




Inflation Targeting under Global Trends Exposure

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Abstract: The purpose of the study was to update the understanding of inflation targeting tools, that can help to develop inflation targeting policy under global trends exposure. The growth of financial, economical, social problems and climate change make mainstream paradigm of sustainable economic development precarious. The contradiction between unconstrained elasticity of capital supply and negative consequences of current approach to natural resources exploration and demographic headwind amplifying political decisions make find new trade-offs between price stability and output volatility. The study aims at the identification of a range of monetary policy tools: traditional and unconventional tools and their influence on output and inflation. The study provided research of international monetary policies across inflation targeting, full employment, and financial stability. We specified global trends exposure on sovereign monetary policy and its adoption to changing environment. The theoretical results of the study are expressed in streamlining international experience of inflation targeting and knowledge systematization about central banks approach to achieve their domestic mandates to stabilise inflation and maintain output at potential under global trends. The practical significance of the research refers to reveal imbalances of Russian inflation targeting tools compared to international practice and to provide specific recommendations to achieve well-balanced policy for state social and economic development.


1 INTRODUCTION


Contemporary social and economic development makes us reconsider basic knowledge about inflation targeting grounded on the quantity theory of money. The main prerequisites for such a revision are the causal relationship between income and money supply, changes in the structure of liquidity and the increased role of costs, which is determined, in particular, by changes in wages and prices of commodities, which became clearly visible in the post-pandemic period.

The growth of global trade and the emergence of value chains that opened access to cheaper inputs, demographic trends that increased the supply of labor in the economy, and digitalization in the labor market that stifled wage growth and potentially flattened the Phillips curves, were the main factors that slowed

down global inflation. The fallout from the 2008 global financial crisis, driven by disinflationary demand, has been further impacted by the crisis during the COVID-19 pandemic. Classical economists believed that money and finance are nothing more than a side effect of the action of fundamental causal factors operating in the real economy (Cao J., 2019). However, while developing quantitative analysis techniques, they believed that the money supply determines the rate of inflation, which can significantly affect the real economy (Vercelli, 2019). D. Hume, I. Fisher, M. Friedman recognized that the increase in money supply can stimulate income growth, but they argued that this effect is temporary. While neoclassical scientists suggest that price and wage flexibility maintains full employment and equilibrium in the short term, neo-Keynesians argue that optimal equilibrium can only be achieved through policies that manage to

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counteract market failures. In the case of stable nominal wages, fiscal and monetary policies can be aimed at regulating price inflation to ensure that real wages are sustainable in line with the concept of full employment (Blanchard, 2013; Petrakis, 2020). The current stage of the development of ideas about state regulation of economy and ensuring the sustainable functioning of financial relations is characterized by numerous attempts to update and revise approaches to the use of monetary instruments and anti-inflationary regulation instruments. Methods and instruments of modern monetary policy, which is carried out by central banks with the aim of influencing the economy indirectly through credit institutions and financial markets, are effective if two conditions are met:

1. The ratio of the components of the money supply to the monetary base is stable, respectively, the effect of the money multiplier is unchanged.

2. Stability of money demand and the level of economic activity, which are expressed in the stability of the money demand function and the investment multiplier. If the first condition is met, the central bank can estimate the level of the monetary base that can be controlled to achieve the desired level of economic activity. From the second condition, it is possible to derive the assumed level of the interest rate through which the bank influences the demand of households. The main attention of the authors is focused on the problem of accumulation and maintenance of global imbalances that cause distortions in prices, private and public savings, and the profitability of investments in the financial system and in the real sector. The process of financialization and a chronic lack of investment in the real economy has generated financial inflation, caused structural imbalances in the economy and determined its consequences for that part of society whose income and welfare depend mainly on investments in the real sector (Arkadeva, 2019; 2021). Inflation targeting is based on the premise that a tight inflation target is a prerequisite for sustainable growth and job creation, and that monetary stability, combined with microprudential supervision, ensures financial stability. The hypothesis of the study is the provision that the current stage involves the development and use of fundamentally new tools to curb inflation for the economy and society in order to level the consequences of the impact of global trends. Based on the study of materials from the leading central banks of the world, an attempt to streamline the development directions of such instruments and identify their specifics was made.

2 MATERIALS AND METHODS

We used general scientific methods of theoretical research in the study:

- methods of induction to observe the usage of a single tool to stabilise inflation and to make the hypothesis on patterns of tool's influence on social and economic processes under global trends exposure;

- methods of deduction to extend common patterns of inflation targeting to different spheres of social and economic developing for further recommendations on strengthening monetary policy;

- methods of analysis to highlight and to study specific tools of inflation targeting and monetary policy;

- methods of synthesis to create a holistic view of transforming monetary policy under global trends exposure.

We carried out the observation of different monetary tools usage by policymakers in many advanced economies, compared them to highlight general and specific characteristics that affected the inflation

We also used general logical methods in the study – abstraction, analogue, aggregation, idealisation, to highlight patterns of emerge disinflation and inflation symptoms and tools that were used to take control under these processes.

3 RESULTS AND DISCUSSION

We studied the objectives of monetary policy of the top central banks. Most of policymakers declare price stability as the single aim of monetary policy; ECB, Bank of England, Bank of Canada, Riksbank, and Bank of Japan are amid these banks. A small group of central banks in addition to price stability mandate have an explicit mandate of responsibility for full employment, that has the same weight as price stability. Job promoting mandate have Federal Reserve System, the Reserve Bank of Australia and the Reserve Bank of New Zealand.

Ensuring price stability is being rethought as a monetary policy goal and is highly influenced by global trends. So, according to the traditional approach to monetary regulation, price stability is achieved through targeting inflation and floating exchange rates. Floating exchange rates are considered to be effective instruments of global shocks absorption and domestic production and import flows management. Changes in the national

currency are projected onto imports, aligning domestic production to a level close to optimal while keeping prices within a given inflation (Corsetti G., 2010; Benigno G., 2006).

In the era of globalization the importance of international trade and the movement of capital have grown significantly. Growing international trade increases the role of external demand and supply in the management of domestic productive resources. Relocation of production facilities to countries with cheap labor, automation of production, simplification of supply chains create a disinflationary effect. The globalization of trade has reduced the price of the consumer basket from a quarter to two-thirds (Feigelbaum P., 2016). Fading inflation is a global trend, although recently researchers have noted new factors provoking inflation. Demographic challenges – population aging and massive retirement of the baby boomer generation – create an internal shift in the labor market and an extension of the Phillips curve. Awareness of the vulnerability of global commodity chains, clearly shaped during the COVID-19 pandemic, is simultaneously driving the scientific community, as well as the government and central banks, to the thought of production localizing, so there is a possibility that the disinflationary force of globalization will decrease in the future. Globalization has increased market competition, equalizing producer prices and weakening the dependence of the state of domestic labor markets and inflation.

In international trade the US dollar accounts for half of payments – five times the US share in world imports and three times the US share in world exports. Thus, import prices do not reflect changes in trade between regions, as they are influenced by the US dollar index. In addition to international payments, the US dollar is of great importance to the financial sector. Two-thirds of securities are denominated in US dollars, the same ratio foreign exchange reserves have, denominated in US dollars (Gopinath G., 2018; Gourinchas P., 2019). Dollar dependence is especially relevant for emerging markets, where any external crises with increased amplitude affect them.

Some researchers believe that the global financial cycle is the US dollar cycle. According to the Deputy Governor of the Bank of England B. Broadbent, in the globalized financial system the monetary policy of a single country ultimately has little impact on domestic financial conditions. As a result of the financial ties intensification, the monetary policy, formed by the central banks of main importance on a global scale, is acquiring a global character.

Therefore, the parameters of monetary policy in different countries become symmetric and fluctuating in the national currency are limited and eventually become close to a fixed one. This connection can be traced in the example of the Bank of Japan, which had to build up its balance sheet and correct internal imbalances caused by the monetary policies of other countries.

Full employment as a goal of monetary policy is also criticized by the scientific and professional community. The belief that the federal government has a responsibility for full employment, has economical sense and appeared at the Great Depression time. At the end of the Second World War there was some concerns that job market could not accept millions of American soldiers after demobilization. In the Employment Act of 1946, the Congress directed the federal government mandatory to foster and to promote conditions under which there will be afforded useful employment, for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power. An amendment to the Federal Reserve Act in 1977 added a new dimension to the current objectives of US monetary policy – promoting maximum employment. A year later passed Full Employment and Balanced Growth Act, requiring from the Federal Reserve report to the Congress about how monetary policy was supporting the goals of the act. At the same time, it is not so much the provision of work for every citizen that is of greater importance for this direction of monetary policy, but the reduction of poverty, inequality of various social groups, discrimination and crime, and the elimination of economic problems facing black communities.

Addressing climate change is becoming increasingly important in the choice of monetary policy instruments. At the present stage, no central bank has decarbonization and the transition to a green economy as priority goals of activity. However, most central banks attach great importance to this problem, calling to direct efforts within their powers to reduce financial risks associated with climate, which can affect the safety and reliability of financial institutions and can potentially threaten the stability of the financial system. Researchers agree that climate change and the transition to a low-carbon economy pose both risks and opportunities for the financial sector. Extreme natural events associated with climate change – drought, forest fires, hurricanes, abnormal weather conditions – are predicted to increase in frequency and magnitude, increasing damage to households and organizations over time, disrupting corporate supply chains,

impacting profitability, creditworthiness of organizations and changing approaches to determining the value of collateral. Financial institutions that do not have well-developed mechanisms for measuring, monitoring, and managing climate-related risks may face losses on climate-dependent assets. Conversely, sustainable risk management, scenario analysis and forward-looking planning will help to ensure that the financial institutions are resilient to the impact of climate-related risk events and ensure a smooth transition to a sustainable economy. The world's banks are collaborating on joint solutions through the Basel Committee Working Group (TCFR) and the Network for Greening the Financial System (NGFS), which brings together 83 central banks and financial supervisors, whose goal is to accelerate the scale up of green finance and develop recommendations for regarding the role of central banks in climate change.

Before the 2008 financial crisis, the interest rate was the main instrument of monetary policy. Changes in the central bank rate affect key indicators of the economy: business activity, rates of commercial banks and the cost of borrowing in financial markets. Disinflationary trends in recent years have forced global central banks to keep interest rates at historically record lows. The base interest rate is influenced by global trends and structural factors, such as population aging, leading to the increase in demand for savings and the decrease in demand for borrowed funds, as well as the decline in the share of industry in GDP, which reduces the demand for capital by enterprises (Goodhart, 2020).

According to M. Saunders, member of the Monetary Policy Committee of the Bank of England, it is easier to return to the base inflation that is at levels higher than the target, than to the one that is lower. Researchers agree that in order to manage risk, monetary policy must be aggressive against downside risks – a “take big strides quickly” strategy in the Bank of England's terminology. If too little incentive is provided, and its impact on the economy is weaker than expected, then the costs of hysteresis will be disproportionately higher. At the same time, it is emphasized that the management of the key rate has its own limit, or an effective lower limit, the movement below which leads to a negative effect. The functioning of financial intermediation is distorted by reducing the profitability of financial institutions and squeezing lending. Therefore, following the exhaustion of the key rate resource, unconventional instruments are currently being developed and used, but they are not ideal substitutes for the key rate. The impact of many of them on

economic processes remains uncertain compared to the relatively well-understood effect of rate management.

In the post-pandemic period, in foreign practice direct financing instruments are developing. They allow banks and certain economic entities to borrow funds with appropriate collateral for a long time at a rate close to the bank's key rate (Bank of England – TFS family of programs, ECB – TLTRO). Such programs provide cheap financial resources to organizations and to small and medium-sized enterprises, which contributes to the growth of lending, positively affects the profits of banks and plays a key role in supporting the flow of credit to the private sector. Quantitative Easing (QE) to buy assets that drive down long-term interest rates was found to be effective during the 2008 financial crisis, mitigating the post-2016 Brexit referendum financial turmoil and the 2020 COVID crisis. Quantitative easing provides additional liquidity, relieves “instant liquidity” strains from the government bond market, stimulates the economy, lowers long-term interest rates, counteracts the deterioration of the government's financial system, and reduces the risk of turbulence from financial markets to the macroeconomy. Research of the effects of QE has identified its primary impact on interest rates, financial markets and asset prices. The impact of QE on GDP and inflation is more limited, according to the US Federal Reserve, no conclusive evidence of the impact of QE on bank lending has been found.

In addition to QE, other tools are used. Controlling the yield curve of government bonds is the central bank's management of the yield on government long-term bonds, in which the bank artificially influences the demand in stock markets. The instrument has been used by the Bank of Japan since 2016 to replace QE. REPO transactions provide unlimited liquidity guaranteed by a wide range of securities. The Bank of England jointly with the Treasury provides REPOs through the CTRF (Contingent Term Repo Facility). A toolkit for purchasing corporate bonds is being developed to directly provide liquidity to non-banking organizations. The Bank of England and the Treasury are acquiring bonds through the CCFF (Covid Corporate Financing Facility). The Fed teamed up with the Treasury through CPFF (Commercial Paper Funding Facility) and MMLF (Money Market Mutual Fund Liquidity Facility) to support investment funds experiencing customer churn. The creation of these institutions helped to ease the panic in the short-term bond market and stop the outflow of funds from investment funds in March 2020. The acquisition of

shares in investment funds is carried out by the Bank of Japan to support financial markets and stimulate the economy. The bank purchases shares in Japanese mutual funds (ETFs) and real estate investment trusts (REITs).

Researchers agree that the effectiveness of the use of any single instrument (change in the key rate, acquisition of assets) separately will have a weak effect, therefore a combination of instruments is important in order to achieve synergy, which will give a more pronounced effect. A side effect of unconventional instruments is the permanent growth of central bank balance sheets. When new monetary policy mechanisms were launched during the World Financial Crisis, central banks believed that balance sheet expansion would be short-term. Attempts to reduce the balance caused pressure on the stock market. The presence of securities on the bank's balance sheet purchased under QE limits its ability to increase the base rate, which can be raised only after the reserves are cleared. The acquisition by central banks of assets other than government bonds (for example, the acquisition of corporate bonds, ETFs, and REITs by the Bank of Japan) inevitably increases the risks associated with owning such assets. Asset inflation, expressed in the growth of the stock market and real estate prices, carries risks of stability of the financial system in the long term.

4 CONCLUSIONS

The growing risk of a liquidity trap in a near-zero rate environment reinforces the importance of joint implementation of monetary and fiscal policy measures to preserve jobs and economic activity. However, the unified policy is more inert due to its bureaucracy, as it requires the introduction and the adoption of bills. At the same time, a time lag for the implementation of measures is laid in the final result, therefore, when developing measures, it makes sense to use a set of tools that give less effect, but require less time for their adoption. At the same time, both the composition of the instruments and their influence on the final result change. If in conditions of positive interest rates the main task was to increase the supply by stimulating the production of goods and services, then in conditions of zero interest rates the main task is to increase the demand. Stimulating the production of goods and services becomes counterproductive, carrying a disinflationary effect. In these conditions, tax deductions for the modernization of equipment by legal entities, or the purchase of certain goods by individuals, have a positive effect. The state creates

demand through infrastructure projects or military spending. The increase in the workload increases the supply in the labor market, which leads to the decrease in total wages. Because of this, the aggregate demand decreases, twisting a deflationary spiral. Changes in the marginal costs of producers associated with falling commodity prices or changes in taxation also affect the bottom line. By laying down price cuts in the future, the manufacturer creates disinflationary expectations. If, within the framework of fiscal measures to overcome the crisis, a reduction in income taxation is envisaged, then the negative effects are eliminated with the help of QE.

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