina and Drazen (1991) show that when a stabilisation program has significant distributional implications, such as the suggestion of an increase in taxes to reduce budget deficits, many socioeconomic groups attempt to shift the cost-burden of stabilisation to socially weak groups that often remain at margins of the society. Consequently, the process leading to the stabilisation of the economy becomes a 'war of attrition', with each group attempting to wait the others out. Stabilisation occurs only when one group concedes and bears the disproportionate share of the burden. In developing

⁷ They include Alesina and Tabellini (1989), Cukierman, Edwards and Tabellini (1992) and Woo (2003).

⁸ Aisen and Veiga (2006) have provided evidence supporting the proposition that political instability has impact on inflation in 100 countries across the globe from 1960 to 1999.

⁹ For empirical evidence on this proposition from 22 countries of the Asia-Pacific, see Hossain (2015a, 2015b).

countries, it is usually those in the lowest income brackets that suffer the most because of the inability of weak economic and political institutions to further equity and social justice. These low socio-economic groups remain silent for some time but become revengeful when they can no longer be able to endure.

Having outlined the political-economy framework in the modern literature about high and unstable inflation, this paper suggests that the main goal of macroeconomic management in a country like Bangladesh should be the establishment of price stability, meaning ‘low and stable inflation of say between three and four percent’ per annum over the medium term. Such a rate of inflation is likely to keep the real interest and exchange rates close to their equilibrium levels. Stable real interest and exchange rates promote long-term investment, with steady economic growth in turn lowering unemployment and reducing social and political tension (Easterly and Fischer, 2001).

The remainder of the paper is organised as follows. Section two surveys the extant literature about the political economy of high and volatile inflation. Section three reviews the literature about whether there is any stable causal relationship between inflation and economic growth. Section four discusses how economic and political institutions remain useful to the formulation and conduct of a rules-based monetary policy for price stability under a floating exchange rate system.¹⁰ This section also highlights the conduct of monetary policy under economic uncertainties, originating from shocks of different kinds. The concluding section summarises the themes of the paper and makes some concluding observations on the need for price stability in Bangladesh at a time when it is passing through a critical phase of its economic and political transformations.

2.0 Political Economy of High and Volatile Inflation: A Survey

The key question relating to the political economy of inflation and monetary policy is why inflation remains high and volatile in developing countries. The literature suggests three explanatory factors, all of which are the outcomes of political-economic power relations. First, there are economic-structural factors that require the running of budget deficits and then their monetisation which fuels inflation. Second, there are ‘unique’ national institutional arrangements, frequently dictated by political history that produces high and volatile inflation. Third, the formulation of fiscal and monetary policies and their implementation with minimum coordination determine the level and volatility of inflation. These factors are explored in the next section, followed by a review of the literature about whether there is any stable relation between inflation and economic growth. The associated Phillips-curve literature is often used as justification for the inclusion of stabilisation as the objective of monetary policy.

2.1 Economic Structure

The structuralist view of inflation¹¹ suggests that developing economies have a myriad of structural constraints and rigidities which generate high budget deficits. They are then monetised, which fuels inflation (Corbo, 1974). When agriculture dominates economic

¹⁰ Under a floating exchange rate system, the central banks can conduct an independent monetary policy for price stability. It does not matter much whether the strategy of monetary policy is monetary targeting or inflation targeting or a variant of each of them.

¹¹ The structuralist view of inflation, as an alternative to the monetarist view of inflation, evolved in the 1950s and 1960s in Latin American countries (Sunkel, 1960, Corbo, 1974).

structure at the early stage of development, frequent supply shocks make the economy unstable. The instability associated with a primary good-producing economy worsens when the country concerned operates under a fixed-pegged exchange-rate system (Aghevli, Khan and Montiel, 1991; Shambaugh, 2004). The fixed exchange-rate system in particular acts as the 'efficient mechanism' for transmitting external shocks into the domestic economy and makes it unstable. Whilst this explanation seems adequate to explain high and volatile inflation and the associated real-exchange rate misalignment, there are many examples of developing countries which maintain low and stable inflation and sustain economic growth despite the presence of 'structural rigidities' in their respective economies (Edwards and Tabellini, 1991). The idea of structural constraints and rigidities as the source of inflation and inflation volatility seems to have lost some relevance in the literature.

2.2 Institutional Frameworks for Conducting Economic Policies

The literature resolves the paradox of the simultaneous presence of high and low inflation in developing countries in the presence of similar structural rigidities by taking into account institutional arrangements for the formulation and conduct of fiscal and monetary policies. The extant literature on inflation suggests that political regimes and institutions play a major role in determining the level and volatility of inflation in many developing countries. In general, countries with strong economic and political institutions have a higher chance of success in keeping inflation low and stable. These countries are less likely to introduce any stabilisation programs as they do not create high and volatile inflation in the first place. In contrast, political instability remains high in many developing countries that possess weak economic and political institutions. These countries suffer from economic and political crises, originating from such expansionary fiscal and monetary policies which aim to achieve economic and social stability through introducing distributive policies and measures (Sachs and Larrain, 1993). As the literature on macroeconomic populism suggests, the outcome of distributive policies could be the opposite of what is intended to be achieved (Dornbusch and Edwards, 1990).

In developed countries, the pressure for policy reform originates when political opposition parties have a say on most issues, whether big or small. The political parties in power therefore further price and economic stability through central banks as per their charters. In contrast, as a legacy of historical colonial systems of power, developing countries possess varied political regimes and institutions for the formulation of economic policies. Although the authoritarian governments, for example, do not face strong political opposition, leaving the economy vulnerable to economic mismanagement, these governments use economic growth and its stability as the source of political legitimacy. Such was the case for Indonesia, where the Suharto regime sustained authoritarian political power over three decades and in the process, pushed the economy forward at a rapid pace until the 1997-98 financial crisis that toppled the government (Hossain, 2012). Many other democratic, quasi-democratic and authoritarian governments in the Asia-Pacific, did not historically perform that well insofar their efforts to sustain price stability and economic growth. Malaysia, Thailand, South Korea and Singapore are exceptions, with these countries managing to economically and socially progress within the midst of varied political orientations and institutional arrangements. The growth-oriented policies of these countries were used to justify their otherwise authoritarian politics and many state-led development policies and programs.

2.3 Policy Formulation and Implementation

The manner in which authorities formulate fiscal and monetary policies is a third complementary factor going beyond socio-political factors and explains why inflation remains high and volatile in developing countries. In general, economic policies in high-inflationary countries are designed within a short-term policy framework, such as a yearly budget. Both resource constraints and political factors play a role in the budget formulation and implementation. In many cases, budget formulation is a routine and tedious exercise that few citizens pay close attention to. Only rarely are any post-budget reviews carried out to improve future policy decisions with respect to the government spending, revenue collection and financing of deficits. Sometimes some international financial institutions, such as the International Monetary Fund and the World Bank, are involved. However, their efforts often go in vain for reasons beyond their controls. As fiscal policy dominates, monetary policy generally takes the back seat in the context of formulating economic policies.¹² Sometimes central banks also fail to coordinate monetary, exchange rate and credit policies with fiscal policy to achieve the objective of price stability.

3.0 Does Inflation Promote or Retard Economic Growth?

3.1 Inflation as Catalyst for Economic Growth

One of the underlying reasons for the trend of high inflation in many developing countries is the Keynesian notion that some inflation is good for promoting economic growth (Mundell, 1963; Tobin, 1965; Fry, 1998). Following Okun's law, economic growth lowers the unemployment rate if the actual rate of economic growth exceeds the growth rate of potential output on a sustained basis. The Keynesian view on inflation is reflected within the early structuralist literature on inflation in Latin America (Corbo, 1974). Monetarists later developed the diametrically opposite view that inflation does not promote economic growth and may, in fact, raise the unemployment rate. This school of thought notes that high unemployment is mainly the consequence of policy distortions in labour markets, wage regulations and other policy-induced uncertainties that lower investment and hence employment (Friedman, 1968). Monetarists then argued that price stability translates into reduced volatility in other decision-critical economic variables, thereby promoting investment and technological innovation. Evidence supporting this claim is found in the rapidly growing economies of East Asia where rapid economic growth enabled unemployment and inflation rates to remain low and steady.

Unlike the Keynesians and Latin-American structuralists, monetarists do not see any positive role for inflation in economic growth since any increase in economic activity generated by price surprises is considered transitory and uncertain (Friedman, 1973). The Keynesian inflationary stimulus, aimed at unemployment minimisation, therefore, has the effect of fuelling economic uncertainty. This economic uncertainty then has a dampening effect on private investment, the effects of which feed through into lower long-run rates of employment creation. Monetarists therefore argue that the Keynesian-influenced inflation-creation is ultimately ironical and self-defeating. Bruno and Easterly (1996) remark that like a bickering couple, inflation and growth do not seem able to settle on what type of relationship they should have. Nevertheless, Alesina and Stella (2011:1004) suggest that, despite these issues with inflation, policymakers are tempted to either create or tolerate inflation in their economy for the following reasons:

¹² Following the structuralist tradition, section four makes some additional discussion on budget deficits, money growth and inflation in developing countries.

Politicians may have an incentive to inflate the economy due to the belief that the unemployment rate is too high (or the GDP gap is too high or the GDP growth too low). This is because the economy is either distorted by taxes or by labour unions keeping real wages above the market clearing full employment level as they care more about employed union members than unemployed non-members.

3.2 Inflation Lowers Economic Growth

In contrast to the proposition that inflation facilitates economic growth, the consensus is that high and volatile inflation achieves the exact opposite. The well-known proposition is that a rise in inflation increases uncertainty about future inflation. Okun (1971) first articulated the idea in the early 1970s¹³, which gained prominence after Friedman's (1977) Nobel Memorial Lecture on inflation and unemployment in December 1976. As a critique of the then-highly influential concept that a Phillips-curve relationship exists between inflation and unemployment, Friedman postulated that high inflation raises inflation uncertainty, which then lowers investment and economic activity. The rationale behind this proposition is that inflation uncertainty reduces the efficiency with which the price system can allocate resources. Friedman (1977:467) stated that the more uncertain inflation is, 'the harder it becomes to extract the signal about relative prices from the absolute prices.' Relative price distortions compromise resource allocation, reducing the level of economic efficiency and consequently the rate of growth. Episodes of either very high inflation or hyperinflation (Cagan, 1956, classifications) have been instrumental in economic stagnation in many countries since the 1950s (Hossain, 2009). This explains why a positive relation exists between inflation and unemployment, especially in countries where inflation is sustained at the two-digit level during political and social instability.

3.3 Feedback Relation between Inflation and Inflation Volatility

Since the 1990s, a body of literature has emerged suggesting that volatility, even in an environment of low average inflation, can damage the economy. Given that inflation uncertainty dampens economic activity, Friedman (1994) argues the Phillips curve is likely to be positively rather than negatively sloped in a high-inflation country. Ball (1992) has formally expanded Friedman's theory in an asymmetric, repeated-information game model whereby the public faces uncertainty about the monetary authority's stance on monetary policy in a high inflation situation. He identified the following two types of policymakers who are classified by attitude towards the costs of inflation control: 'conservatives', whose sole objective is to keep inflation low; and 'liberals', who care about both inflation and unemployment. Assuming that these two sets of policymakers stochastically alternate power, Ball (1992) has shown that a rise in the inflation rate has the immediate effect of increasing uncertainty about future monetary policy and inflation. The argument is that, when the inflation rate accelerates, policymakers face a dilemma. They feel compelled to bring about disinflation as a matter of principle but fear that a recession may follow disinflationary measures. This situation creates general uncertainty about future monetary policy and inflation because economic agents are unable to know with certainty whether conservative or liberal policymakers are currently in power. Nor can agents predict which of the two types will, in the future, come into power. A further unknown is the attitude of these incumbent or potential policymakers towards the costs of inflation relative to those of unemployment. Ball (1992) determined that uncertainty over monetary policy and inflation has consequences for the overall economy as economic agents develop a higher level of sensitivity to money

¹³ Besides Okun (1971), other studies on the rate and variability of inflation include Logue and Willett (1976), Foster (1978) and Blejer (1979a,1979b).

holdings with respect to inflationary shocks (Hasbrouck, 1979). Ball, Mankiw and Romer (1988) have shown that high and uncertain inflation lowers nominal (wage) rigidities, therefore increasing inflation volatility with respect to demand fluctuations. This is represented by a steepened negative slope on the short-run Phillips curve. It is therefore not clear either how policymakers will react to the dilemma in terms of stabilisation, or if deflationary measures are implemented, how long it will take for these measures to impact inflation. Depending on whether monetary policymakers are conservative or not, their policy responses are likely to vary in how erratic, non-transparent and non-credible they are, thereby creating uncertainty about future inflation.

While the Friedman-Ball hypothesis is firmly established in monetary macroeconomics, there is still a debate concerning whether inflation uncertainty impacts the inflation rate. Cukierman and Meltzer (1986) have used the Barro-Gordon model of central-bank behaviour (Barro and Gordon, 1983a, 1983b) to illustrate the feedback impact of inflation uncertainty on inflation. They suggest that higher general uncertainty about future inflation or money-supply growth raises the inflation rate on average. The uncertainty increases the incentive for policymakers to produce ‘inflation surprises’ by means of ‘surprise’ monetary expansions (expansions that are unanticipated by the markets) in the hope of stimulating economic activity (Barro, 1996, 1977). Cukierman and Meltzer (1986) have further developed this proposition within a political economy framework. They argue that political instability in particular increases the general level of ambiguity about monetary policy. An unstable political environment in which anxiety over contractionary employment loss is heightened creates scope for the monetary authorities to generate serial inflation surprises that increase economic activity and employment through a series of short runs. According to the Cukierman-Meltzer theory, the consequence of these inflation surprises is that the higher inflation uncertainty, especially in an environment of political instability, will raise the rate of monetary expansion and thus the average rate of inflation.¹⁴ A significant, positive impact of inflation uncertainty on the inflation rate is interpreted as evidence of an ‘opportunistic central bank.’ Whether a central bank has an opportunistic temptation depends on the objectives of their monetary policy and the institutional arrangements for, and constraints upon, the central bank’s mandate to target price stability. These dynamics, which are consistent with the Phillips-curve, leave open the question of whether there exists a stable short-run Phillips curve relationship. However, it is generally accepted that there is no long-run trade-off between the rates of inflation and unemployment.

Holland (1995) has developed a view that is contrary to the Cukierman-Meltzer thesis, arguing that as inflation uncertainty increases with rising inflation, a stabilising central bank will attempt to circumvent inflation uncertainty to mitigate the resulting welfare losses. In such a situation, a central bank may lower money-supply growth, rather than raise it as per Cukierman-Meltzer. As a result, inflation uncertainty may lead to a reduced, rather than an increased, rate of inflation. A significant, negative impact of uncertainty on inflation is interpreted as evidence of a ‘stabilising central bank’.¹⁵ Several variables determine whether a central bank will attempt to reduce the rate of inflation in an environment where inflation is uncertain. These include the degree of political pressure on the central bank, level of its accountability to the public, and the degree of government sensitivity to public pressure.

¹⁴ For a similar point, see Taylor (1981, 1982).

¹⁵ For evidence on this effect in developed countries, see Apergis (2005), Grier and Perry (1996, 1998) and Grier, Henry, Olekalns and Shields (2004).

4. Economic and Political Institutions for Price Stability

This section reviews the extant literature on the relationship between budget deficits, money growth and inflation, followed by discussion on the need for economic and political institutions for price stability and economic growth (Acemoglu and Johnson, 2005). To sustain price stability, the required institutional reforms include (1) the stable financing arrangements of budget deficits, (2) coordination of fiscal and monetary policies, (3) institutionalisation of the monetary-policy strategy, (4) provision of policy autonomy of central banks and (5) communication of central bank's policy decisions to the public in transparent and credible ways.¹⁶

4.1 Budget Deficits, Money Growth and Inflation

High inflation, technically defined as inflation above 100 percent per annum, and hyperinflation, defined as above 50 percent per month, are essentially monetary phenomena (Sachs and Larrain, 1993). Moderately high inflation could be synonymous with a double-digit inflation rate within the range of between 10 and 20 percent per annum that sustains over few years. Within each of these inflation types, a causal linkage exists between money growth and inflation. This relationship remains stable irrespective of whether the inflation process starts from the demand side, supply side or both, whether the money-demand function is stable or not or whether the exchange rate is fixed or flexible (McCallum and Nelson, 2011). This indicates that the starting point for the formulation of monetary policy is the causal linkage between money supply growth and inflation, which can be traced and validated for many countries over time.

Historically, all high and hyperinflation cases since the 1920s were preceded by a rapid expansion in the money supply. Rapid monetary expansion has been technologically feasible only under the fiat monetary systems. Under the metallic-money or gold-standard systems, there were physical limits on the supplies of precious metals and therefore they imposed limits on the rate at which the money supply could expand. The introduction of fiat money has removed this constraint. Therefore, the use of fiat money is a necessary condition for the manifestation of high inflation or hyperinflation. While excessive monetary expansion remains the immediate cause of inflation, the factors that cause rapid monetary expansion offer insight into the root causes of inflation (Taylor, 1983; Terra, 1998; Dornbusch and Fischer, 1981). An environment of rapid monetary expansion is created when the taxation system breaks down and the opportunities for foreign borrowings dry up. As Barro (2008) reports, in some countries the government revenues from money creation during hyperinflation episodes in the last century approached ten percent of GDP. The factors that lead to large budget deficits over time are therefore considered the root causes of high and hyperinflation.

There are three overlapping explanations for large-scale deficit financing¹⁷ in many developing countries. The first explanation, found in the literature about hyperinflation, maintains that deficit financing through monetisation could be a deliberate act to fuel

¹⁶ One issue is being debated in the literature whether all the reform measures needed for central bank's autonomy in the conduct of independent monetary policy under a floating exchange rate system should have constitutional guarantee under a central bank's charter or order.

¹⁷ Deficit financing represents the option of monetisation of budget deficits by borrowing from the central bank (Hossain, 2009).

inflation as a device to create forced private savings (Hossain and Chowdhury, 2006). The second view, prominent among the Latin American structuralists, is that ‘authorities have imperfect control of the fiscal apparatus and that under these conditions; money creation is the only source of finance’ (Dornbusch and Fischer, 1981:330). Tanzi (1982), Aghevli and Khan (1978) and Agenor and Mantel (2006) have identified five structural causes of budget deficits in many developing countries. These include (1) the inelastic-price tax system, (2) public sector enterprise performance, (3) increased expenditure for political exigencies or administrative weaknesses, (4) temporary export boom, and (5) deterioration of the external terms of trade. The third is the emerging political economy explanation, which comprises macroeconomic populism (Dornbusch and Edwards, 1990) and macroeconomic opportunism (Hossain and Chowdhury, 1994, 1998). In macroeconomic populism, a conventionally populist government gives priority to distributive objectives and undertakes ambitious programs accordingly. Macroeconomic opportunism arises when a non-democratic regime legitimises its rule by purchasing allegiance from the political elites of both the left and the right.¹⁸ These scenarios reflect the weaknesses of the state where the government gives in to the demands of narrow interest groups or courts interest groups for its survival. In both cases, the government underestimates the risk of deficit financing, rate and volatility of inflation, degree of external constraints and strength with which economic agents react to aggressive non-market policies of the government (Dornbusch and Edwards, 1990). Along with these explanations, Healy and Page (1993:284) hold that the degree of political instability in many developing countries has a systematic influence on the rate of production and the degree of monetisation of budget deficits, stating that, ‘[t]he more uncertain are rulers’ expectations of the duration of their power, the higher the degree of fiscal and monetary irresponsibility.’ Cukierman, Edwards and Tabellini (1992) have the view that the ruling government has vested interests in the persistence of an inefficient tax system and often refrains from reforming the tax system for fear that a more efficient tax system would help the incoming government formed by the opposition. With political uncertainty about the identity of future government, it could be optimal for the current government to issue debt because while it does not have to bear the future costs of debt servicing, it can transfer to its constituency resources raised through borrowings. Tabellini and Alesina (1990) share a similar view, arguing that political instability determines the rate of time preference of the society as a whole and hence affects collective intertemporal decisions on borrowings. In a major study with data for 21 developing countries, Edwards and Tabellini (1991) found strong support for the various hypotheses linking political instability and budget deficits.

The studies reviewed above collectively reinforce that the macroeconomics of budget deficits is intertwined with the state of politics and the characteristics of the state.¹⁹ In countries where politicians remain unaccountable to the public for the consequences of their

¹⁸ This includes some ‘democratically elected’ governments that over time destroy democratic institutions and become authoritarian.

¹⁹ Accordingly, they subscribe to the view that large budget deficits, which originate due to structural rigidities in the economy, if financed by money creation may not generate inflation. The rationale is that money-financed budget deficits increase real output, which increases money demand and keeps the money market in balance. Budget deficits therefore may not generate inflation and/or cause macroeconomic instability. In contrast, modern inflation literature suggests a causal linkage between budget deficits, money growth and inflation, especially in high-inflation countries.

policy decisions, they can, with impunity, exercise policy profligacy unhindered by any concern for the public interests as defined by the society's economic development aspirations. Therefore, the literature states that developing countries need to build political and economic institutions to counter these dynamics. The quality of macroeconomic policies is likely to improve when these policies are developed by accommodating the wishes and concerns of the public as a whole (Haliassos and Tobin, 1990).

The remainder of this section elaborates on the need for, and development of, economic and political institutions for countries which are socially and politically polarised. Acemoglu and others (2002) argue that strong institutions are indeed important to avoid economic volatility and crises. An established structure of developed public and private institutions is needed to conduct rules-based monetary and fiscal policies that target price and economic stability. An emphasis is placed upon political factors that lead policymakers to compromise on the goal of price stability in order to reap political gains for incumbents. In the absence of strong economic and political institutions, citizens generally have little confidence in the ability of the government to maintain economic and political stability. This remains the main reason behind the present high and unstable inflation in a weak state. Operationally independent central banks tasked with conducting monetary policy in accordance with well-defined policy rules are an example of an institution which has been established in several developed countries since the late 1980s. The key aspects of this institution include (1) the political and legal relationships between central banks and governments and (2) the technical relations between central bank independence and macroeconomic performance (Hossain, 2009; Hossain and Chowdhury, 1996, 1998). The discussion that follows concentrates on (1) the relationship of central banks with governments, (2) the strategy of monetary policy, and (3) the independence of central banks, policy credibility and macroeconomic performance.

4.2 Relationship between Central Banks and Governments

For historical and technical reasons, the relationship between central banks and governments is replete with political and economic complexities. Governments create central banks and therefore, politicians have a stake in the way that central bank's function. Politicians also have an incentive to place pressure on central banks to serve their respective interests (Walsh, 1995). During the 1980s, economists and policymakers, guided by the success of the Bundesbank in managing inflation in West Germany, began to realise the necessity of minimising political influence over monetary policy for the purposes of keeping the rate of inflation at a low level. Minimising political influence aims to keep the objective of long-term price stability as enshrined in the charters of many central banks. Prior to economists and policymakers making this realisation, a country's central bank was considered to just be yet another government agency and to possess a much lower status than to the government treasury and the ministry of finance respectively. Following this realisation, central banks were empowered with the responsibility of managing monetary policy by primarily targeting inflation with the aim of maintaining long-term price stability. This trend was the beginning of what is known as the 'inflation targeting' strategy of monetary policy. It was a revolutionary transformation requiring major legislative changes to revise the institutional framework of monetary policy. In this new framework, respective governments retained the discretion to set the inflation target and the central banks were then given the operational authority to devise and implement the means to achieve the target rate of inflation. However, it was not a total transformation. While the role of central banks was promoted during this period of reform, in one way or another, they were saddled with at least one additional objective besides inflation targeting. Central banks were also tasked with reducing unemployment or enhancing economic growth, which are objectives that do not go

well with monetary policy. Even today in advanced economies, this issue facing central banks has not yet been resolved.

In the literature on monetary policy, the relationship between the central bank and government originates in the linkage that exists between fiscal and monetary policies (Hossain, 2009). In countries where inflation targeting has been adopted, governments have accorded autonomy on the operation of central banks. In contrast, in many countries where inflation targeting has not been introduced, central banks have been given a greater level of formal independence as well as directions to target inflation as their primary goal. However, these banks are still effectively controlled by politically motivated fiscal policymakers and are required to pursue other goals, at least as vigorously as inflation targeting, such as exchange rate stability and output growth targets. Due to the time-inconsistency problem, these banks have limited credibility in maintaining long-term price stability.

4.3 Relative Dominance of Fiscal over Monetary Policy

Central banks are presently expected to operationalise monetary policy for price stability independently of the government's fiscal policy stance (Bank of England, 1992; Fischer, 1996). However, a central bank's ability to conduct independent monetary policy depends on the institutional arrangements legislated by the government. From an analytical standpoint, the issue is whether fiscal or monetary policy dominates economic management. Historically, fiscal policy has dominated monetary policy, and this tradition continues to persist due to the Keynesian legacy. In the Keynesian framework, the dominant instrument of macroeconomic management is fiscal, or government budgetary policy. The roles of monetary and credit policy measures are supportive, with their main brief being to keep the nominal interest rate low through direct controls, monetary expansion, or some combination of both.

Fiscal and monetary policies are respectively linked through the financing of fiscal deficits through money creation. In effect, the central bank is considered an extension of the treasury. The equivalent in the United Kingdom is the Exchequer, or the ministry of finance, with politicians having decisive influence over the design and conduct of monetary policy, and even over the very details of the central bank's functioning as a civil service institution in service of the government (Hossain, 2009; Hossain and Chowdhury, 1998).

The following two aspects of a monetary-policy regime determine the institutional position of a central bank:

1. The 'political' aspect, which is determined by legislative and administrative rules concerning the appointment and the composition of the governing board and relationship of that board with the legislature and the government.
2. The 'economic' aspect, which is determined by whether the central bank is required to finance budget deficits, the way in which monetary policy instruments are used and the fiscal consequences of regulatory controls over the financial system.

Together, these two aspects determine the extent of fiscal dominance over monetary policy. Fiscal dominance is likely to be low when a central bank remains insulated from political pressure from government agencies, especially from the treasury or finance department. This situation may occur if at least one of the following three conditions are met. First, if the self-representatives of the central bank, subject to approval of the legislature, appoint the governor and the board of directors respectively. Second, if the governor remains accountable to the legislature, rather than to the government, for monetary policy decisions

and performance. Third, the governor and the board of directors are reappointed, subject to the approval of the legislature. Conversely, political pressure from government departments is likely to be high if either or both of the following two conditions are met. First, if government is over-represented in the central bank's decision-making bodies, and second, if the central bank, in the event of conflict, is required to obey the legal directives of a government department (in practice, usually the treasury or finance).

In concluding, the main question about the central bank's relationship with the government is whether its supervising ministry has limited, or unconstrained access to the central bank as a source of financing budget deficits. When a government ministry has full discretion in determining the extent of monetary financing of budget deficits, the central bank loses control over the monetary base. Government-driven excessive money creation then generates inflation, which in turn raises the interest rate. This process puts political pressure on the central bank to keep the interest rate low by any means since the interest rate is determined by the central bank rather than by budget deficits or their mode of financing. In some countries the instrument of regulatory control remains available to the central bank for this purpose. Therefore, it is clearly the case that a high degree of fiscal dominance must inevitably be present in monetary regimes whose finance ministries have easy access to the financing of budget deficits. The key question thus remains how to restrict the government from excessive financing through money creation.

4.4 Central Bank's Autonomy and Monetary Policy Independence

Modern theories of monetary policy emphasise the importance of the central bank's autonomy in conducting monetary policy for price stability (Alesina and Summers, 1993). Although complete independence from the government for central banks is neither desirable nor practicable, the central banking theory points to several principles that can guide modern central banks and/or control central bankers and make them accountable (Dorn, 2018). Ricardo (1824:283) provided a model for central banking that is remarkably similar to the way modern central banks are expected to operate by suggesting three key building blocks for what can be called the *Principle of Autonomy*. These include (1) institutional separation of those empowered to create money and those empowered to spend it, (2) prohibition of monetary financing of budget deficits; and (3) political accountability for central banks. These criteria can be used to judge the extent of a central bank's autonomy in conducting monetary policy. While governments in developed countries have, for the most part, bestowed operational monetary policy autonomy on their respective central banks since the late 1980s, central banks in developing countries have not yet gained genuine autonomy. This lack of autonomy regardless of rather widespread institutional change that has generally conferred independence upon central banks in form only, and not in substance.

The key obstacle to central bank autonomy in developing countries is the conflation of fiscal and monetary policy. This conflation is due to the simple fact that a central bank can finance budget deficits by creating new money at the behest of the government. Therefore, the key difficulty in achieving policy reform in these countries relates to the separation of fiscal policy from monetary policy. Moreover, for both political and economic reasons, central banks in developing countries carry out quasi-fiscal operations that dilute their commitment to monetary and financial stability. Central banks' monetary operations are thus inextricably connected with governments' fiscal operations and with the management of public debt.

The quasi-fiscal activities that have monetary implications fall under the five categories of (1) collecting seigniorage, (2) imposing financial restrictions, (3) implementing selective credit policies, (4) undertaking foreign exchange operations at non-market-clearing prices and (5) providing implicit or explicit deposit insurance at subsidised rates and recapitalising insolvent financial institutions. Although not all central banks engage in such activities, the degree of fiscal dominance of a monetary regime is determined by the central bank's relationship with the financial system and the extent to which it utilises direct instruments of monetary policy. Under the repressive financial systems common in developing countries until the 1980s, financial regulations were often imposed to facilitate the financing of budget deficits. In general, regulatory restrictions such as tight control of credit allocations to sectors and firms around the economy, portfolio constraints and interest-rate ceilings increased the private sector's demand for government securities. These inefficient monetary management methods lowered the cost of government borrowings. Under such financial restrictions, insulating monetary policy from fiscal operations was one challenge faced by central. The solvency of a central bank indeed depended on the explicit and implicit costs of its regulatory activities over interest rates, exchange rates, bank credits and capital flows.

Under the emerging deregulatory financial environment, the amount of control required by the central bank to effectively exercise monetary policy for price stability essentially depends on the underlying relations that determine the appropriate strategy for monetary policy for price stability.

4.5 Choice of Monetary Policy Strategy

Current monetary policy practices are classified under the categories of discretion and rules. The main arguments that compare and contrast discretion and rules are well-known and are as follow.

4.5.1 Discretion-Based Policy

Policymakers who support discretion-based policy over rules-based policy do so on the grounds that monetary policy is essentially an 'art' but require sound judgment as it is science-based. Monetary policy therefore needs to be conducted based on the policy makers' communal interpretation of economic variables that act as indicators of inflationary growth or exchange-rate trends, depending on the objective function set for the central bank by the government.

4.5.2 Rules-Based Policy

Policymakers favouring rules do still support the adoption of targets, such as monetary targets, pre-announced exchange-rate pegs or explicit inflation targets, their argument is that attaining low inflation, and then preserving it and promoting its stability, requires policy credibility and accountability (Svensson, 1999, 2011; Sorensen and Whitta-Jacobsen, 2005). The credibility of central bank policy can be improved through consistency, commitment and transparency in policymaking decisions. The accountability of monetary authorities can be ensured through the adoption of explicit targets and procedures instead of leaving this to the discretion of a limited number of personalities (Fischer, 1990; Kydland, 1992; Kydland and Prescott, 1977).

Therefore, the major decision that a country needs to make is whether the central bank should adopt a discretionary or rules-based monetary policy for the purposes of achieving and sustaining price stability in terms of low average annual inflation. Although there are several

rule-based strategies for monetary policy, there is no definitive rule for choosing an optimal strategy for monetary policy. The factors that are important in the decision-making process include the country's inflationary experience, institutional arrangements and administrative capacity.

One emerging political consensus is that there should be a single objective for monetary policy, with other desirable economic targets assigned to other instruments of national policy. This emerging consensus has certainly made it easier for advanced economies such as Australia and New Zealand to make informed choices about monetary-policy strategy. Given their developed money and capital markets, such countries have opted for rules-based monetary policy. In contrast, the United States and Japan have opted for discretionary monetary policy which has arguably led to serious and prolonged financial crises in these countries.

Choosing a strategy for the implementation of monetary policy is even more difficult for developing countries as they frequently lack the institutions taken for granted in developed countries. The developing country's choice depends on a list of factors including economic structure, financial system, institutional arrangements and whether the country experiences real or monetary economic shock more frequently than another. Many developing countries still operate under a fixed-peg or a managed-float exchange rate system and consequently, have sacrificed monetary policy independence during times of economic uncertainties from various shocks. Monetary policy rules are one approach to improve policymaking under economic uncertainties.²⁰

The following section revisits the question of central bank independence and monetary policy credibility as well as its effectiveness. It is significant to note that recent financial shocks and the global COVID pandemic have cumulatively increased the pace of fiscal activities creating both monetary and financial imbalances to the extent that they have major monetary implications.²¹

4.6 Central Bank Independence and Policy Credibility

4.6.1 Arguments for Central Bank Independence

The main argument in favour of creating independent central banks is that the associated institutional reform required to achieve independence raises the bank's credibility and, in turn, the effectiveness of monetary policy. However, determining the credibility of central

²⁰ Dorn (2018:87) expresses this view as follows:

A monetary rule is a constraint on the monetary authority in line with the rule of law. In addition to reducing regime uncertainty and in ensuring predictability of money and prices, a credible rule reduces the concentration of power over monetary matters and expands economic freedom.

²¹ Dorn (2018: 89) has highlighted these problems:

Discrepancies between the quantity of money demanded and supplied at some prevailing price level set into motion an adjustment process during which real variables are influenced as the economy works its way toward a new equilibrium price level. Sticky prices and wages, as well as other institutional rigidities and the fact that money has no market of its own, mean not only that monetary disturbances are possible but also that they have pervasive effects on real economic activity during the transition process.

banks is more much more complex. Credibility is intricately linked not only to both the perceived and actual objectives of monetary policy and to the mechanisms through which monetary policy achieves those objectives, but also to the perceived or actual functions of policymakers. The issue becomes more complex when policymakers have incentives to conceal their true stance on the role of monetary policy and are perceived to be motivated by personal, political and other objectively irrelevant factors.

Credibility can be enhanced by furnishing a central bank with institutional independence, together with equal measures of the responsibility and authority necessary for achieving a well-defined policy objective. This institutional arrangement can increase the effectiveness of monetary policy in at least four ways.

First, an autonomous central bank can have a sole target in its monetary policy, such as price stability, through consultation with government. Such a focus can avoid the technical conflicts encountered when monetary policy is tasked with multiple targets. When monetary policy has a sole objective, its effectiveness increases and it becomes more credible. On the other hand, when monetary policy is required to address non-inflation targets that are more efficiently handled by other policy instruments, such as the reduction of unemployment, dynamic inconsistency is created. Such inconsistency reduces the efficacy of the policy and potentially defeats all set goals. For example, when monetary policy has inflation and employment objectives, anti-inflationary monetary policy may lack credibility because at some stage in the future, the monetary authorities will face the temptation to create one or more inflation surprises to raise employment. When the private sector is aware of the presence of dynamic inconsistency in the formulation of monetary policy, then an inflation risk premium is incorporated into interest rates and into price and wage decisions thus damaging the effectiveness of monetary policy.

Second, an independent central bank with an inflation target can anchor and hence lower inflationary expectations. This can lower inflation quickly with little or no reduction in output.

Third, an independent central bank can provide disciplinary checks on economic policies, particularly fiscal policy.

4.6.2 Arguments against Central Bank Independence

Critics argue that central-bank independence does not necessarily increase the effectiveness of monetary policy unless the policy is conducted in a binding manner (Friedman, 1962). The major difficulty in the implementation of an independent central bank is that it may cause coordination problems between monetary policy and other economic policies, particularly fiscal policy. If the aim of independence is to improve the credibility of monetary policy, such an aim can only be achieved if the government's economic policy as a whole becomes credible. For example, if the government runs large budget deficits and the central bank pursues tight monetary policy, macroeconomic policy loses its overall credibility. This is because the private sector assumes that monetary policy run by the central bank must ultimately give way to government-run fiscal policy.

Sargent and Wallace (1981) have determined that government budget constraints have the following implication: sustained debt-financing of budget deficits can be more inflationary in the long run even than deficit monetisation. In other words, when a government runs persistent budget deficits, a tight monetary policy can create high inflation

in the future and exacerbates the loss of macroeconomic credibility described above. Moreover, Sargent and Wallace show that a tight monetary policy can even cause high inflation in the present under certain conditions. For policymakers, the key lesson is that gaining credibility for monetary policy requires the coordination of monetary and fiscal policies. Such coordination could be difficult unless the government remains involved and cooperate with the central bank for the design of monetary policy for price stability. In practice, no central bank can be fully independent by making monetary policy in isolation from, and with disregard for other macroeconomic policies. Therefore, the dispersal of responsibility has the potential to reduce the efficiency of monetary policy.

Beyond the coordination problem, the question arises as to whether it is ‘democratic’ to allow the unelected central bankers to determine the major component of economic policy.²² In the event of the misuse of monetary policy, politicians can be removed from office through the ballot box. In contrast, there is no effective approach for the removal of central bankers in the event of misuse of monetary policy. For example, the performance of monetary policy in New Zealand is, in theory, what determines whether the governor of the Reserve Bank would be permitted to continue in that role. However, in practice, there are serious obstacles that prevent the removal of the governor or other highly ranked officials within the central bank.

Since the late 1990s, central banks in developed countries have introduced measures to reduce dynamic inconsistency in monetary policy. The exchange rate regime has been made flexible, while the emphasis has shifted from output growth to price stability by strengthening institutional arrangements for the conduct of a rule-based monetary policy.²³ Enacting central bank independence has been the most prominent measure adopted to mitigate dynamic inconsistency, and central bank governors have been given relatively long tenure in the hope of circumventing political pressure. Furthermore, conservatives who dislike inflation have been regularly appointed as central bank governors. In a deregulated economic environment, these measures have been adequate in keeping inflation low. Citizens’ general dislike of inflation has helped central banks to directly pursue conservative monetary policy and indirectly place pressure on the government to run a more disciplined fiscal policy. Some authors, such as Cukierman, Webb and Neyapti (1992) and Cukierman, Kalaitzidakis, Summers and Webb (1993) have found a significant negative relation between central bank independence and inflation in industrialised countries but not for developing countries.

²² This argument misses the point that elected politicians in democratic governments routinely delegate implementation of their election policies to civil-service technocrats. Furthermore, both the literature and the historical record show that, under certain conditions, technocrats can frequently implement policy more efficiently than politicians. Two prominent conditions are first, setting the technocrats a narrow objective function that circumscribes their activities and limits those activities to their technical area of expertise and second, deployment of an effective accountability mechanism that encourages the avoidance of mistakes and quickly remedies, through repair and effective sanction, any errors that happen to slip through the cracks.

²³ This follows the ‘open-economy trilemma’, which states that it is not possible to achieve simultaneously exchange-rate stability, monetary-policy independence and capital-market integration. In the presence of capital mobility, it is not possible to manipulate the nominal exchange rate to keep the real exchange rate at an unsustainable level for long. Exchange-rate policy can, however, be effective in stabilising the external sector in the short-run, especially under capital controls (Kiguel, 1994; Bhalla, 2008).

Whether a central bank is independent generally has the strongest impact on inflation when four conditions apply (1) the government is not open, (2) inflation abroad is high, (3) the domestic financial sector is relatively small and (4) workers' level of wage-bargaining coordination is low (Grilli, Masciandaro and Tabellini, 1991; Hossain, 2009).

Central banks in developing countries have less autonomy in the pursuit of a single objective for monetary policy than those in developed countries. Developing countries generally rank rapid economic growth as a higher policy priority than price stability. Thus, central bank independence is not seen as paramount since it can slow economic growth (Haldane, 2020). Moreover, an inverse relation between central bank independence and inflation may exist. For example, countries that dislike inflation tend to provide more independence to their respective central banks and possess lower inflation (Blanchard, 2006). Ahsan, Skully and Wickramanayake (2006, 2007) constructed a composite index for central bank independence and governance (CBIG) for 36 countries of the Asia-Pacific using data from 1991-2005. The index values for the sample countries suggest that Australia has the highest CBIG, while Vietnam has the lowest. New Zealand, Taiwan, the Philippines, Nepal, South Korea and Malaysia have relatively more independent central banks, while Indonesia, Japan and Pakistan have relatively fewer independent central banks. By examining the bi-directional relationship between central bank independence and inflation, the authors showed that CBIG has improved in these sample countries since the Asian financial crisis and has contributed to reducing inflation.

4.7 Rules-Based Monetary Policy: Shocks, Uncertainties and Remedial Measures²⁴

Monetary policy can play an important role in keeping inflation low and stable and does so in many countries the majority of the time. A fiat money-based monetary policy becomes appropriate and feasible under a freely-floating currency, which also helps to absorb external shocks impacting economy. Moreover, an independent monetary policy that pursues price stability requires deployment of an explicit or implicit nominal anchor to constrain monetary activism and consequent expectations relating to public inflation. The effect is reinforced when a central bank follows a monetary-policy rule that uses an explicitly nominal anchor to eliminate, or to inhibit the emergence of, the time-inconsistency problem (Kydland and Prescott, 1977). This problem poses an ever-present threat to the pursuit of optimal monetary policy for price stability when a central bank is tasked with pursuing multiple objectives – as most central banks indeed are (Agenor and Montiel, 1996; Aghevli, Khan and Montiel, 1991).

While there is ongoing debate about whether monetary policy should aim to achieve only price stability over the medium term, a recent development in the monetary literature is whether the financial crises of the 2000s and the COVID pandemic of the early 2020s have rendered monetary policy inefficient, ineffective or even redundant for ensuring price stability. Facing multifaceted shocks, policymakers in numerous countries have used both conventional and unconventional monetary-policy instruments to pursue multiple objectives including financial stability. However, because of the inherent trade-off between policies for price stability and those for financial stability, to add 'financial stability' to the traditional objectives of monetary policy risks confusing the public about the central bank's commitment and ability to maintain price stability. The central conflict lies in the fact that an interest-rate change has conflicting effects on price and financial stability. For example, an interest-rate

²⁴ Some materials of this section are drawn from Hossain (2000, 2018, 2024).

rise promotes price stability by dampening inflation but simultaneously undermines financial stability by aggravating financial frictions and borrower stress (Brunnermeir, 2023; Mishkin, 2022). In countries with high public-debt levels, interest-rate rises significantly expand budget deficits, possibly undermining the effectiveness of monetary policy in achieving price stability. It remains a challenge in both theoretical and applied economics to prescribe a policy regime for any central bank to achieve simultaneously the standard, interconnected objectives of economic policy: namely, price stability, output stability and financial stability (Mishkin, 2022; Rajan, 2023).

Therefore, one major issue for the future of monetary policy is how monetary authorities might transition from fiscal (government budgetary) dominance, which expanded during the COVID crisis, to (central-bank) monetary dominance in a way that does not create major fiscal imbalances requiring stringent measures with the potential to cause social and political disruption. Since the outbreak of COVID-19 early in 2020, many countries have already moved to, and remained in, a phase of high inflation and high levels of both public and private debt (Brunnermeir, 2023). The prevalence of high inflation has created uncertainty over whether and how central banks can or should continue using rule-based monetary policy measures such as inflation targeting.

Finally, the economics literature emphasises that the effectiveness of monetary policy in achieving price stability depends critically on policy credibility. Credibility is ultimately created or destroyed by public (i.e., businesses' and households') perception of the commitment by both the government and its central bank to maintain price stability:

1. When policy credibility is low, contractionary inflation-control measures carry increased risk of recession followed by slow recovery. It needs to be emphasised here that assimilation of the rational expectations proposition into mainstream macroeconomics has led many New Classical economists to argue that an improvement in the credibility of anti-inflationary monetary policy can lower inflation, at negligible cost, in the form of a non-recessionary reduction in the growth-rate of output (Sargent and Wallace, 1973,1975,1981).
2. Moreover, low policy credibility makes it difficult for a central bank to lower inflationary expectations amid complex, multifaceted shocks, whether domestic-or foreign-originated (Koch and Noureldin, 2023; Weber, 2023). This has led to the view that even following a crisis, rule-based monetary policy has the advantage of keeping the central bank accountable to the public for achieving and maintaining price stability over the medium term. When a central bank's accountability to the public is ensured through responsible adherence to a policy rule, its institutional and operational autonomy from government interference is likely to improve the effectiveness of monetary policy by raising policy transparency and credibility (Alesina and Stella, 2011; James, 2023; Shirakawa, 2023; Williamson, 2008).
3. A further dimension of the problem emerges when it is understood that, once policy credibility is lost, monetary authorities cannot easily regain it (Grigoli, 2023).

The issue of policy credibility is subject to a complex mix of technological, administrative (especially political) and strategic constraints. Experience suggests that central-bank independence and effective coordination and communication between the monetary and fiscal authorities, can create and maintain high levels of monetary-policy credibility. This high level of credibility is especially the case if the central bank adopts and is seen consistently to conduct monetary policy using a non-discretionary, binding policy rule

that allows some policy flexibility to deal with unexpected developments (Blanchflower and Levin, 2023; Lohmann, 1992). The partnership breaks down, however, when central banks are emboldened to pursue additional social and distributive objectives without considering both their immediate and their long-term implications for the application of monetary policy – and even its effectiveness (Jacome and Pienknagura, 2022). Consequently, many economists have expressed concern that the unconventional monetary policy measures adopted since the mid-2000s have expanded both private and public debt while both the real and the financial markets have become accustomed to a ‘low-interest-rate environment’. The key issue going forward is how to unwind those expanded central-bank balance sheets and the associated financial distortions that have effectively constrained policy action on maintaining price stability (Brunnermeir, 2023).

5. Summary and Concluding Remarks

This paper has provided an overview of the political and institutional factors behind high and volatile inflation and consequent negative real interest rate and the real-exchange-rate misalignment issues in developed and developing countries in the Asia-Pacific. After reviewing the modern monetary literature from a political-economy perspective, this paper has shown that high and volatile inflation, symptomising macroeconomic instability in general, often originates in the exercise of discretionary monetary policy that aims at multiple, frequently conflicting, targets in an unstable socio-political environment. Such a trend is more evident in countries where central banks have limited operational autonomy in conducting monetary policy for price stability. High and volatile inflation then becomes a norm in countries where policymakers maintain a pro-inflation policy stance, which presumably stems from the belief that inflation facilitates economic growth and lowers unemployment. Sustained large budget deficits are then generated and financed by monetary creation compromising the central bank’s authority to conduct monetary policy for price stability under a flexible exchange rate system.

This paper has explored the primary source of inflation and explained why inflation is inimical to economic growth. Inflation is a monetary variable responding to the rate of money supply growth (Lucas, 1972, 1996; McCallum and Nelson, 2011), with high and volatile money growth raising inflation and increasing its volatility. Kormendi and Meguire (1985) found a negative impact of monetary variance on economic growth and Barro (1976) has shown that monetary variance adds ‘noise’ to the process of extracting the correct relative price signals needed for efficient resource allocation. The key markets affected are capital markets, and the relevant prices are the real returns on investments. The overall findings of studies reported in Hossain (2009) are consistent with the proposition that both the rate and the level of volatility of inflation have a negative impact on economic growth. High and volatile inflation affect economic growth, operating through the investment and trade channels where the real interest and exchange rates play important roles. This finding conflicts with the Tobin-Mundell effect which suggests there is a positive impact of anticipated high inflation on economic growth (Mundell, 1963; Tobin, 1965). This effect involves a shift away from real money balances and toward real capital in response to an increase in anticipated inflation. One implication of this effect is that developed and developing countries in the Asia-Pacific should maintain low and steady inflation, while their money and capital markets should be flexible enough to maintain stability of relative prices that affect the efficient utilisation of their economies’ scarce resources. This means that inflation cannot be constructively deployed as an instrument for economic growth and development. The question is how to achieve and sustain price stability preferably following a rules-based monetary policy (Taylor, 1993, 2011, 2012, 2013; McCallum, 1984, 1989,

1999, 2004). Ultimately, it does not matter whether a monetary aggregate or a short-term interest rate is deployed as the instrument of monetary policy under a flexible exchange rate system. In so far inflation is concerned, money plays an important role as the key determinant especially in the long run (King, 2002; Lothian, 2009, 2011, 2014; Taylor, 2000).

Based on the discussion in existing literature, the paper has drawn policy implications for the development of economic and political institutions in order to form a foundational framework within which rule-based monetary and fiscal policies can be conducted by the policy authorities. Poor macroeconomic performance, namely high and volatile inflation or low and unstable growth rates, can be generally explained by weak institutions leading to macroeconomic policies that are ineffective at best, and counterproductive at worst. Weak political institutions create political instability that leads to large budget deficits and high and volatile inflation. The implementation of stabilisation policies is delayed under unstable governments because they frequently comprise coalitions of politically diverse parties with varied ideological viewpoints. Independent central banks, through their authority to control inflation, remain the only institution legally obliged and in the economic power to ensure that the welfare of the nation can be enhanced by maintaining price stability (Yeager, 1962).

The huge literature on inflation and inflation volatility, as reviewed in this paper, leads to several implications for the formulation and conduct of monetary policy in Bangladesh. First, Bangladesh Bank is legally authorised to maintain low and stable inflation, representing price stability, as per the Bangladesh Bank Order 1972 that was amended in 2003 and 2025. The issue remains whether price stability can be achieved and sustained while making efforts to achieve other objectives such as exchange rate stability, economic growth (or low unemployment) and financial stability. Available data show that except for a few episodes of high inflation, inflation in Bangladesh remained moderately high and volatile over the past five and a half decades. Some empirical studies such as Hossain (2015,2016,2024) suggest that high and volatile inflation in Bangladesh was mostly caused by high and volatile growth of the money supply under a fixed-pegged exchange rate regime and controlled interest rates, which led to repressed financial system. This suggests that Bangladesh Bank was unable to maintain price stability due to institutional constraints, policy inconsistency and the pursuance of multiple objectives. It appears that Bangladesh Bank could not communicate any clear idea whether inflation or economic growth or both had precedence over other objectives and whether monetary policy has the ability to achieve multiple, conflicting objectives simultaneously.²⁵ Therefore, monetary policy in Bangladesh carried the burden of achieving multiple, conflicting objectives under a repressed financial system where fiscal policy dominated monetary policy. Under these circumstances, it is imperative that Bangladesh Bank gains the required autonomy to declare that price stability is the overriding, if not the sole, objective of monetary policy and that monetary policy would be conducted

²⁵ Throughout the 1970s, the inflation rate in Bangladesh remained high, volatile and persistent. Inflation declined slowly but significantly in the early 1980s, although the rate of inflation remained moderately high until the Bangladeshi economy was rapidly deregulated under various structural adjustment programs of the International Monetary Fund (IMF) and the World Bank in the early 1990s (Hossain, 1995). Since the late 1990s, the Bangladeshi economy has shifted to a higher growth path while experiencing a relatively high inflation rate of approximately six percent per annum. In the absence of required autonomy of Bangladesh Bank in the conduct of monetary policy for price stability, high and volatile inflation that persisted undermined monetary policy credibility. A rules-based monetary policy is therefore expected to raise monetary policy credibility and effectiveness.

following some pre-set rules over the medium-term. Furthermore, monetary policy independence requires that the country concerned must operate under a flexible exchange rate system. Accordingly, under the current financial and institutional reform programs in Bangladesh, the Bangladesh Bank is moving toward introducing a rules-based monetary policy while sustaining a flexible exchange rate system. It is indicated in the amended Bangladesh Bank order 2025 that both price stability and financial stability should get prominence over any other objectives of monetary policy.²⁶ Second, Bangladesh Bank is required and should be seeking autonomy for the conduct of monetary policy for price and financial stability. In so doing, the Bank can, and should, deploy whichever policy instrument it deems appropriate for achieving the price-stability objective.²⁷ Third, in the ultimate analysis, monetary policy cannot operate without the support of the government. Not only is there a need for coordination of fiscal policy with monetary policy, but the government should go along with the stated monetary policy objective(s) by maintaining fiscal discipline as a principle on sustained basis. Monetary policy would be effective in achieving its goal when the government formulates fiscal policy and adjusts it if needed to raise monetary policy credibility. Fourth, as financial stability has now been generally added in the list of monetary policy objectives, a conflict is likely to arise between price and financial stability. This is because an increase or decrease of the interest rate to achieve price stability is likely to affect the financial sector. For example, an interest-rate rise promotes price stability by dampening inflation but simultaneously undermines financial stability by aggravating financial frictions and borrower stress (Brunnermeir, 2023; Mishkin, 2022). In countries with high public-debt levels, the interest-rate rises significantly expand budget deficits. It is possible that such an increase in the interest rate would undermine the effectiveness of monetary policy in achieving price stability. Therefore, it remains a challenge to both theoretical and applied economics to prescribe a policy regime for central banks to achieve simultaneously the standard, interconnected objectives of economic policy: namely, price stability, output stability and financial stability (Mishkin, 2022; Rajan, 2023). Fifth, to avoid creating a major conflict between monetary and financial stability, there is need for improving the prudential regulation and supervision of the financial system under a regulatory authority that is not directly controlled by the central bank. Sixth, for effective conduct of monetary policy, Bangladesh Bank needs to raise policy credibility by

²⁶ An independent monetary policy that pursues price stability requires deployment of an explicit or implicit nominal anchor to constrain monetary activism and consequent public inflationary expectations. The effect is reinforced when a central bank follows a monetary-policy rule that uses an explicit nominal anchor to eliminate, or to inhibit the emergence of, the time-inconsistency problem. This problem poses an ever-present threat to the pursuit of optimal monetary policy for price stability when a central bank is tasked with pursuing multiple objectives – as most central banks indeed are (Agenor and Montiel, 1996; Aghevli, Khan and Montiel, 1991).

²⁷ As long as a rules-based monetary policy strategy is adopted under a flexible exchange rate system, the choice of an appropriate monetary policy instrument is not obvious. Whether a monetary aggregate or short-term policy interest rate should be deployed as monetary policy instrument depends on the stability of some monetary relations and models, including the stability of long-run money-demand relationships, and whether the monetary authority has effective control over monetary aggregates such as the monetary base. This means that with respect to the choice of monetary policy strategy, whether it is a monetary targeting or an inflation targeting or a variant of these, it does not matter much provided that Bangladesh operates under a flexible exchange rate system and there are no controls over the money and capital markets.

maintaining policy autonomy. The issue of policy credibility remains intertwined with a complex mix of technological, administrative (especially political) and strategic constraints. Experience suggests that central-bank independence and effective coordination and communication between the monetary and fiscal authorities, working together, can create and maintain high levels of monetary-policy credibility especially if the central bank adopts and is seen consistently to conduct monetary policy using a non-discretionary, binding policy rule that allows some policy flexibility to deal with any unexpected developments (Blanchflower and Levin, 2023). The partnership breaks down, however, when central banks pursue additional social and distributive objectives without considering their long-term implications for the application of monetary policy – and even its effectiveness. Sixth, Bangladesh Bank is required to introduce a rules-based monetary policy such that there is a clear inflation target that should be acceptable to the public and can be achieved over a longer period.

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