

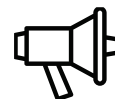
INNOVATION SCIENCE AND TECHNOLOGY



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ISSUE 3

 Acceptance of papers **March, 2026**



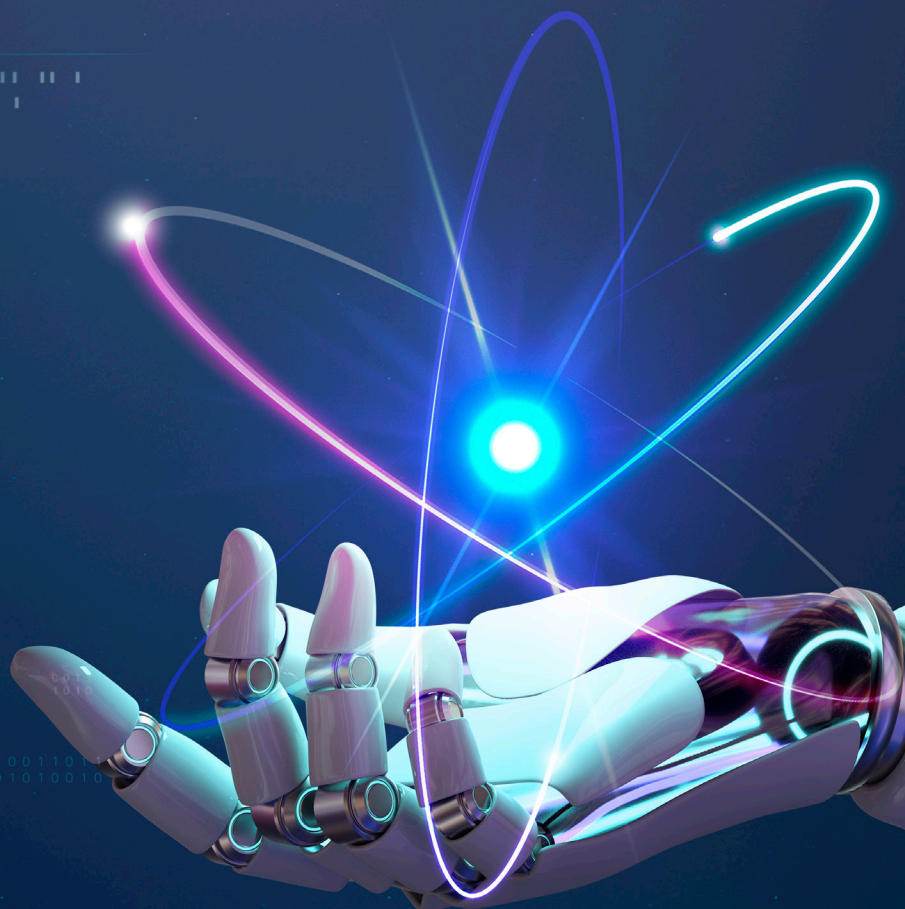
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JOURNAL **"INNOVATION SCIENCE AND
TECHNOLOGY"** HAS BEEN REGISTERED
UNDER THE NUMBER **C-5669633** BY THE
AGENCY FOR INFORMATION AND MASS
COMMUNICATIONS (AOKA) OF THE
REPUBLIC OF UZBEKISTAN, EFFECTIVE
FROM OCTOBER 9, 2024.

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MECHANISMS OF THE IMPACT OF FISCAL AND MONETARY POLICY ON INFLATION AND PUBLIC DEBT

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Abstract. This article analyzes the mechanisms through which fiscal and monetary policies affect inflation and public debt. It examines the impact of fiscal policy on economic activity and the formation of public debt via government spending, taxation, and the budget deficit. Additionally, it provides a scientific rationale for the role of monetary policy in regulating interest rates, the money supply, and inflation. Furthermore, the study analyzes the interplay between fiscal and monetary policies and their significance in ensuring macroeconomic stability, controlling inflation, and maintaining public debt at an optimal level. The research findings demonstrate that the effective coordination of these policies is a crucial factor in ensuring sustainable economic growth and financial stability.

Keywords: fiscal policy, monetary policy, inflation, public debt, budget deficit, interest rate, macroeconomic stability, economic growth.

Annotatsiya. Ushbu maqolada fiskal va monetar siyosatning inflyatsiya hamda davlat qarziga ta'sir mexanizmlari tahlil qilinadi. Fiskal siyosatning davlat xarajatlari, soliqlar va byudjet taqchilligi orqali iqtisodiy faollikka, shuningdek, davlat qarzining shakllanishiga ko'rsatadigan ta'siri yoritiladi. Monetar siyosatning foiz stavkalari, pul massasi va inflyatsiyani tartibga solishdagi o'rni ilmiy jihatdan asoslanadi. Shuningdek, fiskal va monetar siyosatning o'zaro uyg'unligi, ularning makroiqtisodiy barqarorlikni ta'minlash, inflyatsiyani nazorat qilish hamda davlat qarzini maqbul darajada ushlab turishdagi ahamiyati tahlil etiladi. Tadqiqot natijalari ushbu siyosatlarning samarali muvofiqlashtirilishi barqaror iqtisodiy o'sish va moliyaviy barqarorlikni ta'minlashning muhim omili ekanligini ko'rsatadi.

Kalit so'zlar: fiskal siyosat, monetar siyosat, inflyatsiya, davlat qarzi, byudjet taqchilligi, pul-kredit siyosati, foiz stavkasi, makroiqtisodiy barqarorlik, iqtisodiy o'sish.

Аннотация. В данной статье анализируются механизмы влияния фискальной и монетарной политики на инфляцию и государственный долг. Рассматривается воздействие фискальной политики на экономическую активность и формирование государственного долга через государственные расходы, налогообложение и бюджетный дефицит. Кроме того, приводится научное обоснование роли монетарной политики в регулировании процентных ставок, денежной массы и инфляции. Кроме того, в исследовании анализируется взаимосвязь между фискальной и денежно-кредитной политикой, а также их роль в обеспечении макроэкономической стабильности, сдерживании инфляции и поддержании государственного долга на оптимальном уровне. Результаты исследования свидетельствуют о том, что эффективная координация этих направлений политики является ключевым фактором обеспечения устойчивого экономического роста и финансовой стабильности.

Ключевые слова: фискальная политика, денежно-кредитная политика, инфляция, государственный долг, бюджетный дефицит, процентная ставка, макроэкономическая стабильность, экономический рост.

INTRODUCTION

In the modern world economy, ensuring macroeconomic stability is one of the priority tasks of every state. Stimulating economic growth, maintaining price stability, increasing employment, and ensuring the stability of public finances are the main goals of a country's economic policy. In achieving these goals, fiscal and monetary policies serve as important economic management tools. These policies determine the mechanisms through which the state influences the economy and directly affect the inflation rate, public debt, investment climate, consumption, savings, and economic growth rates.

In recent years, global financial instability, the economic consequences of the pandemic, geopolitical uncertainty, changes in international trade conditions, and fluctuations in energy prices have contributed to higher inflation in many countries.

In response, many central banks have adopted tighter monetary policies, while governments have increased public spending to support economic activity. This has led to an increase in public debt and an expansion of budget deficits. Therefore, ensuring the coordination of fiscal and monetary policies is one of the most urgent scientific and practical issues today.

Fiscal policy is a set of measures aimed at regulating economic processes by the state through taxes, public spending, and transfer payments. This policy plays an important role in stimulating economic activity, reducing unemployment, strengthening social protection, and supporting economic growth. At the same time, an increase in public spending or a decrease in budget revenues creates a budget deficit. To finance the budget deficit, the state attracts domestic or foreign debt. As a result, the size of public debt increases, as does its impact on the economy.

Monetary policy is implemented by the central bank through the money supply, interest rates, reserve requirements, and open market operations. The main goal of monetary policy is to ensure price stability, control inflation, and maintain the stability of the national currency. Excessive growth in the money supply increases inflationary pressures, while tight monetary policy, on the contrary, can lead to a decrease in economic activity. Therefore, central banks strive to implement balanced monetary policies based on economic conditions.

Inflation is one of the most important macroeconomic indicators of the economy, indicating a continuous increase in the general price level. A high level of inflation reduces the real incomes of the population, negatively affects investment activity, leads to the depreciation of the national currency, and undermines economic stability. Therefore, maintaining inflation at an acceptable level is one of the main tasks of state economic policy. The coordinated implementation of fiscal and monetary policies is an important condition for effective inflation management.

Public debt is also one of the factors that significantly affect macroeconomic stability. Public debt makes it possible to attract the financial resources necessary to finance economic development, implement infrastructure projects, and support social programs. However, an excessive increase in public debt raises debt-servicing costs, negatively affects the investment climate, and can undermine fiscal stability. Therefore, the effective management of public debt is considered one of the important areas of economic policy.

In the Republic of Uzbekistan, large-scale reforms have been implemented in recent years to liberalize the economy, reform public finances, reduce inflation, and improve monetary policy. Strengthening budget discipline, maintaining public debt at a safe level, developing an inflation-targeting system, and ensuring macroeconomic stability have become priority areas of the country's economic policy. Under such conditions, an in-depth study of the mechanisms through which fiscal and monetary policies influence inflation and public debt is of great scientific and practical importance.

LITERATURE REVIEW

The issue of the relationship between public debt and inflation has been widely studied by various theoretical schools and scholars in macroeconomics. Scientific views on this issue have been formed mainly within the framework of monetarist, Keynesian, neoclassical, and modern fiscal-monetary approaches.

Milton Friedman, a representative of the monetarist school, associates inflation primarily with the growth of the money supply and emphasizes that "inflation is always and everywhere a monetary phenomenon." In his opinion, if public debt is financed through money issuance, this creates excess liquidity and increases inflationary pressure. The monetarist approach explains the relationship between public debt and inflation mainly through monetary policy.

John Maynard Keynes, the founder of the Keynesian school, views public debt as a means of regulating economic cycles. According to his theory, during a recession, increasing government spending through debt stimulates aggregate demand and restores employment. However, when the economy approaches full employment, fiscal expansion can increase inflationary pressures. Thus, in the Keynesian approach, the impact of public debt on inflation is interpreted according to economic conditions.

According to the Ricardian-Barro equivalence theory, advanced by the neoclassical economist Robert J. Barro, expenditures financed by government debt are offset by future tax increases. Under rational expectations, the private sector will increase savings, and aggregate demand will remain unchanged. Therefore, it is argued that the impact of government debt on inflation may be neutral.

In the modern theory of fiscal-monetary interaction, the concept of "fiscal dominance," developed by Thomas J. Sargent and Neil Wallace, plays an important role. According to this concept, if fiscal policy is prioritized and the central bank is forced to finance the budget deficit, inflation may increase. This approach explains the relationship between government debt and inflation in terms of institutional factors.

Empirical studies also examine this issue from different perspectives. Stanley Fischer, Ratna Sahay, and Carlos A. Végh analyze episodes of high inflation and suggest that the monetary financing of budget deficits

and persistent debt growth may intensify inflationary pressures.

RESEARCH METHODOLOGY

The study employs a systematic, comparative, and logical analysis of the mechanisms through which fiscal and monetary policies affect inflation and public debt. The theoretical foundations of Keynesian, monetarist, neoclassical, and modern fiscal–monetary approaches are reviewed and compared. The analysis focuses on the aggregate demand, interest rate, credit, exchange rate, expectations, and debt sustainability channels. Scientific publications, reports of international financial institutions, and relevant macroeconomic studies are used as the main information base. Based on synthesis, induction, deduction, and comparative analysis, the study identifies the conditions under which fiscal and monetary policy coordination contributes to price stability and sustainable public debt management.

ANALYSIS AND RESULTS

(i) *The impact of fiscal policy on aggregate demand, expenditure structure, and debt sustainability:*

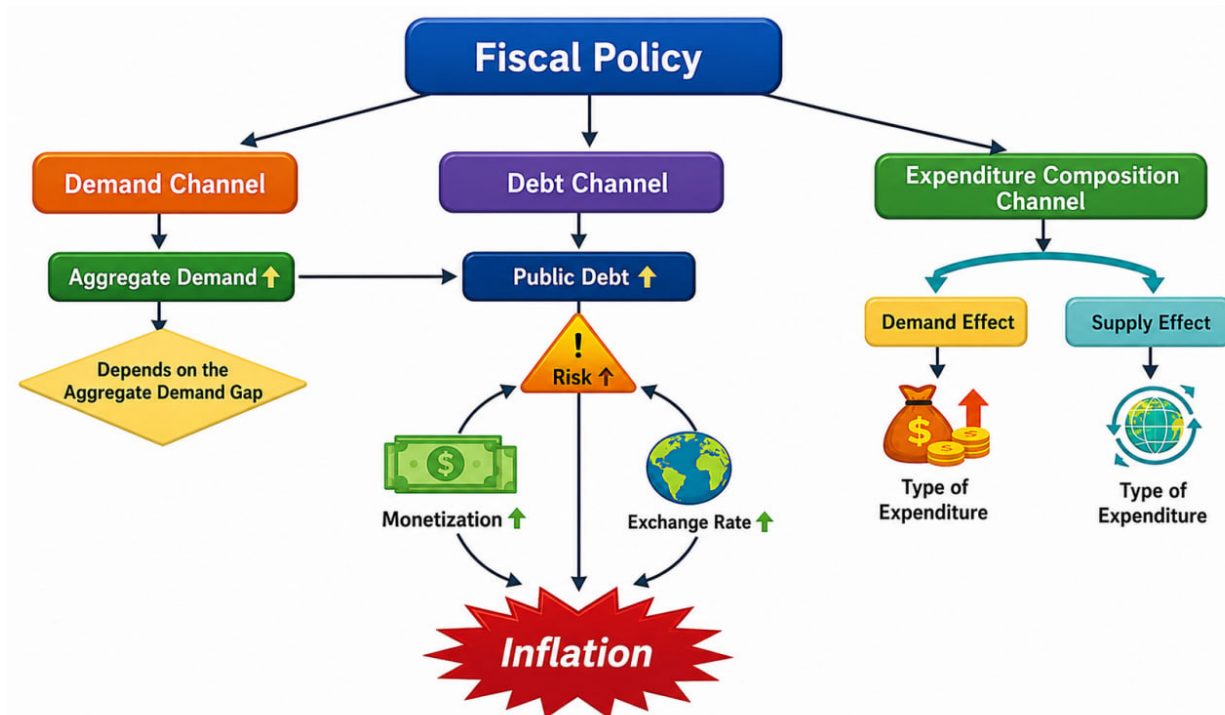


Figure 1. The impact of fiscal policy on inflation through aggregate demand, expenditure structure, and debt sustainability¹

In this part of the study, we consider the impact of fiscal and monetary policy on inflation and public debt dynamics not as separate policies, but as interconnected links in a single macro system. Inflation in applied macroeconomics is not a purely monetary or purely fiscal phenomenon; it is often the combined result of fiscal decisions, monetary transmission channels, expectations, and institutional credibility. Therefore, we divide the analysis into two parts: (i) the impact of fiscal policy through aggregate demand, the expenditure structure, and debt sustainability; (ii) the impact of monetary policy through the interest rate, credit, exchange rate, and expectations channels; and then we consider the issue of coordination of these two policies separately.

Fiscal policy affects inflation primarily by managing aggregate demand. An increase in government spending ($G \uparrow$) or a decrease in taxes ($T \downarrow$) increases aggregate demand. In the presence of spare capacity, this impulse leads mainly to growth in real output and an improvement in employment. However, as the economy approaches the level of potential output, a larger part of the additional demand is manifested in the form of price increases. Therefore, in assessing the inflationary impact of fiscal policy, we consider the cyclical state of the economy, particularly the output gap, supply elasticity, and the share of imports to be more important than the fact of “expenditure growth” itself.

In the literature, the impact of fiscal policy on inflation is explained primarily by the transmission mechanism

¹ Prepared by the author based on the studied literature

operating through aggregate demand (AD). In this case, an increase in government spending or a decrease in the tax burden increases aggregate demand in the short run, but the “direction” of this impulse is determined by the cyclical state of the economy and supply-side constraints. In new Keynesian approaches, the multiplier and price response are strongly conditioned by the monetary policy response and the presence of a “GDP gap” in the economy; that is, when the economy is below potential output, fiscal expansion increases real output more, and when it approaches potential, demand pressure is transmitted to the price level more quickly. This logic gives reason to consider parameters such as the output gap and supply elasticity (how quickly the economy can expand, how tight the labor market is) as priority measures when assessing the inflationary outcome of a fiscal impulse, rather than focusing solely on increases in government spending or reductions in taxation.

Empirical studies also show that fiscal effects are uneven across time periods. Fiscal multipliers differ significantly in the crisis and growth phases of the economy. In the regime-switching approach, Auerbach and Gorodnichenko show that the impact of fiscal shocks on GDP is stronger in the crisis phase and relatively weaker in the growth phase; this result means in practical terms that if demand expansion during periods of spare capacity is mainly reflected in real output and employment, then price pressures are more likely to increase when the economy is operating close to or above its potential output. Evidence in this direction poses the inflationary impact of fiscal policy as a matter of “cyclical matching”: the same fiscal package will produce different inflationary outcomes under different macro conditions. In addition, the impact of fiscal policy on inflation is significantly modified by open economy conditions. In small and open economies, part of the additional demand is absorbed by imports, as a result of which the domestic production and price response may be weaker than in closed economies; at the same time, import prices are also quickly passed on to domestic inflation through the exchange rate channel. Ilzetzi, Mendoza, and Végh empirically show that fiscal multipliers are smaller in open economies, and that the exchange rate regime and external linkages strongly condition this effect. The IMF’s methodological commentary also identifies trade openness (import share), exchange rate regime, financial development and cyclicalities as key determinants of the multiplier; hence, it is theoretically and empirically sound to take the “import share” as a separate control variable in explaining the inflationary outcome of a fiscal impulse.

The impact of fiscal policy on inflation is assessed in another important way in the literature—through fiscal consolidation and growth response: Blanchard and Leigh (based on post-crisis forecast error analysis) show that fiscal multipliers are higher than expected in many estimates, and argue that fiscal tightening reduces real activity more than expected when the cyclical situation worsens. Although this result does not seem to be directly related to inflation, it is logically important: if a fiscal impulse can significantly change real activity, it also plays a central role in the formation of inflationary pressures through GDP contraction.

The second and often overlooked channel of fiscal policy is debt dynamics. The logic here is that when the deficit is high and persistent, public debt will grow; and debt growth will increase future budgetary pressures through interest payments. As debt service costs increase as a share of the budget, the government’s room for maneuver becomes narrower: it becomes necessary to cut social and investment spending or raise taxes. If fiscal adjustment is delayed because of institutional constraints or implementation challenges, market concerns regarding debt sustainability may increase. Such concerns may lead to an increase in the sovereign risk premium, further increasing the cost of debt, and ultimately to a “debt-interest” spiral. This spiral fuels inflation in two ways: first, expectations about the possibility of monetization increase (see next section); second, exchange rate pressures (if sensitivity to external debt and capital flows is high) accelerate domestic inflation through import prices.

Although the literature on the impact of fiscal policy on inflation has long focused on the aggregate demand channel, recent theoretical and empirical research suggests that one of the most important sources of inflationary pressure is not the fiscal position itself, but rather how it is shaped over time into a stable or unstable trajectory through debt dynamics. That is, the issue is not just the size of the current deficit; the key question is how persistent deficits increase government debt, how debt growth increases interest costs, and through what mechanism this increasing debt service pressure ultimately affects the price level. It is at this point that modern research reveals the interdependence of fiscal and monetary policy: if the government’s intertemporal budget constraint is not sufficiently reliable, the price level will depend not only on the money supply but also on expectations about how government liabilities will be financed in the future. Sargent and Wallace address this very issue in their work, concluding that even if tight monetary policy is pursued in the short term, if the fiscal path is not sustainable, the need for monetization may arise in the future. Later work by Davig, Leeper, and Walker developed this idea within the “fiscal limit” framework, showing that as government debt approaches a certain threshold, the institutional and economic capacity to increase revenues or adjust expenditures becomes more limited, resulting in higher inflation to reduce the real value of the debt.

In this context, the first central concept in the study of debt dynamics is fiscal dominance. Under fiscal dominance, the central bank pursues price stability not as an absolute independent goal, but rather as a

constraint on the need to service the public debt. This does not necessarily occur through direct monetary financing. Rather, it may be sufficient for markets to begin to price in the possibility that the government will eventually reduce the real debt burden through inflation. Blommestein and Turner, analyzing the interaction between sovereign debt management and monetary policy, show that in conditions of high public debt, the interaction of monetary policy decisions with exchange rates and sovereign risk is strengthened. They conclude that, especially in emerging market economies, high debt strengthens the relationship between interest rates, the sovereign risk premium, and the exchange rate. Thus, fiscal weakness stimulates inflation not directly, but also through financial prices. The Bank for International Settlements (BIS) has a similar conclusion: the relationship between public debt, debt management, and monetary policy becomes more complex in times of heightened financial instability, especially as investors become more skeptical about the government's ability to accommodate future fiscal pressures.

The second major area of research is how markets operate when debt sustainability is disrupted. The basic mechanism here is as follows: deficits increase debt; increased debt increases interest payments; increased interest payments make it more difficult to restore primary budget balance. As a result, debt itself becomes more expensive endogenously. This is why the literature often uses the terms "debt-interest spiral" or "snowball effect." Mitchener and Trebesch summarize modern research on sovereign debt and show that crises often stem not only from high debt itself, but also from the increased cost of debt refinancing, disruptions in bank-sovereign relations, and investor confidence. The European Central Bank's research on the eurozone debt crisis confirms this logic. As fiscal fundamentals weakened in countries like Greece, Ireland, and Portugal, bond spreads widened sharply, and the repricing of risk further strained public finances. De Santis' research shows that markets reprice credit risk, especially in the context of high debt and deficits, and thus put debt on an unsustainable path more quickly. Thus, the macroeconomic risk of debt is not just a matter of "level"; the cost of servicing debt and the speed of its repricing in the market are also crucial.

A third important area is the sovereign risk premium, the exchange rate, and inflation. Especially in developing countries with large external debt or sensitive to capital flows, doubts about debt sustainability immediately pass through the exchange rate channel. When investors become concerned about sovereign solvency or the credibility of macroeconomic adjustment, capital outflows may increase, the national currency may depreciate, and import prices may rise, thereby accelerating domestic inflation through the exchange rate channel. The World Bank's study of the impact of exchange rate movements on domestic prices shows that the pass-through from exchange rate movements to consumer prices is generally higher in developing countries than in developed countries, especially in situations where monetary policy and inflation expectations are less well-established. The Bank for International Settlements also emphasizes that exchange rate movements affect not only external trade but also financial conditions and price stability in emerging market economies. As a result, debt crises in many countries are seen not only as a fiscal problem but also as a currency and price stability problem.

Empirical research in recent years has further strengthened this theory. An International Monetary Fund study co-authored by Arizala et al., which assesses the impact of fiscal policy on inflation expectations in a large sample of countries, shows that episodes of fiscal consolidation reduce medium-term inflation expectations, i.e., markets and agents perceive fiscal discipline as a signal of price stability. This is a very important conclusion: the debt dynamics channel therefore operates not only through past inflation, but also through future expectations. If economic agents expect future fiscal adjustment to be delayed because of institutional or implementation constraints, current inflation expectations may increase; this will affect wage negotiations, long-term interest rates, asset prices and the exchange rate. Therefore, in modern research, fiscal soundness is not only an indicator of the debt-to-GDP ratio, but also includes institutional capacity, consolidation reliability and the quality of monetary-fiscal coordination.

Overall, the study draws three main conclusions. First, the key implication of persistent fiscal deficits is the gradual accumulation of public debt over time, in addition to their effect on current demand. Second, rising debt reduces fiscal space through higher interest costs and requires the government to choose among several adjustment options, including expenditure optimization, revenue enhancement, refinancing at higher costs, or greater reliance on direct or indirect monetary financing. Third, particularly in emerging and externally sensitive economies, the transmission of debt dynamics to inflation often occurs through the exchange rate, sovereign risk premium, and expectations channels. Therefore, the concept of the "debt-interest spiral" has a sound theoretical and empirical basis in modern economic research. The inflationary outcome is determined not only by the level of debt, but also by its financing structure, currency composition, the credibility of fiscal adjustment, and the institutional independence.

The third mechanism of fiscal policy is the impact through expenditure composition. From a methodological perspective, fiscal expansion should not be treated as a homogeneous policy package: current consumption expenditures (e.g., administrative expenditures) and capital expenditures (infrastructure, logistics, energy

efficiency) have different effects on inflation. Capital expenditures can expand supply capacity in the medium term and mitigate price pressures; current expenditures, on the other hand, exert short-term inflationary pressure through the demand channel. Therefore, the analysis of fiscal policy should distinguish not only the size of the deficit but also the composition of expenditures through which the deficit was generated.

(ii) the impact of monetary policy through the interest rate, credit, exchange rate, and expectations channels;

The classic mechanism of monetary policy is the interest rate channel. When the central bank increases the policy rate, credit resources become more expensive, consumption and investment decisions slow down, aggregate demand decreases, and inflationary pressures ease. The strength of the effect depends on the development of the banking sector, the speed of interest rate impact on the market, and the level of financial intermediation. Conversely, if the rate decreases, lending revives and demand increases.

The second channel is the credit/liquidity channel: central bank operations (open market operations, reserve requirements, liquidity) affect the balance sheet of banks, expanding or restricting the supply of credit. In developing economies, this channel can often be even more important than the interest rate channel, since the amount of credit and credit standards directly affect real activity.

The third channel is the exchange rate channel. If the economy is import-dependent, a depreciation of the exchange rate increases import prices, and this change is “passed through” to domestic prices with a certain delay. Therefore, monetary policy tightening often reduces inflation by stabilizing the exchange rate. This is especially relevant in conditions of high external debt: exchange rate fluctuations increase not only inflation, but also debt service costs.

The fourth channel is the expectations and credibility channel. If there is high confidence in the central bank’s goal and its ability to achieve it, the price-setting process (firm pricing, wage negotiations) accepts “low inflation” as the norm. On the contrary, if the central bank is influenced by fiscal needs or policy consistency is violated, inflation expectations may become de-anchored, increasing the persistence of inflation. Therefore, we associate the effectiveness of monetary policy not only with the list of instruments, but also with the independence of the central bank as an institution and its communication policy.

In a practical macro system, fiscal and monetary policy do not operate in isolation from each other. We consider it appropriate to explain this relationship within the framework of “monetary priority” and “fiscal priority”. In a monetary policy environment, the central bank firmly upholds price stability as its primary objective; the fiscal authority adjusts its deficit and debt path in a manner that does not conflict with the central bank’s strategy. In such a context, debt growth does not automatically mean inflation: markets believe that there will be fiscal adjustment, and the central bank does not move towards monetization.

Under fiscal dominance, growing budgetary pressures may increase the central bank’s involvement in the direct or indirect financing of the fiscal deficit. This may weaken the focus of monetary policy on price stability and increase inflationary risks. In our opinion, it is at this point that the relationship between public debt and inflation becomes more acute, and the “regime” in which the debt is managed becomes more decisive than the size of the debt.

The main conclusion from this analysis is that the impact of fiscal and monetary policy on inflation and public debt is not one-sided, but a complex system formed through channels of influence and institutions. Fiscal policy affects inflation mainly through the demand and debt stability channel; monetary policy manages price dynamics through the interest, credit, exchange rate, and expectations channels. The most important condition is coordination between policies: without fiscal discipline, the long-term credibility of monetary tightening will weaken; without monetary credibility, fiscal expansion may contribute to a deterioration in inflation expectations.

CONCLUSION AND SUGGESTIONS

The relationship between public debt and inflation has been established over the course of economic theory, not as a simple and unidirectional relationship, but as an element of a complex macroeconomic system. While the classical and neoclassical approaches prioritized fiscal discipline and a balanced budget, the Keynesian approach interpreted public debt as a tool to smooth economic cycles, and monetarism explained the impact of debt on inflation through its monetization. Modern fiscal theory and DSGE models have substantiated the endogenous relationship between debt, inflation, interest rates, expectations, and institutions. The results of the study show that the impact of public debt on inflation depends, first of all, on how it is financed. If the budget deficit is financed through market instruments, without violating the independence of the central bank, then even a high level of debt does not automatically lead to high inflation. However, if the deficit is financed through monetary issuance or indirect central bank support, this may lead to an expansion of the money supply, higher inflation expectations, and increased risks to price stability. Thus, the central factor in the relationship between debt and inflation is the mode of its financing, rather than the size of the debt.

It was argued that the degree of coordination between fiscal and monetary policy is one of the most important

institutional conditions determining the dynamics of public debt and inflation. In the context of monetary priority, the central bank protects price stability, and fiscal authorities adjust the debt path to this end. Under fiscal dominance, the central bank may face increased pressure to support public debt sustainability, which may contribute to higher inflationary pressures. Therefore, the impact of debt on inflation is determined not only by economic indicators, but also by the strength of institutions, policy consistency, and market confidence.

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Proofreader: Zokir ALIBEKOV

Layout and Designer: Oloviddin Sobir ugli

2026. № 3

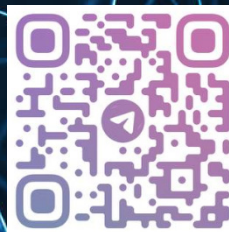
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