

November 2022

Cooling

Overheating

December 2022

Dashboard for assessing current economic activity



According to the dashboard results for December, **17 out of 30 factors show an overheating of the economy**. The analysis was carried out in 4 blocks: inflation, monetary, economic and external terms. A semantic analysis of the National Bank of the Republic of Kazakhstan press release was also carried out.

Designations	Number of indicators	
	Current	Previous
Overheating ■	17	20
Growth ■	5	3
Cooling ■	8	7
Total	30	30

Compared to the previous dashboard, 1 indicator in the monetary conditions block and 1 in the external conditions block have moved into the cooling zone. Due to the tightening of internal monetary conditions and the mitigation of the negative impact of the external inflationary background, there is a slight weakening of the price overheating in the economy in December 2022. And we note a positive increase in economic development for the first time since the last spring.

We believe that a further increase in interest rates can only deepen stagflationary risks in the current conditions. Keeping the base rate at the current level will help maintain a balance between limiting further price growth and maintaining positive business activity dynamics.

Inflation block

Factors	Target indicator	Comment on the target indicator	Indicators			Estimated impact	
			Monthly data			Current	Previous
			Current value	Average for 3 months	Average since the beginning of the year		
Current inflation rate (YoY)	4-6%	The target indicator of the National Bank of Kazakhstan for 2022	20.3	19.6	14.9	●	●
Current inflation rate (MoM)	0.7%	The average value in this month for 2019-2021	1.2	1.4	1.6	●	●
Inflation expectations	5.0%	A cap on the target corridor of the National Bank of the Republic of Kazakhstan in a year	21.6	19.0	14.4	●	●
Real interest rate (difference between TONIA and inflation expectations for the year ahead)	3.6-3.7%	Research data of the National Bank of the Republic of Kazakhstan	-4.0	-2.4	0.2	●	●
Housing prices (MoM)	0.9%	The average value of the change in the sale prices of new housing in a given month for 2019-2021	0.4	0.8	1.2	●	●
	1.6%	The average value of the change in the resale prices of apartments in a given month for 2019-2021	-1.5	0.5	1.7	●	●

Overheating ■ Growth ■ Cooling ■

Source: BNS, the National Bank of Kazakhstan, Jusan Analytics calculations

Conclusions on the inflation block:

The growth rate of consumer prices is slowing down. **The actual inflation reached 20.3% at the end of the year (the growth of monthly inflation is 1.2%).** The tightening of monetary conditions (6 times in 2022) and the gradual weakening of external inflationary pressure made possible to slightly slow it down, but not yet limit the further growth of consumer prices.

The increased consumer inflation growth rates were mainly due to the cost increase of the consumer basket goods again. Service inflation showed minimal growth rates during 2022 and was comparable to the same period in 2021.

Household and business representatives' inflation expectations worsened in November*, they exceed the actual level of inflation by increasing the period needed to normalize them and reduce the increased inflationary background. Their further growth may become a reason for the National Bank's growing concern since the slowdown in actual inflation for several months has not yet led to a decrease in inflation expectations. Therefore, despite the apparent trend of decreasing price pressure in the economy, pro-inflation risks still prevail, and they should not be underestimated.

*Data on expectations for December were not yet available at the time of the dashboard's publication.

Monetary terms block

Factors	Target indicator	Comment on the target indicator	Indicators			Estimated impact	
			Monthly data			Current	Previous
			Current value	Average for 3 months	Average since the beginning of the year		
Retail lending	657 419 млн ₸	Average value for 2019-2021	1 330 714 million tenge	1 184 891 million tenge	1 030 497 million tenge	●	●
Lending to the trade and services sectors	543 660 млн ₸	Average value for 2019-2021	546 141 million tenge	599 178 million tenge	598 674 million tenge	●	●
Loans/deposits	100%	Average value for 2019-2021	105%	103%	104%	●	●
Demand for currency in exchange offices	169 729 млн ₸	Average value of foreign currency sales for 2019-2021	204 611 million tenge	160 996 million tenge	139 098 million tenge	●	●
Tenge deposits movement*	Growth		+0.1%	+8.2%	+12.0%	●	●
Foreign exchange deposits movement*	Decline		-4.8%	-2.2%	+3.4%	●	●
Dollarsation*	Decline		-1.13 p.p	-6.35 p.p	-5.10 p.p	●	●
Monetary multiplier	2.2	Average value for 2019-2021	3.27	3.10	3.14	●	●
Credit multiplier	1.8	Average value for 2019-2021	2.95	2.85	2.74	●	●
Reserve multiplier	0.3	Average value for 2019-2021	0.16	0.16	0.17	●	●

* changes for 3 months and since the beginning of the year are presented

Overheating ● Growth ● Cooling ●

Source: National Bank of the Republic of Kazakhstan, Jusan Analytics calculations

Conclusions on monetary terms block

Retail lending increased markedly in November 2022, most likely provoked by marketing campaigns of retail banks. The indicators of the loan volumes to individuals are 2 times higher than the optimal values, and the issuance of loans in trade and services, on the contrary, has decreased to the optimal level. **But despite this, unresolved supply problems, as well as seasonal factors of credit growth at the end of the year will lead to an increase in consumer demand, which will increasingly put pressure on inflation.**

The increase in retail lending indicators came along with a reduced growth rate of funding. Tenge deposits increased by 0.1%, in foreign currency decreased by 4.8%. A noticeable reduction in foreign currency deposits led to a decrease in dollarization level by 1.1 percentage points, due to which we observe one of its lowest levels for 2022 (34.2%). **And together, the reduction in foreign currency deposits and the subsequent decrease in the level of dollarization had a positive effect on funding indicators.**

Demand among the population for foreign currency in the exchange offices has increased during the month. The indicators of November exceeded the optimal values by 21%, while the average indicators for the last 3 months are at the level of optimal values.

All monetary multipliers still signal the overheating of the economy. Due to the expansion of the total loan portfolio, the indicators of the credit multiplier increased by 0.1 percentage points. The indicators of the monetary multiplier decreased slightly. Banks continue to invest in securities indexed in the TONIA rate (treasury bills indexed to the TONIA), while there is a shift away from medium- and long-term treasury securities. The total volume of government securities decreased by 281 thousand, while the growth in the treasury bills indexed to the TONIA volume amounted to 259 thousand. As a result, we note the need for measures that significantly slowdown unsecured consumer lending. **And while maintaining current conditions, we expect an increase in consumer demand, which will lead to even greater volumes of lending and an increase in the household debt load.**

Economic terms block

Factors	Target indicator	Comment on the target indicator	Indicators					Estimated impact	
			Monthly data			Quarterly data		Current	Previous
			Current value	Average for 3 months	Average since the beginning of the year	Current value	Previous quarter		
Output gap*	0.0%	International practice				0.5%**	0.5%	●	●
Monetary conditions (RMC1)	0.0%		Neutral	Expansio-nary	Contractio-nary			●	●
Non-oil budget deficit/GDP	0.0%	International practice				-6.8% (-7.7%)*	-8.5% (-10.8%)*	●	●
Short-term economic indicator	103.3	Average value for 2019-2021	103.9	101.9	103.8			●	●
Business Activity Index	50.0	Global practice	49.2	49.1	49.0			●	●
"Hours" of the business cycle	0.7%	The National Bank of Kazakhstan data	Growth	Growth	Growth			●	●
Consumer expenditures	9.7%	The average value of changes in household consumption expenditures 2019-2021				13.8%	13.3%	●	●
Volume of goods and services trade	2.8%	Average value retail trade change for 2019-2021	7.2%	1.6%	1.9%			●	●
	3.0%	Average value of wholesale trade change for 2019-2021	11.8%	5.1%	7.2%			●	●
Import of goods	7.6%	Average value of import change for 2019-2021	27.1%	24.6%	18.1%			●	●

*Calculated using the Hodrick-Prescott filter

**Based on the dynamics of GDP in average annual prices in 2005

***Calculations according to the methodology of the Ministry of Finance of the Republic of Kazakhstan

Overheating ● Growth ● Cooling ●

Source: BNS, Ministry of Finance of the Republic of Kazakhstan, Jusan Analytics calculations

Conclusions on economic terms block

Following the data for the 3rd quarter of 2022, the output gap remains at 0.5% and will be at the same level by the end of the year according to our forecasts. This is due to the slowing growth of the industrial sector of the mining industry. GDP grew by 2.8% in annualized terms for 9 months of 2022 (real growth for 11 months – 2.7%) and amounted to 64.6 trillion tenge.

The state budget has a deficit of 602.9 billion tenge for 11 months, the deficit is -1.0 trillion tenge) or -0.9% of GDP for 9 months of 2022. The budget deficit in Q3 was -1.2% of GDP (-5.6% in Q3 of 2021). The budget deficit (non-oil) deepens to -6.8% of GDP (-8.6%) excluding transfers of the National Fund from the revenue part. And the expenditure part of the budget for this period continues to grow (+21.7% YoY) and has an impact on the increase in demand. This creates **additional pressure on prices and hinders market construction, as well as contributes to a new round of price increases with a positive response from aggregate expenditures** (signs of an inflationary spiral).

The growth of the short-term economic indicator showed a recovering dynamics for 11 months and amounted to 3.2%. The growth for 10 months was 3.1%. For the first time since June of this year, the short-term economic indicator growth significantly accelerated and amounted to 3.9% MoM. While the goods sector continues its slowdown, the services sector is recovering its growth rates. Cooling is continued in construction and industry. The trade industry has returned to growing dynamics, which, together with stable growth in agriculture and communications, has allowed short-term economic indicator growth to accelerate. Thus, now the economic growth is close enough to its potential level, which in the conditions of a pro-inflationary background gives more pluses than minuses. This level of economic development allows us to have a downward impact on further growth and price response.

According to data for 3 quarters, **consumer demand** on average per capita showed growth. Consumer spending, which accounts for more than 90% of all household spending, increased by 13.8% YoY (+13.3% in Q2 2022) and amounted to 219.1 thousand tenge on average per capita. 55% of them come for food commodities, 27% - non-food products. The expenses for market services are 18%.

Retail trade in November by volume increased by 7.2% YoY (+0.8% YoY in October), and wholesale – by 11.8% YoY (+3.5%). In our opinion, a significant acceleration of wholesale trade and the recovery of retail growth rates is due to the growing demand from the population for non-food products. **The food market shifted to the wholesale segment** due to high prices (+20.1% YoY, retail -3.2%).

External conditions block

Factors	Target indicator	Comment on the target indicator	Indicators			Estimated impact	
			Monthly data			Current	Previous
			Current value	Average for 3 months	Average since the beginning of the year		
The price of Brent crude oil	\$ 90.0 за баррель	The price for crude oil according to the amendments to the state budget, which were approved in Mat 2022 (the price of \$ 60 per barrel was previously set)	\$ 81.6 per barrel	\$ 88.5 per barrel	\$98.9 per barrel		
FAO Consumer Price Index	106.3	Average for 2019-2021	132.4	134.4	143.8		
Inflation in the main trading partner countries	4.8%	Average for 2019-2021	12.0%	12.8%	13.9%		
	7.1%	China, average price change for 2019-2021	1.6%	2.2%	2.5%		
	1.7%	The EU. Average price change for 2019-2021	11.1%	10.9%	8.9%		
	15.7%	Turkey, average price change for 2019-2021	64.3%	78.1%	72.0%		
Dollar Index	95.24	Average value for 2019-2021	104.5	107.9	103.9		

Overheating Growth Cooling

Source: BNS, TradingEconomics.com, fao.org, Jusan Analytics calculations

Conclusions on the external conditions block:

The downward trend in price pressure from global food and energy prices continued in December 2022.

The FAO Food Price Index continues to have a disinflationary effect on the world market. And by the end of December, food prices have decreased as much as possible over the past 4 months and now, are comparable to the pre-war period of the end of 2021.

The oil price fell to \$ 81.6 per barrel due to more favourable than expected weather conditions in the United States and the European Union. This has reduced the energy demand and likelihood of a future shortage of energy resources against the background of the embargo imposed on Russian oil. At the same time, the unfavourable epidemiological situation, which constrains the further easing of quarantine measures in China, also worsens the prospects for global demand for commodities, including oil.

Inflation in most of Kazakhstan's main trading partners continues to exceed their target values. However, there is a gradual easing of the inflationary background in these countries. The inflation slowed from 11.5% to 11.1% in the EU, it fell from 84.4% to 64.3% in Turkey, it continues to decline and reached 1.6% in China.

The Dollar Index in December 2022 continues to scale down (an average value is 104.5 points), which is still significantly higher than the average for the last 3 years. During 2022, the Fed raised rates in total by 425 bps and began to slow down the growth by the end of the year. And against the background of the observed decline in inflation, market participants assume that the Fed's cycle of tightening the monetary conditions may be nearly over, which leads the global dollar position to decline.

Analysis of press releases

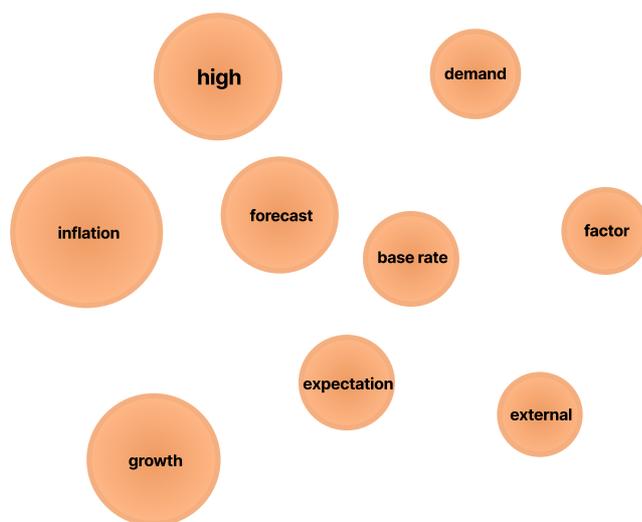
According to the semantic analysis of the National Bank of Kazakhstan "On raising the base rate to 16%" press release, the frequently repeated keywords have not changed much since the last one. The word "inflation" was repeated 23 times, the words "high" and "growth" - 10 times. The words "forecast" and "base rate" were repeated 8 times. Key words as "expectation", "demand", "factor" are repeated 7 times, and the word "external" - 6 times.

Can be assumed that the key factors in deciding on the rate were the **the rate of price growth/inflation, the US Federal Reserve rate.**

Forward looking

The National Bank of Kazakhstan forecasts peak annual inflation in the first quarter of 2023. And the inflation rate in 2023 is expected to be 11-13%. External economic factors will also be mitigated due to the monetary policies implemented in the world. Therefore, we believe that we will observe a decrease in the base rate level this year.

Phrase/word	Number	Frequency %
"inflation"	24	2.95
"high"	11	2.09
"growth"	9	1.60
"forecast"	7	0.98
"base rate"	7	0.86
"expectation"	7	0.86
"demand"	6	0.74
"factor"	6	0.74
"external"	6	0.74



Using <https://advego.com/text/seo/>

Methodology

we have used The Taylor Rule as a theoretical basis

The Taylor Rule is a monetary policy rule that determines how much it is necessary to change the interest rate in case of changes in GDP, inflation, and other economic terms. The rule was invented to scientifically and systematically determine which monetary policy should meet the task of maximum employment and price stability, as well as to make the monetary policy of the central bank more predictable.

The Taylor Rule Formula is the following:

$$i_t = \pi_t + r_t^* + a_\pi(\pi_t - \pi_t^*) + a_y(y_t - \bar{y}_t).$$

i_t — interest rate

π_t — level of actual inflation

π_t^* — desired level of inflation, the target of the monetary regulator

r_t^* — estimated level of equilibrium interest rates

$(y_t - \bar{y}_t)$ — the output gap, the difference between actual and potential GDP, determines the phase of the cycle relative to the long-term growth trajectory

Our interpretation of the economic terms for the dashboard

The dashboard we have built divides The Taylor Rule into three blocks, either way corresponding to the factors that are used in the basic equation.

Moreover, we have increased the number of explanatory factors, and also added some of leading ones. The data on the relevant factors are evaluated, as a result of which the degree of their deviation from the optimal level is determined. **The deviation of the indicators in the negative direction indicates an overheating of the economy** or other problems requiring a tightening of fiscal and monetary terms. **The decrease indicates the need for additional incentives.**

1. **Inflation block** is the main indicator of the disequilibrium of economic policies, overheating of economic activity, and the presence of excess demand;
2. **Monetary terms block** are leading factors of inflation, interpretation, and replacement of the equilibrium rate factor in the basic Taylor equation;
3. **Economic terms block** gives a broader picture and interpretation of whether there is a positive or negative output gap.

Important clarification of The Taylor Rule: several external conditions must be taken into account for small open economies.

4. **External terms block** shows the most relevant external factors that can have a major impact on the phase of the current cycle.

A set of results for each indicator reflects the current state of the economy and the expected reaction of regulators within the cycles: **"overheating", "growth", and "cooling"**. At the same time, the lack of an appropriate response will cause further deterioration of indicators, exacerbating overheating or slowing down the economy.



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