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INFLATION TARGETING IN MONETARY AND CREDIT POLICY OF CENTRAL BANKS

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Inflation targeting in monetary and credit policy of central banks

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SUMMARY

The complex economic processes taking place in the globalized modern world affect the world economy through various channels. Recently, the price of oil in the world markets has fallen to the lowest level in the last ten years, which has led to a decrease in foreign exchange reserves in countries and a decrease in the supply of foreign currency. Inflation targeting is a strategic approach used by central banks' monetary and credit policies to achieve price stability in the economy. This strategy involves the annual percentage growth of the consumer price index (CPI) and the use of monetary policy instruments, with the central bank setting an open target for the inflation rate.

The purpose of inflation targeting is to reflect the complex processes and trends of macroeconomic development in the form of a statistical-graphic model, to examine various scenarios and to make effective decisions supporting the maintenance of price stability through the model. In the study of inflation targeting regimes, attention is paid to issues such as economic growth in the country, reduction of unemployment, balanced trade in foreign trade relations, improvement of financial policy and economic behavior at the level of economic institutions.

Key words: *Inflation targeting, monetary-credit policy, macroeconomic policy, central banks, price stability, financial system*

JEL kodu: *E31; E50; E58*

INTRODUCTION

Maintaining price stability is very important in ensuring the success of economic policy and strong economic progress within the country. It is from this point of view that price stability is one of the main economic goals of the state. In the field of restoring price stability, it is important to ease import inflationary pressure, ensure an inflation targeting regime and conduct an effective monetary policy.

In general, in modern times, researchers of central banks, International Monetary Fund, and interstate financial institutions such as the World Bank conduct various researches in the field of inflation targeting. The main purpose is to investigate the characteristics of monetary policy regimes, the factors affecting their selection, the causes of inflation in different states and also in countries, the targeting regimes, the analysis of measures to combat it, and the necessity of transitioning to a new monetary policy regime.

During the assessment of the theoretical part of the materialscomparative analysis, graphic grouping, analytical theoretical methods, summarization, evaluation of the practical part consists of economic-statistical analysis, comparative analysis, graphic studies.

The necessity of implementing the inflation targeting policy, keeping it stable and solving the problems it will face, the implementation of the anti-inflation policy in the right form brings to the fore the importance of the research results.

IMPORTANCE OF INFLATION TARGETING WITHIN MONETARY AND CREDIT POLICY

Inflation targeting is characterized as a monetary policy regime that has been applied by both developed and developing countries and whose results have been proven to be successful. Inflation targeting can be defined as a regime directed by the Central Banks to keep inflation at a specified level. Central banks implement inflation targeting in a broader framework that includes the management of money supply, interest rates and credit conditions (Trichet J.C.,2014). The

difference between the inflation targeting regime and other strategies that seek to control inflation is that in this regime, the pastor based on the inflation level for future periods instead of current inflation. The difference between the target inflation rate chosen by the Central Bank for the next period and the actual inflation rate is considered the success of the Central Bank.

In general, until the first half of the 20th century (until the 30s), there was almost no inflation problem in the countries of the world. Inflation became a serious problem after the abolition of the gold standard. In those years, the biggest problem was unemployment and economic stagnation, and the implemented measures were aimed at solving these problems. Starting from the 70s of the last century, inflation began to have an intensively devastating effect on the world economy and national economies, and from those times, both economists and monetary authorities began to conduct research in the direction of preventing this problem. Some countries have chosen the money supply as a means of targeting to curb inflation and tried to keep inflation at a stable level through the regulation of the money supply. However, structural changes in the countries, implementation of financial liberalization has started to create certain difficulties in choosing the money supply as a target. Therefore, starting from the end of the last century, many countries began to search for new alternative policies and goals in the implementation of monetary policy. After this period, many countries chose the exchange rate targeting strategy and others started to apply the new inflation targeting strategy.

Inflation targeting regime transparencyand has a significant advantage in terms of accountability (Mishkin F.S.,2015). This also creates a control mechanism for Central Banks. In order to avoid large deviations, the Central Bank uses the policy tools necessary to achieve the stated goals in a timely manner. In the other hand, the application of this regime eliminates uncertainties, which makes investment and savings decisions easier.

The inflation targeting regime is considered one step ahead of the others as it is a flexible, systematic and rational monetary policy regime. In this regime, although the reduction of inflation is initially determined as the goal, after the passage of time, it is in the center of attention due to its flexibility, which includes taking steps in the direction of the development of the real sector.It has already been proven that the inflation targeting regime is the right monetary policy. Because the inflation targeting regime allows the monetary policy to respond to demand shocks, it has the ability to take contractionary measures against shocks aimed at inflation growth. To implement this, Central Banks use the tool of increasing interest rates.

ECONOMIC THEORIES AND FRAMEWORKS SUPPORTING INFLATION TARGETING

In our modern world, the nature of inflation has changed its direction from the local level to the global level, and periodicity has become chronic in the economy. In general, inflation processes should not be treated as an event, but as a dynamic process. Let's note that there are two groups of inflation processes in the economy: demand and cost inflation processes. violation occurs. The second group of inflationary processes is formed as a result of the factors that increase the price of goods by increasing the cost of producing goods and, as a result, increase the money supply. In the economy, these two groups of factors interact and form inflationary processes by increasing the prices of goods and services. The militarization of the economy, the deficit of the state budget and the increase of internal debts, the credit expansion of banks, import inflation are the main factors that shape demand inflation processes.

Demand inflation is related to the theory of CM Keynes. Thus, according to Keynes, the increase in aggregate demand in the economy under full employment conditions leads to an increase in the demand for goods in the commodity markets and consequently increases the general price level. (Şanlı B., 2016).

The process of cost inflation shows the increase in prices mainly due to the increase in production costs. At this time, the production of the product is treated as the effect of the wage costs incurred on the raw materials and materials used, as well as the workers. There are factors such as price leadership, labor productivity and labor productivity, increase of labor costs per

product unit, energy crisis, etc., which form the cost inflation. The increase in fuel energy prices, especially crude oil prices, increases the cost of the product and, as a result, leads to an increase in product prices. Note that each country has its own national characteristics in relation to the above factors. However, monetarist economists like M. Friedman, if the state and its central bank do not increase the money supply in circulation They noted that the cost inflation processes in the value of goods and services were increasing. In other words, they indicated that if the money supply remained stable, there would be a decrease in spending on goods and services. Monetary economists justified the process in such a way that, in the relevant situation, prices will tend to fall because there is not enough puff mass in circulation to sell products and services at that price. Thus, monetarist economists highlighted the monetary and credit policy as a priority in the formation of inflationary processes, showing that it indirectly affects economic events (Mehmet AD, 2018).

STRATEGIES USED BY CENTRAL BANKS TO COMMUNICATE INFLATION TARGETS

In modern times, the role of Central Banks in the development of the country's economy has been almost determined theoretically and practically. In this regard, it should be noted that in recent times, the role of Central Banks in economic development is mainly shown as ensuring price stability. This goal has already been accepted as a direction of activity by almost all Central Banks, and at the same time it has been established in the legislation on Central Banks. With this, the process of lifting the targets set by the Central Banks years ago and which cannot be interfered with by them has begun. It describes how the Central Bank's changes in monetary policy parameters affect economic activity and inflation, and this process is complex, and the timing and size of the impact on the economy is extremely important (Scheme 1).

Anti-inflationary policy measures implemented against inflationary processes are important in mitigating inflationary processes. In this regard, there are forms of anti-inflationary policy such as deflation policy (or demand regulation), income policy (cost regulation) and competitive stimulation of production in response to demand inflation and cost inflation processes.(Şişli, E, 2010)

The deflationary policy includes measures such as reducing government spending, increasing interest rates on loans, increasing taxes, limiting the money supply, etc. The effects of this policy are primarily slow economic growth and sometimes even cause economic crises. Income policy includes parallel control by setting limits on price and wage growth. In terms of social motives, this type of anti-inflationary policy is rarely applied. Because the slowdown in price growth creates a deficit in some commodities.

Scheme 1. The mechanism of influence of the Central Bank on the economy and inflationary processes
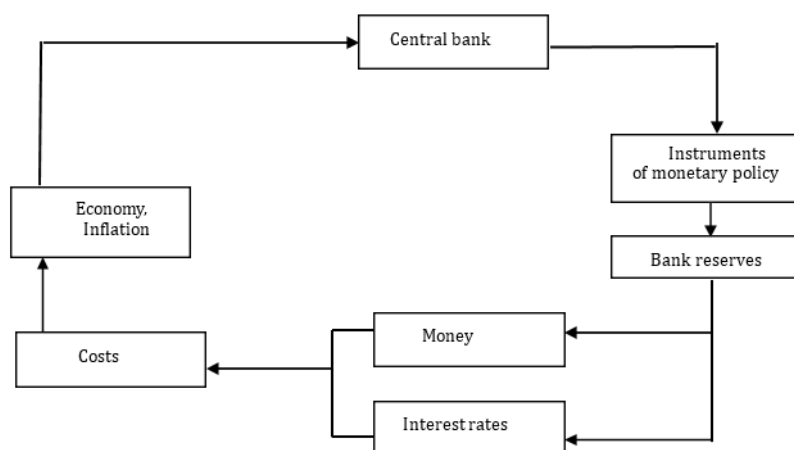
Source: Shanli, B. (2016), p.170

Central banks serve the ultimate goal of determining monetary policy strategies. It should be noted that Central Banks use certain intermediate targets to achieve this ultimate goal. For example, let's assume that the Central Banks have planned to implement an expansionary monetary policy for a long time. In this case, the economic units will build their activities according to the expansionary policy (raising prices and wages) and as a result, it will lead to high inflation and other negative situations for the economy in the long run.

In order to prevent the occurrence of these negative situations, decision-making bodies (the Central Bank or the government) prefer to take steps in this direction by choosing an intermediate instrument of monetary policy. The selection of this intermediate target (Turkish-nominal capa, English nominal anchor, etc.) is made by decision-making bodies between its money supply, exchange rate and inflation itself (Shiriner, I., TurgaY, T., 2017). However, one issue should be noted here that if the selection of the intermediate target determined by the decision-making bodies is insufficient in estimating or forecasting inflation for future periods, it will create difficulties in achieving this final goal. In order to ensure price stability, Central Banks have used various alternative intermediate targets. Among these, we mentioned above, as the targeting of the money supply. However, implementing inflation targeting involves a complex interplay of factors and requires continuous monitoring of economic indicators, risk assessment, and adjustments to policy instruments based on evolving economic conditions and external shocks (IMF, 2016).

EXAMINATION OF THE RELATIONSHIP BETWEEN INFLATION TARGETING AND ACTUAL INFLATION RATES

In the theoretical and technical application of monetary policy, Svensson divided intermediate targets (money supply targeting and exchange rate targeting) into two groups in the form of nominal GDP and inflation targeting as targeting strategies based on target variables (economic growth and price stability).

Intermediate targets should be mentioned as the first stage of a two-stage policy process, and in this stage, Central Banks select an intermediate variable (target) and use it to achieve the final goal. The main arguments in favor of using such an intermediate target are the rapid and that it is easy. Let's look at the most commonly used money supply targeting strategy. The theoretical foundations of this targeting regime are monetarists based on M. Friedman's rule of increasing the money supply at a constant rate, based on the idea that inflation is a monetary phenomenon at all times and everywhere, the income level and prices are determined by the money supply, and through the money supply targeting regime, nominal income and inflation are maintained for a long time can be controlled (Handa J., 2009, p.63). For this reason, many countries implement monetary and credit policy more effectively by switching to the inflation targeting regime (table 1). In addition to the influence of monetarist ideas, the transition to the money supply targeting regime was also influenced by the processes that took place in the world economy in the 1970s. The collapse of the Bretton Woods system led to an increase in oil prices, then rising inflation in the world countries, and at the same time, a decrease in confidence in the Keynesian policy created the need to define a new intermediate target. (Shanli, B., 2016: p.99).

## Table 1. Reasons for the transition of some countries to inflation targeting

Countries	Previous intermediate target	Macroeconomics in general poor condition	Exchange rate instability	Target reference aimed at inflation expectations
Developed countries				
Australia	Exchange rate	x		x
England	Exchange rate		X	
Sweden	Exchange rate		X	
Iceland	Exchange rate			
Canada	Exchange rate			x
Norway	Exchange rate			x
New Zealand				x
Developing countries				
Brazil	Exchange rate		X	x
Czech. Resp.	Exchange rate - Money supply		X	
Philippines	Exchange rate - Money supply			x
South Africa	Money offer		X	x
South Korea	Money offer		X	x
Israel	Exchange rate			x
Colombia	Exchange rate	x	X	x
Hungary	Exchange rate		X	x
Mexico	Money offer			x
Peru	Money offer		X	x
Poland	Exchange rate			
Chile	Exchange rate	x		x
Thailand	Money offer	x		x

Source: Melike Alparslan-Pelin Ataman Erdönmez, (2010), p.35

Inflation targeting refers to the use of the Central Bank's operational tools to achieve inflation targets. The following 5 key elements of inflation targeting should be noted:
- Price stability is defined as the main goal of monetary policy;
- Quantitative inflation targets are officially announced to the public;
- Monetary policy is based on a wide range of information and at the same time inflation forecast;
- Transparency;
- Having an accountability mechanism.

Scheme 2. Opportunities to influence economic processes through the short-term interest rate
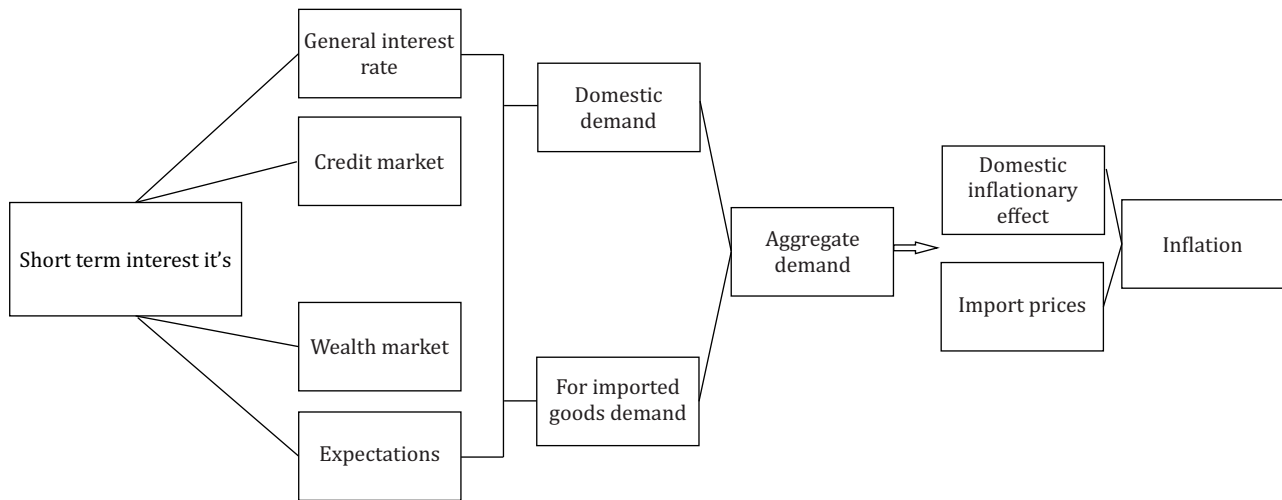
Source:Gul, E., Eking, A. and Gurbuz, AA, (2016), p.102

As can be seen from the scheme 2, the Central Bank influences the credit market and asset market through short-term interest rates, and at the same time controls the general interest rates across the country and thus forms the expectations of economic units on interest rates. This, in general, affects both the domestic demand and the demand for imported goods, thus affecting the formation of aggregate demand. Aggregate demand, in turn, determines inflationary processes.

Table 2. Contrasting Inflation Targeting, Money Supply Targeting, and Exchange Rate Targeting Regimes

	Volatility in the inflation rate	Release date playfulness	Playfulness in interest rates	Real exchange rate volatility	The standard deviation of the loss functionmass
Inflation targeting	1.6	1.8	0.8	5.1	6.7
Currency targeting	2.7	3.2	8.5	2.9	53.8
Money of mass	2	2.1	0.7	5.9	8.8

Source:"Inflation Targeting and the IMF", IMF, March (2016), p.47.

As can be seen from the table 2, the volatility of all indicators is lower in the inflation targeting regime than in other regimes. Since the inflation target is determined in this regime, other macroeconomic policies are prepared based on it.In modern economic conditions, some monetary policy rules and targets previously applied by central banks are losing their importance.

CONCLUSION

Inflation targeting has become an important strategy in the monetary policy of many central banks around the world. This implies the determination of a specific inflation rate as the main objective for monetary policy, aiming at price stability and a moderate level of inflation. This approach allows central banks to use interest rate adjustments and other monetary tools to achieve a target inflation rate.

The nature and application mechanisms of the inflation targeting regime can be summarized in the following aspects:

1. In modern times, in the conditions of globalization, national economies have become

economies affected by the economic development of individual countries in various ways. The development of foreign economic relations between countries brought the countries closer together in economic, cultural, political and other relations, but also conditioned the transmission of unfavorable changes in the economies of these countries to each other through commercial and economic channels. From this point of view, it is important to study within the framework of the transmission of import inflation processes to the national economy, which originates from inter-country mutual economic relations.

2. In the framework of the transmission of inter-sectoral relations of the national economy to inflation processes: it should be noted that both the world financial crisis that occurred in 2008 and the oil price shock in the world markets at the end of 2014 affected the development of the non-oil sector and inter-sectoral goods, work in the country and revealed the importance of diversifying the flow of services.

In contrast to the impact of previous economic crises, the inflationary processes that occurred at the end of 2014 were directly caused by the sharp drop in world oil prices, the oil sector having a significant share in exports, the risk of diversification in the export-oriented non-oil sector, the demand of the domestic commodity market being met mainly by imports. has made the issues of making more relevant.

3. Within the framework of the financial stability of the financial sector: In the financial sector, the revaluation of the exchange rate in financial institutions that place financial assets in foreign currency and have a short position in foreign currency, as well as the increase in administrative and other financial costs as a result of inflationary processes, adversely affected the financial results of the organizations.

4. Within the framework of improving people's social condition: inflationary processes are economic processes that directly affect the financial condition and financial results of economic subjects, as well as affecting the social conditions of individuals in the society. From this point of view, it is important to model inflation processes in order to improve the material well-being of the population and improve business conditions. In this regard, determining the level of unemployment that does not accelerate inflationary processes is of great importance from the aspect of socio-economic development of economic processes.

5. Within the framework of the initial conditions of the application of the inflation targeting regime: the application of the inflation targeting regime has a number of advantages. The inflation targeting regime ensures sustainable development in the monetary, fiscal, real and foreign sectors, more rational management of inflation expectations of both households and the real sector and reduction of inflation expectations, implementation of government programs in the field of employment, economic activity as a result of low inflation expectations has a number of important advantages, such as ensuring that tax revenues enter the budget as a result of its creation.

6. Within the framework of the relationship between the inflation level and inflation uncertainty let's note that the study of the asymmetric effects of positive shocks on inflationary processes compared to negative shocks on inflation uncertainty and evaluation in terms of financial information asymmetry will further improve communication and further improve inflation uncertainty is important in terms of reduction.

Controlling inflation is crucial for a healthy economy, as it influences consumer behavior, business investments, and overall economic stability. Central banks regularly assess and refine their approaches to inflation targeting to navigate complex economic environments and fulfill their mandates effectively.

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MƏRKƏZİ BANKLARIN PUL-KREDİT SİYASƏTİNDƏ İNFLYASİYA HƏDƏFLƏMƏSI

Yusif MƏMMƏDOV

XÜLASƏ

Qloballaşan müasir dünyada gedən mürəkkəb iqtisadi proseslər dünya iqtisadiyyatına müxtəlif kanallar vasitəsilə təsir edir. Son zamanlar dünya bazarlarında neftin qiyməti son on ildə ən aşağı səviyyəyə düşməsi nəticəsində ölkələrdə valyuta ehtiyatlarının və valyuta təklifinin azalmasına səbəb olmuşdur. İnflyasiyanın hədəflənməsi iqtisadiyyatda qiymət sabitliyinə nail olmaq üçün mərkəzi bankların pul və kredit siyasətləri tərəfindən istifadə edilən strateji yanaşmadır. Bu strategiya istehlak qiymətləri indeksinin (İQİ) illik faiz artımını və mərkəzi bankın inflyasiya dərəcəsi üçün açıq hədəf təyin etməsi ilə pul siyasəti alətlərinin istifadəsini nəzərdə tutur.

İnflyasiyanın hədəflənməsinin məqsədi makroiqtisadi inkişafın mürəkkəb proseslərini və tendensiyalarını statistik-qrafik model şəklində əks etdirmək, müxtəlif ssenariləri araşdırmaq və model vasitəsilə qiymət sabitliyinin qorunmasını dəstəkləyən effektiv qərarlar qəbul etməkdir. İnflyasiyanın hədəflənməsi rejimlərinin öyrənilməsində ölkədə iqtisadi artım, işsizliyin azaldılması, xarici ticarət əlaqələrində balanslaşdırılmış ticarət, iqtisadi institutlar səviyyəsində maliyyə siyasətinin və iqtisadi davranışın təkmilləşdirilməsi kimi məsələlərə diqqət yetirilir.

Açar sözlər: İnflyasiyanın hədəflənməsi, pul-kredit siyasəti, makroiqtisadi siyasət, mərkəzi banklar, qiymət sabitliyi, maliyyə sistemi

ИНФЛЯЦИОННОЕ ТАРГЕТИРОВАНИЕ В ДЕНЕЖНО-КРЕДИТНОЙ ПОЛИТИКЕ ЦЕНТРАЛЬНЫХ БАНКОВ

Юсиф МАМЕДОВ

РЕЗЮМЕ

Сложные экономические процессы, происходящие в современном глобализированном мире, влияют на мировую экономику по различным каналам. В последнее время цена нефти на мировых рынках упала до самого низкого уровня за последние десять лет, что привело к уменьшению валютных резервов стран и уменьшению предложения иностранной валюты. Таргетирование инфляции — это стратегический подход, используемый денежно-кредитной и кредитной политикой центральных банков для достижения стабильности цен в экономике. Эта стратегия предполагает ежегодный процентный рост индекса потребительских цен (ИПЦ) и использование инструментов денежно-кредитной политики, при этом центральный банк устанавливает открытый целевой уровень инфляции.

Целью инфляционного таргетирования является отражение сложных процессов и тенденций макроэкономического развития в виде статистико-графической модели, рассмотрение различных сценариев и принятие эффективных решений, поддерживающих поддержание ценовой стабильности с помощью модели. При исследовании режимов инфляционного таргетирования внимание уделяется таким вопросам, как экономический рост в стране, снижение уровня безработицы, сбалансированность внешнеторговых связей, совершенствование финансовой политики и экономического поведения на уровне экономических институтов.

Ключевые слова: Инфляционное таргетирование, денежно-кредитная политика, макроэкономическая политика, центральные банки, ценовая стабильность, финансовая система