



NATIONAL BANK OF KAZAKHSTAN

# Inflation Report

The Fourth Quarter of 2017

Almaty, Kazakhstan

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**The Inflation Report** is a quarterly publication of the National Bank which contains the analysis of key macroeconomic indicators affecting inflation as well as the forecast of macroeconomic parameters in the short- and medium-term horizon.

The Report is published in an electronic form on the official Internet-resource of the National Bank in the Kazakh, Russian and English languages.

The forecast of macroeconomic indicators was prepared on the basis of statistical information as at February 15, 2018.

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## SUMMARY

At the end of 2017, the inflation had been at 7.1% and was aligned with the mid-point of the target band of 6-8%. The declining external inflationary pressure, stabilization of situation in the foreign exchange market and the appreciation trend of the tenge during the fourth quarter given a positive pattern of the business environment in the global commodity markets, stability of prices of key commodity items in foreign agricultural markets, contributed to deceleration of inflation processes. A continuing price shock in the energy market, which only diminished its influence by the quarter-end, prevented a stronger deceleration of inflation. Core inflation indicators continued to demonstrate a steadier deceleration.

The real sector of the economy continues to recover. A favorable pricing environment in the global commodity markets and the growing domestic consumption against the increasing investment activity contributed to positive rates of the GDP growth. However, the consumer demand is slowing down given a continuing downward trend in the real income of the population.

During the fourth quarter, monetary conditions remained neutral. The situation in the money market and credit market was influenced by implementation of the Program for Increasing Financial Soundness; this determined a limited expansion of lending to the economy. The base rate remained unchanged in October and in November 2017 at 10.25%. In January 2018, the rate was lowered to 9.75%, and in March – to 9.50%.

The National Bank, when designing forecasts of macroeconomic variables for short-term and medium-term periods, revised its baseline scenario towards increasing the price of oil (Brent) to USD 60, given the improving market expectations for 2018-2019 (the previous scenario assumed USD 50 per barrel). According to the National Bank's updated forecasts, under the baseline scenario the real GDP growth in Kazakhstan would be 2.9% in 2018 and 2.8% at the end of nine months of 2019.

Under the baseline scenario, there is a high probability that inflation would significantly decelerate and would go beyond the lower boundary of the target band of 5-7% at the end of 2018. Disinflation will be caused by a low annual inflation in the countries – Kazakhstan's main trading partners, by steadily low levels of prices in the global food markets, by persistently negative domestic output gap against sluggish consumption of households and businesses caused both by the drop in real income of the population and low profitability of enterprises. As the consumer activity in the country recovers and external inflationary background slightly accelerates, the annual inflation in Kazakhstan will demonstrate a minor growth thus helping the inflation to come back within its target band of 4-6% in 2019.

Under the scenario which assumes the oil price to be at USD 40 per barrel and which was considered along with the baseline scenario, a higher inflation and more modest rates of GDP growth are expected.

## I. MACROECONOMIC ENVIRONMENT AND THE FINANCIAL SECTOR DEVELOPMENT

### 1. EXTERNAL MACROECONOMIC ENVIRONMENT

#### 1.1 Situation in the Global Commodity Markets

##### 1.1.1 Oil Market

In the fourth quarter of 2017, the average price of oil (Brent) had been at USD 61.5 per barrel (Figure 1). As compared to the previous quarter, the price increased by 18%, and as compared to the corresponding quarter of 2016 the growth accounted for over 25%.

The oil pricing was affected by a protracted shortage of oil that was accompanied by a high demand and a low supply on the part of producing countries (Figure 2). At the same time, a negative balance between oil production and consumption decreased as compared to the previous quarter of 2017 and amounted to 0.32 million barrels a day.

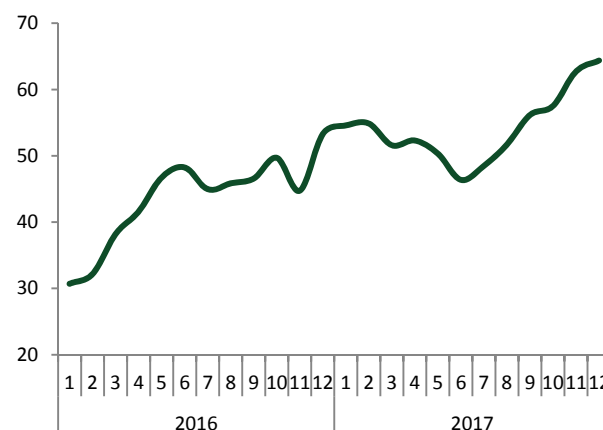
The global oil consumption, after its minor slowdown, was gradually recovering, mainly owing to the increased consumption in India, China and the USA. The main factor for the increased oil consumption in India and the USA was the beginning of the heating season; in China, the demand was caused by replenishment of strategic reserves and the increased production capacities in petrochemical plants of the country. The reduced consumption in Russia, Japan and the EU countries served as a constraining factor for the demand (Figure 3).

The global rates of oil production slightly slowed down. If in the third quarter the global oil production increased by 1.3% in annual terms, in the fourth quarter of 2017 the growth accounted for 0.03% (Figure 4).

In countries outside of OPEC, in the fourth quarter the oil production increased by 1.2% in annual terms as compared to 1.7% in the third quarter of 2017.

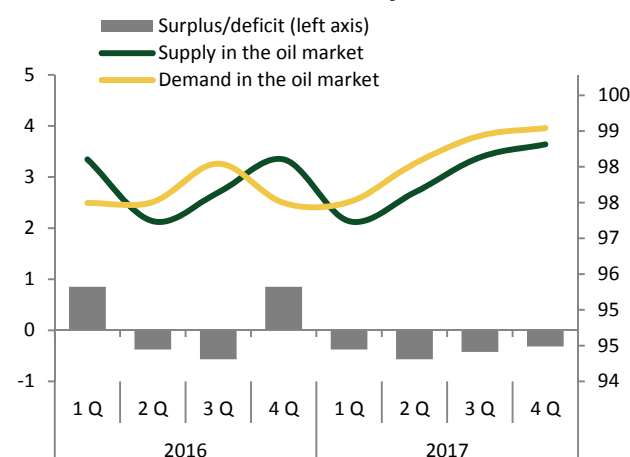
The main reason for the slowing rates of growth in production was the accident in the pipeline in the North Sea; about 40% of all the North Sea oil is transported via this pipeline. The decreased production in Russia because of its adherence to the Algerian Agreement and in Canada due to repair operations on the pipeline also translated into the decreased input of this group of countries into the global oil

**Figure 1. Price of Oil (Brent), USD per Barrel, Monthly Average**



Source: U.S. Energy Information Administration (EIA)

**Figure 2. Demand and Supply in the Global Oil Market, Million Barrels a Day**



Source: U.S. Energy Information Administration (EIA)

production. The decreased production in these countries was offset by a dramatic increase in oil production in the USA where an average number of drilling rigs increased by 152 units to 742 units already as at the beginning of 2017.

Oil production volumes in OPEC countries in the fourth quarter of 2017 versus the corresponding quarter of the previous year decreased by 2.0%, being caused by a significant drop in oil production in Venezuela given the progressing economic crisis and the increasing protests by workers at the drilling units of the country. Other factors also include a high discipline kept by OPEC+ countries to implement the agreement to reduce oil production. The main contribution to oil production in OPEC countries is primarily made by Libya, Nigeria and Iran.

### 1.1.2 Non-Ferrous Metals Market

In the fourth quarter of 2017, the weighted average price index of copper, aluminum, zinc and lead slightly increased (Figure 5).

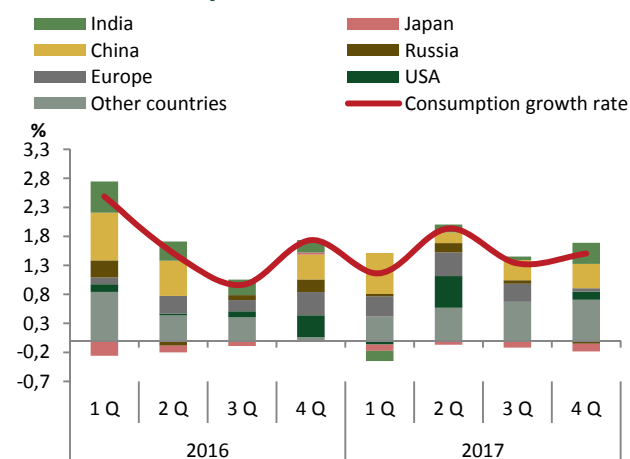
The average price of aluminum increased at the end of the quarter; however, a quarterly price behavior demonstrated a certain slowdown in the price growth. It was caused by a dramatic growth in reserves in Shanghai because of the reduced consumption in China given implementation of the Winter Environmental Program.

The price of lead increased being influenced by the emerging shortage in the global market because of the increased demand on the part of battery manufacturers.

Copper price quotations in the global metals market hit their three-year maximum. The resulting price growth is explained by a sharp drop in supply on the part of China where the operation of two large copper plants was suspended for some time as part of the government's effort to fight the air pollution in the winter months.

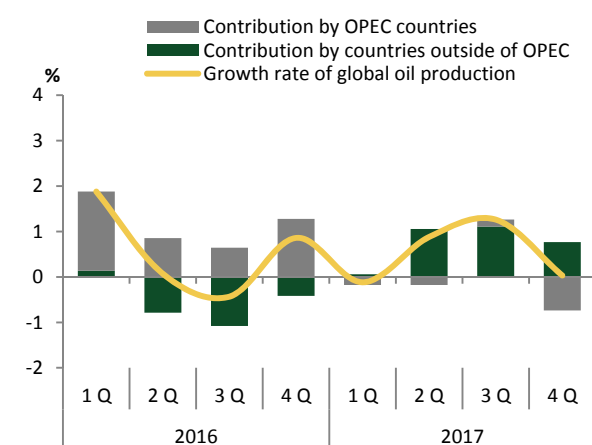
From the beginning of 2016, the price of zinc more than doubled. The price growth is still relatively high because of the decreasing world reserves and the increasing concerns about a shortage of the metal.

**Figure 3. Global Oil Consumption and Contribution by Countries, YoY**



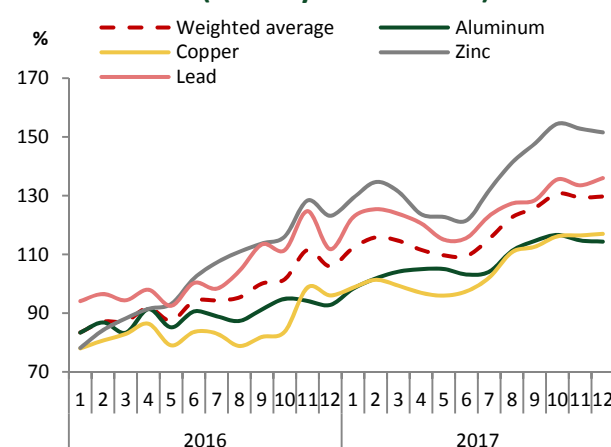
Source: U.S. Energy Information Administration (EIA)

**Figure 4. Global Oil Production, YoY**



Source: U.S. Energy Information Administration (EIA)

**Figure 5. Price Index of Copper, Aluminum, Zinc and Lead (January 2015=100 %)**



Source: NBRK's calculations based on data from Bloomberg

### 1.1.3 Food Market

In December 2017 as compared to September, the FAO Food Price Index decreased by 4.9%. The decline in prices is observed in all commodity groups that are included in the calculation of the index, except cereals. Meantime, at the end of 2017 the average value of the index increased by 8.1% (Figure 6).

The sugar price index slightly decreased against the slowdown in the global demand and the expected excess supply on the part of sugar producers in 2018. In annual terms, the sugar price index decreased by 11.2%; this was primarily associated with a record-high crop in Brazil as well as the expansion in production in India and Thailand.

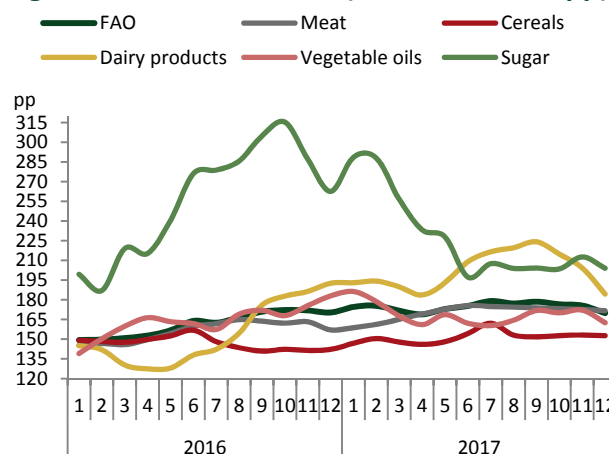
The cereal price index in the environment of reduced volumes of sales slightly increased. The growth of the index was also affected by the increase in corn prices because of concerns about the change in weather conditions in Argentina as well as by the steady growth in the demand for rice in Asia. Over the year, cereal prices have increased by 3.2%.

At the end of 2017, the average of the meat price index decreased because of the increased supply of beef in the domestic and international markets. As a whole, the annual average of the index increased by 9%. The highest growth was noted among prices of lamb meat; the growth in prices of pork, poultry and beef was less prominent.

The dairy price index, given an excess supply coupled with a feeble demand, resulted in the 17.7% decrease of the index. In annual terms, the index increased by 31.5%, with the highest annual growth in prices of butter and the lowest – in prices of milk powder and cheeses.

The vegetable oil price index demonstrated the 5.4%, in connection with the fall in prices of palm oil, rapeseed oil and soya oil. The decline in price quotations for these oils was associated with excessive production and a feeble global demand.

**Figure 6. FAO Price Index (2002-2014=100 pp)**



Source: UN FAO

### 1.2 Economic Situation in the USA and the Fed's Rate

In the fourth quarter of 2017, the US economy was growing at steady rates having demonstrated the best performance over the last two years.

Versus the corresponding quarter of 2016, the US GDP increased and accounted for 2.5% (Figure 7). A significant support to the economic growth was made by the increased consumer spending which account for about 70% of the US GDP. The increase in consumer spending is associated, first of all, with hurricanes which hit the USA and which resulted in the increased expenditures for repair works as well as for the purchase of new cars and other lost belongings. A positive contribution to the economic growth was also secured by the increased capital investments by companies (for construction, purchase of hardware and software) and the growth in the government spending.

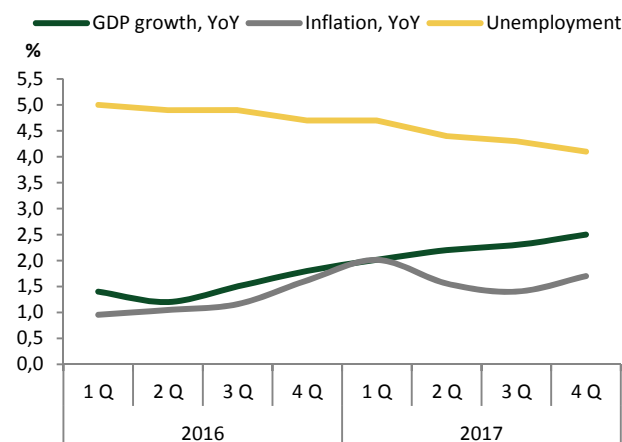
A negative contribution to the GDP growth was made by the reduced stocks of products in warehouses as well as by the increased foreign trade deficit. In particular, the growth rates of imports were outrunning the growth rates of exports in the fourth quarter, since consumers started to buy more of foreign-made goods.

The annual inflation in the fourth quarter of 2017 accelerated as compared to the previous quarter as a result of the increased economic activity against the approval of a new tax reform (Figure 7), the increased tariffs for residential rental payments, medical services as well as the increase in prices of certain foodstuffs (dairy products, meat and fruits).

In the reviewed period, the labor market was characterized by positive trends. Unemployment decreased by 13% versus the corresponding quarter of 2016 and accounted for 4.1% (Figure 7). Wages of employees who are paid on an hourly basis increased and the number of Americans who used to receive an unemployment benefit decreased.

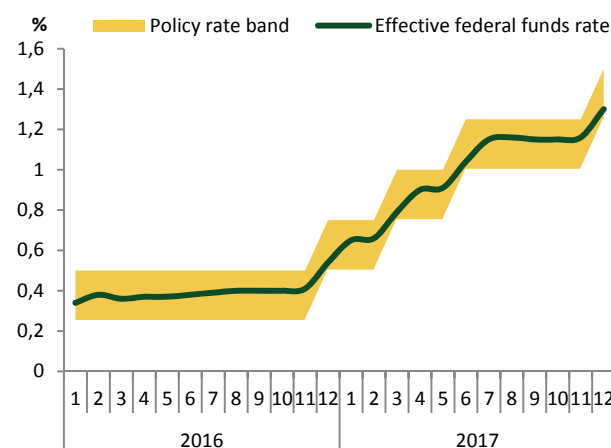
Based on its December session, the US Fed's Federal Open Market Committee raised its policy rate from 1-1.25% to 1.25-1.5% per annum (Figure 8). This was the third time when the Fed was raising its rate in 2017. The decision to raise the rate was motivated by the

**Figure 7. US Economic Performance**



Sources: U.S. Bureau of Economic Analysis (BEA), U.S. Bureau of Labor Statistics (BLS)

**Figure 8. US Rates**



Source: Reuters



intention to ensure moderate economic activity, improve conditions in the labor market and also to ensure that inflation reaches its target level. According to the Fed's forecasts, in 2018 the policy rate will be 2.1%, and in the long term – 2.7%.

### 1.3 Economic Situation in Countries – Kazakhstan's Trading Partners

#### 1.3.1 China

In the fourth quarter of 2017, the annual GDP growth in China accounted for 6.8% (Figure 9).

A positive effect on the economic growth in China in the reviewed period was made by the increase in retail sales against the growth in the domestic consumption as well as by the global economic growth which secured a high demand for export goods.

Negative factors which constrain acceleration of the economic growth included a slowdown in the real estate sphere and the growth in the cost of corporate borrowing. In addition, in connection with measures taken to mitigate the environmental pollution, the activity of industrial enterprises decreased. Fixed capital investments are still financed mainly by the government and their growth in 2017 accounted for 7.1%.

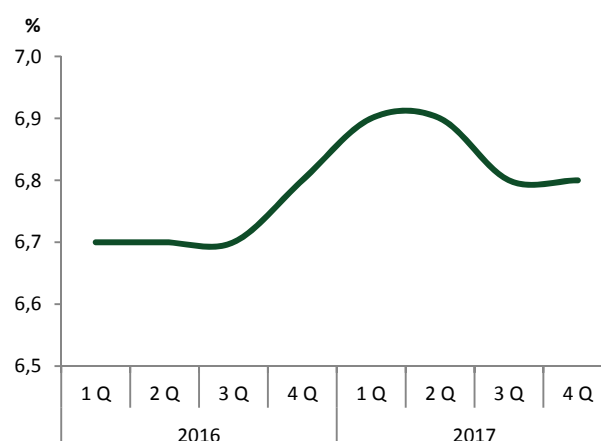
The intra-quarter inflation pattern was divergent; after its deceleration in November to 1.7% it slightly accelerated to 1.8% in December. A low inflation was driven by a high base of the previous year and also by the decline in the price of pork and vegetables which represent key elements of the consumer basket in China (Figure 10).

The factors contributing to the inflation growth include the growth in prices of a large range of services and household items that is related to the growth in the domestic consumption. In general, prices of consumer industrial goods increased by 1.7%, and services increased by 3% in terms of price.

In the fourth quarter of 2017, the People's Bank of China kept its policy rate at the existing level (Figure 11).

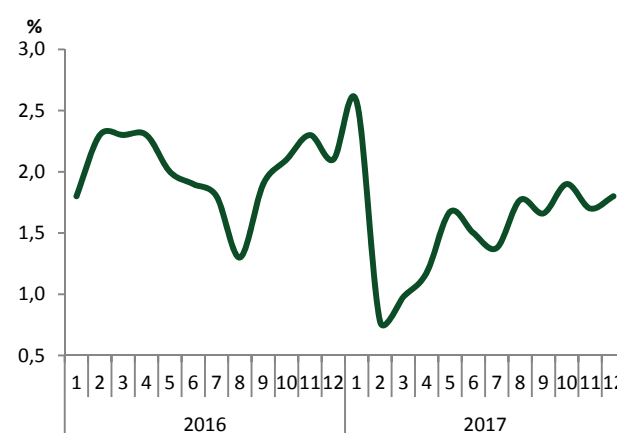
So, the average monthly over-night SHIBOR rate slightly decreased from 2.73% in November to 2.67% in December 2017.

Figure 9. China's Real GDP Growth, YoY



Source: Bloomberg

Figure 10. Inflation in China, YoY

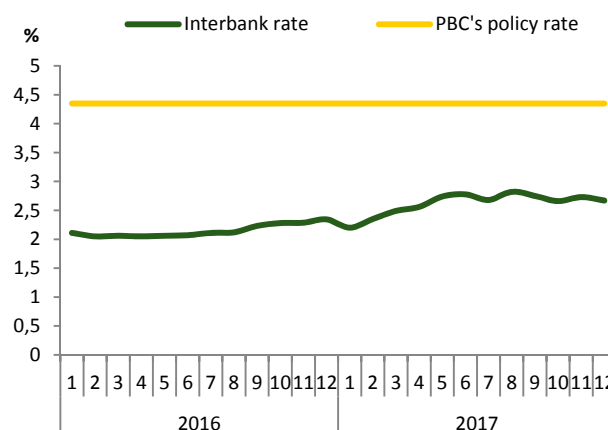


Source: National Bureau of Statistics of China

The average monthly exchange rate of the Yuan against the US Dollar had gradually appreciated from CNY 6.6250 in October to CNY 6.5906 per USD in December (Figure 12).

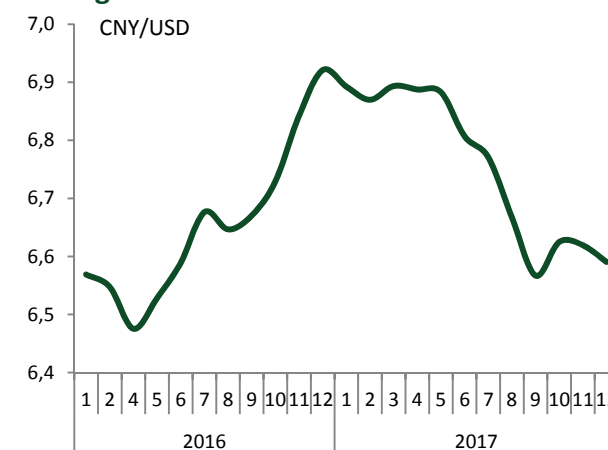
The main reasons for appreciation had been the US Dollar depreciation in the global market as well as the statement made by the Chinese authorities that in 2018 the monetary policy will be of a neutral nature.

**Figure 11. Interest Rates in China**



Source: Reuters

**Figure 12. USD/CNY Exchange Rate, a Monthly Average**



Source: Reuters

### 1.3.2 European Union

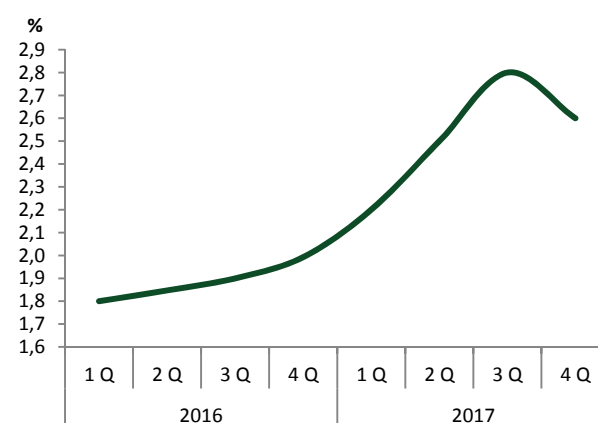
According to preliminary data of the Eurostat, the economic growth in the EU in the fourth quarter of 2017 accounted for 2.6% in annual terms (Figure 13). The growth was observed in all major EU countries (except Italy and Spain).

A favorable impact to the GDP growth was made by a positive trend in the industry, by acceleration in the global trade and the decreasing unemployment in some countries.

The growing cost of export goods as a result of appreciation of the European currency as well as a possible tightening of funding terms in the global markets may serve as constraining factors for a further growth of the EU's GDP.

Despite a growing business activity in the EU, inflation remains moderate – 1.7% in annual terms as at the end of December 2017 (Figure 14). The major growth in prices was observed in

**Figure 13. EU's Real GDP Growth Rate, YoY**



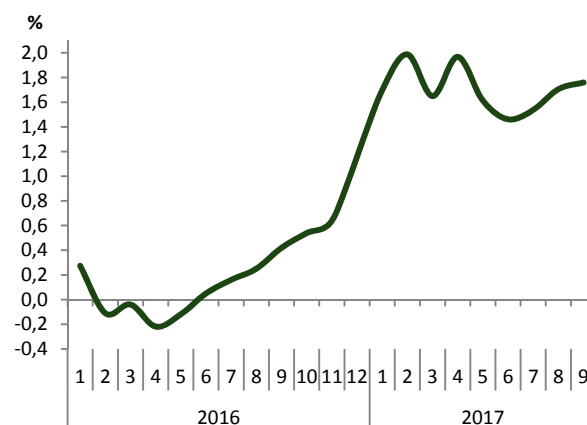
Source: Eurostat

such commodity groups as fuel for transport, tobacco products as well as milk, cheese and eggs.

A feeble growth in real wages acts as a constraining factor for anchoring the inflation around its 2% target. Since the inflation was below its 2% target, the ECB remain key money market rates unchanged (Figure 15). Also, the regulator confirmed a further implementation of the asset purchase programme to buy EUR 30 billion every month until the end of September 2018, with a possibility of its extension in the case if a steady inflation pattern will not be in line with the goals.

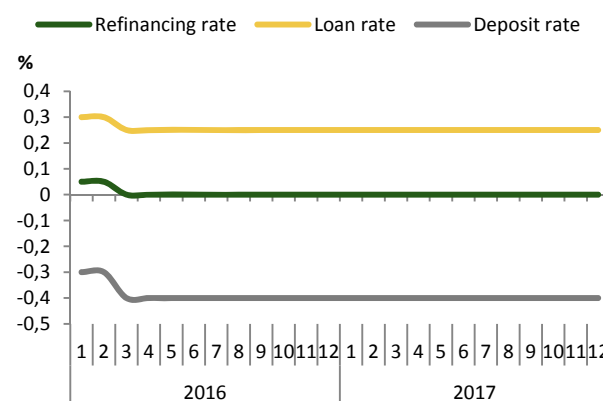
During the reviewed period, the Euro appreciated from USD 1.1753 on average in October 2017 to USD 1.1835 on average in December 2017 (Figure 16). Depreciation of the US Dollar as a result of capital outflow from the USA and its inflow to the Euro zone had been the main reason for appreciation of the Euro.

**Figure 14. Inflation in the EU, YoY**



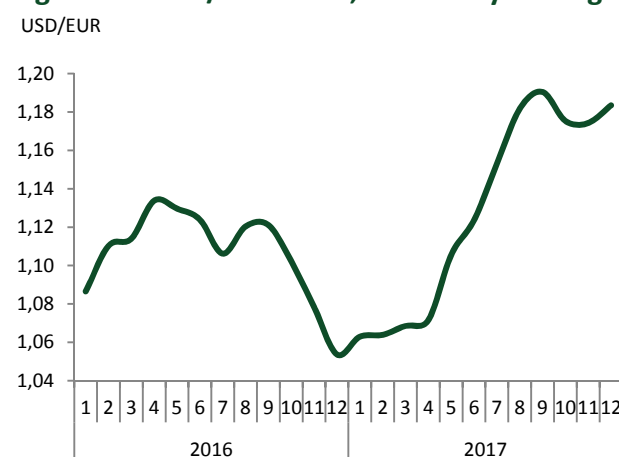
Source: Eurostat

**Figure 15. ECB's Rates**



Source: Reuters

**Figure 16. USD/Euro Rate, a Monthly Average**



Source: Reuters

### 1.3.3 Russia

According to the initial assessment by Rosstat, in the fourth quarter of 2017 the annual growth rates of the Russian economy accounted for 1.2% as compared to 1.8% in the previous quarter (Figure 17). The decreased rates of GDP growth were driven by the downturn in industrial production which was related to implementation of arrangements as part of the OPEC agreement to reduce oil production as well as in the agriculture and construction sectors.

The growth in wholesale and retail trade and in the transport sector had served as a positive factor.

In the fourth quarter of 2017, the annual inflation in Russia continued to decelerate and accounted for 2.5% in December (Figure 18). Such change in the inflation pattern was caused by appreciation of the ruble and the increased supply in the agricultural product market that are related to the growth in crop yield and the shortage of warehousing facilities.

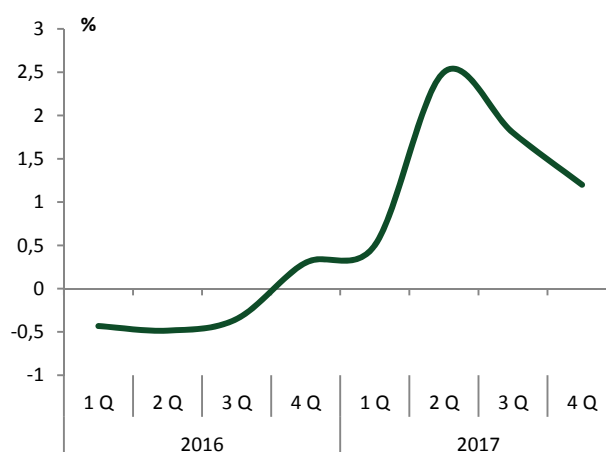
In the environment of a decelerating pattern of inflation and inflation expectations which had been observed since the beginning of the year, in December 2017 the Bank of Russia decided to lower its key rate from 8.25% to 7.75% (Figure 19).

Nonetheless, a possible depreciation of the ruble, the growth in real wages at such rates that outrun the growth in labor productivity as well as the change of the household behavior pattern towards consumption represent risk factors for acceleration of inflation.

The exchange rate of the Russian ruble against the US Dollar was showing a divergent movement during the fourth quarter (Figure 20).

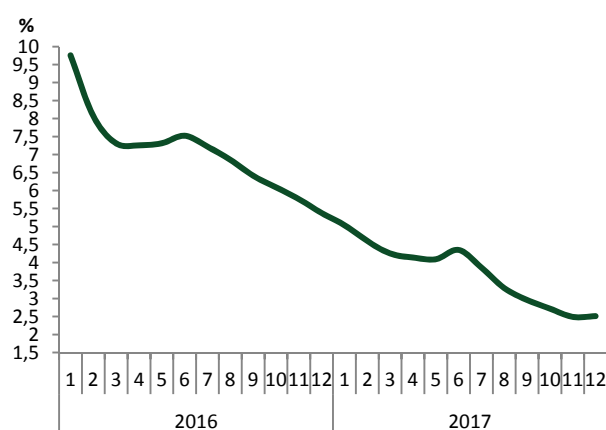
In November, the average monthly exchange rate of the ruble depreciated by 2.1% versus October 2017, then it appreciated to RUB 58.54/USD. Such a turn in the behavior was to a larger extent caused by the volatility of world oil prices.

**Figure 17. Russia's Real GDP Growth, YoY**



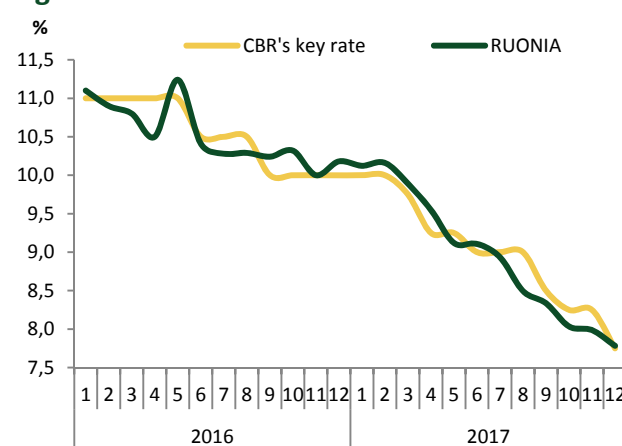
Source: Rosstat

**Figure 18. Inflation in Russia, YoY**

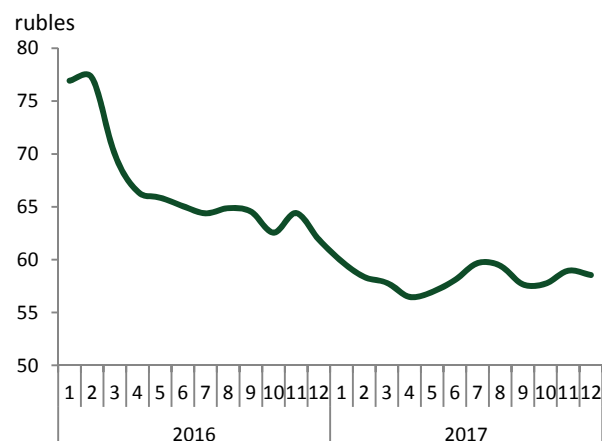


Source: Reuters

**Figure 19. Rates in Russia**



Source: Reuters

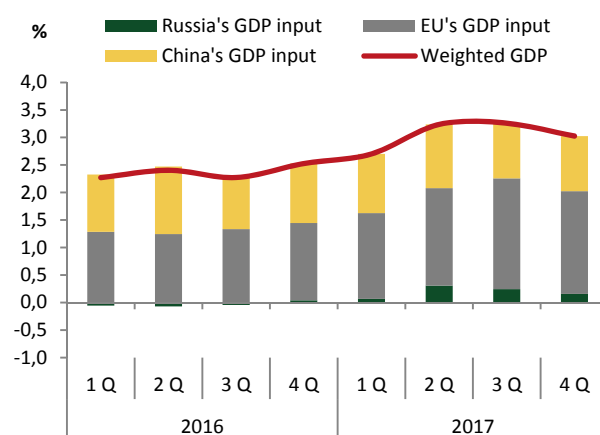
**Figure 20. RUB/USD Exchange Rate, a Monthly Average**

Source: Reuters

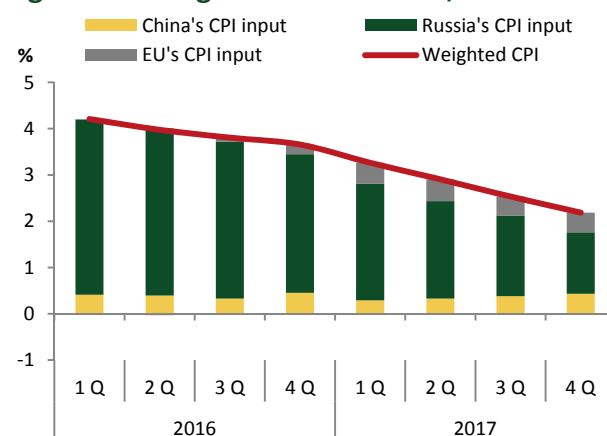
**1.3.4 Aggregate External GDP and Inflation**

Aggregate external GDP which is calculated on the basis of the data about Kazakhstan's international trading structure and is characterizing the demand for Kazakhstani exports, slightly decreased during the reviewed period as compared to the third quarter of 2017 (Figure 21). The main reason for such decrease had been the slowdown in Russia's and EU's economies whereas the input by the Chinese economy remained unchanged.

Aggregate external consumer price index which is calculated based on the share of main trading partners in Kazakhstan's imports also demonstrated a decline (Figure 22). Such drop is determined by a significant deceleration of the annual inflation in Russia in the fourth quarter of 2017 as well as by moderate inflation in China and in the EU. Thus, the decline in this indicator speaks for deceleration of external inflationary pressure on consumer prices in Kazakhstan.

**Figure 21. Weighted External GDP , YoY**

Source: NBRK's calculations

**Figure 22. Weighted External CPI , YoY**

Source: NBRK's calculations

### 1.4 Kazakhstan's Balance of Payments

At the end of the third quarter of 2017, the current account had been negative despite a significant growth in the balance of trade surplus as compared to the third quarter of 2016. The current account deficit was financed with the capital inflow on the financial account. The overall net balance of payments had been negative and was USD 1.3 bln. at the quarter-end (Figure 23).

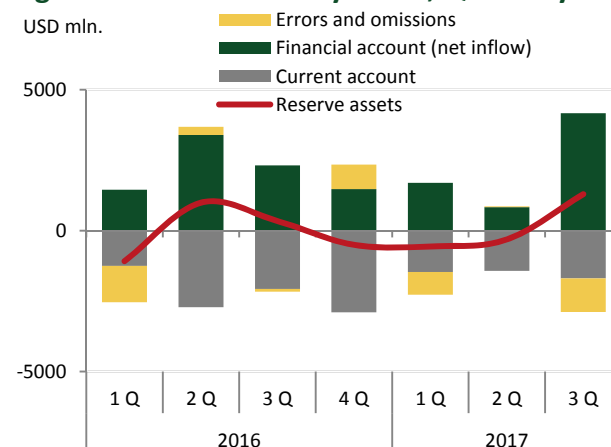
The 1.5 times expansion of the balance of trade surplus (USD 3.4 bln.) as a result of the growth in export proceeds given a favorable environment in the oil market and the commissioning of commercial production in the Kashagan oil field led to reduction in the current account deficit. During the reviewed quarter, the current account deficit contracted by 17.9% (USD 1.7 bln. or 4.1% of GDP) as compared to the same period of 2016<sup>1</sup> (Figure 24).

Exports of goods increased by 20.7% (USD 11.7 bln.). Exports of mineral products increased by 23.6% (exports of oil and gas condensate increased by 21.5%). Exports of ferrous and non-ferrous metals increased by 41.1% and 11.1%, respectively.

Imports of goods showed a slower growth – 12.6% (USD 8.3 bln.). The growth in imports of consumer goods was 16.5% (USD 2.0 bln.), including the 14.4% growth in foodstuff imports, and the 17.9% growth – in imports of non-food products. The import of interim industrial consumption products increased by 12.6% (USD 2.8 bln.), and of investment goods – by 11.3% (USD 2.5 bln.).

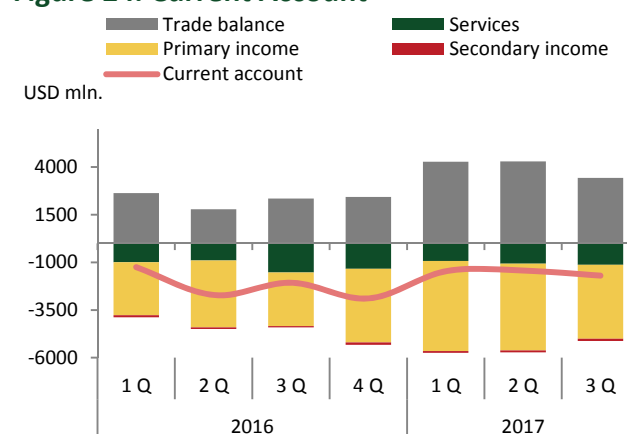
As for the trade in services account, given the concurrent 5.1% growth in exports and 10.1% reduction in imports the negative balance decreased by 26.5% (USD 1.1 bln.) (Figure 25). The growth in exports of services is related to the growth in expenditures of non-residents associated with their trips to Kazakhstan (attending EXPO-2017). The 76.0% reduction in imports of services was driven by the reduced expenditures by residents related to payment for fee-based services rendered by non-resident financial intermediaries because

**Figure 23. Balance of Payments, Quarterly**



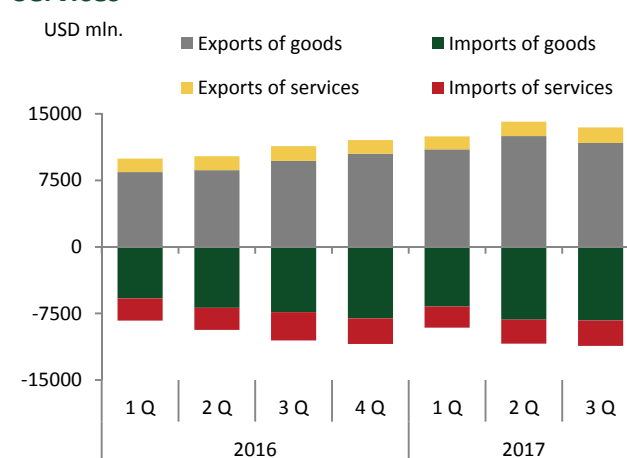
Source: NBRK

**Figure 24. Current Account**



Source: NBRK

**Figure 25. Exports and Imports of Goods and Services**



Source: NBRK

<sup>1</sup> Henceforth, the comparison is made with the third quarter of 2016

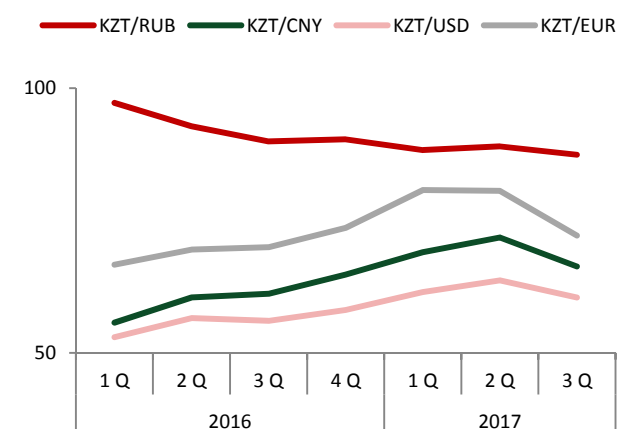
of the reduced volumes of financial resources borrowed from abroad as well as other business services associated with engagement of non-residents in implementation of large infrastructure projects.

Despite a trade surplus, the current account showed up a deficit because of expansion of negative balances on other components of the current account. The deficit on primary income was growing because of the 44.7% increase in returns of non-residents on direct investments as a result of the growth in primary exports. A portion of such returns was channeled by non-residents to finance their Kazakhstani subsidiaries in the oil and gas sector. Payments of interest to creditors that are not in direct investment relationship increased by 4.8%. As a result, a negative balance on the investment returns increased by 41.8%, which partially offset the improvement in the balance of trade thus holding in the reduction in the current account deficit.

The real effective exchange rate index of the tenge increased by 3.1% (the tenge appreciated in real terms). The tenge had depreciated against the CIS-currency basket by 0.9%, and appreciated by 9.3% against the basket of other currencies. Indices of bilateral real exchange rates (RER) of the tenge against currencies of countries – main trading partners demonstrated growth. The tenge had appreciated in real terms against the US Dollar by 7.9%, against the Euro – by 3.2%, against the Yuan – by 8.5% and it depreciated against the ruble by 2.8%. The real effective exchange rate index decreased by 22.3% versus the benchmark competitiveness index of December 2013 (Figure 26).

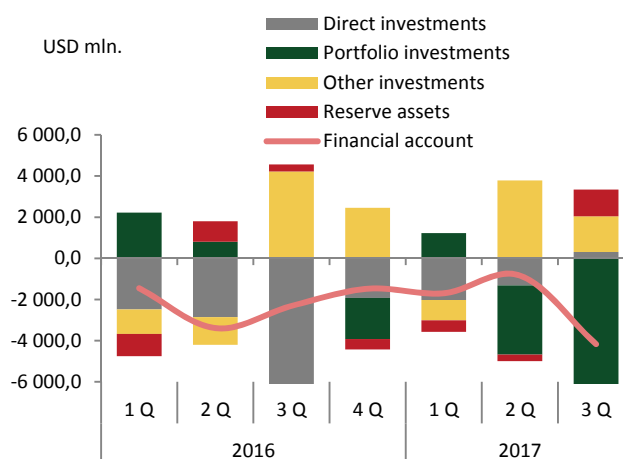
The financial account (less reserve assets) showed up a net capital inflow (USD 4.2 bln.) because of higher growth rates of residents' liabilities as compared to the growth rates of their assets. Portfolio investments and medium- and long-term investments whose inflow was partly offset by an outflow associated with the growth in short-term assets of residents on foreign accounts served as the main funding source for the balance of payments in the reporting quarter (Figure 27).

**Figure 26. Real Effective Exchange Rate Index (December 2013 = 100%)**



Source: NBRK

**Figure 27. Financial Account**



Source: NBRK

Foreign direct investments showed up a net outflow (USD 0.3 bln.). Direct equity investments into Kazakhstani enterprises had partially offset the capital outflow and were channeled to finance companies in the oil and gas sector, trade, metallurgical industry.

Issue of Eurobonds by non-banking organizations as well as reduction in assets of residents invested in foreign securities contributed to a net inflow on portfolio investments (USD 6.2 bln.). There was a net outflow on other investments (USD 1.7 bln.) that was related to the increase in assets of residents maintained on accounts with foreign banks and foreign cash held by the population.

The growth in liabilities on long-term loans and the increase in payables of non-banking organization reduced the capital outflow on other investments.



## 2. DOMESTIC ECONOMY

### 2.1 Monetary Policy and the Financial Sector Development

#### 2.1.1 Money Market and Operations of the National Bank of the Republic of Kazakhstan

The money market kept functioning in the environment of liquidity surplus. As before, the main liquidity volume was withdrawn with the help of the National Bank's short-term notes with maturities ranging from 7 days to 1 year. In October-December, the National Bank increased the volume of placed short-term notes with one-year maturity as part of implementation of the Program for Increasing Financial Soundness of Kazakhstan's Banking Sector. KZT 620.0 bln. out of KZT 732.6 bln. was placed with participating banks.

As a result of operations performed as part of the Program, special bank loans provided in the first half of 2017 with an aim to urgently stabilize the financial condition of certain banks were repaid at the end of December.

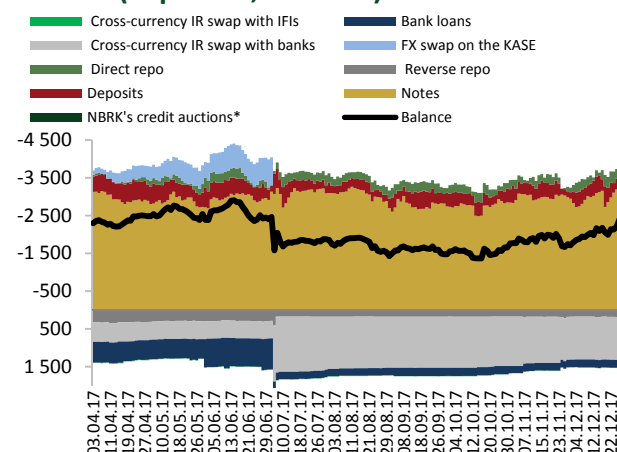
In effect, an exposure on the National Bank's operations increased from KZT 1.5 trln. at end-September to KZT 2.4 trln. at end-December (Figure 28).

Given the persistence of inflation risks on the part of the external sector and the supply factors, the National Bank retained monetary conditions at a neutral level. Throughout the quarter, the base rate remained unchanged.

The TONIA rate had been mainly at the lower boundary of the base rate interest rate band throughout the period (Figure 29). During the tax payment period (end-November – beginning of December) the demand for liquidity was increasing. Hence, certain market participants conducted repo operations at the rate at the upper boundary of the interest rate band. The result was that on some days the interest rate was building above the base rate level. At December 29, 2017, the indicator equaled 9.33%.

During the quarter, the Money Market Index was ranging between 9.23% – 10.34%. At December 29, 2017, the MMI was at 9.4% (Figure 30).

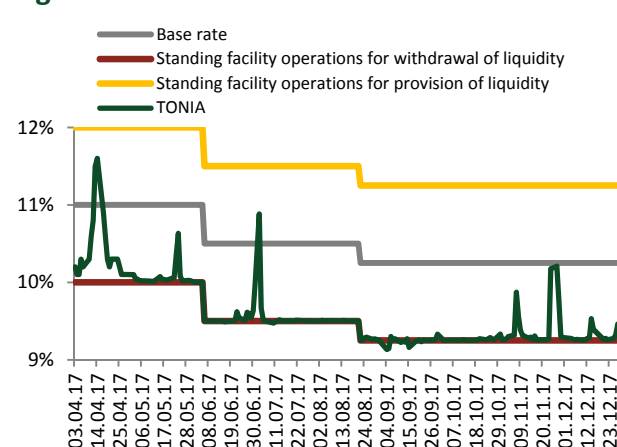
**Figure 28. NBRK's Operations in the Domestic Market (exposure, KZT bln.)**



\* NBRK's securities buy/sell back auction

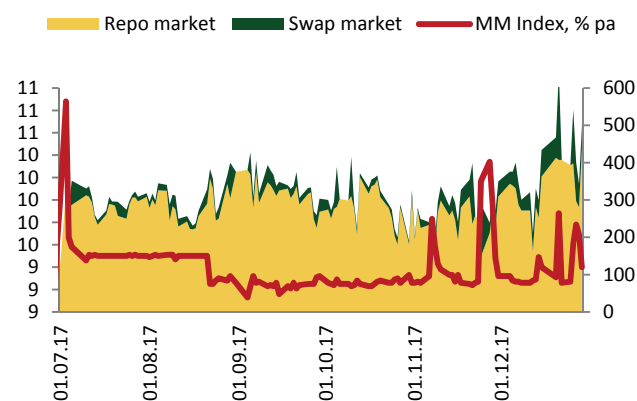
Source: NBRK

**Figure 29. Base Rate and TONIA Rate**



Source: NBRK, KASE

**Figure 30. Changes in the MMI and the Volume of Transactions (KZT bln., right axis)**



Source: KASE

### 2.1.2 Foreign Exchange Market and Foreign Exchange Operations of the National Bank of the Republic of Kazakhstan

Despite the fact that there was a high volatility in the foreign exchange market at the beginning of the quarter, a further improvement of the situation in world commodity markets and gradual stabilization of devaluation expectations created conditions for decreasing the amplitude of exchange rate movements of the tenge and appreciation of the tenge against foreign currencies.

The exchange rate of the tenge was fluctuating against the US Dollar within the range of KZT 330.00-345.00 per USD. As of the end of the quarter, the official exchange rate of the tenge against the US Dollar appreciated to 332.33 or by 2.6% (Figure 31).

Since the demand for foreign currency persisted in the first half of October, the National Bank sold foreign currency with total value of USD 379.75 mln.

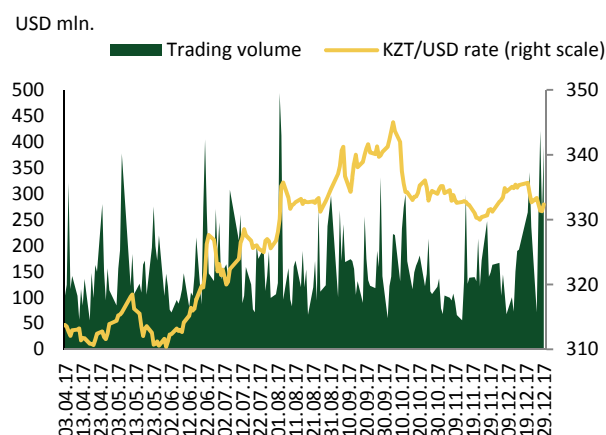
Given that devaluation expectations among the population and professional participants of the foreign exchange market were gradually decreasing the demand for foreign exchange was contracting. The volumes of on-exchange and over-the-counter exchange tradings in the KZT/USD compared to the third quarter accounted for 2.6% and 2.8%, respectively.

### 2.1.3 Deposit Market

In the fourth quarter, the volume of deposits amounted to KZT 17.5 trln., having decreased by 6% as compared to the third quarter. Deposits in the domestic currency contracted by 4.5% and foreign currency deposits – by 7.7%.

Reduction in the bank deposit base in the fourth quarter was related to implementation of the Program for Increasing Financial Soundness of Kazakhstan's Banking Sector. Transferrable deposits placed on the account of the Program Operator "Kazakhstan Sustainability Fund" JSC (the "KSF") in the third quarter were used to purchase bank subordinated bonds by the Fund in the fourth quarter; thus, such changes made the largest contribution to reduction in the deposit volume

**Figure 31. Exchange Rate Behavior and the Trading Volume in the Foreign Exchange Market**



Source: KASE

(Figure 32). Excluding KSF's resources, reduction in the deposit volume accounted for 3.1%.

The corporate sector deposits decreased by 5.9% (excluding KSF); this also made a significant contribution to reduction in the deposit base. Revaluation of a foreign exchange component of deposits given the 2.6% appreciation of the tenge made a minor negative contribution.

Retail deposits have not undergone changes over the quarter; however, excluding revaluation of a foreign exchange component the growth is estimated at 1.5%. Retail deposits in the tenge increased by 10.9%, foreign currency deposits decreased by 8.2%. The inflow of deposits in the tenge during the fourth quarter in absolute terms in the amount of KZT 382.1 bln. against a physical outflow of foreign currency deposits of KZT 260.7 bln. is indicative of both the on-going conversion of foreign currency deposits into the tenge deposits and of an inflow of new retail deposits in the tenge. As a consequence of such changes, dollarization of retail deposits decreased to 52.2% (in the third quarter – 56.8%).

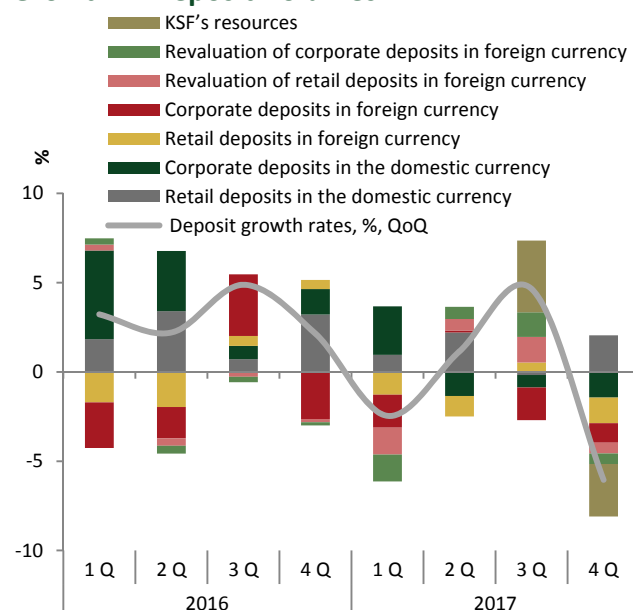
An overall level of dollarization of deposits decreased from 48.5% to 47.7%, which represents the minimum since end-October 2014.

The weighted average interest rate on deposits attracted in the domestic currency decreased from 8.4% in September 2017 to 8.2% as at the end of December, on foreign currency deposits – from 2.0% to 1.5% given that maximum recommended interest rates on retail deposits in foreign currency were lowered from 1.5% to 1% from December 1, 2017 (Figure 33).

#### 2.1.4 Credit Market

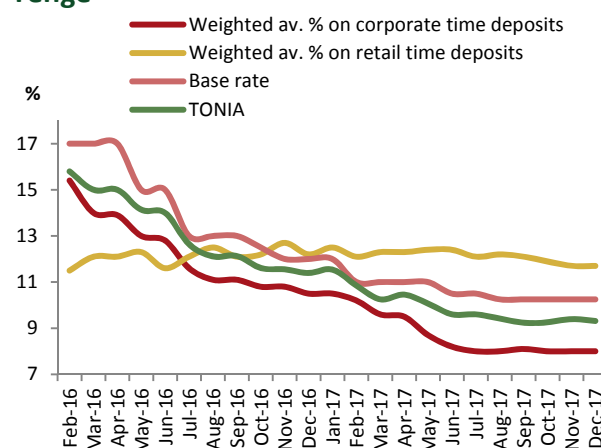
In the fourth quarter, the bank loan portfolios decreased by 3.9% and amounted to KZT 12.7 trln. (Figure 34). The banks' balance sheet clean-ups as part of the Program for Increasing Financial Soundness of Kazakhstan's Banking Sector (restructuring of assets and liabilities of "Kazkommertsbank" JSC and "Bank RBK" JSC, as well as license revocation of "Delta Bank" JSC) led to reduction in the bank loan

**Figure 32. Composition of Components to the Growth in Deposit Volumes**



Source: NBRK's calculations

**Figure 33. Interest Rates on Deposits in the Tenge**



Source: NBRK

portfolios. Excluding above three banks, the growth in loans accounted for 2.8% over the quarter.

According to the poll conducted among banks on the topic of lending in the fourth quarter of 2017<sup>2</sup>, the business demand for loans continued to grow; this was fostered by a favorable macroeconomic environment, by the lowering of interest rates, extension of loan tenors, by the increasing need to purchase of fixed assets and to fund working capital in connection with expansion of the business. The willingness of banks to provide loans to businesses was also growing.

According to the poll among enterprises in the real sector of the economy conducted by the National Bank<sup>3</sup>, the affordability of loans is gradually increasing: the percentage of enterprises which applied to a bank but had not obtained a loan is decreasing. In the fourth quarter of 2017, 19.6% out of 22.4% of enterprises participating in the monitoring survey and applying to a bank have obtained the loan.

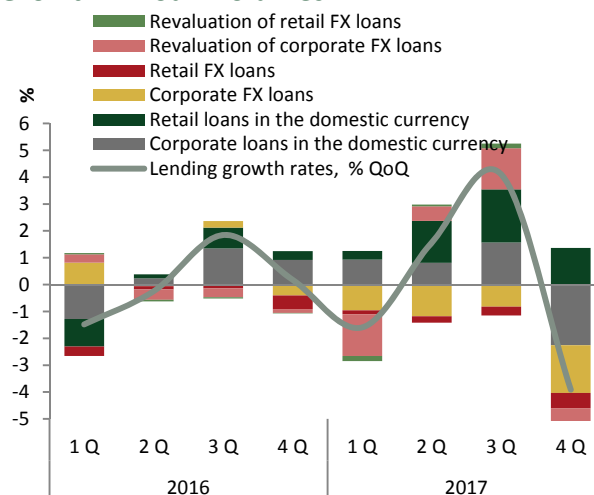
The loan portfolio of the retail sector in the fourth quarter increased by 2.2%. The main growth factor for retail loans is an increasing contribution by consumer loans. At the same time, according to the poll among banks, banks tightened the terms and conditions on retail lending except for the unsecured consumer lending and increased the margin on standard and risky consumer loans.

In the fourth quarter, the weighted average interest rate on loans decreased to 13.5% from 14.0% in the third quarter (Figure 35).

### 2.1.5 Monetary Aggregates

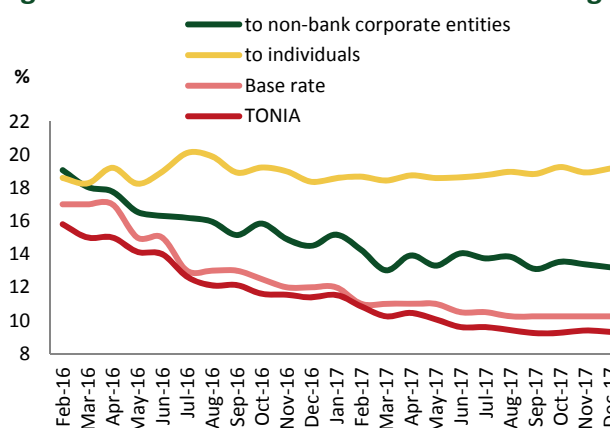
Implementation of the Program for Increasing Financial Soundness of Kazakhstan's Banking Sector had an impact on the money supply indicators (Figure 36). In the fourth quarter, the money supply decreased by 4.9%, and the reserve money contracted by 8.7%. At the same time, a seasonal growth in the demand for cash resulted in that cash in

**Figure 34. Composition of Components to the Growth in Loan Volumes**



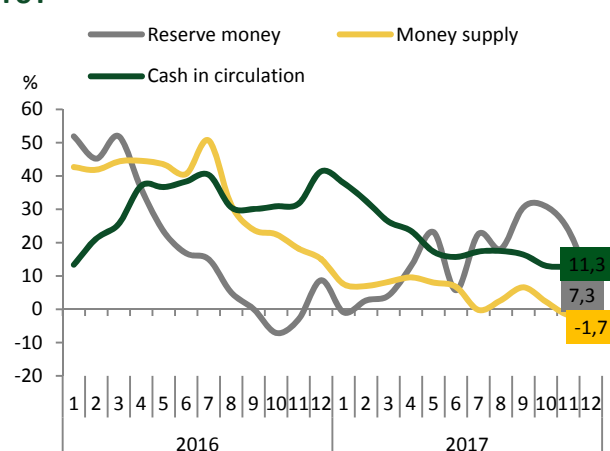
Source: NBRK

**Figure 35. Interest Rates on Loans in the Tenge**



Source: NBRK

**Figure 36. Growth in Monetary Aggregates, YoY**



Source: NBRK

<sup>2</sup> <http://nationalbank.kz/?docid=3535&switch=russian>

<sup>3</sup> <http://nationalbank.kz/?docid=3341&switch=russian>

circulation increased by 7.2%.

As compared to the previous quarter, the main factors of monetary aggregate formation had not changed.

A major negative contribution to the formation of money supply in annual terms was made by claims on the economy because of the reduction in claims on non-bank financial organizations<sup>4</sup> which was not offset by the growth in net claims on the general government. Also, there was a negative contribution on the part of other net assets (Figure 37).

A positive contribution to the formation of money supply was made by the growth in net foreign assets as a result of the 3.2% growth in gross international reserves of the National Bank as well as by net claims on the general government within domestic assets.

A positive contribution to the behavior of the reserve money was made by the growth in gross international assets of the National Bank, the increased claims on non-bank financial organizations and the growth in other assets.

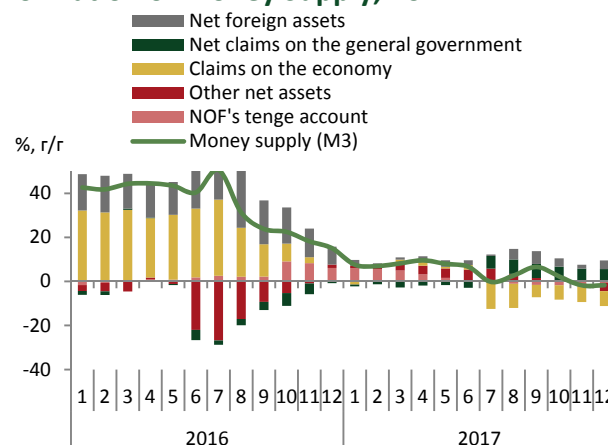
## 2.2 Prices and Inflationary Processes

### 2.2.1 Prices in the Consumer Sector

In December, the annual inflation accounted for 7.1%, which was aligned with the mid-point of the target band of 6-8% for 2017 (Figure 38). In October, there was a spike in prices of certain goods as a result of increased volatility in the energy market and in the vegetable market that resulted in a short-term acceleration of inflation. However, such acceleration was offset by other components of the food inflation in the following months of the quarter (Figure 39).

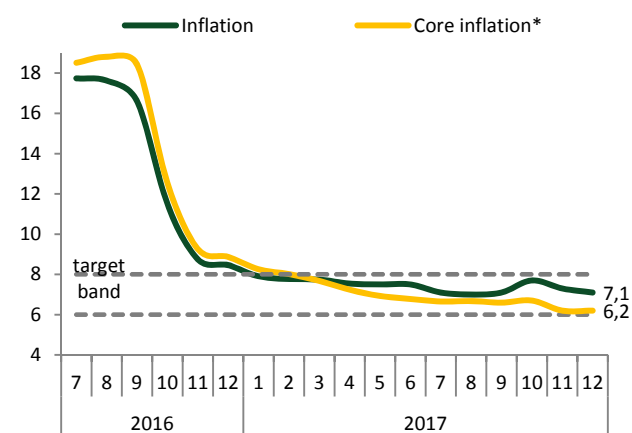
The core inflation, excluding fruit and vegetable production, energy carriers and regulated services, had decreased from 6.6% to 6.2% over the quarter. The main factors for deceleration of the core inflation were the reduced cost of imports, both of foodstuffs and non-food products, the decline in prices of food producers, a high level of supply in the food market.

**Figure 37. Dynamics of Sources to the Formation of Money Supply, YoY**



Source: NBRK

**Figure 38. Annual and Core Inflation Pattern, YoY**



Source: CS MNE RK

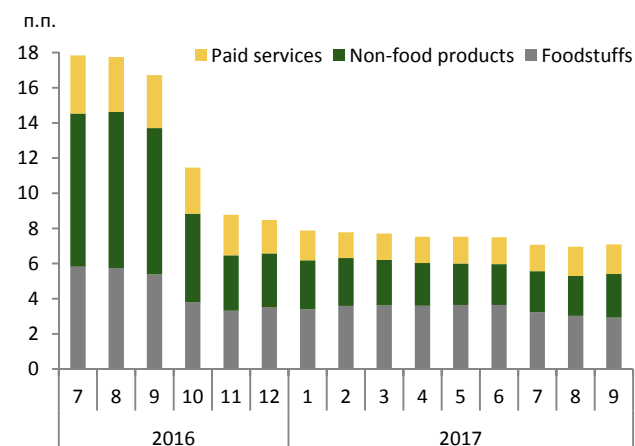
\* excluding prices of fruits and vegetables, utilities, railway transport, communication, gasoline, diesel fuel and coal

<sup>4</sup> See Inflation Report No.3, 2017

The structure of the food inflation showed the slowdown in the price growth virtually on all components except excisable products. A major contribution was made by the decline in prices of cereals, eggs and sugar, by twenty five percent of their cost on average. As a result, the annual growth rates of food prices slowed from 7.8% to 6.5%.

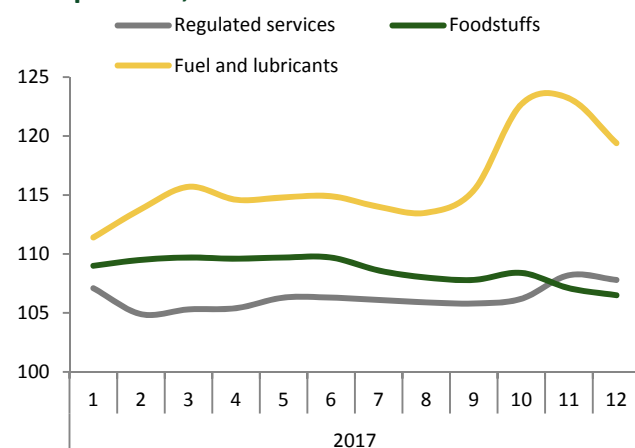
The structure of the food inflation showed that the growth in prices of non-durable goods was decreasing. However, given the reduced supply in the domestic market and the increased demand for imported products, the growth in prices of fuel and lubricants continued in October (Figure 40). Despite the fact that by the end of the quarter the situation in the energy market recovered and prices of the consumer non-food imports slowed their growth rates, in general, the growth rates of prices of non-food products accelerated from 8.3% to 8.9% in December. The contribution to the annual inflation by paid services slightly increased as a result of the increased cost of regulated utilities.

**Figure 39. Contribution of its Components to Inflation, YoY**



Source: CS MNE RK, NBRK's calculations

**Figure 40. Behavior of Certain CPI Components, YoY**



Source: CS MNE RK, NBRK's calculations

### 2.2.2 Prices in the Real and External Sectors

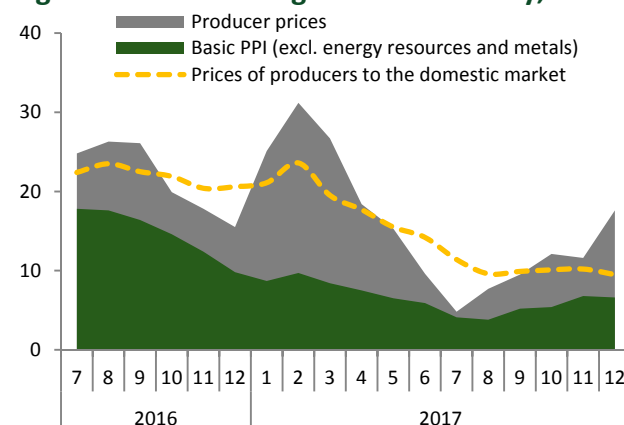
The producer price index demonstrated acceleration – from 109.5% in September to 117.6% in December (Figure 41) given the increase in export prices in the mining industry (extraction of crude oil and metal ores) (Figure 42).

Producer prices in the domestic market slightly declined from 9.9% to 9.5%. The price growth in the sector of food production slowed down, prices of enterprises - vegetable oil producers continued to decline (by 5.6% over the year).

In general, the increase in price was noted in such categories as machinery, equipment, transport vehicles; this translated into a double increase in the price of production means.

The annual growth in prices of industrial

**Figure 41. Price Changes in the Industry, YoY**



Source: CS MNE RK



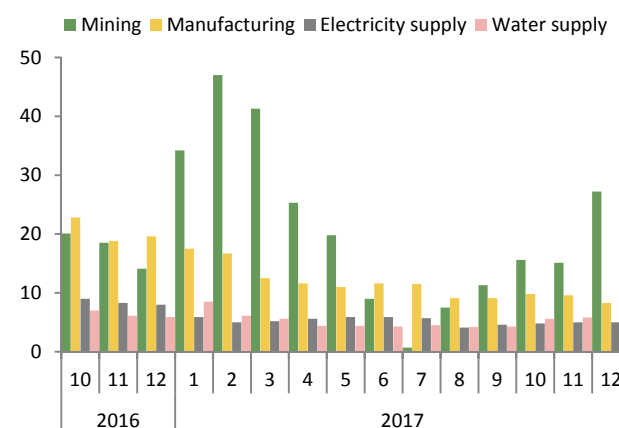
services slowed from 7.6% in September to 6.9% in December 2017.

In agriculture, the price growth rates slowed from 4.4% to 2.6% both because of the animal production and plant production (Figure 43). In annual terms, cereals and oil-bearing crops, chicken and eggs cheapened.

The price index of imported goods declined from 7.4% in September to 6.8% in December 2017 because of the slowing growth rates of prices of goods imported from the CIS-countries (from the EAEU, in particular) to a larger extent due to the cheapening of consumer food products, raw materials and construction materials.

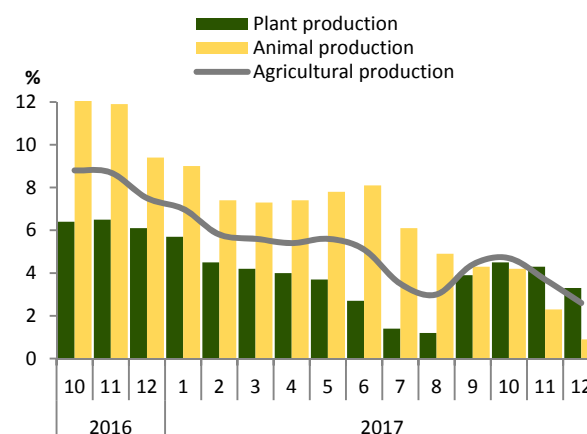
According to the monitoring survey data, starting from the first quarter of 2017, the trend for a minor slowdown in the growth rates of prices of final products showed up (Figure 44). In the fourth quarter of 2017, prices were growing virtually at the same rates as in the previous quarter (the diffusion index was 56.5).

**Figure 42. Price Changes in the Industry by Types of Economic Activities**



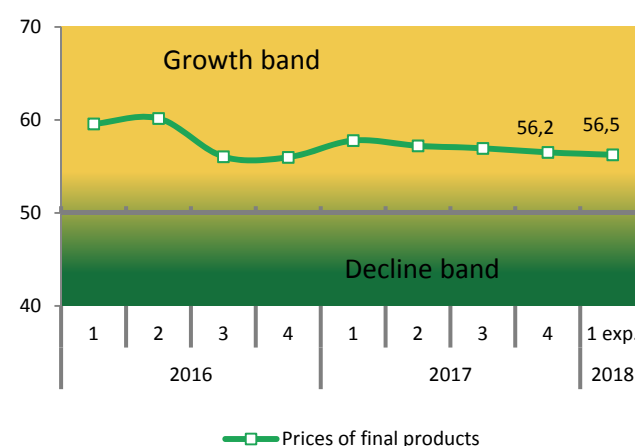
Source: CS MNE RK

**Figure 43. Price Changes in Agriculture, YoY**



Source: CS MNE RK

**Figure 44. Outcomes of the Enterprise Monitoring Survey by the NBRK**



Source: NBRK

\* The higher (lower) from 50 the DI (diffusion index) is, the higher (lower) the rates of growth (decline) of the indicator, and where the DI=50 it means the absence of a change

### 2.2.3 Inflation Expectations

The public poll outcomes show that in the fourth quarter of 2017 both the level of perceived inflation and expected inflation had slightly increased. The main factor for such growth was the increase in prices in the fuel and lubricants market in October 2017.

Expectations of households regarding the prospects of price changes in the next 12 months have slightly increased. Along with that, the growth of inflation expectations while having reached its peak in November had notably decreased by the end of 2017. A major percentage of respondents continue to anticipate that the price growth rates will remain the same in the next year (Figure 45).

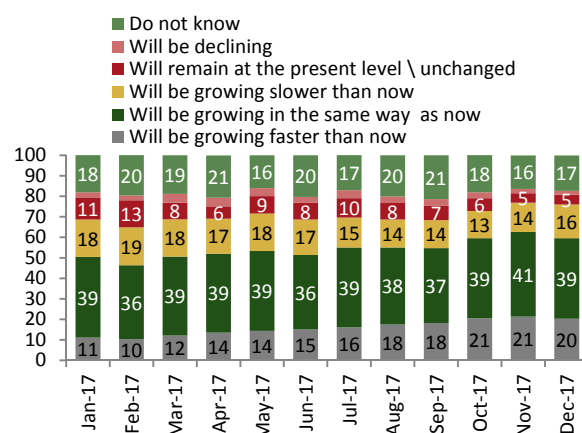
In general, despite the shock in the energy market, inflation expectations regarding the prospects of growth in prices of foodstuffs, non-food products and paid services in the fourth quarter are at a stable level and are gradually approximating the actual annual inflation indicator.

A quantitative assessment of expected inflation<sup>5</sup> for the coming year decreased to 7.1% in December 2017 (Figure 46), having equaled to the actual annual inflation indicator.

In addition to expected inflation, the so-called perceived inflation is determined; it is generated based on the subjective basket of goods of an individual. Therefore, perceived inflation often rests above the officially stated inflation (Figure 47). This being said, the perceived inflation indicator<sup>6</sup> had significantly decreased over 2 years having reached the minimum at the end of 2017 (see Annex 1).

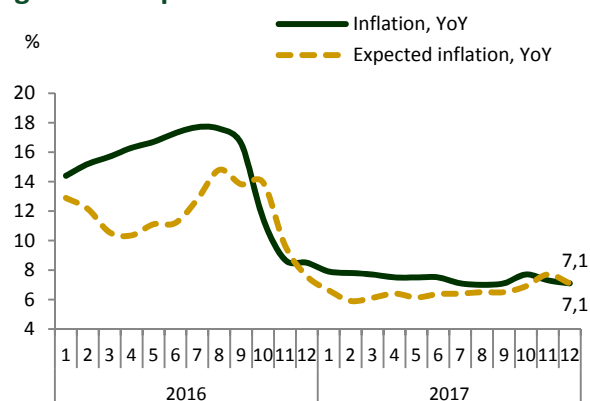
**Figure 45. Assessment of the Price Growth in a Year**

In your opinion, how much generally will prices of foodstuffs, non-food products and services change in the next 12 months?



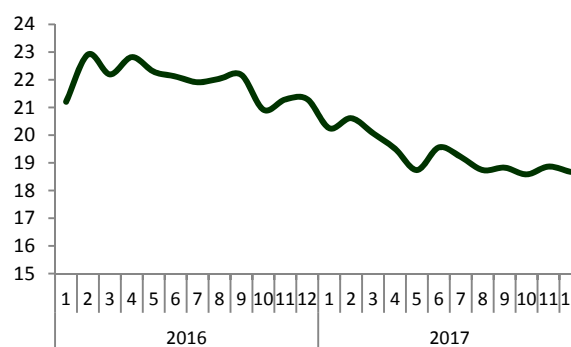
Source: GfK Kazakhstan

**Figure 46. Expected Inflation**



Source: Committee on Statistics of the MNE RK, GfK Kazakhstan

**Figure 47. Perceived Inflation**



Source: GfK Kazakhstan, NBRK's calculations

<sup>5</sup> The Methodology for calculating the quantification of inflation expectations is posted on the official Internet resource of the National Bank in the "Monetary Policy"- "Inflation and Inflation Expectations" Section

<sup>6</sup> The median of the results of answers to the question "In your opinion, how much have prices of foodstuffs, non-food products and services grown over the past 12 months?" is used as perceived inflation.



### 2.3 Real Sector Development

In the third quarter of 2017, the GDP growth continued to demonstrate a positive pattern being fueled by a favorable pricing environment in the global commodity markets and by the growth in the domestic consumption amidst the increasing investment activity.

#### 2.3.1 Domestic Demand

The GDP growth rates by the final consumption method accounted for 4.2% at the end of the first nine months of 2017 (Figure 48).

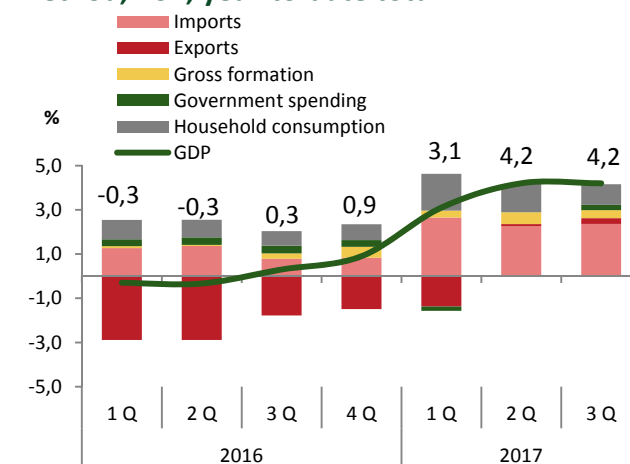
A positive contribution of net exports to the GDP growth was observed against reduction in real imports of goods and services as well as a moderate increase in exports. A negative pattern of imports was accompanied by the ongoing negative path of the movement in real cash income of the population. A moderately positive pattern of exports was secured by the growth in exports of mineral products and metals given the improved pricing environment in the global primary markets, and by expansion of crude oil extraction in the Kashagan and Tengiz oil fields.

The gross formation growth rates increased by 2.5% due to implementation of government economic stimulus programs and acceleration of a positive trend in fixed capital investments. The growth of investment activity was accompanied by the increased fixed capital investments in accommodation and catering services – by 36.4%, education – by 26.0%, trade – by 9.8%, industry – by 6.0% and in the transport sector – by 4.5%. The growth rates of investments in residential construction remained virtually unchanged and accounted for 1.9%.

A positive pattern of the consumer demand has been slowing for two consecutive quarters (to 1.4% at the end of the first nine months of 2017) (Figure 49). The constraining effect on the consumer demand is made by contraction in real cash income of the population. At the same time, the growth in consumer lending as well as deceleration of inflationary processes helps maintain real household spending at a positive level.

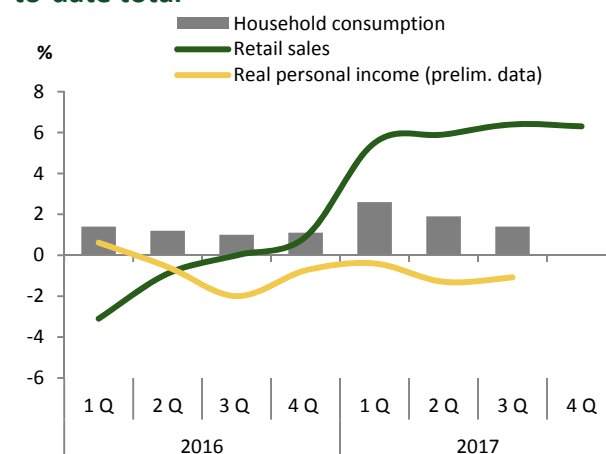
The structure of the growth in nominal

**Figure 48. Decomposition of the GDP Components by the Final Consumption Method, YoY, year-to-date total**



Source: CS MNE RK, NBRK's calculations

**Figure 49. Household Consumption, Household Real Cash Income and Retail Sales, YoY, year-to-date total**



Source: CS MNE RK

consumer spending by households had undergone some changes in the third quarter. Contributions made by foodstuffs and non-food products as well as by paid services became more even as compared to the second quarter of 2017. The decreased contribution by foodstuffs and increased contribution by non-food products ensured a more even distribution of these contributions. The growth rates of spending on foodstuffs and non-food products accounted for 13.1% and 12.1%, and on paid services – 12.1% (Figure 50).

### Income of the Population

In October and in November 2017, nominal cash income of the population demonstrated reduction in annual terms by 1.1% and 1.5%, respectively. Nominal cash income decreased because wage reductions in certain sectors of the economy. However, in December 2017 wages resumed their growth which accounted for 4.1% (Figure 51).

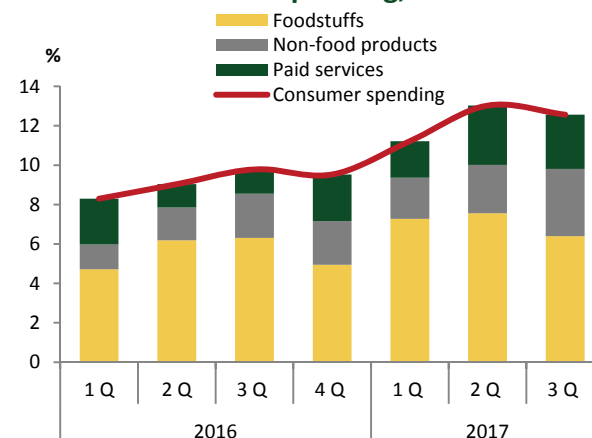
A negative pattern in real cash income was persisting; in December 2017 it decreased by 2.8% in annual terms. Deceleration of inflationary processes had a constraining effect on reduction in real cash income.

### Investments

In the fourth quarter of 2017, investment activity in the real sector continued to grow and at the year-end the growth in fixed capital investments accounted for 5.5% (Figure 52).

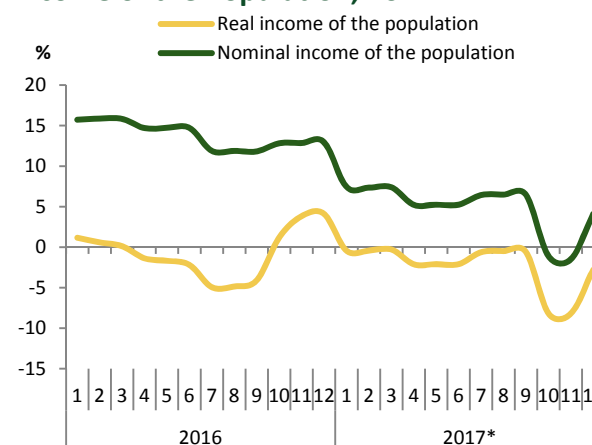
By the year-end the industry-based structure of fixed capital investments had undergone significant changes. So, the largest contribution to the growth in investments was made by the sector of real estate operations due to the increased construction of residential buildings in the city of Astana. Also, a significant acceleration in investments (to 29%) was shown by agriculture owing to the procurement of agricultural equipment in November 2017 and construction of a greenhouse complex for tomato production in the Pavlodar region. The contribution of investments of the mining industry and transport services decreased given

**Figure 50. Structure of Growth in Household Nominal Consumer Spending, YoY**



Source: CS MNE RK, NBRK's calculations

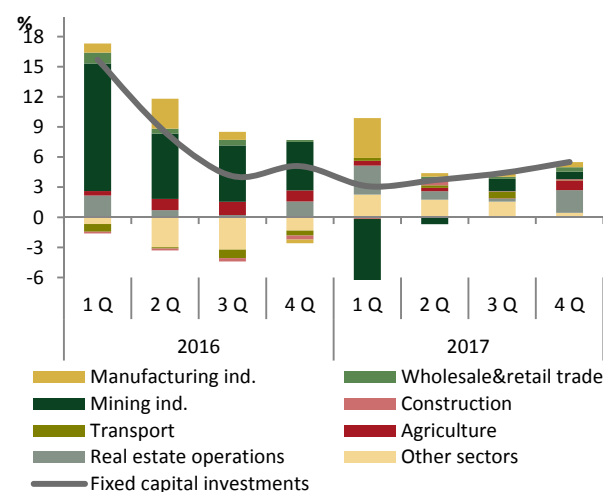
**Figure 51. Indices of Nominal and Real Cash Income of the Population, YoY**



\*-preliminary data

Source: CS MNE RK

**Figure 52. Fixed Capital Investments, by Types of Economic Activity, Contribution, YoY, year-to-date total**



Source: CS MNE RK, NBRK's calculations

a high base of the fourth quarter of 2016 associated with the growth of investments in oil extraction and transportation as well as investments in extraction of copper ores in the East Kazakhstan region. At the same time, given positive prospects for the economy and implementation of the government support programs, investments in the manufacturing industry, water supply and electricity supply sectors, in the construction sector, trade, and communication continue to grow.

The percentage of domestic investments in the overall investment volume in 2017 accounted for 73%, and of foreign investments – for 27%. During 9 months of 2017, the gross inflow of foreign direct investments amounted to USD 15.8 bln. and increased by 5.3% as compared to the corresponding period of the previous year. Such sectors as oil production, metallurgy and trade are still the most attractive for foreign investors.

### 2.3.2 Domestic Production

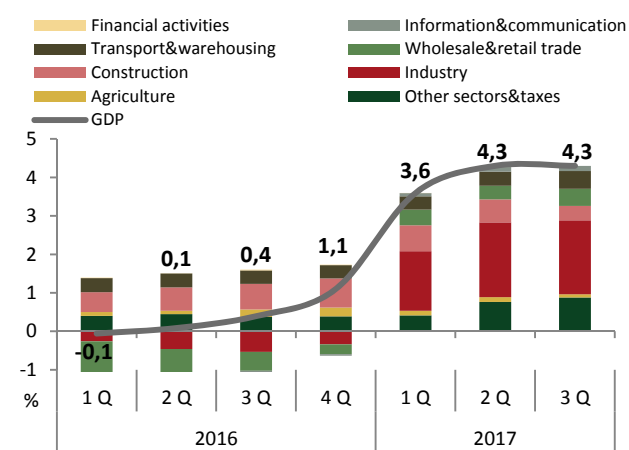
At the end of nine months of 2017, the real GDP growth by the production method accounted for 4.3% versus the corresponding period of the previous year (Figure 53).

The main driver for the economy's growth had been the increase in the volumes of manufactured goods by 7.0% owing to extraction of mineral resources and production of industrial products. The service sector also keeps recovering; its growth accounted for 2.5%.

The data from the CS MNE RK on key economic sectors for 2017 indicate that recovery processes are going on, however, at a slower pace. The short-term economic indicator increased by 3.5% as compared to the fourth quarter of the previous year (Figure 54).

A significant expansion in extraction of crude oil at the Kashagan and Tengiz fields (the country's total – 10.5%) as well as the increased volumes of extraction of natural gas, ferrous ore and ores of non-ferrous metals had driven the 9.3% growth of the mining industry in 2017 (Figure 55). However, a slight deceleration in the growth rates was caused by the effect of launching the oil extraction in the Kashagan

**Figure 53. GDP Decomposition. Contribution by Economic Sectors to the GDP Growth, YoY, year-to-date total**



Source: CS MNE RK, NBRK's calculations

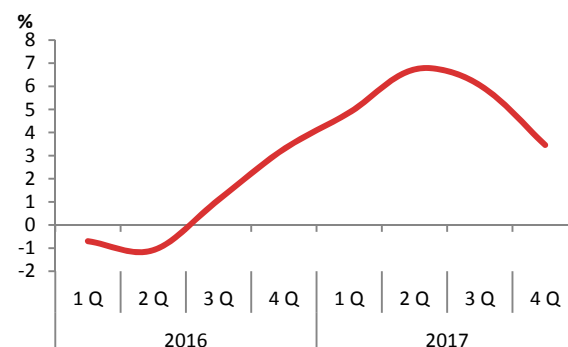
field in October 2016.

By the end of 2017, the growth in the manufacturing industry slowed to 5.1%; this is partially related to the decreased volume of construction works in the industry<sup>7</sup> versus the previous year (Figure 56). Nonetheless, given a favorable external environment and the growth in metal extraction in Kazakhstan, the metallurgical industry still represents the main source of growth. So, at the end of 2017, production in the non-ferrous metallurgical industry increased by 6.6%, and in ferrous industry – by 5.5%. The growth in oil refinery was secured by the increased oil production but since there were repair works at the Pavlodar Oil Refinery in the fourth quarter of 2017, by the year-end the growth decreased to 5.1%. Other sectors which are important in terms of the economic diversification continue to develop. So, production in the light industry increased by 7.3%, production of foodstuffs – by 4.1%, production of key pharmaceuticals – by 41.8%, and the growth in the machine-building industry was secured by the increased manufacturing of motor transport (by 39.0%) and electric equipment (by 26.5%).

At the end of 2017, the physical output in the agricultural sector increased by 2.9% owing to the growth in production in the livestock breeding (by 3.9%) and in the plant production (by 2.2%). A gradual growth in diversification of the agricultural production should be regarded as a positive trend. So, given the overall growth in crop acreage (by 1.7%), reduction in acreage for wheat was noted along with the increased acreage for oil-bearing crops, barley, pulses, oat, buckwheat.

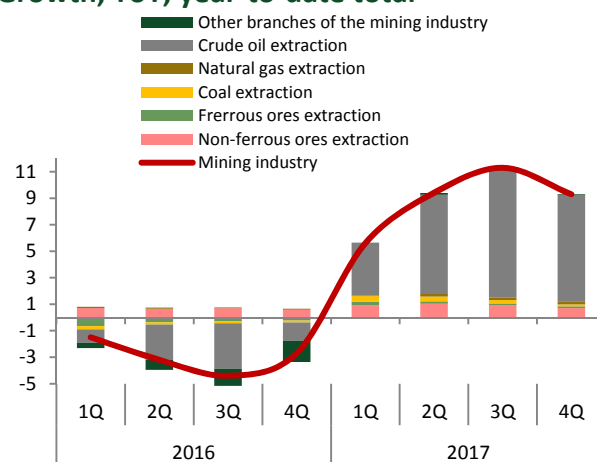
The growth in volume of construction works slowed down to 1.9%; this was related to the decreased volume of construction and installation works and a significant increase (by 43.6%) in the major overhaul works (Figure 57). In turn, the decrease in the volume of construction and installation works (by 2.5%) was driven by the effect from completion of construction of the Winter Universiade facilities

**Figure 54. Short-Term Economic Indicator, YoY**



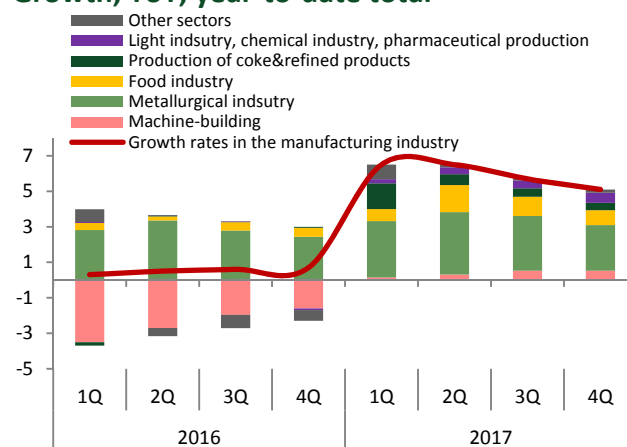
Source: CS MNE RK, NBRK's calculations

**Figure 55. Decomposition of the Mining Industry. Contribution by Sectors to the Growth, YoY, year-to-date total**



Source: CS MNE RK, NBRK's calculations

**Figure 56. Decomposition of the Manufacturing Industry. Contribution by Sectors to the Growth, YoY, year-to-date total**



Source: CS MNE RK, NBRK's calculations

<sup>7</sup> According to the CS MNE RK, the volume of construction works performed for industrial facilities amounted to KZT 1 126 bln. in 2016 and to KZT 665 bln. – in 2017.

in Almaty in the fourth quarter of 2016 and the EXPO-2017 facilities in the second quarter of 2017, and the increase in the major overhaul works was driven by reconstruction of industrial facilities and engineering tracks. The largest shares in the structure of facilities under construction are comprised by transport and warehousing facilities, industrial facilities and real estate; this is furthered by implementation of government housing programs and infrastructure projects.

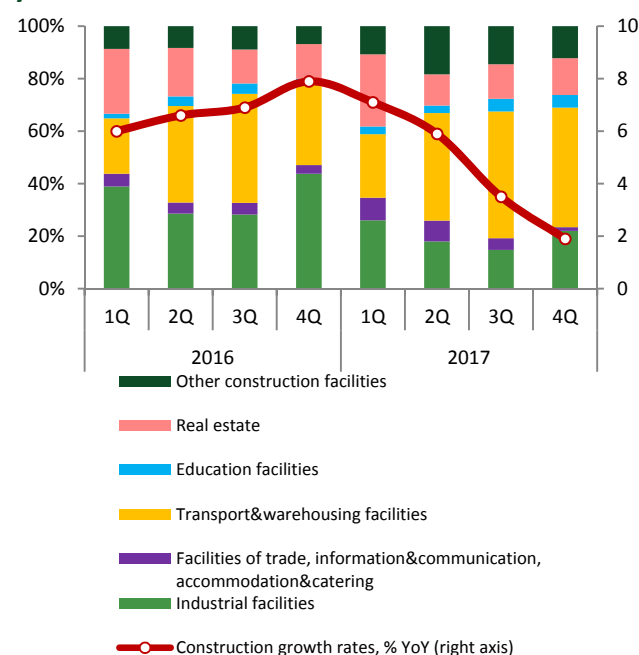
Alongside with production of goods, the service sphere also demonstrates positive growth rates. At the end of 2017, retail sales increased by 6.3% as compared to the previous year against a moderate growth in the consumer demand (Figure 58). In the structure of retail sales, a positive contribution was made both by sales of foodstuffs and non-food products. However, the growth in wholesale turnover accounted for 1.5% only since the wholesale of foodstuffs decreased.

Implementation of infrastructure projects as well as positive trends in the industry and trade help increase the rendering of transport and warehousing services. In 2017, the growth in the sector accounted for 4.8%, with a significant contribution being made by railway cargo transportations (10.6%), pipeline transport (13.0%) and motor transport (0.6%).

During 2017, the growth in the information and communication sector accounted for 3.3%, mainly due to the increased volume of the Internet services (11.8%). At the same time, regular and express mail services are growing (12.2%) while services of mobile communication demonstrated a zero growth.

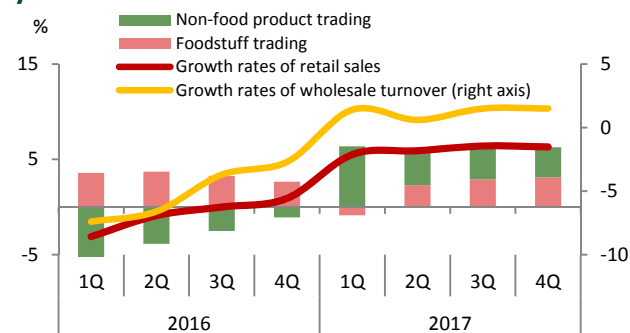
The composite leading indicator, which summarizes the assessment of the existing situation in the fourth quarter of 2017 as well as expectations of CEOs of companies in the real sector of the economy in the first quarter of 2018, are positive, thus indicating that recovery processes in the economy are on-going. The interviewed enterprises note the improvement in demand for final products in key sectors (the industry, agriculture, transport, and trade), less reliance of enterprises on fluctuations of the tenge exchange rate, a slowdown in the growth

**Figure 57. Growth Rates of Construction and a Relative Share of Commissioned Facilities, YoY, year-to-date total**



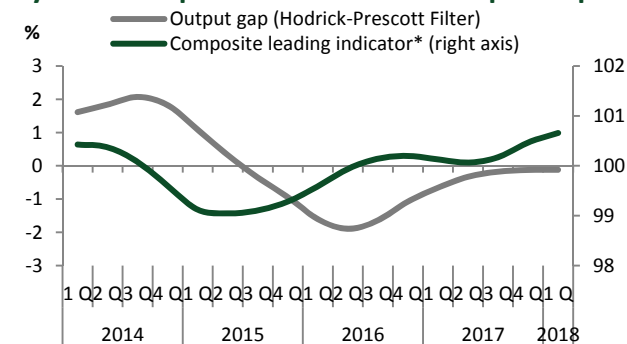
Source: CS MNE RK, NBRK's calculations

**Figure 58. Growth Structure of Retail Sales and Growth Rates of Wholesale Turnover, YoY, year-to-date total**



Source: CS MNE RK, NBRK's calculations

**Figure 59. Behavior of the Composite Indicator, Cyclical Component of GDP and Output Gap**



Source: NBRK

\* the calculation of a composite leading indicator was revised based on the OECD methodology

in prices of final products, raw materials and supplies. Assessment methods based on filtration principles showed the persistence of negative values of the output gap. However, gap parameters are close to zero indicating that inflationary pressure in the economy is neutral (Figure 59).

### 2.3.3 Labor Market and Unemployment

In the fourth quarter of 2017, nominal wages accelerated their growth to 5.9% after the 4.8% growth in the previous quarter (Figure 60).

As a result of acceleration in the growth of nominal wages their reduction slowed to 1.4% in real terms.

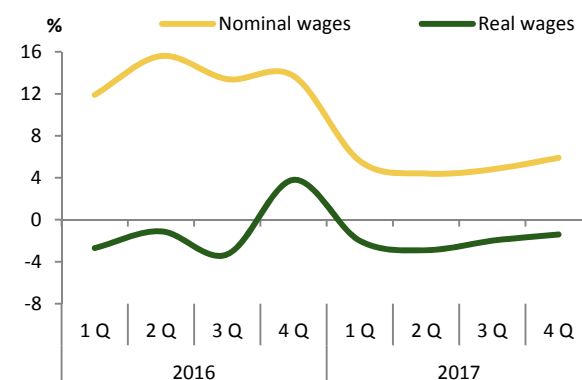
Real wages were decreasing in the professional, scientific and technical activities (by 13.7%), healthcare (by 6.3%), education (by 5.8%), financial and insurance activities (by 5.3%), and transport (by 4.9%).

At the same time, real wages are growing in the area of administrative and ancillary service (by 32.3%), real estate operations (by 9.9%), public administration and defense (by 7.4%) and trade (by 3.2%).

At the end of nine months of 2017, the growth of labor productivity in the economy accelerated to 4.5%. The acceleration trend in the labor productivity has been observed since the first quarter of 2016. A significant growth in productivity in sectors which manufacture goods (by 11.5%) helped retaining a positive trend in labor productivity in the economy as a whole. So, labor productivity in the industry increased by 12.1% given the increased productivity in the mining and in the manufacturing industry (by 11.2% and 10.3%, respectively). In the construction sector and agriculture, labor productivity increased by 8.7% and 6.5%, respectively.

However, a negative pattern of labor productivity in the services sector has been persisting since the first quarter of 2015. So, at the end of nine months of 2017, labor productivity in the services production decreased by 0.7%, being associated with the decreased productivity in the area of real estate operations (by 13.8%), professional, scientific

**Figure 60. Nominal and Real Wage Indices, YoY**



Source: CS MNE RK



and technical activities (by 4.6%), activities in the area of administrative and ancillary service (by 3.2%) and education (by 1.3%).

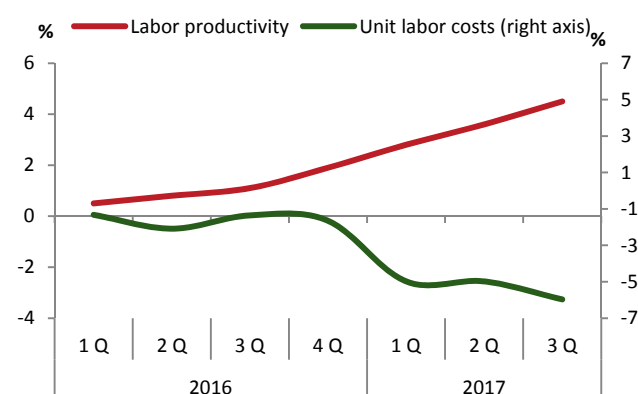
The trend of an outstripping GDP growth as compared to nominal wages continues to determine the downward pattern of unit labor costs (Figure 61). So, at the end of nine months of 2017 the decrease in unit labor costs accounted for 6.0%.

In the fourth quarter of 2017, the unemployment rate was 4.9%. Unemployment has been unchanged throughout six consecutive quarters starting from the third quarter of 2016. A stable unemployment rate was accompanied by positive growth rates of business activity in the majority of economic sectors as well as by the on-going creation of new jobs as part of implementation of government employment and infrastructure development programs.

In the fourth quarter, the labor force grew by 0.2% given the increase in numbers of the employed population, mainly employees. The number of the self-employed population reduced significantly (by 4.5%). The number of the unemployed population also reduced by 0.4% (Figure 62).

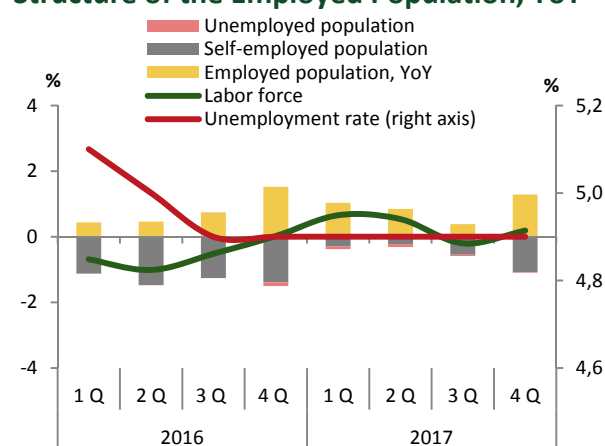
The growth rates of the number of employees had not changed and accounted for 1.1% (Figure 63). The number of employees increased in such areas as activities in the area of administrative and ancillary service (by 10.5%), trade (by 5.0%), healthcare (by 3.4%), transport (by 2.6%) and education (by 2.3%). However, reduction in the number of employees occurred in such sectors as communication (by 10.1%), construction (by 9.5%), water supply (by 8.0%), real estate operations (by 5.2%), electricity supply (by 3.6%) and professional, scientific and technical activities (by 1.4%). In agriculture, the number of employees continues to decrease (by 3.3%) against the growth in labor productivity in the sector.

**Figure 61. Labor Productivity and Unit Labor Costs, YoY, year-to-date total**



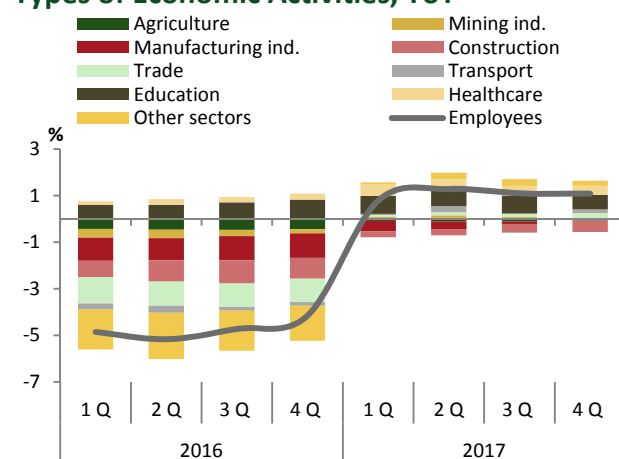
Source: CS MNE RK, NBRK's calculations

**Figure 62. Unemployment Rate, Growth Structure of the Employed Population, YoY**



Source: CS MNE RK, NBRK's calculations

**Figure 63. Employee Growth Structure\*, by Types of Economic Activities, YoY**



Source: CS MNE RK, NBRK's calculations

\*-excl. small businesses engaged in entrepreneurship

## 2.4 Fiscal Policy

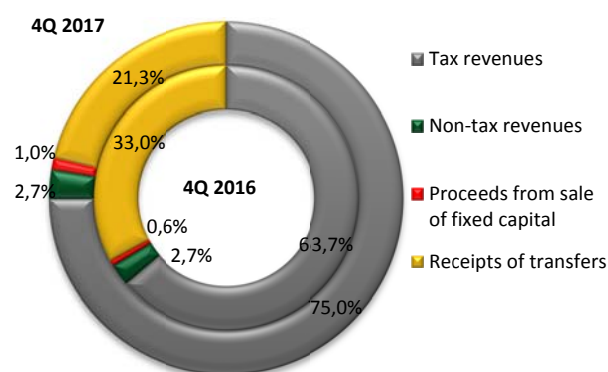
In the fourth quarter as compared to the same period of the previous year, budget revenues had not virtually changed and amounted to KZT 2.8 trln. or 16.9% of GDP (Figure 64). Tax revenues increased by 17.7% and were provided by the growth of consumption in the economy (VAT) and by the improved external environment (custom payments and export duties). Transfers to the state budget from the National Fund decreased by 35.3% to KZT 0.6 trln.

The state budget expenditures increased by 7.6% and amounted to KZT 3.1 trln. (19.0% of GDP).

As a result, the state budget showed up a deficit of KZT 393.5 bln. or 2.4% of GDP (Figure 65).

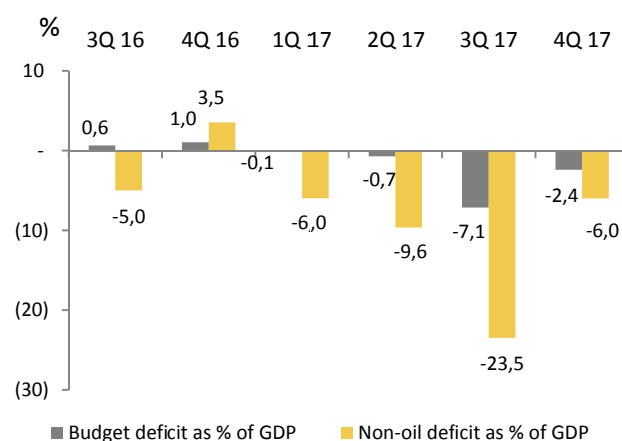
Borrowing in the domestic market via the issuance of government securities served as a funding source for the state budget deficit.

Figure 64. Structure of State Budget Revenues



Source: Kazakhstan's Ministry of Finance

Figure 65. Change in the Overall Balance and Non-Oil Balance of the State Budget



Source: Kazakhstan's Ministry of Finance



## II. FORECAST OF KEY MACROECONOMIC INDICATORS AND FURTHER MONETARY POLICY GUIDELINES

*The forecast of macroeconomic indicators was prepared on the basis of statistical information as at February 15, 2018*

### 1. KEY ASSUMPTION FOR EXTERNAL FORECAST PARAMETERS

In 2017, the average price of oil (Brent) made up USD 54.3 per barrel. The usual averaging of updated forecasts made by information agencies, international financial institutions and private companies demonstrates that in 2018 the price of oil (Brent) will be USD 58.7 per barrel on average (Table 1). Along with that, market expectations show evidence of a possible moderate growth in the oil price to USD 61.5 per barrel in 2019.

To that end, the National Bank, in designing forecasts of macroeconomic variables, both for a short-term (to the end of the third quarter of 2018) and the medium-term (to the end of the third quarter of 2019) periods, revised the baseline scenario towards increasing the price of oil (Brent) to USD 60. In its previous forecasts, the National Bank used the price of oil (Brent) at USD 50 per barrel as the baseline scenario.

Alongside with that, despite positive forecasts of international analysts regarding the oil price behavior in 2018-2019, there are a number of risks which may result in a lower actual price level. In 2018-2019, the key risk for the oil market is still the occurrence of a global overstock of oil caused by the growth in supply and/or reduction in the global demand. Negative factors for behavior of oil prices include escalation of extraction of shale oil in the USA given a favorable pricing environment and a new tax reform, the increased production of oil in Canada based on the increased operating drilling activity as well as violation of the OPEC+ Agreement by certain countries (Iran, Iraq and Venezuela). Reduction in the demand may be affected by a slowdown in the growth rates of the global economy against a slowdown in China's and India's economy, adverse weather conditions as well as an

**Table 1**  
**Forecasts of Oil Price (Brent) in USD per Barrel**

Source	2018	2019	Date of the Forecast Release
International Monetary Fund	53.3		October 2017
World Bank	57.5	60.6	October 2017
Thomson Reuters	60.0	61.8	December 2017
Consensus Economics	61.9	61.7	January 2018
Bloomberg	62.0	62.0	January 2018
Average	58.7	61.5	-

Source: prepared by the NBRK

unstable geopolitical situation. For this reason, the National Bank additionally considers a risk scenario which assumes that the price of oil (Brent) will decline to USD 40 per barrel in the forecast horizon.

The National Bank's assumptions regarding the terms of trade related to the demand for Kazakhstani export commodities on the part of Russia, EU and China, which accounted for 68% of the total foreign trade turnover of goods in the fourth quarter of 2017, had not undergone dramatic changes as compared to previous forecasts presented in the Inflation Report for the third quarter of 2017.

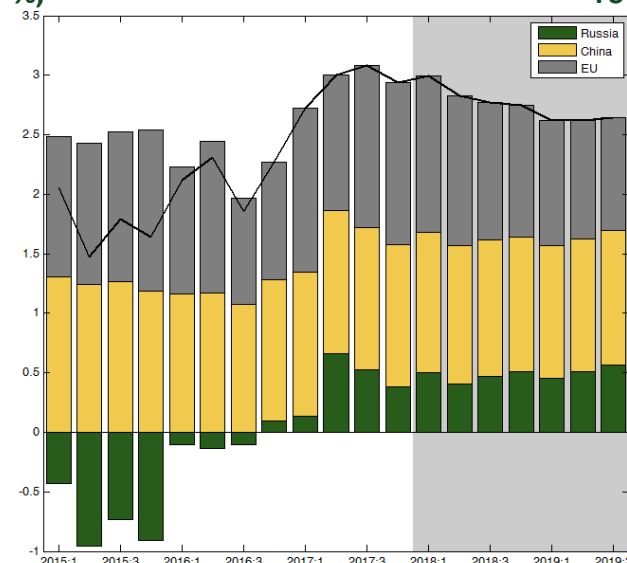
According to expectations which take into account estimates of international organizations, recovery of the external demand in the medium term will serve as a factor promoting the economic growth in Kazakhstan. To a larger extent, the external demand will be improving owing to recovery of positive growth rates of the Russian economy as well as due to a moderate growth of the Chinese economy around its potential and persistently stable rates of economic growth in the EU (Figure 66).

Assessment of a future pattern of external inflation characterized as consumer inflation in main trading partners weighted based on their shares in Kazakhstan's imports (Figure 67), also had not demonstrated significant changes as compared to the previous forecast round (see the Inflation Report for the third quarter of 2017).

The baseline scenario assumes that in the medium-term the analyzed indicator will show a feeble growth against a minor acceleration of inflation in the Russian Federation to the target of 4% set by the Bank of Russia. At the same time, in the analyzed period inflation in the EU and China will not show a significant difference from the existing levels. Therefore, till the end of September 2019, a negative impact of aggregate external inflation on the consumer price behavior in Kazakhstan will be quite small under the baseline scenario.

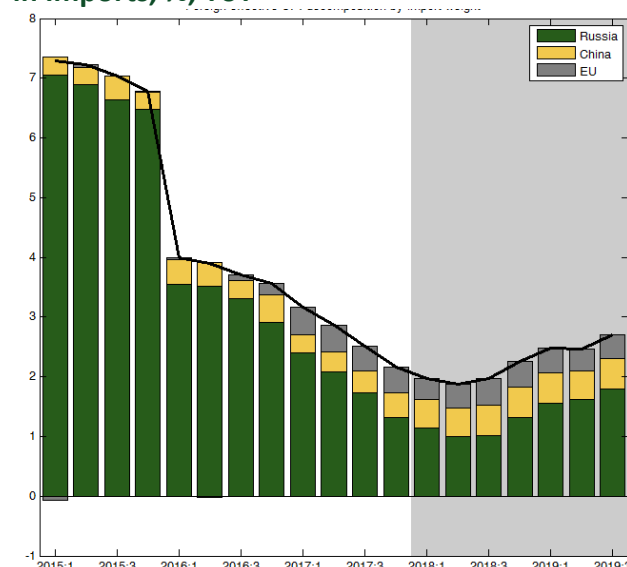
In the short term, according to projections made by the Food and Agriculture Organization

**Figure 66. External GDP Decomposition Broken Down by Kazakhstan's Main Trading Partners, %, YoY**



Source: NBRK's calculations

**Figure 67. Weighted Inflation Broken Down by Kazakhstan's Main Trading Partners by Shares in Imports, %, YoY**



Source: NBRK's calculations

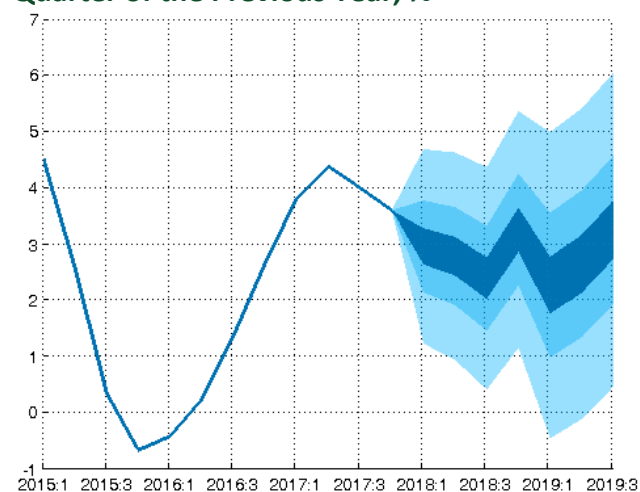
of the United Nations (FAO), the supply in the food market, cereals in particular, will prevail over demand. So, according to the FAO, one may expect that by the end of the season of 2018 cereal stocks will reach a new record-high level. This will result in a further stabilization of the ratio between stocks and utilization of cereals<sup>8</sup>. According to the National Bank's expectations, under the baseline scenario a positive situation in the world food market in the absence of weather and climate shocks will remain unchanged in the medium term, too. Thus, at present there are good reasons to assume that world cereal prices will be having a neutral impact on the behavior of food prices in Kazakhstan till the end of the third quarter of 2019.

Expectations regarding external monetary environment in the medium term also have not changed. As before, monetary conditions are expected to be tightened given expectations about a further increase in the US Fed's federal funds rate.

## 2. FORECAST UNDER THE BASELINE SCENARIO

According to updated forecasts of the National Bank, under the baseline scenario Kazakhstan's real GDP growth at the end of 2018 will account for 2.9% on a cumulative basis (Figure 68). This is in line with the National Bank's prior estimates under the scenario where the price of oil (Brent) is USD 60 per barrel. This being said, net exports will be serving as the main driver for the growth in the forecasting period; the amount of net exports will be shaping up under the influence of a stable recovery of growth rates of exports and persistence of negative growth rates of imports in real terms. A further buildup of oil production in the Kashagan oil field will act as a factor which helps maintaining positive growth rates of exports. In turn, a drop in the volumes of real imports will be shaping up under the pressure of the slowing consumer activity in Kazakhstan.

**Figure 68. GDP, Quarter to the Corresponding Quarter of the Previous Year, %**



Source: NBRK's calculations

<sup>8</sup> <http://www.fao.org/worldfoodsituation/csdb/en/>

So, with a persisting negative trend in the growth of household real cash income, persisting low profitability of enterprises in key sectors of the economy as well as the completion of a larger portion of government programs for the support of economic activity, real volumes of household consumption and gross fixed capital formation will be growing at a slow pace. In the short-term, the main source of support for the household spending on final consumption will be the consumer lending which has a limited potential for a further growth in the medium-term. Given the plans of the Kazakh Government regarding a consolidation of the national budget including reduction of its deficit, a positive contribution to the overall real GDP volume by the government spending on final consumption is also expected to be limited.

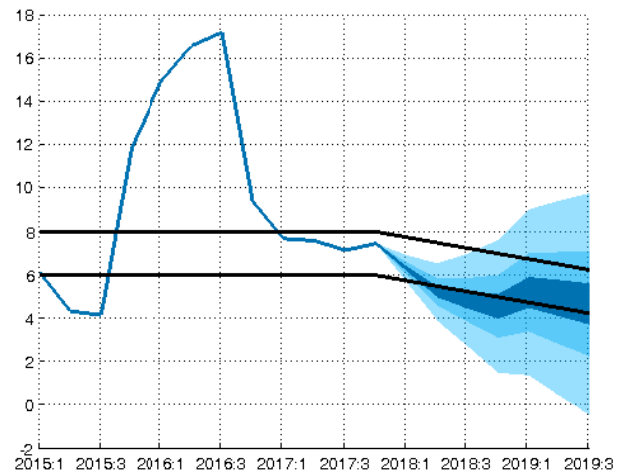
According to the National Bank's estimates, in the medium term under the baseline scenario the growth in domestic consumption will be accelerating being driven by the resumed growth of real income and the increased profitability of enterprises given relatively high oil prices of USD 60 per barrel. As a consequence, the behavior of net exports would demonstrate a minor slowdown due to a more rapid recovery and a further growth in the imports of goods. So, at the end of nine months of 2019, under the baseline scenario the economic growth in Kazakhstan will account for 2.8% versus the corresponding period of the previous year.

In general, according to the National Bank's updated estimates, in the short term the output gap in Kazakhstan will be weakly negative while it will reach zero by the end of 2018. At The same time, in 2019 the output gap will become positive and will remain in the positive range till the end of the forecast period thus making a minor pro-inflation impact on the pricing in the country.

So, under the baseline scenario, according to the National Bank's projections, there is a high probability that the annual inflation would decelerate significantly at the year-end of 2018

and would go below its target band of 5-7% (Figure 69). Disinflation would be caused by a low annual inflation in countries - Kazakhstan's main trading partners, by steadily low prices in the global food markets, by persistence of a negative domestic output gap against a feeble consumption of households and businesses caused by a drop in real income of the population and a low production profitability of enterprises in such sectors as trade, transport, real estate operations, etc. As the domestic consumer activity recovers and the external inflationary background slightly increases, the annual inflation in Kazakhstan will demonstrate a minor growth thus ensuring that inflation comes back within the target band of 4-6% in 2019.

**Figure 69. Inflation, Average for the Quarter, YoY, %**



Source: NBRK's calculations

### 3. RISKS IN THE MEDIUM TERM

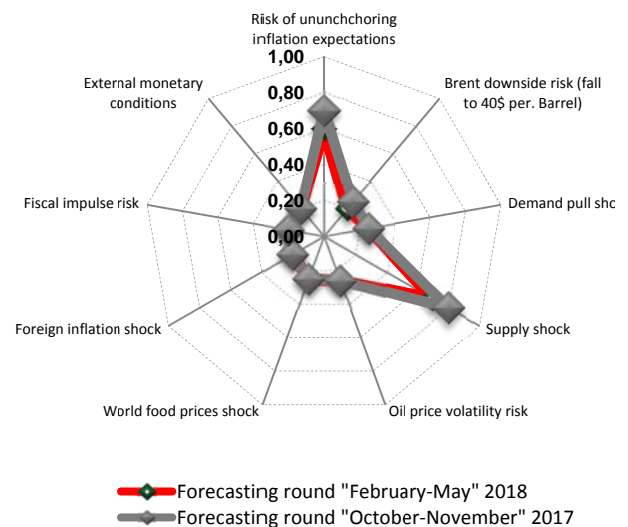
The key risk of the forecast is still the decline in oil price (Brent) throughout the entire forecast period.

So, alongside with the baseline scenario the scenario of USD 40 per barrel was considered, where a higher inflation and more modest GDP growth rates are anticipated. According to such scenario, in 2018 inflation is expected to be within its target band of 5-7%. However, there is a high risk that inflation would go beyond its target band of 4-6% in the first quarter of 2019. The economy's growth rates are expected to slow down to 2.1%, mainly in 2018. A possible reaction of the National Bank would be the tightening of its monetary policy, and conditions in which the monetary policy is implemented would be changed from neutral to contracting ones.

The risk profile in the forecast has not changed to a significant degree (Figure 70):

- the non-anchoring of inflation expectations caused both by supply shocks and devaluation expectations of a non-fundamental nature may significantly change the forecast path of the baseline scenario. There is a probability that a gradual lowering of inflation targets decreases the possibilities of the

**Figure 70. Risk Map Based on the Expert Judgment**



Source: NBRK's estimate

Risk of the non-anchoring of inflation expectations; Risk of deterioration of external monetary environment; Risk of fiscal impulse; Risk of acceleration of external inflation; Risk of growth in world food prices; Risk of the oil price going below \$40 per barrel; Risk of inflationary pressure on the part of demand; Risk of supply shocks; Risk of oil price volatility.

October-November 2017 forecast round; July-August 2017 forecast round

National Bank to anchor long-term inflation expectations;

- unforeseen supply shocks that were observed in 2017 and their recurrence serve as a serious factor of uncertainty for implementation of the baseline scenario. In this case, a more probable thing would be the inflation pressure on the part of producer prices, specifically energy prices (refined products and primary resources);

- a dramatic and a more significant tightening of the US Fed's policy without preliminary preparatory discussions that would affect redistribution of global assets and potentially increase inflation expectations. This risk has not changed dramatically due to the constant growth path of the Fed's rate versus the previous forecast round;

- an oil price volatility which is not taken into account in forecasting key variables would conduce higher devaluation and inflation expectations;

- the risk of acceleration of external inflation approximated through inflation in countries of trading partners is assessed as low.

Due to stabilization of world cereal prices, the risk of growth in the world food prices is assessed to be the same as in the previous forecast round.

The fiscal consolidation is anticipated in the forecast period. Any unscheduled fiscal impetus will be affecting the inflation and GDP path.

## The Use of Other Estimates in the Analysis of Expected and Perceived Inflation

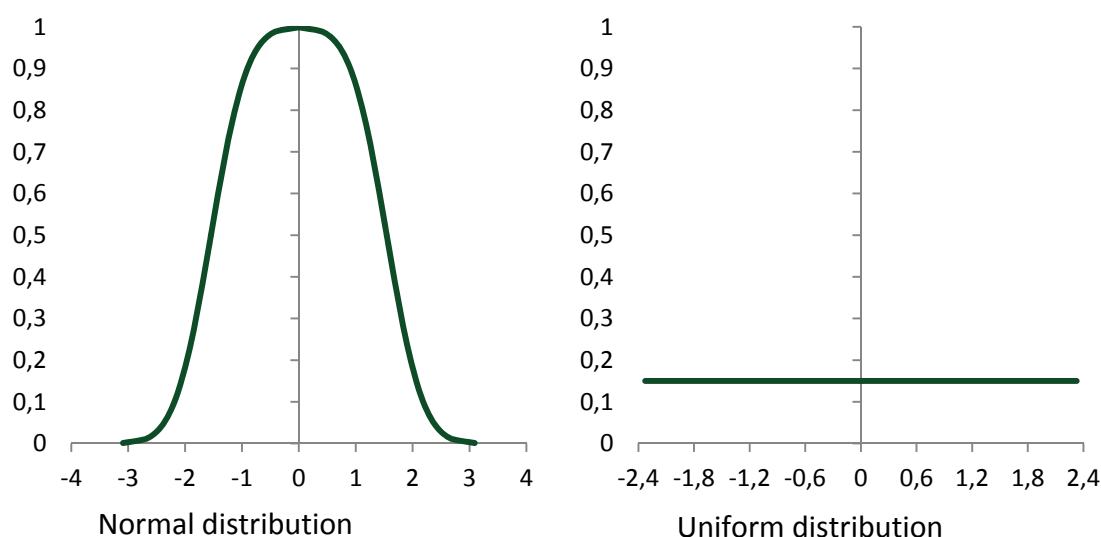
### 1. Quantification with the Use of a Uniform Distribution.

When quantitative data obtained through public polls is processed, the choice of a proper methodology for its quantification is important. In a standard assessment similar to that used by many central banks to come up with a quantified value of inflation expectations for the next 12 months, an answer to Question No.5 of the Questionnaire, “In your opinion, how much will generally prices of foodstuffs, non-food products and services change in the next 12 months?”, is used. The calculation is performed with the help of a method of probabilistic quantification under M.Burke’s methodology which is presented on the National Bank’s web-site for review<sup>9</sup>. Under the methodology, inflation expectations are assumed to have a normal distribution.

A normal standard distribution enables getting a reliable estimate of expected inflation without additional assumptions about rationality of respondents. An additional advantage of using this distribution method is a smaller volatility of an obtained estimate as compared to a uniform distribution, which results in a more adequate opinion about inflation expected by respondents. However, this advantage brings about some loss of information value of the obtained estimate since it assigns less weight to responses with a strong deviation from the median estimate.

By using a uniform distribution in quantification, one may enhance the sensitivity of the resulting indicator to the number of responses for the future change in the inflation rate. Estimate obtained with the use of a uniform distribution is more sensitive to responses with a strong deviation from the median point (Figure 1).

**Figure 1. Normal and Uniform Distribution**



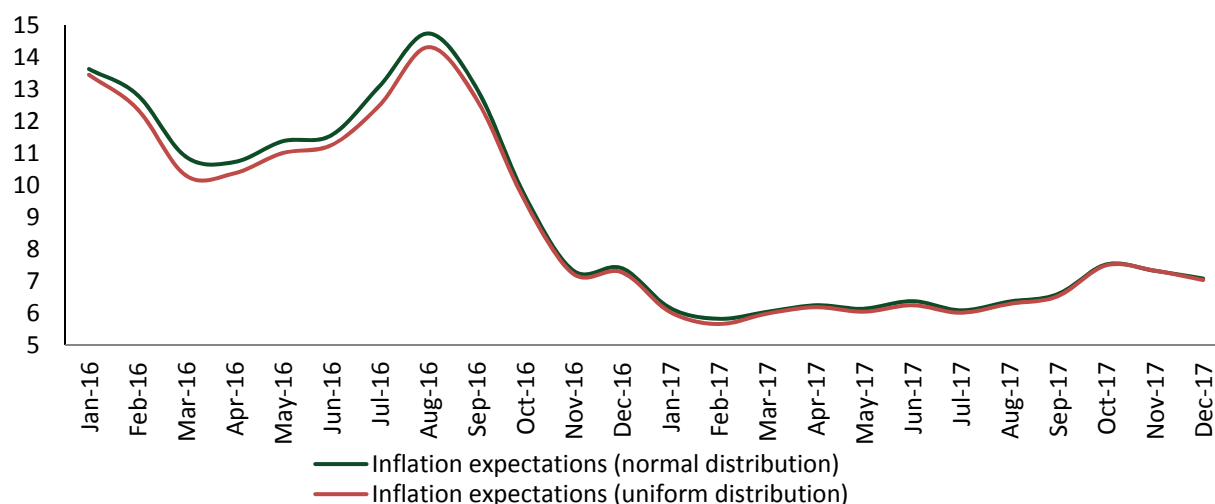
By using this type of distribution, a researcher assumes that each interviewed individual makes his/her guesses based on all possible information about inflation available at the time of the interview. In other words, a researcher makes a guess about a greater rationality of each respondent as compared to the classical method where a quantitative estimate of a response tends towards the median.

<sup>9</sup> [http://nationalbank.kz/cont/методология\\_рус.pdf](http://nationalbank.kz/cont/методология_рус.pdf)



Such approach to the data quantification enables not only to get an expected inflation value but also to assess how dispersed opinions are changing within the reviewed period, with a specified degree of accuracy as compared to the classical assessment.

**Figure 2. Comparing a Normal and a Uniform Distribution Based on the Example of an Expected Inflation Indicator**



Source: GfK Kazakhstan, NBRK's calculations

Figure 2 shows the expected annual inflation obtained by quantification of responses to the question: "In your opinion, how much will generally prices of foodstuffs, non-food products and services change in the next 12 months?". Depending on what percentage of responses (towards deceleration of inflation or towards its acceleration) prevails in the public poll outcomes, the resulting estimate of inflation expectations will be either higher or lower than the actual annual inflation. When responses in favor of the change in expected inflation in one direction are strongly dominant, a gap between estimates by a normal and a uniform distribution appears.

At the beginning of 2016, a large percentage of responses refers to deceleration of inflation (Figure 3). Here, the percentage of "Do not know" responses is not taken into account. This Figure clearly shows a strong bias of responses towards deceleration of inflation from March to July 2016.

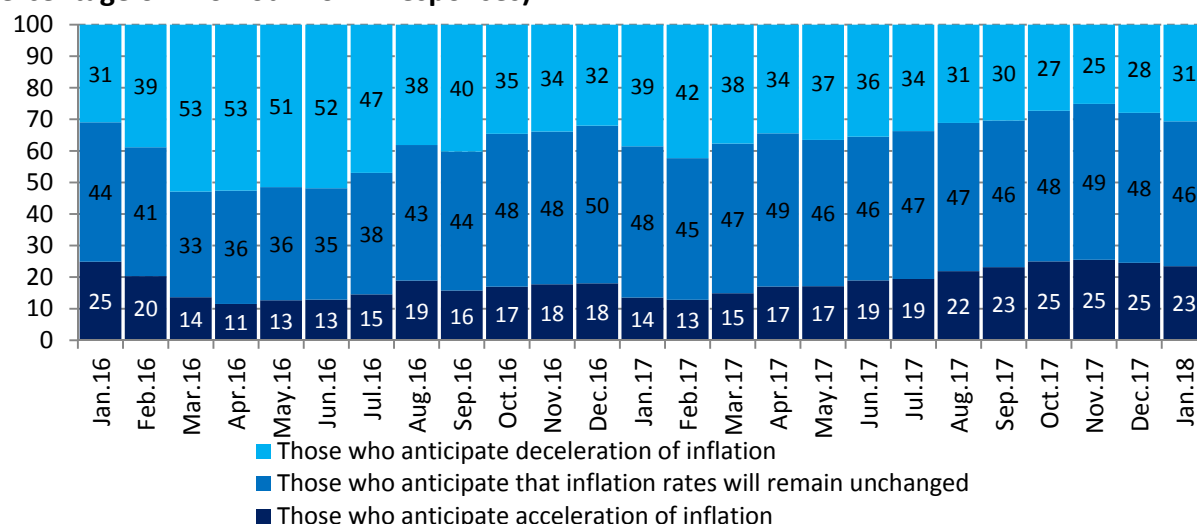
As a result, a big gap between the data obtained by a normal distribution method and a uniform distribution method is observed in this period. The line of expected inflation estimated with the use of a uniform distribution is beneath since a normal distribution is more sensitive to responses which favor the change in the inflation rate whereas responses get a smaller weight in the case of a normal distribution.

As the percentage of respondents anticipating that inflation rates will remain unchanged increases, the gap between the two lines is narrowing. The existing value of actual inflation also affects the gap size. The higher such value, the more visible the gap.

In other words, convergence of the two lines shows the growing adaptivity of expectations.



**Figure 3. Generalized Distribution of Responses to Question No. 5 (Excluding the Percentage of “Do not Know” Responses)**

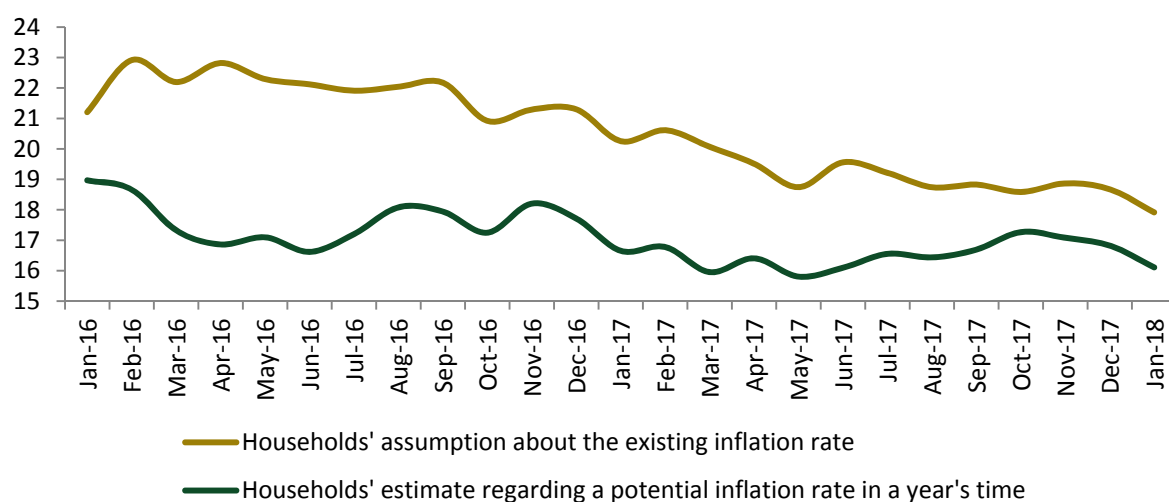


Source: GfK Kazakhstan

## 2. Alternative Assessment of Expected and Perceived Inflation Based on the Data on Questions No.4 and No.6 of the Questionnaire<sup>10</sup>.

If the previous indicator was analytical to a larger extent, i.e. it served as a certain indicator of volatility of inflation expectations among the population, the data in Figure 4 is directly reflecting perceived and expected inflation by households since the posed questions required that respondents should indicate the numerical range of the existing and expected annual inflation.

**Figure 4. Comparing Perceived and Expected Inflation**



Source: GfK Kazakhstan, NBRK's calculations

As Figure 4 shows, the resulting estimate is overestimated as compared to the actual data about the price growth. Such overestimation effect is also observed in other countries using the similar assessment methodology, both in developing countries and developed

<sup>10</sup> The median of results on Questions No.4 “In your opinion, how much prices of foodstuffs, non-food products and services have grown over the past 12 months?” and No.6 “In your opinion, how much will prices of foodstuffs, non-food products and services grow in the next 12 months?” is used as perceived/expected inflation.

countries. This is confirmed by the study undertaken by the European Central Bank in 2017<sup>11</sup> (Table 1):

**Table 1. Average Annual Data on Inflation in the European Union Member Countries from January 2004 through July 2015**

	Inflation Perceptions	Inflation Expectations	Actual Average Annual Inflation
Belgium	8.5	4.7	2
Bulgaria	19.5	19.2	4.2
Czech Republic	8.1	9.4	2.2
Denmark	4.1	3.1	1.6
Germany	6.6	4.9	1.6
Estonia	-	8.2	3.9
Greece	14.3	11	2.1
Spain	14.2	8.6	2.2
France	6.9	3.7	1.6
Croatia	17.8	14.2	2.4
Italy	14.1	5	1.9
Cyprus	13.8	9.9	1.8
Latvia	15.4	14.4	4.7
Lithuania	15.4	16.3	3.3
Luxembourg	7.2	4.7	2.5
Hungary	9.1	9.4	-0.1
Malta	8.1	8.1	2.2
Netherlands	6.7	4.1	1.7
Austria	9.6	6.5	2
Poland	13.8	12.1	2.5
Portugal	6.2	5.3	1.7
Rumania	20.1	17.8	5.7
Slovenia	11.2	8.1	2.4
Slovakia	9.1	9.1	2.7
Finland	3.7	3.1	1.8
Sweden	2.4	2.3	1.3
<b>European Union</b>	<b>9.8</b>	<b>6.3</b>	<b>2</b>

As Table 1 shows, even in the countries with a steadily low inflation the population tends to overestimate this fact significantly. Therefore, the key information that can be derived from Figure 4 is the trend and a steadily lower level of estimated future inflation rates as compared to the perceived ones.

By analyzing the outcomes obtained from Figure 4, the following conclusions can be made:

- both indicators have a downward trend but deceleration rates are notably lower than in the actual annual inflation, which speaks for a conservative nature of the public opinion regarding the price growth;

<sup>11</sup>According to the data from the European Central Bank's publication: "EU consumers' quantitative inflation perceptions and expectations".

<https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op186.en.pdf?bc91d1bc6ad64614b2d76abbd884b1ba>

- the values of perceived and expected inflation are much higher than the annual inflation. This is explained by the fact that, first, the population is keeping an eye on the food inflation which, as a rule, is higher than the aggregate inflation. Second, people mainly notice the increase in prices of certain goods without paying attention to the fact that prices of other goods have not changed. Even in the countries with fairly low inflation, perceived inflation is several folds larger than actual inflation. For example, in the EU where the average annual inflation accounted for 2% in the period from 2004 through 2015, perceived inflation was at 9.8%.

- perceived inflation is higher than expected inflation which points to a positive nature of people's expectations regarding deceleration of the future inflation. However, lately the trend of a narrowing gap between the actual and perceived inflation indicators has been discernible; it is connected with the slackening rates of disinflation.

## BASIC TERM AND DEFINITIONS

**Core Inflation** – means the inflation which excludes transitory uneven price changes subject to certain factors of administrative, event-related and seasonal nature.

**Base Rate** is a key monetary policy instrument of the National Bank that helps to regulate nominal interbank interest rates in the money market. By setting the level of the base rate, the National Bank determines a target value of the targeted interbank short-term money market rate in order to achieve the goal of ensuring price stability in the medium term

**Gross Fixed Capital Formation** – is the growth in non-financial assets which have been used in the process of industrial production for a long time. Gross fixed capital formation includes the following components: a) acquisition, less retirement, of new and existing fixed assets; b) costs for major improvements of tangible produced assets; c) costs for improvement of tangible non-produced assets; and d) expenses in connection with the transfer of title for non-incurred costs.

**FX Swap** – means a foreign exchange transaction which involves the concurrent purchase and sale of a certain amount of one currency in exchange of another currency with two different value dates.

**Gross Domestic Product** is an indicator that reflects the market value of all final goods and services (i.e. designated for direct consumption) produced during a year in all sectors of the economy within the territory of the country for consumption, exports and saving, irrespective of the national identity of the used production factors.

**Money Base (Reserve Money)** includes cash issued in circulation by the National Bank, other than cash at the cash departments of the National Bank (cash outside the National Bank),

transferrable and other deposits of banks, and transferrable deposits of non-bank financial organizations and current accounts of government and non-government non-financial organizations in the tenge at the National Bank.

**Money Supply (M3)** is determined on the basis of consolidation of balance sheet accounts of the National Bank and banks. It consists of cash in circulation and transferable and other deposits of non-bank legal entities – residents and households in the domestic and foreign currency.

**Dollarization of the Economy** means the situation where a foreign currency (largely – the US Dollar) starts to be used for transactions within a country or in certain sectors of its economy, pushing out the domestic currency from the domestic money turnover, and acting as the means of saving, measure of value and the legal tender.

**Inflation** – is an increase in the general price level of goods and services. In Kazakhstan, inflation is measured with the use of consumer price index.

**Consumer Price Index (CPI)** – the change in the overall level of prices for goods and services purchased by the population for consumption. The consumer basket of Kazakhstan for calculation of inflation reflects the structure of household expenditures and includes goods and services which represent the largest relative share in the consumption of population. The CPI is calculated as the ratio of the cost of a fixed set of goods and services in current prices and its cost in the prices of the previous (base) period. The index is calculated by the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan.

**Inflation Targeting** – is a monetary policy regime which is oriented at achieving a target inflation rate.

**Composite Indicator** – is a generalizing indicator which is used to reflect short-term trends in the development of the real sector of the economy. Composite indicator as possessing the forward-looking feature is used to reflect a cyclical change and to identify turning points when recovery and downturns in the economy occur and change. A composite indicator is built on the basis of survey findings among enterprises which participate in the market research conducted by the National Bank.

**Short-term economic indicator** is calculated with a view to ensure efficiency and is based on the change in the output indices by key sectors: agriculture, industry, construction, trade, transport and communication accounting for over 60% of GDP. The indicator is built without recalculations for the unobservable economy and without other macroeconomic adjustments.

**Credit Auctions** mean the National Bank's auction for the securities buy/sell back.

**Minimum Reserve Requirements (MRRs)** mean the mandatory share of bank's liabilities which a bank is to keep in the form of cash in its cash department and monies on correspondent accounts with the National Bank in the domestic currency (reserve assets). The volume of reserved liabilities of banks is regulated by the MRR ratios.

**Nominal Anchor for Monetary Policy.** It is a certain indicator including a macroeconomic indicator which helps the National Bank to influence the ultimate monetary policy goal.

**Reverse Repo** is the purchase of a security with the commitment to sell it after a specific period of time and at a specific price. The

National Bank conducts reverse repos with a view to provide the tenge liquidity to banks against the pledge of securities in line with the National Bank's list of collateral.

**Open Market Operations** are regular operations of the National Bank in the form of auctions for liquidity provision or withdrawal in the money market with a view to set interest rates around the base rate.

**Standing Facilities** refer to monetary policy instruments for adjustment of volumes of liquidity, which resulted from the open market operations. Standing facilities are provided as part of bilateral arrangements where the National Bank is one party to the transaction. Such operations are conducted at the initiative of banks.

**Transferrable Deposits** refer to all deposits which: 1) can be converted into cash at face value at any moment in time without any penalties and restrictions; 2) are freely transferable through a check, draft or endorsement orders; and 3) are widely used for making payments. Transferable deposits represent a part of the narrow money.

Other deposits primarily include savings and time deposits that only can be withdrawn on expiration of a certain period of time, or can have different restrictions which make them less convenient for use in the ordinary commercial transactions and, mainly, meet the requirements established for saving vehicles. In addition, other deposits also include non-transferable deposits and deposits denominated in foreign currency.

**Potential Output** reflects the level of output in the economy that can be reached subject to full utilization of inputs and full employment. It reflects the volume of production which can be manufactured and realized without creating prerequisites for the change in the price growth rates.

**Consumer Basket** means a sample of goods and services which characterizes the standard level and the structure of monthly (annual) consumption of an individual or a family. Such sample is used to calculate the minimum subsistence level, based on the cost of the consumer basket in current prices. The consumer basket also serves as a comparative basis for estimated and real consumption levels and also as the basis to determine the purchasing capacity of currencies.

**Interest Rate Channel** of the monetary policy transmission mechanism is the transmission mechanism channel which describes the impact of the central bank on the economy through the interest rate regulation.

**Direct Repo** is the sale of a security with the commitment to repurchase it after a specific period of time and at a specific price. The National Bank conducts direct repos with a view to withdraw excess liquidity in the tenge.

**Free Floating Exchange Rate.** According to the current classification of the International Monetary Fund, under the floating exchange rate framework a central bank does not establish any pegs including operating ones for the level or the change in the exchange rate, allowing the exchange rate to be determined by the market factors. In doing so, the central bank reserves the opportunity to periodically intervene in the foreign exchange market in order to smooth out the volatility of the domestic currency exchange rate or to prevent its dramatic changes as well as to ensure the financial system stability.

**Output Gap (GDP Gap).** Deviation in GDP expressed as a percentage of a potential output. Expresses the difference between an actual GDP and potential GDP for a certain time frame. Serves as an indicator which reflects the effectiveness of resources utilized in the country. If an actual output exceeds the potential one (a positive output gap), other

things remaining equal, the trend of acceleration in the price growth rates would be anticipated because of the overheating of the economy. The presence of a negative output gap indicates an expected slowdown in the price growth rates due to low economic activity. Output fluctuations around its potential level reflect business cycles in the economy.

**Real Exchange Rate** refers to a relative price of a commodity produced in two countries: the proportion of commodity exchange between countries. The real exchange rate depends on the nominal rate, relation between exchange rates of currencies, and prices for goods in the domestic currencies.

**TONIA Rate** – (Tenge OverNight Index Average) represents a weighted average interest rate on one-day repo opening transactions made on the stock exchange with government securities in the automatic repo sector.

**Monetary Policy Transmission Mechanism** is the process, by which monetary policy tools influence final macroeconomic indicators such as the economic growth, inflation.

**Narrow Reserve Money** is the reserve money excluding other deposits of banks at the National Bank.

**NDF** – non-deliverable forwards used to hedge foreign exchange risks.

**LIST OF KEY ABBREVIATIONS**

GDP – Gross domestic product  
GPIID – Government Program for Industrial and Innovation Development  
EU – European Union  
ECB – European Central Bank  
CPI – consumer price index  
PI – price index  
CS MNE RK – Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan  
KASE – Kazakhstan Stock Exchange  
NBRK – National Bank of the Republic of Kazakhstan  
VAT – value-added tax  
OPEC – Organization of Petroleum Exporting Countries  
UN FAO – Food and Agriculture Organization of the United Nations  
RK – Republic of Kazakhstan  
REER – real effective exchange rate  
USA – United States of America  
FAO – UN Food and Agriculture Organization  
ΦPC – Federal Reserve System  
MMI – Money Market Index  
bln. - billion  
mln. - million  
thous. – thousand  
USD – dollars