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**MONETARY POLICY OF THE
REPUBLIC OF KAZAKHSTAN TO 2020**

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INTRODUCTION

In its development, Kazakhstani monetary policy has gone through a number of crucial phases, reflecting key macroeconomic trends during the past 20 years. The directions of monetary policy were determined by the National Bank's crucial tasks for the corresponding period to reduce inflation, ensure stability of the national currency, and also create conditions for functioning of the country's system.

Today, the monetary policy's objective is price stability, intending to achieve and hold inflation at a low level. The National Bank's distinct orientation on reducing and stabilizing inflation at a low level also contributes to steady and balanced economic growth. In these conditions, inflation targeting is preferable for Kazakhstan as a monetary policy regime.

Instruction of inflation targeting in Kazakhstan assumes implementation of the following set of measures.

It is planned to increase the efficiency of the interest rate channel of the transmission mechanism by expanding the system of tools for regulating liquidity and also introducing a new "base" interest rate. The interest rates of monetary policy tools will be linked to the base rate. Standing facility interest rates will form the upper and lower limits of the money market rate fluctuations. In the event of tightening or easing of monetary policy, the base rate may accordingly be raised or lowered, which will entail a change in the rest of the interest rates.

Taking into account the significant influence of the exchange rate on inflation, implementation of the exchange rate policy will be aimed at achieving the inflation objectives. In the transitional phase, the National Bank will adhere to an exchange rate corridor regime and will allow for a more flexible exchange rate, to the extent that it will not be contrary to achieving the inflation targets. In the event of foreign exchange shocks, ensuring stability in the financial market will become the priority.

The consumer price index, as the simplest and most understandable inflation indicator, will serve as an inflation target in the form of a pinpoint target with a range of permissible deviations. As work progresses in inflation targeting, the current yearly target will be replaced by a medium-term target. This issue will be resolved simultaneously with development of model tools for assessing the effect of monetary policy signal on the macroeconomic processes.

The National Bank will introduce an analysis and forecasting system for monetary policy decision making. The final result will be forecasts of inflation and other macroeconomic indicators, on the basis of which recommendations will be compiled for future monetary policy.

The decision making system will be changed. The inflation targets will be established by the Executive Board of the National Bank. To fulfill the target established by the Board, a Monetary Policy Committee will be created, which will determine the base interest rate, rates on basic monetary policy transactions, and also approve the state monetary policy. It is also planned to create the Money Market

Committee, which will make timely decisions on strategy set out by the Monetary Policy Committee.

Structuring an effective communication strategy of the National Bank is an important component of inflation targeting. The main goals of the communication strategy will be to increase confidence in the policy being implemented by the National Bank, shift priorities of economic agents from the exchange rate to inflation, and also hold inflation expectations of economic agents at a low level.

Thus, implementation of Kazakhstan's monetary policy to 2020 will be aimed at introducing an inflation targeting regime and, in the final analysis, ensuring steady economic growth in the long-term.

I. EVOLUTION OF THE DEVELOPMENT OF THE MONETARY SPHERE IN KAZAKHSTAN

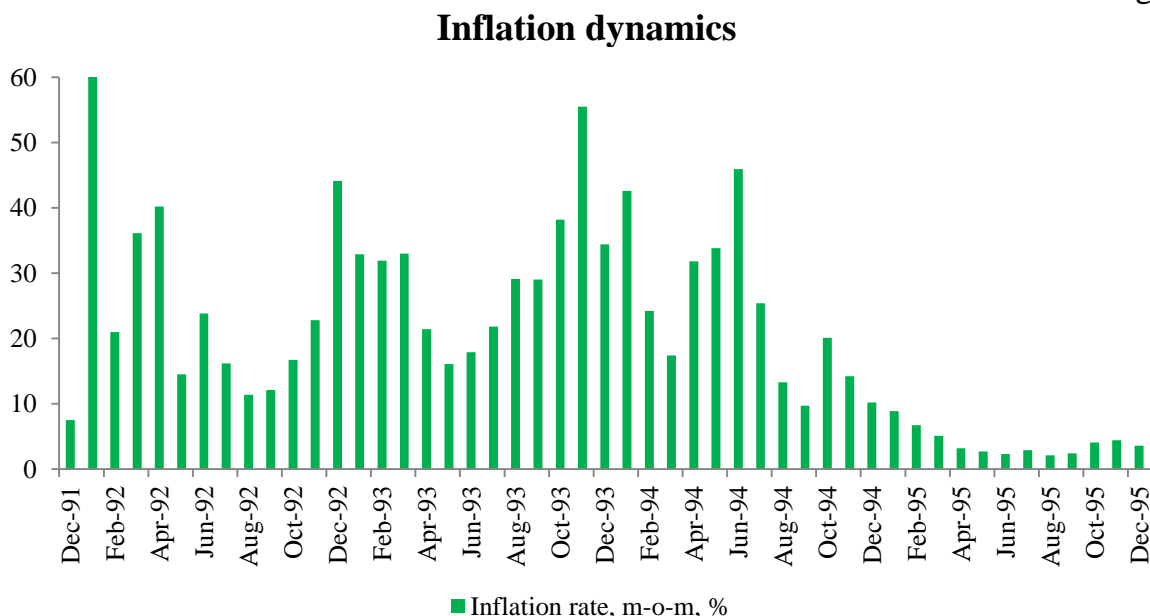
1.1. Formation of monetary policy of the National Bank (1993-1999)

After gaining independence in 1991, Kazakhstan was faced with the task of changing the functioning of the economy in connection with the transition from a planned system to market principles. First and foremost, this required conducting privatization, liberalization of pricing, and also creation of a competitive environment.

The collapse of the USSR and disruption of the earlier existing economic ties resulted in a deep crisis in the first half of the 1990s in all sectors of the country's economy.

In early 1992, measures were taken for transition to market pricing. The price liberalization conducted in 1992 in the absence of a competitive environment resulted in hyperinflation, a worsening of the financial condition of enterprises, a decrease in product output, a decline in real incomes of the population, and stagnation of the entire economy. The level of inflation in Kazakhstan in 1992 reached the maximum value of 3060 percent. Although in recent years its pace decreased, it remained at a sufficiently high level: 2265 percent in 1993 and 1258 percent in 1994 (Figure 1).

Figure 1



The annual economic contraction in 1991-1995 averaged 9.3 percent. Payment transactions between enterprises were practically destroyed, and the non-payments reached significant amounts. The task of granting the necessary funds for the economy was resolved by the National Bank by granting credits to enterprises, banks,

and the government to finance the budget deficit, which affected maintaining the high rates of inflation.

To improve the situation that had developed, it was necessary to take urgent measures to decrease hyperinflation and prevent a further drop in production and establish the correct proportions of cash flow.

To overcome the crisis it was required to pursue a strict monetary policy, which was possible only after introducing a national currency. In April 1993, the Republic of Kazakhstan Law “On the National Bank of the Republic of Kazakhstan” was passed, which established as the main goal to ensure internal and external stability of the country’s national currency. In November 1993, the national currency was introduced – the tenge, which made it possible to pursue an independent monetary policy.

In order to decrease the high rates of inflation and transition to the classic functions of central banks, from 1994 the practice of issuing soft loans and direct crediting of enterprises was stopped. Government loans for funding the republic budget deficit began to be granted on a fee paid basis at the official refinancing rate, but in 1995 this practice was stopped completely.

When implementing the monetary policy, the National Bank began to use classic instruments: granting credits to banks, establishing the official refinancing rate and minimum reserve requirement standards, and conducting transactions on the foreign exchange market.

New instruments were introduced, such as Lombard loans and short-term National Bank notes. National Bank notes became the main tool for timely regulation of liquidity, and the emission volumes of the notes were determined by the monetary aggregate targets. Nevertheless, the underdevelopment of the secondary securities market did not allow the National Bank to make full use of this tool.

Credit resources were placed by the National Bank by credit auctions and on a Lombard basis. In 1997, credit resource auctions stopped being held due to the sufficiency of resources in the banking system.

Steps taken by the National Bank helped to reduce inflation from 60.3 percent in 1995 to 1.9 percent in 1998. In 1996-1999, an average annual growth of production of 0.75 percent was observed.

The National Bank furthered infrastructure development of the money and financial markets. A system of electronic over-the-counter government securities market began to operate, making it possible to conduct buying and selling transactions on a real time basis.

In 1996, the National Bank began to conduct short-term REPO transactions secured by government securities of the Republic of Kazakhstan Ministry of Finance, which made it possible to regulate bank liquidity effectively.

In 1998-1999, as a result of unfavorable situation for world prices for oil and nonferrous metals, as well as the significant devaluation of national currencies of Kazakhstan’s trading partners, the tenge strengthened considerably in real terms. This

decreased the competitiveness of Kazakhstani goods and had a negative impact on the rate of economic growth.

To prevent adverse consequences on the country's economy, on April 5, 1999, Kazakhstan went to a regime of freely floating national currency exchange rate. As a result, the supply of foreign exchange on the domestic forex market increased, which helped to stabilize the forex market and the financial sector. According to the results of 1999, inflation was at a level of 17.8 percent.

In conditions of stabilization of the situation in the economy, the monetary policy was eased somewhat. The refinancing rate in 1999 was gradually decreased from 22 percent to 18 percent.

The National Bank opened additional refinancing "windows" for banks experiencing temporary difficulties with liquidity: day loans and "overnight" loans.

Bank reserve requirement standards did not change and remained at 10 percent of a bank's total deposit liabilities, except for the period from April 5 to 18, 1999, when the level of minimum reserve requirements was temporarily reduced to 5 percent.

Thus, by 1995, the National Bank was able to curb the hyperinflation by reducing the money supply. During 1991-1999, classic monetary policy tools of the central bank were gradually put into practice – an official refinancing rate, minimum reserve requirement standards, and open market transactions, in particular forex interventions and transactions with short-term notes. The main elements of the financial infrastructure were created, which led to favorable conditions for further development of the economy.

1.2. The National Bank's role in the process of macroeconomic stabilization and growth of the economy (2000-2006)

The macroeconomic environment in Kazakhstan from 2000 to 2006 developed under the influence of favorable internal and external factors. Positive trends in the world financial and commodity markets, as well as the consistent conduct of socioeconomic reforms impacted the stabilization of the macroeconomic situation in the country. In 2000-2006, inflation was maintained at a level of 6.4-8.4 percent, and the average real GDP growth was 10.3 percent (Figure 2).

Figure 2



Investment activity of domestic and foreign capital largely contributed to the growth of the Kazakhstani economy. A favorable pricing environment was established for domestic export positions (oil, gold, zinc, copper, lead, and grain) against the background of internal macroeconomic stability.

In these conditions, the National Bank was to have, on the one hand, pursue a policy limiting price increases and, on the other, implement a gradual easing of monetary policy in order to broadening money supply aimed at maintaining economic growth and expanding production.

Within the framework of easing monetary policy, during the period 2000-2003, the refinancing rate was gradually decreased from 18 percent to 7 percent, the rate on “overnight” loans from 27 percent to 8 percent, and the rate on REPO transactions from 23 percent to 19 percent. In 2000, the required reserve ratio for banks was gradually reduced from 10 percent to 6 percent.

In 2000, the discount rate was introduced for rediscounting bills. Initially, it was set at 12.5 percent, and during 2000-2003 it was lowered to 8 percent. The rate was in effect right up until the end of 2003, and afterwards bill transactions began to be conducted at the official refinancing rate.

The interest rate policy oriented banks on reducing lending rates in order to increase access to loan funds. From 2000 to 2003, the average weighted rates on loans for legal entities decreased from 19.4 percent to 14.9 percent, and for individuals – from 27.5 percent to 20.3 percent.

Thus, the easing of monetary policy led to an increase in the loan volumes by banks to the economy and a growth of money supply. The annual increase in the volume of bank loans to the economy during 2000-2003 averaged 66.8 percent, and money supply growth averaged 37.5 percent. In doing so, inflation declined from 9.8 percent to 6.8 percent.

From 2004, the National Bank began to determine the monetary policy guidelines for three years ahead with an annual update of parameters. Achieving macroeconomic stability made it possible to forecast and develop strategic directions for a longer period taking into consideration the situation in the economy and financial markets.

In order to reform the system of government regulation of the financial market, from 2004 the functions of supervision and regulation of the financial market went to a separately created department – the Agency of the Republic of Kazakhstan for Regulation and Supervision of the Financial Market and Financial Organizations. The National Bank by legislation was given the main objective– ensuring price stability.

The period from 2004 to 2006 was characterized by high rates of economic growth. The volume of bank loans from 2000 to 2006 increased 17-fold. At the same time, the increase in lending, based on significant external bank loans, also increased Kazakhstan’s vulnerability with respect to the foreign economic situation.

Lending to the economy occurred disproportionately to the structure of the economy, which resulted in excessive lending to individual sectors of the economy and the appearance of “bubbles”. Against the background of the limited choice of financial instruments for investing available money, subjects of the economy began to sharply question their profitable investing. Putting available money into real estate became especially attractive. As a result, mortgage lending and equity construction increased considerably, which sparked an increase in real estate prices.

A high influx of foreign capital, excess liquidity in the domestic market, and an increase in state budget expenditures helped to intensify inflationary pressure in Kazakhstan’s economy from 2005. In 2006, for the first time since 2001, inflation exceeded the 8 percent level (Figure 3).

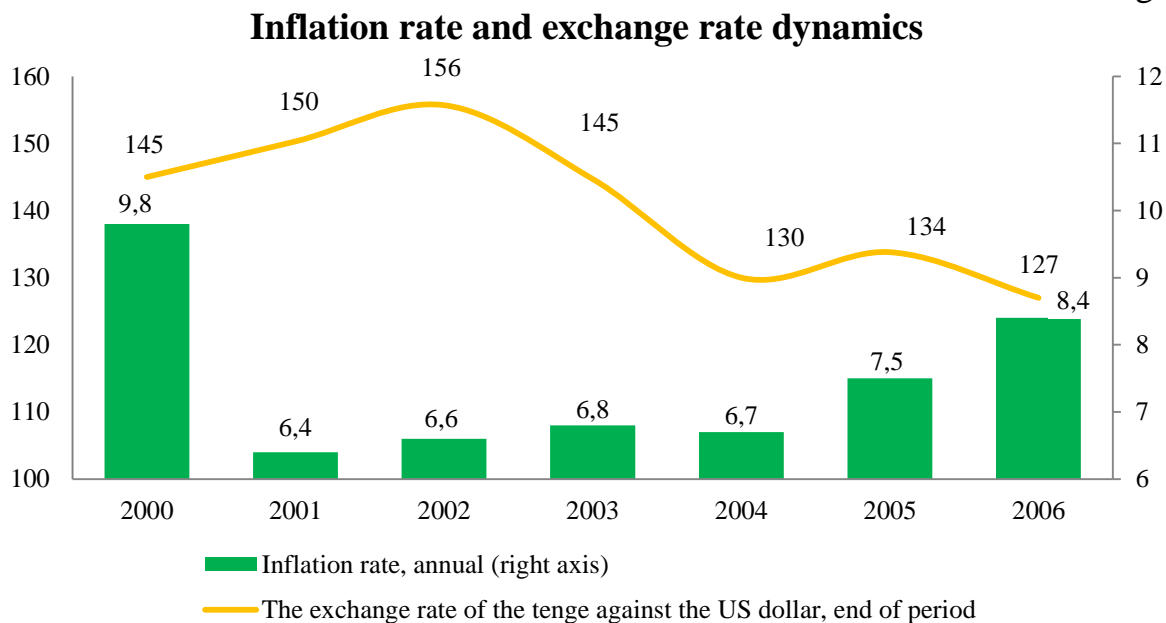
Intensification of inflationary processes in the economy caused measures to be taken to tighten monetary policy, i.e., increase rates on monetary transactions and absorb excess liquidity. The official refinancing rate was increased from 7 percent to 9 percent, the official rate for “overnight” loans was raised from 8 percent to 9.0 percent, and the rate on reverse REPO transactions was raised from 7.5 percent to 8.0 percent.

Bank deposits in the National Bank became the main instrument during this period for sterilization of excess liquidity. The rate for attracted deposits was increased from 2 percent to 4.5 percent. As a result, the volume of bank deposits in the National Bank in 2004 increased 2.5-fold, 3.4-fold in 2005, and tripled in 2006.

To increase the attractiveness of the National Bank’s short-term notes, the effective yield of the National Bank’s short-term notes increased during 2006 from 2.24 percent to 4.69 percent (the average weighted monthly rate).

When implementing the foreign exchange policy, the floating exchange rate regime for the tenge was retained, assuming its formation depending on supply and demand on the domestic foreign exchange market. The significant influx of foreign currency as a result of the price increases for main export goods and also an increase in foreign loans of banks helped to strengthen the tenge from 2002 (Figure 3).

Figure 3



The trend of the tenge appreciation caused an increase in the amount of foreign exchange interventions by the National Bank. Despite the fact that the National Bank sterilized the purchase of foreign currency, transactions on the foreign exchange market contributed to an increase in liquidity in the market. This decreased the effectiveness of the measures to regulate the inflationary processes.

In order to limit excessive lending activity of banks as a result of significant external borrowing, in July 2006 changes were made to the minimum reserve requirement mechanism. Separate standards were introduced for internal and other liabilities: 6 percent for internal liabilities and 8 percent for other liabilities. These changes led to an increase in the minimum reserve requirements, which made it possible to absorb part of the surplus liquidity of the banking sector.

To control inflation, the National Bank also undertook measures to intensify the regulating effects of official rates. To increase the role of the refinancing rate, from 2005 the National Bank introduced a periodic (quarterly) review and establishment of an official refinancing rate, depending on overall condition of the money market, supply and demand for loans, and the level of inflation and inflationary expectations. Such monetary policy operations as deposit and loan transactions, issuance of short-term notes, and REPO transactions were standardized by maturity and rates. The granting of “overnight” loans, “overdrafts”, and the conduct of direct REPO transactions was temporarily halted. In addition, from April 2005, the maturity of short-term notes was reduced to 28 days. These measures were aimed at establishing a market interest rate band: the lower border of the band was the rate on transactions for removing liquidity (deposit transaction rate), and the upper border of the band was the rate for granting liquidity (lending transactions, reverse REPO transactions), i.e., the refinancing rate.

Thus, in 2000-2006, Kazakhstani banks attracted significant borrowings from external markets. This contributed to the country's economic growth, but at the same time increased the financial sector's vulnerability to external shocks. In addition, this led to a gradual acceleration of the inflationary processes. Monetary policy during this period was multidirectional in nature: whereas in 2000-2003 the National Bank eased the monetary policy to support the economy, in 2004-2006 the National Bank tightened the monetary policy in order to overcome the inflationary pressure in the economy.

1.3. Monetary policy of the National Bank during the financial crisis and post-crisis recovery (2007-2013)

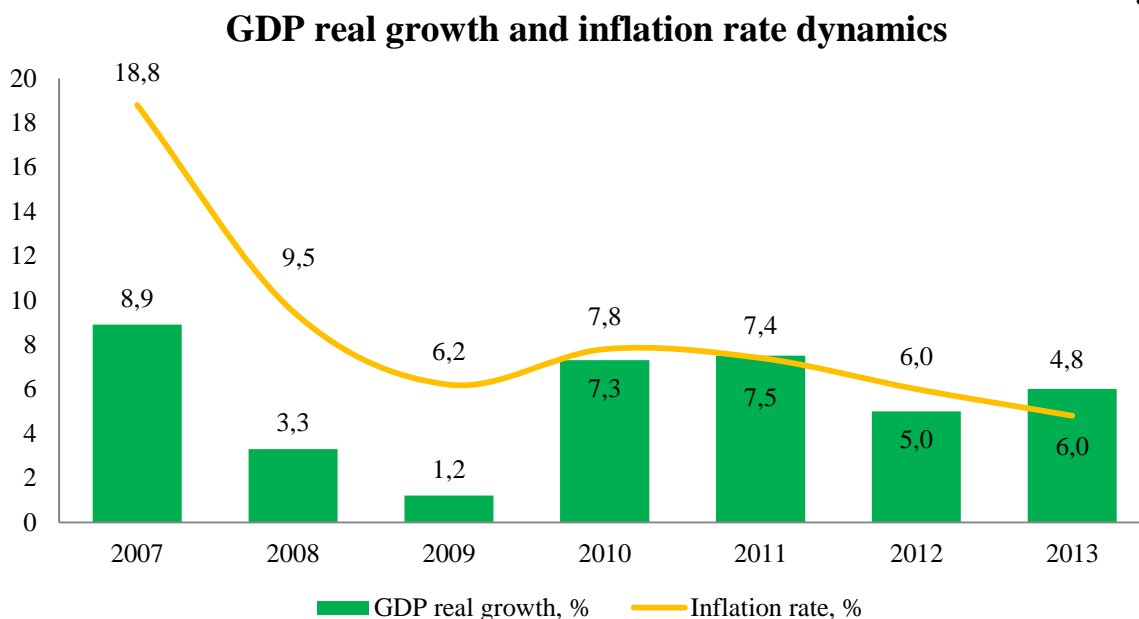
Development of the macroeconomic situation in Kazakhstan, beginning from the second half of 2007, took place against the background of a world financial crisis which subsequently grew into an economic crisis. The slowdown in the rate of growth of the world economy and also aggravation of the systemic problems in Kazakhstan's economy that had accumulated during previous years resulted in a slowdown in the dynamics of development in all sectors.

In 2007-2009, in conditions of the financial crisis the world economy entered a period of recession. The slowdown in growth of the global economy in 2007 to 5.3 percent was followed by a decline by 0.4 percent in 2009. The leading financial markets experienced a shortage of liquidity, interest rates rose, and portfolio investors withdrew capital from developing markets.

As a result, for the majority of the developing markets, including for Kazakhstan, access to foreign borrowing was virtually closed. In addition, shocks on the world food markets had a negative impact on Kazakhstan's macroeconomic indicators. The situation worsened in the second half of 2008 when the "price bubble" on the world commodity markets burst, causing a sharp drop in prices for Kazakhstan's main export goods (oil and metals). The price for oil, having reached US\$145.70 per barrel in the summer of 2008, fell to US\$34 per barrel. These factors, in addition to an increase in the population's incomes and the low level of competition contributed to an intensification of inflation in Kazakhstan to 18.8 percent in 2007. The increase in real GDP slowed down to 1.2 percent in 2009 (Figure 4).

In these conditions, the priority of the National Bank's monetary policy was given to the objective that was being threatened and nonfulfillment of which threatened the greatest negative consequences for the economy. Whereas in 2007 the National Bank undertook steps aimed at reducing inflation in the economy, from August 2007 the emphasis of the monetary policy shifted towards ensuring stability of the financial system. From October 2007 to January 2009, the National Bank made considerable efforts to ensure stability of the tenge exchange rate.

Figure 4



Simultaneous use of the measures contradicted one another since an infusion of liquidity was required to maintain stability of the banking system, and absorption of liquidity was required to reduce inflationary pressure.

Whereas in the first half of 2007 the main transactions of the National Bank were basically transactions to remove liquidity, from August 2007 they were transactions to provide liquidity. The volume of reverse REPO transactions was increased, currency swap transactions were conducted, and short-term loans backed by balances in correspondent account at the National Bank were also granted. The list of collateral when conducting reverse REPO transactions was gradually expanded.

During 2008-2009, the official refinancing rate was gradually decreased from 11 percent to 7 percent. From October 2007, changes were made to the minimum reserve requirements mechanism; in 2008-2009, standards for banks were reduced from 6 percent to 1.5 percent for internal liabilities and from 8 percent to 2.5 percent for other liabilities.

The choice of the priority objective for preserving stability of the banking system over the objective of maintaining price stability resulted in forecast inflation benchmarks for 2007 not holding up. Inflation reached 18.8 percent by the end of the year. However, already in 2008 the level of inflation was within the forecast band.

As a result of the decline in world prices for raw materials exported by Kazakhstan, the country's balance of payments worsened and pressure intensified on the tenge exchange rate. In order to maintain stability of the national currency, the National Bank conducted interventions in the foreign exchange market, which resulted in a decrease in gold and foreign exchange reserves. In the second half of 2008 and early 2009, Kazakhstan's main trading partners devalued their currencies. In order to preserve gold and foreign exchange reserves and the competitiveness of domestically produced goods, the tenge was devalued in Kazakhstan. In February

2009, an exchange rate band was established at the level of 150 tenge per US dollar ± 3 percent. This made it possible to decrease the devaluation expectations, improve the state of the balance of payments, and preserve gold and foreign exchange reserves.

The conducted devaluation and also the state's measures to stabilize the economy and support the financial sector improved the liquidity situation in the banking sector. This enabled the National Bank in March 2009 to stop conducting forex swap transactions and granting loans backed by money balances in correspondent accounts of banks in the National Bank. The maturities and interest rates on bank deposits in the National Bank were gradually changed in order to reduce the attractiveness of this instrument for banks. This, rates on bank deposits in the National Bank with a term of one month decreased from 2.5 percent in August 2009 to 1 percent in December 2009, and those with a 7-day term decreased from 2.0 percent to 0.5 percent, respectively.

The average weighted yield on notes was decreased from 2.23 percent in December 2009 to 1.19 percent in December 2010. In addition, from August 2009 the National Bank stopped issuing 28-day notes.

These measures by the National Bank were aimed at stimulating lending by banks to the economy, which during the period 2008-2009 was in a state of stagnation. The macroeconomic situation in 2010-2011 began to stabilize gradually as a result of the revival and recovery of the world economy, a resumption of the increase in prices and demand for the main goods exported by Kazakhstan, and also the state's anti-crisis measures. This resulted in a return of the monetary policy's priority to maintaining price stability.

In 2010-2011, with continued inflationary pressure, the National Bank raised the refinancing rate to 7.5 percent and the minimum reserve requirements standard for internal liabilities to 2.5 percent and for other liabilities to 4.5 percent.

The measures taken helped to maintain inflation within the established band. In addition, economic growth resumed and was 7.3 percent in 2010 and 7.5 percent in 2011.

The slowdown in inflationary processes that followed enabled the National Bank during 2012 to gradually decrease the official refinancing rate from 7.5 percent to 5.5 percent per annum. The main tools for removing liquidity remained the issuance of short-term National Bank notes and attracting bank deposits, and for providing liquidity – refinancing loans.

Within the framework of improving monetary policy tools, in 2012, changes were made to the minimum reserve requirements mechanism, including cash and correspondent accounts in foreign exchange were excluded from reserve assets. In addition, an additional criterion for differentiation of bank liabilities by maturity was introduced. Separate standards were introduced for each type of liabilities: for internal short-term liabilities – 2.5 percent, for internal long-term liabilities – 0 percent, for external short-term liabilities – 6.0 percent, and for external long-term liabilities – 2.5 percent.

The domestic foreign exchange market developed with minimum participation of the National Bank to maintain the tenge exchange rate. During the period the foreign exchange band was in effect, introduced on February 4, 2009, and in effect until February 28, 2011, the tenge exchange rate remained stable. In February 2011, the band the tenge was allowed to trade in was abolished and the regime of a controlled floating exchange rate was introduced. Thus, in 2007-2013, the National Bank's monetary policy helped to maintain the rate of growth of the economy and ensure financial stability and price stability. During this period, inflation had decreased by the end of the year from 18.8 percent in 2007 to 4.8 percent based on the results of 2013, which is the minimum level since 1999.

1.4. Modern trends of the money and foreign exchange markets (2014-2015)

In 2014, the reduction of anti-crisis programs to support the financial sector in the US¹ significantly impacted the world economic situation, which brought about an outflow of capital from developing countries to developed countries. As a result, pressure increased on the currency of developing countries (Brazil, Russia, India, China, and the Republic of South Africa). The majority of currencies of developing countries were devalued or had a tendency toward a decrease in the exchange rate.

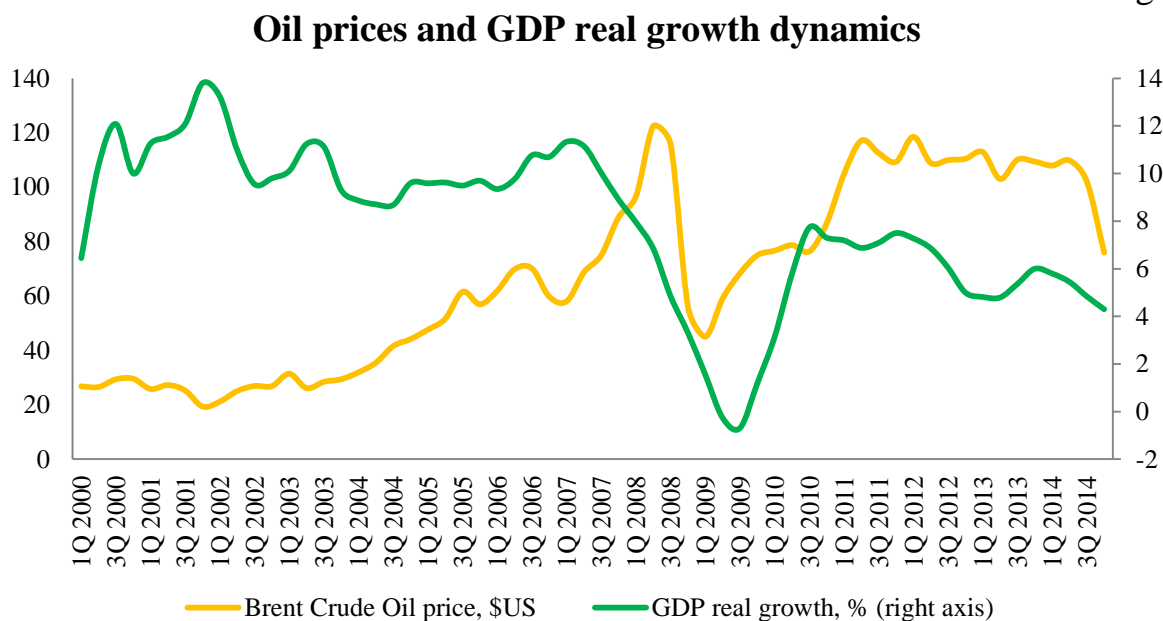
The overvalued real exchange rate of the tenge resulted in a decrease in the competitiveness and a worsening of the conditions of foreign trade for Kazakhstani exporters.

As a result, devaluation expectations intensified in Kazakhstan's economy and speculative transactions increased. In this regard, the National Bank made significant foreign exchange interventions, and the level of the country's gold and foreign exchange reserves decreased. In this regard, on February 11, 2014, the National Bank made the decision to abandon maintaining the exchange rate at the previous level, decrease the amounts of foreign exchange interventions, and reduce interference in the process of forming the tenge exchange rate. A new exchange rate was formed at a level of 185 tenge (\pm) 3 tenge per US dollar.

This resulted in a slight acceleration of inflationary processes as a result of an increase in prices for imported goods and also devaluation expectations, which intensified as a result of the decrease in world prices for Brent crude oil. Nevertheless, based on the results of 2014, the level of inflation was 7.4 percent within the target band of 6-8 percent (Figure 5).

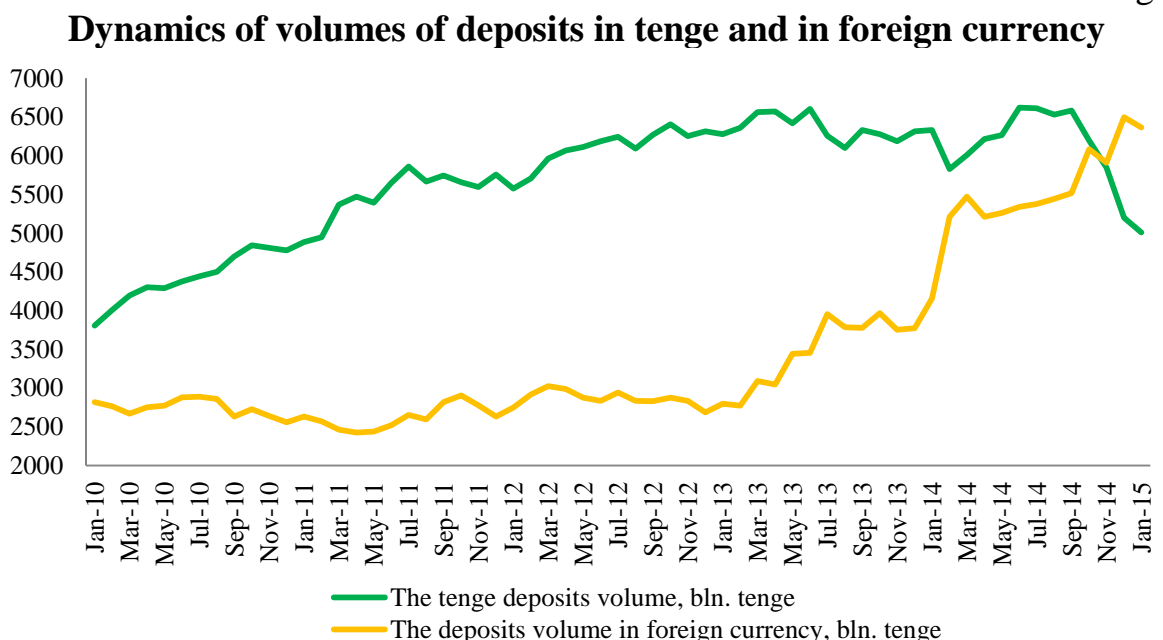
¹ Quantitative Easing Program.

Figure 5



An increase in the volume of transactions to convert tenge liquidity into foreign exchange liquidity and an increase in the percentage of foreign exchange deposits were observed in Kazakhstan’s foreign exchange market. Deposits in national currency during 2014 decreased by 17.7 percent to 5.2 trillion tenge and in foreign exchange increased by 72.2 percent to 6.5 trillion tenge (Figure 6).

Figure 6



To regulate bank liquidity, the National Bank conducted transactions to provide short-term tenge liquidity through reverse REPO transactions and foreign exchange swaps. In addition, in July 2014, long-term cross-currency and interest rate

swaps were conducted, which helped to decrease volatility of market rates. Stabilization of the situation in the foreign exchange market enabled the National Bank to expand the tenge to US dollar exchange rate fluctuation band in September 2014 and establish an asymmetrical band of $185+3/-15$ tenge.

The minimum reserve requirements standards in 2014 remained as before, and the structure of reserve assets in 2014 gradually changed: the percentage of banks' correspondent accounts in tenge decreased (from 55.4 percent on December 30, 2013, to 44.5 percent on December 29, 2014). Despite the decrease in the volume of reserve assets (a decrease of 2.1 percent from the beginning of the year as of December 29, 2014), in 2014 the reserve assets as a whole for the system exceeded the necessary reserve provisioning volume an average of 2.2-fold.

Based on historical experience, one can conclude that in these conditions, ensuring a stable foreign exchange rate of exchange requires spending gold and foreign exchange reserves of the National Bank and, on the whole, does not correspond to the practice of classic functioning of an open market economy. In addition, heavy regulation of the forex exchange rate creates favorable conditions for speculative attacks on the forex market. The situation that has developed in the money and forex markets reduces the effectiveness of government programs to provide loans to subjects of the economy. Banks basically act as the implementers of these programs. However, today they prefer to keep foreign exchange reserves and refrain from lending in tenge. On the whole, this makes it necessary to review the state economic policy in order to increase the effectiveness of implementing a monetary policy corresponding to the inflation targeting regime.

II. MONETARY POLICY REGIMES

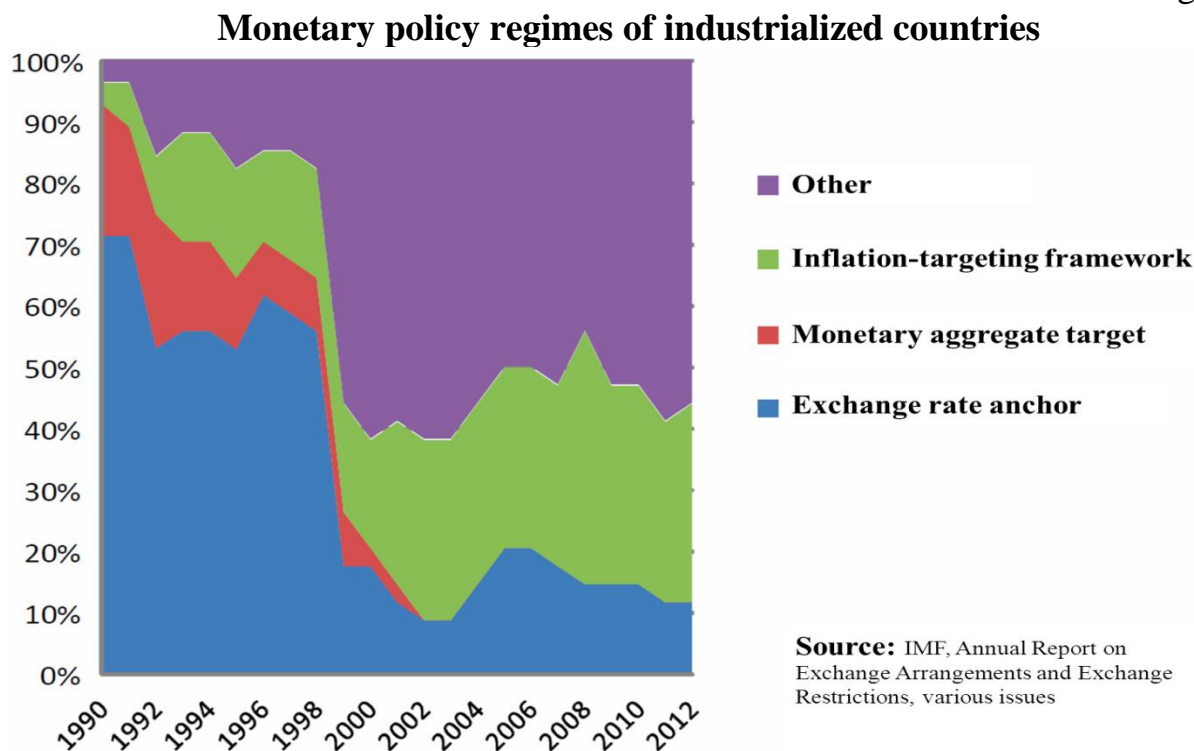
The main monetary policy regimes are exchange rate targeting, monetary aggregate targeting, monetary policy without establishing a “nominal” anchor, and inflation targeting.

The exchange rate targeting regime envisions either fixing exchange rate of the national currency to the currency of the country with a low level of inflation, or establishing a horizontal or inclined band within which the exchange rate of the national currency can move freely, or targeting the real exchange rate to a basket of currencies of trading partners.

The monetary aggregate targeting regime is aimed at achieving price stability by using monetary aggregates as an intermediate objective. The main efforts of the monetary policy in this regime are aimed at holding down the rate of growth of monetary aggregate at the target level.

The monetary policy regime without a nominal anchor assumes refusal of central banks to accept any obligations to achieve specific values of nominal indicators. At the same time, proclaiming only long-term goals (stable growth of the economy, high employment, low inflation), central banks establish intermediate benchmarks which are not officially announced.

Figure 7



Inflation targeting envisions a public announcement of quantitative inflation goals for the medium term and actions of the central bank aimed at bringing current inflation to its target indicator using monetary policy tools.

After the 1998 crisis, the percentage of countries using forex targeting decreased sharply, with an increase in the percentage of countries using the inflation targeting regime. Since the early 2000s, monetary aggregate targeting has practically not been used by central banks (Figure 7), but an increase in the number of countries using a “mixed” controlled exchange rate regime and a multitude of targets has been observed.

In the process of their own development, countries use the monetary policy regime which is most suitable for their national economy at the current level of development. With a decrease in the effectiveness of the monetary policy being pursued, countries change its regime, benchmarks and priorities, and also the tools for achieving the benchmarks.

2.1. Exchange rate targeting

Exchange rate targeting can make it possible to quickly and effectively decrease a high level of inflation, which is important during crisis periods. Such a regime increases the transparency and clarity of the central bank’s monetary policy. If the national currency depreciates, the monetary policy is tightened and, conversely, an increase in the national currency’s value requires an easing of the policy.

Targeting of the foreign exchange regime in individual countries (Chile, Brazil, Columbia, Tunisia) was conducted by establishing goals for the real exchange rate. The experience of Chile and Tunisia was successful in doing this, which reduced the level of inflation considerably. In Chile, during the period of applying a regime of targeting a benchmark for the real exchange rate, the level of inflation decreased from 130 percent in the 1970 to 15 percent in 1992. In Tunisia, which has maintained a stable rate of exchange of the national currency to currencies of trading partners, inflation was reduced from 7 percent in 1990 to an average level of 3 percent in 2000-2008, which made it possible to subsequently begin preparing for a transition to an inflation targeting regime.

A key shortcoming of forex exchange rate targeting is the impossibility of pursuing an independent monetary policy in free mobility of capital and the complexity of responding to internal shocks. For example, an increase in interest rates in Germany in 1990-1991 resulted in an increase in rates in France and later caused a slowdown in economic growth and an increase in unemployment.

Risks of speculative attacks on their national currencies are another problem for countries targeting forex exchange rate. Speculative attacks in September 1992 on the currencies of countries pegged to the German mark exchange rate can serve as an example of this. In conditions of Germany’s foreign exchange crisis, speculators counted on the fact that the targeting countries would devalue their currency against

the mark. With the exception of France, the other countries (Italy, Great Britain, Spain) did not protect their national currency and allowed the devaluation.

Strategies of currency pegging and dollarization can be considered the most popular strategies reducing currency regime risks.

Currency pegging assumes that the domestic currency is backed 100% by foreign currency, and the central bank establishes a fixed exchange rate and is ready at the request of the population to exchange domestic currency at this exchange rate. The advantages of currency pegging are control of the money supply and also a stricter obligation of the central bank to adhere to the fixed exchange rate and thus in short time periods help to decrease inflation and reduce speculative attacks on the currency. Countries such as Hong Kong (1983), Argentina (1991), and Bulgaria (1997) served as historic examples of the corresponding international experience. Argentina's experience is interesting, which abandoned the currency peg to the US dollar in 2002. In the initial stage, this regime enabled the country to decrease inflation significantly (from 800 percent to 5 percent) and accelerate economic growth to 8 percent per year. In conditions of the impossibility of pursuing an independent monetary policy, severe recessions in the economy, the country's default, and also a banking crisis followed in 1995 and 1998. In 2002, Argentina abandoned the regime of pegging of the currency to the US dollar.

Another method of solving the problem of non-transparency of exchange rate targeting is dollarization, i.e., adopting a hard currency like the US dollar as the country's currency. The main advantage of dollarization is precluding the possibility of speculative attacks on the national currency. With the existence of other shortcomings of foreign exchange targeting, dollarization assumes the loss by the central bank of revenue received by the government from the issuance of money.

In addition to the advantages, exchange rate targeting has a number of serious shortcomings. The need to maintain the exchange rate in the event of speculative attacks can lead to a significant decrease in the level of gold and foreign exchange reserves.

In conditions of mobility of capital, fixing the exchange rate takes away the possibility of pursuing an independent monetary policy and, consequently, to react to internal shocks of the economy. The nature of the central bank's monetary policy will to a certain extent depend on the measures of the central bank of the country to whose national currency exchange rate the peg is made.

Establishing exchange rate goals is aimed at solving problems in a short time period. The influence of a stable exchange rate on long-term trends is not well-defined, since the stability of the nominal exchange rate does not ensure stability of the real exchange rate, and in conditions of price volatility for raw material commodities, the likelihood of it being overvaluation remains high.

2.2. Monetary aggregate targeting

In the 1970s, the monetary targeting regime gained special popularity among the central banks of developed countries such as Great Britain, Canada, Japan, Germany, Switzerland, and the US.

Monetary targeting is often used in countries with a transitional economy to curb high inflation. The main advantage of monetary targeting compared to foreign exchange targeting is that it provides the central bank extensive opportunities to pursue monetary policy in accordance with internal needs of the economy, regardless of external shocks.

In addition, this strategy is characterized by great flexibility in adjusting monetary policy. The result of measures taken by the central bank is manifested almost immediately. The central bank directly influences money supply and has the ability to estimate rather precisely the indicators of narrow monetary aggregates, which considerably simplified observance of the target level.

However, one can single out a number of objective reasons making it impossible to use this monetary policy receive by central banks.

All the advantages cited above depend on whether or not a strong and stable link exists between the strategic target variable, for example, and the level of inflation and the chosen monetary aggregate. Otherwise, having achieved the intermediate monetary aggregate target, the central bank might not achieve the strategic goal – price stability.

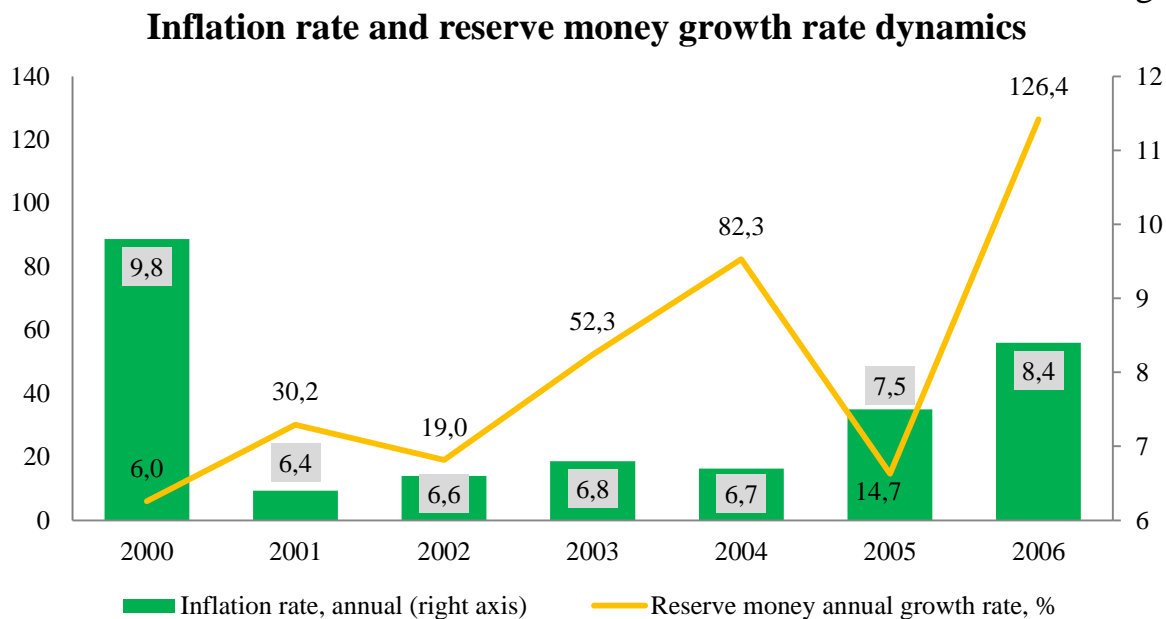
In addition, it often does not appear possible to obtain and estimate of the demand for money in countries with a transitional economy. Furthermore, the dependence of the national economy on the foreign economic situation increases the likelihood of errors when forecasting demand for money.

The complexity of determining a change in the velocity of money, the structure of money supply and the money multiplier, the volatility of money velocity, and the demand for money in the short term, especially taking into account its susceptibility to cyclical fluctuations, make use of monetary targeting ineffective.

Central banks practicing the monetary targeting regime have achieved various successes in ensuring price stability. Among developed countries, Germany has demonstrated the greatest successes in monetary targeting.

The National Bank of Kazakhstan had experience in conducting monetary aggregate targeting prior to 2000. The main reason for abandoning this regime was its ineffectiveness. The rate of grow of the monetary base did not correspond to the dynamics of inflation, i.e., a stable interrelationship was not tracked between them (Figure 8). Consequently, the monetary base could not serve as an intermediate benchmark of monetary policy for decreasing the level of inflation.

Figure 8



2.3. Regime without nominal anchor

In the international practice of central banks, when implementing monetary policy, as a rule, a specific nominal anchor – a currency exchange rate or inflation or monetary aggregate benchmark – is used. At the same time, the US demonstrates the ability to achieve good macroeconomic indicators without using any obvious nominal anchor. This does not mean that the US does not have a coordinated strategy of pursuing monetary policy, control over inflation in the long term is of given top priority.

It is believed that in those developed countries in which the level of inflation has been at a low level for many years, inflationary processes are quite inert. This causes a long temporary lag between monetary policy measures and achievement of the end result – about one year to impact the volume of issuance and about two years to affect inflation. In this regard, the Federal Reserve System (FRS) adhered to a strategy based on a thorough analysis and monitoring of the prerequisites for increasing inflation and taking preventive measures to prevent price increases.

The FRS monetary policy makes it possible to focus attention on internal problems of the economy and does not require a stable interconnection of monetary aggregates and inflation. Adhering to this strategy, the FRS was able to achieve a decrease in inflation in the 1980s from double digits to 3 percent by 1992. Against this background, the US achieved a decrease in the level of unemployment to 4 percent at a level of inflation of 2 percent.

2.4. Inflation targeting

The inflation targeting regime assumes conduct of a monetary policy oriented on achieving a target level of inflation.

An advantage of this regime is the clear identification of the objectives and priorities of monetary policy, which among other things helps form economically favorable expectations in society. Clear orientation of the central bank on one objective – decreasing inflations and its stabilization at a low level – potentially increases market confidence in the central bank. In addition, bringing down inflation and effectively maintaining its low rates in the final analysis ensures stable and balanced economic growth.

Critics of the inflation targeting regime believe that strict pursuit of an objective may have a negative impact on economic growth. However, the experience of countries using this regime shows that in practice, the countries did not apply an excessively tight monetary policy and made it possible to deviate from inflationary goals as a reaction to supply shocks. If the macroeconomic situation worsens, central banks have a “stipulation from liability” for the effects of the financial and economic crisis. This assumes deviation from inflation benchmarks and announcement of the period of time during which the central bank shall return to the inflation benchmarks.

Introduction of inflation targeting requires the existence of certain conditions which can be divided into the following groups.

The first group includes the authority of the central bank and its accountability. First of all, this is the central bank’s authority formalized in legislation to achieve target inflation indicators and independence in choosing the monetary policy tools. Secondly, this is the transparency and openness of the monetary policy being pursued by the central bank, helping to strengthen the population’s confidence. The target value of inflation cannot immediately send signals to the market about the status of the monetary policy since monetary policy measures are influenced with a certain delay on inflation. Therefore, it is important to explain the policy and reasons for the central bank’s decision to change the operational benchmark, for example, of a key rate or currency exchange rate.

The second group includes creation of macroeconomic conditions making it possible to transition to inflation targeting, such as the absence of fiscal domination over monetary policy and achievement of external stability.

The absence of fiscal domination signifies a low level of government debt and a state budget deficit, as well as a legislative ban on its financing by the central bank.

Countries transitioning to the inflation targeting regime also must have a stable external position assuming stability of the financial sector to external shocks. Furthermore, to increase stability of the financial sector to external shocks, the central banks must take measures for prudential regulation and supervision of financial institutions so that stability of the financial systems is not undermined by changes in the currency exchange rate.

The third group includes ensuring financial stability and stable functioning of the money market. To pursue the monetary policy, existence of a broad and liquid market for government securities, as well as other financial instruments making it possible to perform central bank operations.

The fourth group includes taking measures making it possible to impact the inflation target indicator by using monetary policy tools. For the central bank, it is important to determine the operational benchmark, which short-term interest rates are used for in developed countries.

Inflation targeting usually assumes use of a flexible national currency exchange rate, which is typical for developed countries. In developing countries, especially in countries exporting raw material resources, monetary policy depends considerably on the exchange rate regime. In these cases, central banks using inflation targeting can conduct interventions or adjust interest rates to limit the effect of foreign exchange shocks on inflation and financial stability. Thus, the central banks of Norway, the Czech Republic, Peru, South Korea, and Hungary conducted interventions in conditions of the foreign exchange shock in order to smooth over significant fluctuations in the currency exchange rate.

International experience of introducing inflation targeting shows that observance of the above-mentioned conditions enables central banks to move successfully to this monetary policy regime.

When pursuing monetary policy, the National Bank prior to the early 2000s used the monetary targeting regime. Monetary aggregate targeting was halted by the National Bank in connection with the decrease in the stable interconnection between monetary aggregates and inflation. From 2004, despite preparations to transition to the inflation targeting regime, not all the conditions could be fully observed for objective reasons.

III. INTRODUCTION OF INFLATION TARGETING IN KAZAKHSTAN

The choice of inflation targeting in Kazakhstan is caused by the peculiarities of the national economy, which is classified as a small, open, export-oriented economy. The predominance of the advantages of inflation targeting over its shortcomings and also the possibility of evening out the shortcomings of using this regime, including through measures of macroprudential regulation, gives favorable prospects for its introduction in Kazakhstan.

The clear orientation on decreasing inflation and its stabilization at a low level will contribute to stable economic growth in the long term.

Success in introducing the inflation targeting regime depends on implementation of a set of measures encompassing an increase in the effectiveness of the monetary policy transmission mechanism, establishing target benchmarks, creating a system of modeling and forecasting, improving central bank tools, and building a system of decision making and an active communication policy.

The Monetary Policy of the Republic of Kazakhstan to 2020 includes a package of measures of the National Bank on implementation of inflation targeting till 2020 aimed at decrease of inflation rate to 3-4 percent in the medium run. This package of measures is reflected in this chapter in details.

Achievement of target inflation will take place gradually and step by step so that it does not cause negative trends in development of economy. Considering the short term character of monetary policy the National Bank will annually develop the monetary policy guidelines in order to achieve inflation target taking into account situation on domestic market as well as external financial and commodity markets. Thus target inflation will be annually set by the Governing Board of National Bank so that by 2020 to reach of inflation rate 3-4 percent.

Achievement of target inflation by 2020 will depend on efficiency of the joint coordinated measures and actions of the National Bank, Government and local executive bodies for ensuring price stability in the country.

3.1. Transmission mechanism

3.1.1. Interest rate and credit channels

Interest rate channel

Countries successfully making the transition to inflation targeting (New Zealand, the Czech Republic, Poland) had a common characteristic – an effective monetary policy transmission mechanism. The transmission mechanism consists of channels through which monetary policy affects macroeconomic variables. An important role in inflation targeting is assigned to the functioning of the interest rate channel, which reflects the influence of the central bank's interest rate policy on

market rates with a further shift to investment and consumer activity and, in the final analysis, to inflationary processes.

The abstract concept of an interest rate channel comes down to the following: an increase in the nominal interest rate entails an increase in the real rate and an increase in costs from using financial resources. The rise in the cost of financial resources, in turn, entails a slowdown in lending and investments. As a result, a decrease in economic activity leads to a decrease in inflation.

Central banks achieve the planned transmission in the following way:

- monetary policy tools (open market operations, standing facilities, minimum reserve requirements) affect market interest rates;
- a change in prices occurs for financial assets (shares, bonds, etc.) and real assets (durable goods and real estate). This leads to changes in the expenditures and incomes of agents due to a change in the balance sheets of borrowers and depositors;
- changes occur in the rate of growth of unemployment and the economy, which is reflected on a change in wages and prices. The economy, in the final analysis, moves to a new equilibrium state.

The impact of monetary policy occurs depending on the business cycle trajectory and also on externalities, which the central bank cannot influence. Accordingly, transmission does not occur evenly over time.

The experience of central banks that have transitioned to inflation targeting shows that the main tool for impacting nominal interest rates is the base rate (rate level or market expectation for its trend), which affects short-term money market rates. In turn, money market rates affect the cost of credit resources.

Today in Kazakhstan, the interest rate channel of the monetary policy transmission mechanism has a weak influence on economic activity.

For successful introduction of the inflation targeting regime, the National Bank's policy will be aimed at intensifying the functioning of the interest rate channel.

The National Bank's measures to strengthen the interest rate channel will include:

1. introduction of a base rate, which will be an indicator of the monetary policy being pursued;
2. choice targeting market rate;
3. expansion of the system of tools for controlling short-term tenge liquidity;
4. pegging interest rates for all monetary policy tools to the base rate.

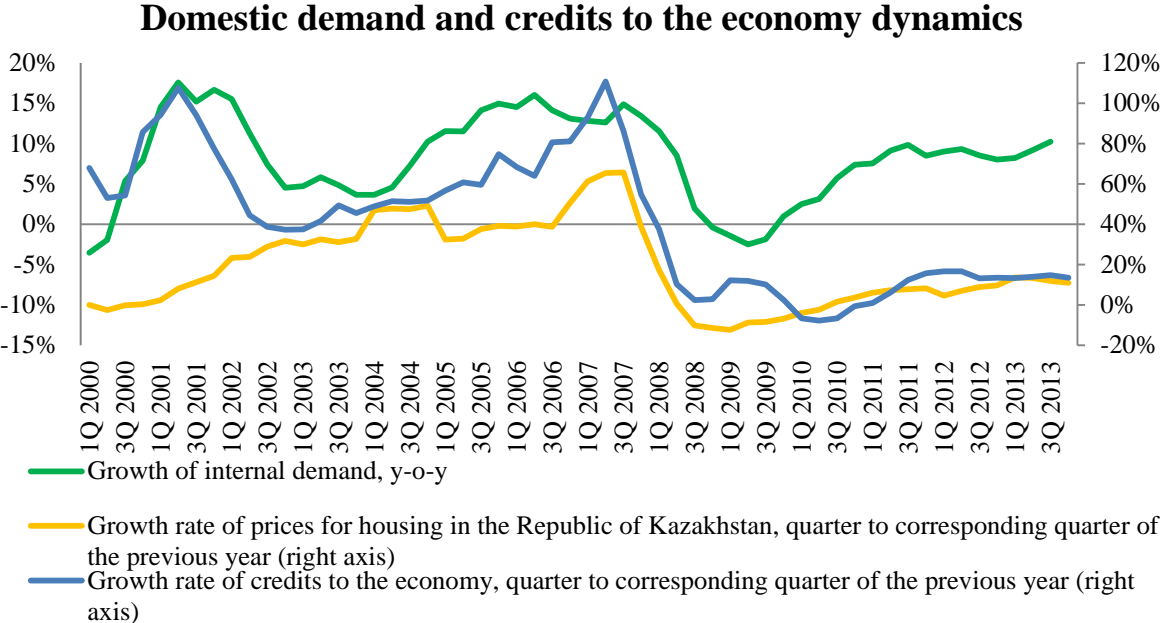
Credit channel

Besides the interest rate channel, macroeconomic indicators may be impacted by the credit channel. Transmission of the credit channel comes down to the fact that with an increase in the money supply, the volume of banks' liquid funds increases and the supply of credits increases, which leads to a change in the volumes of investments, consumption, and output. The credit channel is especially effective in

those countries in which banking credit is the main form of attracting additional funds for borrowers and the main financial asset for banks.

A statistical analysis of the functioning of the interest rate and credit channel in Kazakhstan makes it possible to identify certain economic dependences characterizing, among other things, the specific nature of the national economy. The existing reliable statistical interconnection between the growth of credits to the economy and domestic demand² (Figure 9)³ corresponds to the classic economic model.

Figure 9



In the meantime, a significant interconnection is observed in Kazakhstan between the growth rate of credits to the economy and housing prices⁴. The supply of investment projects in Kazakhstan is limited; therefore, with a growth of prosperity, economic agents actively invest in housing real estate in the hopes of preserving their savings and earning an investment income. In countries with a developed securities market, there are no such disproportion, and also prices for assets among other factors also depend on the cost of credit resources, functioning of the stock market makes it possible to distribute wealth to various sectors and thereby diversify risks.

². This indicator is calculated by adding up the GDP components by the end use method, namely expenditures for final consumption and gross accumulation of fixed capital.

³The correlation between the rate of growth of credits and domestic demand is positive and is 58 percent. According to the Granger causality test, when there is an increase in lending, an increase in credit activity is observed, which leads to economic growth with a 94 percent probability.

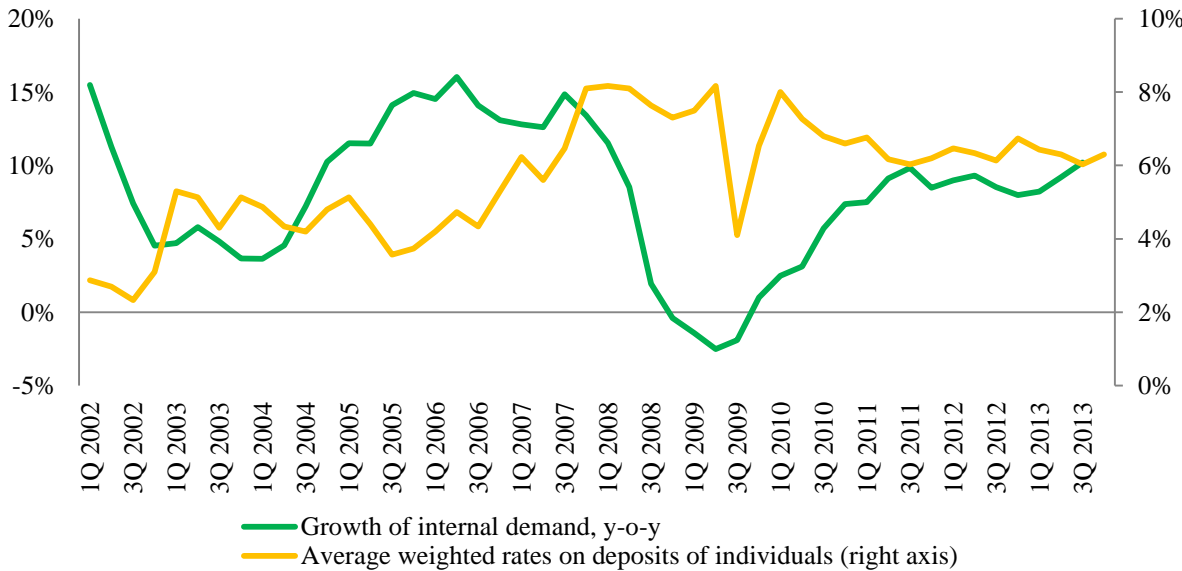
⁴ The correlation between these indicators is 64 percent. According to the Granger causality test, an increase in credits leads to an increase in housing prices in Kazakhstan with a lag of three quarters with a probability of 94 percent..

In Kazakhstan, a strong dependence between the interest rate channel, growth rate of housing prices, and g domestic demand is not observed. The correlation coefficient between the average rate of remuneration for credits in tenge, issued by banks to individuals, and the average weighted rate for credits issued by banks to enterprises with growth rate of domestic demand is (-) 23 percent. This makes it possible to conclude that domestic demand is more sensitive to the volumes of issued credits than to their cost, i.e., the rate of remuneration for credits.

In 2007-2009, a shifting of the funding base of banks from foreign to domestic sources led to an increase in rates on deposits. This served as the cause of an increase in savings and a reduction in domestic consumption⁵ (Figure 10).

Figure 10

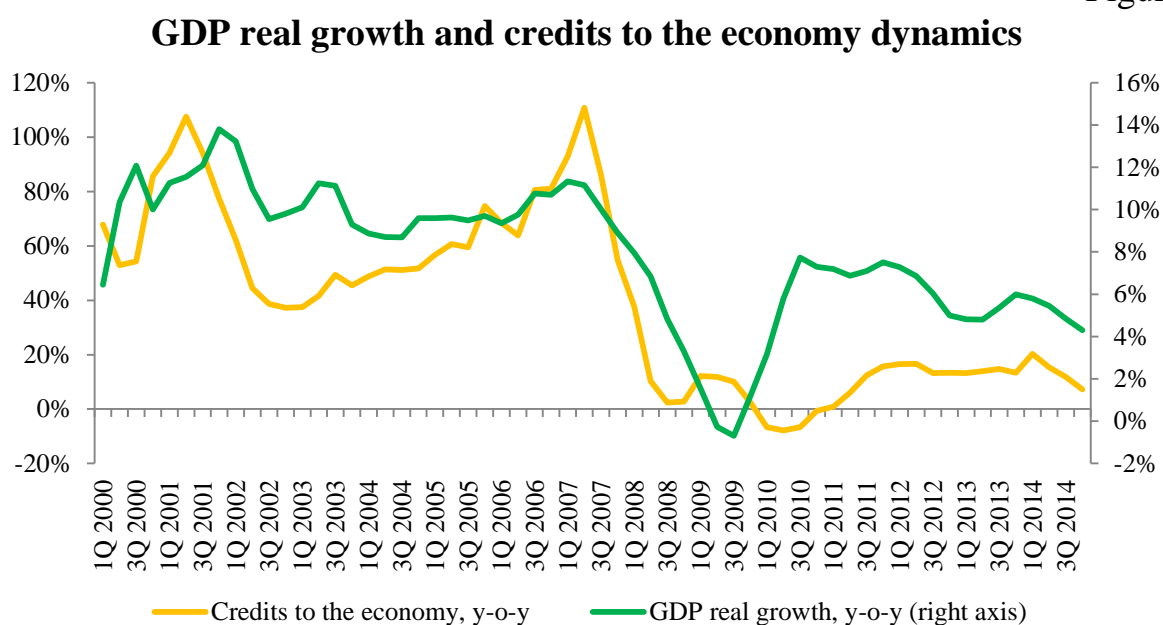
Domestic demand and average weighted rates of individuals deposits dynamics



A positive relation between the growth of lending to the economy and growth in real GDP is also confirmed statistically. Thus, high rates of growth of lending in the first decade of the 2000s served as key drivers of growth of real GDP. Also, the significant decline in rates of growth of lending served as a precursor to an economic contraction of 1 percent in the third quarter of 2009, given the fact that the decline in lending occurred in the third quarter of 2008 (Figure 11). Thus, the existence of a credit channel in Kazakhstan is confirmed by statistical analysis methods.

⁵ This relation is confirmed statistically: the correlation of rates on deposits with growth of domestic consumption is negative and is (-31 percent). According to the Granger causality test, a change in domestic consumption is the consequence and a change in rates on deposits is the cause with a 94 percent of probability.

Figure 11



Granting economic subjects a significant volume of state funding contributes to development of the credit channel in Kazakhstan. Banks receiving a guaranteed percentage of the yield act as a buffer. The effectiveness of the monetary policy being pursued by the National Bank weakens in such conditions.

For successful introduction of the inflation targeting regime, the National Bank’s policy must be aimed at constant assessment of the impact of government lending and subsidizing programs and interaction with the Government to achieve a balance of effectiveness between the credit and interest rate channels.

3.1.2. Foreign exchange channel

The foreign exchange channel is the impact of monetary policy impulses through a change in the foreign exchange rate on inflation and aggregate output.

In conditions of the high import-intensive domestic market of Kazakhstan, presently inflation is fairly sensitive to fluctuations in the exchange rate. Considering that import goods comprise a significant percentage in the structure of consumer goods, the foreign exchange channel in Kazakhstan has a significant influence on the pricing of consumer goods and, accordingly, on the level of the consumer price index (CPI). In the inflation targeting regime, the National Bank will ensure achievement of the inflation target through monetary policy transactions. Considering the influence of the exchange rate on inflation, implementation of the exchange rate policy will also be aimed at achieving inflation goals.

In the transitional stage, the National Bank will adhere to the currency band regime. The National Bank will allow a more flexible exchange rate, to the extent that this will not be contrary to achieving inflation goals.

Effective pursuit of monetary policy is possible only provided there is a stably functioning financial market. Foreign exchange shocks can have a strong impact on the stability of banks and other financial market participants. Therefore, in the event of an onset of foreign exchange shocks, the National Bank's priority task will be to ensure stability on the financial market by smoothing out sharp and significant exchange rate fluctuations. The National Bank can use various exchange rate policy tools to stabilize the situation in the financial market, including conducting direct foreign exchange interventions. The National Bank's interest rate policy in such conditions is also directed at accomplishing this task by timely and significant change in the rates for monetary policy tools.

3.2. Inflation targets

Choosing the inflation indicator

According to international practice, mainly two indicators are used as inflation target parameters: the consumer price index and core inflation. Theoretically, the GDP deflator can be used, but in connection with a number of shortcomings, it is not used by any country. The CPI is the most widespread inflation target parameter indicator.

The CPI measures the average level of prices for goods and services that are part of the population's consumer basket. Since the CPI is a generally accepted inflation indicator, this indicator compares favorably with other indicators by its clarity for business and the population.

The central banks of Eurozone countries, as well as Canada, Great Britain, Poland, the Czech Republic, Thailand, and Indonesia, use the CPI or its modified types (for example, the Harmonized Consumer Price Index in the Eurozone) for

targeting. Core inflation, due to the exclusion of individual food items and fuel susceptible to brief and sharp price changes, is a less volatile indicator. From this standpoint, core inflation more accurately reacts to central bank policy.

At various times, South Korea, Great Britain, and other countries used core inflation as a target benchmark. They later returned to using the CPI. The reason for this was the assessment of core inflation on the part of the population and business as a simplification by the central bank of its objective and concealment of the inability of regulation inflationary processes.

In Kazakhstan, the CPI structure includes more than 500 names of goods and services, which are divided into three main groups: food items, nonfood items, and paid services. The method of gathering information and calculating the CPI meets the requirements of the International Labor Organization. The gathering of information on price changes, the monthly calculation and publication of information on the CPI are accomplished by the authorized state body on statistics.

The National Bank presently uses the CPI as an estimate of achieving its main goal – ensuring price stability. In the inflation targeting regime, it is planned to continue to use the CPI as the inflation benchmark.

Pinpoint or interval target level of inflation

Various methods exist for establishing the target level of inflation: pinpoint, interval, and pinpoint-interval.

The pinpoint indicator is characterized by the preciseness of the objective and by the central bank's decisive intention to achieve it. The pinpoint benchmark is used by industrially developed countries of the Eurozone, as well as Great Britain, Norway, Sweden, and Ireland.

A less popular type of target level of inflation is the interval (target inflation band) type. The main advantages of this type of benchmark is the ability to react flexibly to changes in the economy and allow brief, sharp price changes caused most often by seasonal factors and external shocks. It is used by such countries as Australia (2-3 percent), Columbia, Israel, South Africa, and New Zealand.

The most common inflation benchmark in world practice is the pinpoint benchmark with an interval of acceptable deviations. This method combines the advantages of the pinpoint and interval methods: economic agents are given a clear signal about the central bank's objective, and some flexibility remains in achieving this objective.

The pinpoint benchmark with an interval of allowable values is used by such countries as Brazil, Chile (3 percent \pm 1 percentage point), Peru (2 percent \pm 1 percentage point), the Czech Republic, Poland, South Korea, and Turkey.

Today, taking into account the current macroeconomic conditions, structure of the economy, and consumption of the population, Kazakhstan uses the inflation target band. When transitioning to the inflation targeting regime, the National Bank plans to use the pinpoint benchmark with an interval of allowable deviations.

Time horizon of the benchmark

The inflation target benchmark is established by the central bank for a specific period in the foreseeable future. The time horizon depends on the duration of the action of the monetary policy transmission mechanism, as well as the central bank's ability to manage inflation expectations.

In world practice, the benchmark horizon, as a rule, is medium-term (more than one year) for countries where actual inflation is in the area of the target level (Eurozone, Australia, the Czech Republic, Poland, Turkey, South Korea). For countries where actual inflation is significantly higher than the target level, the central bank pursues a tighter monetary policy and established a shorter time horizon. The central banks of countries where the impact of interest rates on inflation occurs more quickly also may choose a shorter time horizon (Brazil).

Central banks prefer medium-term benchmarks because such a time horizon makes it possible to manage inflation expectations of economic agents more effectively. In addition, in the event of economic shocks, the central bank can allow short-term deviations from the inflation target level without serious damage to its reputation.

In Kazakhstan in practice, the benchmark time horizon is one year. As the inflation targeting regime is introduced, the National Bank will replace the one-year benchmark with a medium-term one. This issue will be resolved simultaneously with development of model tools for estimating the impact of monetary policy signals on macroeconomic processes.

3.3. Forecasting and Policy analysis system

The central bank makes decisions on monetary policy in conditions of a relative uncertainty of their future influence on achieving the inflation target level. Success in using the inflation targeting regime largely depends on the central bank's ability to model the economy and forecast inflation.

Central banks use various types of models – structural, macroeconomic, and dynamic stochastic general equilibrium (DSGE) models. In addition, the models can be divided into theoretical and empirical, as well as short- and long-term.

DSGE is used as the main model in Australia, the Czech Republic, South Korea, Great Britain, and Mexico. The Quarterly Projection Model (QPM) is used as the main model in Turkey, Serbia, and Chile.

The National Bank uses various structural and macroeconomic models, as well as a number of satellite models for analyzing the effect of monetary policy measures on macroeconomic indicators.

When transitioning to the inflation targeting regime, the National Bank will introduce the forecasting and policy analysis system for making monetary policy decisions consisting of the following components:

- (1) the Quarterly Projection Model (QPM);

- (2) current monitoring and short-term forecasting models;
- (3) signal models;
- (4) satellite models.

The Quarterly Projection Model occupies the central place in the system, which generates medium-term projections of the main macroeconomic indicators for the purpose of making monetary policy decisions.

In the future, in addition to the QPM model, models of the DSGE class will be developed. Today, development of DSGE models is made very difficult by the limitation of the necessary statistical data.

Ancillary components in the system are models of short-term indicators and accompanying signal and satellite modules, as well as an operational liquidity forecasting system.

A key advantage of using the main QPM model in the forecasting process is the possibility of studying the consequences of monetary policy implementation. The forecasting process will be accomplished in the following manner. Based on base assumptions, a short-term forecast for inflation and GDP for 1-2 quarters will be built. The results of short-term forecasts will be used in the QPM for compiling the medium-term forecast for 3-6 quarters. The results obtained will be additionally evaluated for stability using accompanying satellite models. If the results of the medium-term forecast are not confirmed by the satellite models, the base assumptions in the short-term forecast and possibly certain elements of the QPM model will be reviewed.

The aggregate result of this process will be forecasts of inflation and other macroeconomic indicators, on the basis of which recommendations will be compiled for future monetary policy.

3.4. Monetary Policy instruments system

The operational objective for central banks using the inflation targeting regime is the market interest rate. The central bank uses monetary policy tools of a market nature to maintain this interest rate at the target level.

Monetary policy transactions can be arbitrarily divided into the following groups:

- main operations (open market operations) to provide and withdraw liquidity. They are conducted on the initiative of the central bank on an auction basis with standard maturities;
- long-term operations. These are similar to basic transactions with longer maturities;
- fine-tuning operations. They are used to neutralize unexpected liquidity shocks on a general or bilateral basis with nonstandard maturities;
- structural operations. The buying/selling or issuance of securities on an auction or bilateral basis;

- standing facility operations (standing mechanism). They are used to adjust amounts of liquidity, which has developed based on results of open market transactions. These operations are conducted at the initiative of banks at penalty interest rates.

- minimum reserve requirements. They are used as a tool for sterilization of structural surplus liquidity.

The most common monetary policy tool in international practice is open market operations in the form of REPO auctions. Open market operations are used by central banks to maintain volumes of internal liquid funds at a level corresponding to the base interest rate. Such operations, as a rule, are fairly short-term. Furthermore, central bank debt securities (Chile, Poland, Sweden) and government debt securities (Brazil, Israel, South Africa, Canada, New Zealand) may serve as collateral. In Great Britain, operational standing mechanisms backed by government securities and central bank securities are the main monetary policy tool. In Australia, open market operations are conducted secured by top-rated securities denominated in Australian dollars.

The short-term (in most cases one-day) interest rate, as a rule, acts as the main operational target indicator of monetary policy. However, the Czech Republic uses a two-week REPO rate and Great Britain – a one-week.

In the inflation targeting regime, the operational goal of the National Bank will be market targeting interest rate. This operational goal will be achieved by open market operations, standing facility operations, and also through the mechanism of minimum reserve requirements.

The National Bank, within the framework of measures to strengthen the interest rate channel for transition to the inflation targeting regime, plans to introduce a new “base” interest rate. Interest rates for the rest of the monetary policy tools will be pegged to the base rate. Here the interest rates for standing facility operations will form the upper and lower limits of money market interest rate fluctuations.

In the event of tightening or easing the National Bank’s monetary policy, the base rate may be raised or lowered accordingly, which will entail a change in the rest of the interest rates. The upper and lower interest rate limits for standing facility transactions are also subject to review, depending on the volatility of money market rates.

The main monetary policy tools which will be used by the National Bank in the inflation targeting regime are presented in Table 1.

Table 1

Purpose	Type of tool	Tool	Collateral
Providing liquidity	Standing facility transactions (fixed rates)	Currency swap*	Foreign exchange
		Credits secured by nonmarket assets	High-quality credit portfolio

		Reverse REPO	Government securities
			Securities in tenge
	Open market transactions (auction)	Credits secured by nonmarket assets	High-quality credit portfolio, securities
		Reverse REPO	Government securities
			Securities in tenge
Removing liquidity	Open market transactions (auction)	Direct REPO	Government securities
		Deposit auctions	
		NBRK notes	
	Standing facility transactions (fixed rates)	Deposits	

*- note: as needed

The National Bank may conduct “fine-tuning” operations in order to prevent sharp and significant money market rate fluctuations within the interest rate band. Based on the results of assessing the state of liquidity of the banking sector, the National Bank, if necessary, can decide to conduct “fine-tuning” operations.

The minimum reserve requirements mechanism is used by central banks for impact on the part of liquidity demand in the banking system. By changing the bank reserve requirements, the central bank influences the volume of reserved assets and thereby regulates banks’ lending activity. Thus, reserve requirements are an additional tool for regulating liquidity in the banking sector and the level of interest rates in the money market within the framework of the monetary policy being pursued.

In central banks using the inflation targeting regime, as a rule, direct tools, including the minimum reserve requirements mechanism, are used fairly rarely. In individual countries, this tool is not used (Great Britain, Australia, New Zealand, Sweden, Canada). In other countries, the minimum reserve requirements mechanism is not actively used, and the legal reserve requirements are adjusted infrequently. In the Czech Republic, the requirements were changed at the time of introducing inflation targeting and have remained unchanged since 1999. This tool remains most active in developing countries which are characterized by a high level of volatility in the money and foreign exchange markets.

In 2015, the National Bank introduced a detailed structure of margin requirements by introducing a division of liabilities by types of currencies (national and foreign currency), with preservation of the principle of residency and maturity. To improve the ability of banks to manage liquidity, the procedure was changed for calculating minimum reserve requirements with preservation of the averaging principle.

In the medium term, the National Bank will continue to pursue an interest rate policy aimed at increasing the attractiveness of tenge instruments, including by expanding the list of monetary policy instruments and collateral for them.

3.5. Decision making system

In the inflation targeting regime, the central bank's main objective is medium-term inflation. To achieve this objective, it is necessary to establish intermediate (inflation forecast) and operational (market rates) goals. An effective decision making system contributes to achieving these target indicators.

Establishing an inflation target parameter

In international practice, a target parameter is established either by the central bank, the government or jointly by the government and central bank.

The most common practice is joint establishment of the target indicator by the central bank and the government. The advantage of this approach lies in the coordination of monetary policy measures with fiscal policy, which is important for achieving the goal.

In a number of countries, the inflation goal is set by the central bank (the Czech Republic, Poland, Peru, Mexico, Hungary, Columbia). The advantage of this approach is the central bank's complete responsibility for setting and achieving the goal, which characterizes the high degree of independence of the central bank from other state bodies. A shortcoming may be the fact that sometimes government measures may not agree with monetary policy measures.

The issue of establishing an inflation target parameter is important in the context of the central bank's accountability and the degree of responsibility for achieving the goal. It should be noted that in countries practicing setting of the target parameter by the government (Great Britain, Norway), the central bank is accountable to the government or the parliament.

Within the framework of the inflation targeting regime in Kazakhstan, inflation goals will be set by the Executive Board of the National Bank.

Responsibility for achieving the target parameter

In individual countries, the chief executive officer [CEO] of the central bank bears personal responsibility for achieving the inflation target parameter. It calls for the responsibility of the chief executive officer of the central bank for submitting a report on monetary policy measures taken in the form of an open letter to the country's minister of finance or parliament.

In the event of not achieving the inflation target level, the central bank publishes a special issue and/or the CEO reports to parliament on the reasons for not achieving the target indicator. In this document, the central bank also communicates to the public on the measures and deadlines for achieving the benchmark to preserve confidence in the monetary policy being pursued.

In Kazakhstan, the chairman of the National Bank will bear personal responsibility for achieving the inflation target parameter. If the inflation benchmarks

are not achieved, the chairman of the National Bank submits a public report on the reasons for the deviations, as well as the deadlines for returning the indicators to the target framework.

Accountability of the National Bank

International central bank's experience indicates that the central bank best performs its functions if it is ensured independence in developing and implementing monetary policy.

There exists a direct relation between the independence of the central bank and confidence in its actions. The latter is especially needed by the central bank during periods of crises. An independent central bank pursues the monetary policy worthy of much trust, thereby stimulating a sensitive market response to its signals. According to the opinion of international organizations (World Bank, Bank for International Settlements, International Monetary Fund), there exists a fairly strong relation between the growth of the central bank's independence and the increase in transparency in the monetary policy decision making process.

Upon introduction of the inflation targeting regime in Kazakhstan, the issue of increasing the National Bank's independence acquires special importance. The degree of the National Bank's independence must correspond to the level of economic development of the state and optimally ensure achievement of macroeconomic stability.

Monetary policy decision making bodies

Strategic monetary policy decisions, as a rule, are made by the executive boards of central banks, and decisions on interest rates are made by monetary policy committees. The existence of a separate committee on monetary policy signifies delegation of decision making in the area of monetary policy to experts in this area. In some countries, specific requirements regarding experience or knowledge in the area of monetary policy (Great Britain) are imposed on monetary policy committee members at the legislative level. In other countries (Armenia, the Philippines), the monetary policy committee or consultative committee of technical experts provides recommendations to the executive board, which bears official responsibility for decision making in the area of monetary policy.

Presently, the highest decision making body in the area of monetary policy in Kazakhstan is the Executive Board of the National Bank. The Executive Board approves the state monetary policy, sets the official refinancing rate, establishes minimum reserve requirements, and also considers the issue of granting loans to banks as the lender of last instance, and other things.

Within the framework of the transition to the inflation targeting regime, it is proposed to structure a decision making system in the following manner.

The Executive Board of the National Bank sets the inflation target.

The Monetary Policy Committee will be created, which determines the base interest rate and rates for the main monetary policy transactions, approves the state

monetary policy for achieving the targets established by the Executive Board, and makes decisions on other issues on the initiative of the Chairman of the National Bank. The Monetary Policy Committee will include the Chairman of the National Bank and his deputies. Decisions of the Monetary Policy Committee will be made by a simple majority vote of the Committee members. The Monetary Policy Committee will meet at least 12 times a year.

A Money Market Committee will be created for making timely decisions within the framework of the strategy established by the Monetary Policy Committee. The competence of this Committee will include the following:

- (1) assessing the state of the banking sector liquidity;
- (2) analyzing the situation that has developed in the domestic and foreign financial markets;
- (3) determining the volumes of transactions in the money and foreign exchange markets;
- (4) determining and approving a list of monetary policy instruments, as well as a list of collateral assets for these instruments.

The Money Market Committee will include the Deputy Chairman of the National Bank managing and coordinating activities on issues of conducting monetary transactions, as well as the heads of structural divisions responsible for the development and conduct of monetary policy. The Money Market Committee adopts a decision by a simple majority of the members of the Committee. The Money Market Committee meets at least once a week.

3.6. Communication and publications

The central bank's communication strategy is an important component of the inflation targeting regime and is oriented on achieving the following goals:

- managing inflation expectations;
- maintaining confidence in the national currency and stability of the financial system;
- ensuring transparency and integrity of conducting monetary policy;
- achieving predictability of actions of the central bank;
- building a positive image and protecting the reputation of the central bank.

In the inflation targeting regime, the following communication tools are used: press releases, press conferences, interviews of executive board members, meeting minutes, inflation reports, seminars for financial market analysts, articles of central bank workers, current situation reports, internal-use protocols, as well as special publications and research work. Each communication tool is characterized the particular features of its content, the intended use for a specific audience, and the time of use.

One of the most popular communication tools of the central bank on a decision in the area of monetary policy is the publication of press releases. The central banks

of many countries, including Brazil, Canada, the Czech Republic, Israel, New Zealand, Great Britain, and others, immediately publish press releases after taking monetary policy decisions.

Another mandatory document subject to regular publication is the inflation report (inflation survey or monetary policy report). In countries that have transitioned to inflation targeting, the inflation report is published at least three times a year, with the exception of Israel, the Republic of South Africa, and South Korea, which publish this report twice a year. The central banks of New Zealand, Romania, and Great Britain hold press conferences simultaneously with publication of the inflation report, and those of Brazil and Canada do so after disclosure of the inflation report. In Kazakhstan, the National Bank publishes the inflation survey four times a year.

Publication of the minutes of the Monetary Policy Committee meeting is done by the central banks of the Czech Republic and Brazil within 8 days after the meeting, Armenia – within 10 days after the meeting, Australia, Chile, Columbia, Israel, Poland, Sweden, Thailand, and Great Britain – within two weeks after meeting, and South Korea – six months after the meeting. The Central Bank of Guatemala does not publish the minutes, but instead submits a brief justification of each decision on interest rates one month after the meeting. The Central Bank of the Philippines publishes information on the meeting held with a summary of the issues reviewed and decisions of the Monetary Policy Council four weeks after holding the meeting. The Central Bank of Turkey publishes brief information on the meeting held by the Monetary Policy Committee within five business days after the meeting.

Full disclosure of information about individual voting results is practiced by the central banks of Chile, the Czech Republic, Hungary, Poland, Sweden, and Great Britain. The central banks of Brazil, Iceland, and Thailand publish information about the ratio of votes, and Columbia publishes information about whether a decision was adopted unanimously or by a majority of votes. Israel publishes the ratio of votes, but publication of by-name voting is not mandatory. In Norway, a decision adopted by consensus is published.

Presently, the National Bank on a regular basis uses various communication tools for monetary policy issues.

In the transition to inflation targeting, the main goals of the National Bank's communication strategy will be:

- shifting the priorities of economic agents from the exchange rate to inflation;
- consolidating the inflation expectation of economic agents at a low level.

Kazakhstan's Monetary Policy Guidelines

This document contains a survey of world economic trends, an analysis of the country's macroeconomic development as well as of the monetary policy results during the past year. The document sets forth a forecast of scenarios of the socioeconomic development of Kazakhstan and the National Bank's planned monetary policy implementation for the coming year based on the entirety of data presented.

The Monetary Policy Guidelines do not represent a rigid guide for action, since when it is necessary to react quickly to unforeseen external shocks or extreme fluctuations of the foreign or domestic economic situation, the National Bank has the right to take appropriate measures in response. Publication of this document is aimed at explaining the nature of future actions of the central bank and factors affecting monetary policy.

This document is usually prepared with the coming year in mind, at the same time in conditions of stable development of the economy and a high degree of predictability of the main factors determining the trends of financial market development, the National Bank may forecast with a broader horizon, for example, for three or five years ahead.

Inflation Report

In accordance with international practice of central banks adhering to the inflation targeting regime, in order to increase the transparency of monetary policy and increase public awareness in this area, the National Bank of Kazakhstan publishes a quarterly analytical publication devoted to issues of the monetary policy being conducted – the “Inflation Report”.

In the “Inflation Report”, a comprehensive analysis of inflationary processes in the country is conducted, including the consumption side, as well as price formation in industry, agriculture, and at enterprises; key factors of inflation, i.e., aggregate demand, production, and the labor market; monetary factors, including monetary aggregates, the country’s financial market. The publication also contains a section which reviews monetary policy transactions and the tools used by the National Bank. On the whole, the “Inflation Report” conducts a comprehensive analysis of the current monetary policy.

Since inflation expectations are an important indicator for the purpose of short-term forecasting of inflation, the “Inflation Report” will include a corresponding section. The calendar of publications of the “Inflation Report” will be announced in advance and placed on the National Bank’s website.

National Bank press releases

Presently, press releases contain indicators of Kazakhstan’s financial and economic development for a specific period, reports on making changes to the tools for implementing monetary policy, for example, changing minimum reserve requirements or the refinancing rate, information about the results of auctions held by the National Bank, and others.

As inflation targeting is introduced, the National Bank will publish press releases on the results of meetings of the Monetary Policy Committee.

Besides the above-listed regular channels of communication, the National Bank will continue the constant work to cover its activities in the mass media.

CONCLUSION

The National Bank conducted analytical work to choose an appropriate monetary policy regime, taking into account the particular features of the financial sector and the level of development of Kazakhstan's economy. The most acceptable regime is inflation targeting, the peculiarities and advantages of which are clear identification of the end goal and priorities of the monetary policy in addition to the central bank's "freedom of action" when making decisions.

Introduction of inflation targeting in Kazakhstan will be done in phases.

In the preparatory phase, work will be done to expand the system of tools of monetary policy and collateral for transactions of the National Bank, building a system of analysis and forecasting for the short- and medium-term periods. In addition, a decision making system will be built assuming complete independence of the National Bank. Within the framework of communications, the strategy will be aimed at increasing confidence in the monetary policy conducted by the National Bank and also shifting the priority of economic agents from the exchange rate to inflation.

In the phase of introducing inflation targeting, the National Bank will test the interest rate channel to determine the operational goal. The communication strategy will be aimed at the formation and management of inflation expectations of economic agents.

Thus, monetary policy until 2020 will be directed at implementing a set of measures for transition to the inflation targeting regime. This monetary policy regime will contribute to stable economic growth and help to achieve the country's strategic goals upon joining the 30 most developed countries of the world.

GLOSSARY

Consumer Price Index – the change in time of the level of prices for goods and services acquired by the population for consumption . The consumer basket for calculating inflation reflects the structure of household spending and includes 508 goods and services occupying the greatest percentage of the population’s consumption. The CPI is calculated as the ratio of the cost of a fixed set of goods and services in current prices to its cost in prices of the previous (base) period. The index is calculated by the Committee for Statistics of the Ministry of National Economy of the Republic of Kazakhstan.

Core inflation – inflation excluding brief, erratic price changes under the influence of individual factors of an administrative, event-driven and seasonal nature (fruit and vegetables, fuel, housing and utilities, energy sources, and others).

Since 2004, base inflation has been calculated by five different methods:

- core inflation-1: inflation excluding price increases for vegetables, fruits, gasoline, and coal;

- core inflation-2: inflation excluding price increases for vegetables, fruits, regulated services, and energy resources;

- core inflation-3: inflation excluding the five maximum and five minimum price increases;

- core inflation-4: trimmed mean – when calculating the CPI, those components whose cumulative weight is less than 8 percent and more than 92 percent are excluded, that is, those goods and services whose prices have changed the most (increased or decreased) are not counted;

- core inflation-5: median CPI – when calculating the CPI, all prices changes are cut off except those in the middle of the series of price changes, that is, the statistical median. The median CPI will equal the price change of the first component whose cumulative weight is equal to or exceeds 50 percent.

Monetary base (reserve money) – currency put into circulation by the National Bank, except cash located in vaults of the National Bank (cash outside the National Bank), transferable and other bank deposits, transferable deposits of nonbank financial institutions and current accounts of state and nonstate nonfinancial organizations in tenge in the National Bank.

Narrow monetary base – monetary base not counting other bank deposits in the National Bank.

Monetary aggregate M0 – cash in circulation, i.e., money outside the banking system.

Monetary aggregate M1 – the sum of cash in circulation and transferable deposits of nonbank legal entities and the population in tenge.

Monetary aggregate M2 – the sum of monetary aggregate M1 and other deposits in tenge and transferable deposits of nonbank resident legal entities and the population in foreign currency.

Money supply (M3) – the sum of cash in circulation and transferable and other deposits of nonbank resident legal entities and the population in national and foreign currency.

Base rate – the interest rate of the National Bank to indicate the position of the monetary policy in order to regulate the liquidity of the banking system, the impact on money market and targeting rate.

Targeting rate – the interest rate of the money market, selected by the National Bank as an operational objective in the operations of monetary policy.

Banking sector liquidity – balances in correspondent accounts of second-tier banks in national currency in the National Bank for the purpose of making payment transactions and meeting minimum reserve requirements.

“Currency swap” operations – paired conversion operations exchanging foreign currency for national currency with the obligation of a reverse operation within a specific period on predetermined terms.

Open market operations – regular operations of the National Bank in the form of auctions to provide or remove liquidity in the money market in order to form interest rate levels near the base rate.

Standing facility operations – operations to provide or remove liquidity in the money market at the upper or lower boundary of the interest rate band at the initiative of banks.

REPO operations – paired operations for the sale (purchase) of a security with the obligation of a reverse purchase (sale) within a certain period on predetermined terms.

“Fine-tuning” operations – special irregular operations conducted in order to smooth over excessive volatility of market interest rates.

LIST OF ABBREVIATIONS

NBRK – National Bank of the Republic of Kazakhstan

GDP – Gross Domestic Product

FRS – US Federal Reserve System

ECB – European Central Bank

CPI – Consumer Price Index

QPM – Quarterly Projection Model

DSGE – Dynamic Stochastic General Equilibrium Model

GS – Government Securities

S – Securities

Basic macroeconomic and financial indicators (1995-2014)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Macroeconomy																					
GDP, bln. tenge	1 014	1 416	1 672	1 733	2 016	2 600	3 251	3 776	4 612	5 870	7 591	10 214	12 850	16 053	17 008	21 816	27 572	30 347	35 275	38 033	
Real GDP growth, %	-8.2	0.5	1.7	-1.8	2.7	9.8	13.6	9.7	9.3	9.6	9.7	10.7	8.9	3.3	1.2	7.3	7.5	5.0	6.0	4.3	
GDP per capita, US Dollar	1 052	1 351	1 446	1 469	1 130	1 229	1 491	1 659	2 068	2 874	3 771	5 292	6 772	8 514	7 165	9 071	11 358	12 121	13 612	12 186	
Inflation, %																					
y-o-y growth, %	60.3	28.7	11.2	1.9	17.8	9.8	6.4	6.6	6.8	6.7	7.5	8.4	18.7	9.5	6.2	7.8	7.4	6.0	4.8	7.4	
average per year, %	176.3	39.3	17.5	7.1	8.3	13.2	8.4	5.9	6.4	6.9	7.6	8.6	10.8	17.0	7.3	7.1	8.3	5.1	5.8	6.7	
Indicators of monetary policy (end of period)																					
Official refinancing rate, %	52.5	35.0	18.5	25.0	18.0	14.0	9.0	7.5	7.0	7.0	8.0	9.0	11.0	10.5	7.0	7.0	7.5	5.5	5.5	5.5	
"Overnight" rate, %			15.0	27.0	27.0	21.0	12.0	9.0	8.0	8.5	*										
Repos / reverse repos interest rate, %				23.0	23.0	12.5				4,25 ± 2	*										
Rediscount rate on bills of exchange, %							8.0		**	**	**	*									
Gross international reserves, mln. US Dollar	1 653	1 961	2 291	1 964	2 003	2 096	2 508	3 141	4 962	9 277	7 069	19 127	17 629	19 872	23 091	28 275	29 328	28 269	24 715	28 919	
National Fund assets, mln. US Dollar	0	0	0	0	0	0	1 240	1 919	3 663	5 131	8 074	14 092	21 006	27 486	24 368	30 980	43 625	57 927	70 792	73 562	
The monetary base, bln. tenge	64	82	115	81	127	134	175	208	317	578	663	1 501	1 464	1 525	2 451	2 572	2 837	2 890	2 826	3 414	
	<i>change over period, %</i>	100.4	28.1	40.9	-29.4	55.7	6.0	30.2	19.0	52.3	82.3	14.7	126.4	-2.5	4.2	60.7	5.0	10.3	1.9	-2.2	20.8
Money supply (M3), bln. tenge	116	135	173	149	274	397	576	765	972	1 650	2 065	3 678	4 630	6 267	7 487	8 483	9 752	10 523	11 598	12 816	
	<i>change over period, %</i>	109.0	16.6	28.2	-14.1	84.4	45.0	45.1	32.8	27.0	69.8	25.2	78.1	25.9	35.4	19.5	13.3	15.0	7.9	10.2	10.5
Monetization (M3 / annual GDP), %	11.4	9.5	10.3	8.6	13.6	15.3	17.7	20.3	21.1	28.1	27.2	36.0	36.0	39.0	44.0	38.9	35.4	34.7	32.9	33.7	
Balance of payments																					
Current account balance of payments, bln. US Dollars	-0.2	-0.8	-0.8	-1.2	-0.2	0.4	-1.4	-1.0	-0.3	0.3	-1.0	-2.0	-8.4	6.3	-4.1	1.4	10.2	1.1	0.9	4.6	
	% Of GDP	-1.3	-3.6	-3.6	-5.6	-1.4	2.0	-6.3	-4.2	-0.9	0.8	-1.8	-2.5	-8.0	4.7	-3.6	0.9	5.4	0.5	0.4	2.2
Trade balance, bln. US Dollars	0.1	-0.3	-0.3	-0.8	0.3	2.2	1.0	2.0	3.7	6.8	10.4	14.7	15.2	33.6	15.0	28.5	44.8	38.1	34.8	35.6	
Export, bln. US Dollars	5.4	6.3	6.9	5.9	6.0	9.3	8.9	10.0	13.2	20.6	28.3	38.8	48.3	72.0	43.9	61.4	85.2	86.9	85.6	79.1	
Import, bln. US Dollars	5.3	6.6	7.2	6.7	5.6	7.1	7.9	8.0	9.6	13.8	17.9	24.1	33.1	38.4	28.9	32.9	40.3	48.8	50.8	43.4	
Gross external debt, bln. US Dollars	4.8	5.8	7.7	9.9	12.1	12.7	15.2	18.3	22.9	32.7	43.4	74.0	96.9	107.9	112.9	118.2	125.3	136.9	149.9	157.1	
Direct and guaranteed public debt	2.1	2.6	2.3	4.0	4.1	3.9	3.8	3.5	3.6	3.1	2.2	3.1	2	2.2	3.7	5	5.5	5.9	6.2	8.6	
Banks								1.4	3.5	7.7	15.3	33.3	45.9	39.2	30.2	19.9	14.6	13.5	11.2	10.1	
Foreign exchange market																					
The official exchange rate of tenge to the US dollar (end of period)	63.95	73.30	75.55	83.80	138.20	144.50	150.20	155.60	144.22	130.00	133.98	127.00	120.55	120.77	148.36	147.40	148.04	150.29	153.61	182.35	
Securities market																					
Issue of GS by MF, bln. tenge	11	31	55	108	101	61	26	52	105	126	123	155	163	472	698	660	674	1 067	983	827	
GS of MF in circulation, bln. tenge (end of period)		12	23	64	57	61	71	108	163	230	303	368	511	816	1 288	1 669	2 080	2 905	3 619	4 611	
Issue of NBK short-term notes , bln. tenge	14	37	78	61	66	133	116	208	613	562	1 960	3 827	4 257	2 946	1 447	3 299	2 968	857	79	81	
NBK notes in circulation, bln. tenge (end of period)		9	7	12	6	48	18	64	199	396	161	533	229	312	473	900	510	186	4	27	
The effective yield of notes, % (end of period)	37.6	25.8	11.6	25.7	14.4	7.0	5.6	5.5	5.1	2.9	2.4	5.0	5.6	6.0	2.6	1.5	1.0	1.8	2.2	3.3	
Loans to the economy (end of period)																					
The total volume, bln. tenge	62	61	72	93	149	276	490	672	978	1 484	2 592	4 691	7 258	7 460	7 644	7 592	8 811	9 958	11 292	12 106	
the share of loans to legal entities, %	97.9	96.4	94.2	93.9	94.5	94.7	93.7	91.3	87.5	79.5	74.2	67.3	64.5	68.7	70.9	72.1	73.4	71.3	67.9	66.8	
the share of loans to individuals, %	2.1	3.6	5.8	6.1	5.5	5.3	6.3	8.7	12.5	20.5	25.8	32.7	35.5	31.3	29.1	27.9	26.6	28.7	32.1	33.2	
The growth of total loans, %		-1.8	17.6	30.3	59.3	85.6	77.3	37.3	45.5	51.7	74.7	81.0	54.7	2.8	2.5	-0.7	16.1	13.0	13.4	7.2	
The weighted average interest rate on loans in KZT, %																					
legal entities			29.4	20.4	22.3	19.1	17.4	15.6	15.5	14.4	13.7	13.0	13.5	16.1	15.2	13.6	11.7	11.0	10.5	10.9	
individuals			27.5	23.7	26.0	27.2	25.5	24.3	21.8	20.9	19.7	19.6	17.5	19.4	19.4	19.9	20.3	20.9	20.3	19.2	
Deposits of the banking system (end of period)																					
Deposits of residents, bln. tenge			80	80	170	291	445	603	732	1 270	1 654	3 077	3 890	5 409	6 574	7 334	8 387	8 995	10 086	11 694	
the share of deposits of legal entities, %			65.6	61.9	68.9	69.6	58.4	58.4	54.2	65.3	64.5	66.9	63.2	72.8	71.2	70.1	67.5	62.5	61.3	62.4	
the share of individuals' deposits, %			34.4	38.1	31.1	30.4	41.6	41.6	45.8	34.7	35.5	33.1	36.8	27.2	28.8	29.9	32.5	37.5	38.7	37.6	
The weighted average interest rate on term deposits in tenge, %																					
legal entities			11.6	8.9	8.8	6.5	5.7	5.2	4.2	3.0	3.1	4.0	5.1	5.3	5.0	3.0	2.9	2.4	4.1	5.6	
individuals			19.9	12.0	16.0	15.9	14.3	11.3	10.6	9.4	9.5	9.6	10.4	11.4	7.8	9.7	8.4	8.2	6.9	8.3	

* suspended

** at the official rate of refinancing

Minimum reserve requirements standards and rates on deposits of the NBRK

Effective period	Minimum reserve requirement standards, in percent							
	single standard							
01.03.1995-30.06.1996	20							
01.07.1996-31.12.1996	15							
01.01.1997-30.04.2000	10							
01.05.2000-30.06.2002	8							
01.07.2002-06.08.2006	6							
	on internal liabilities				on other liabilities			
07.08.2006-17.08.2008	6				8			
18.08.2008-07.12.2008	5				7			
08.12.2008-15.03.2009	2				3			
16.03.2009-19.06.2011	1.5				2.5			
20.06.2011-02.12.2012	2.5				4.5			
	on internal liabilities				on external liabilities			
	short-term		long-term		short-term		long-term	
03.12.2012-11.05.2015	2.5		0		6		2.5	
	liabilities in national currency				liabilities in foreign exchange			
	short-term		long-term		short-term		long-term	
	internal	external	internal	external	internal	external	internal	external
12.05.2015-further	2	4	0	2	2	6	0	2
	z	+	0	z	z	0	0	z

period	Rates on attracted NBRK deposits, at end of period, in %			
	7 days	14 days	1 month	in foreign exchange
2004	2.15%	2.27%	2.46%	1.60%
	single			
2005	3.50%			
2006	4.50%			
2007	5.50%			
2008	5.30%			
2009	0.50%			
	7 days		1 month	
2010	0.50%		1.00%	
2011	0.50%		1.00%	
2012	0.50%		1.00%	
2013	0.50%		1.00%	
2014	3.05%		halted	

