MARKET REVIEW

Enterprises Survey Results in the Real Sector of the Economy

### Q4 2021

Monetary Policy Department
National Bank of Kazakhstan

CONTENT

DYNAMICS OF COMPOSITION OF MONITORING PARTICIPANTS

Regional structure of the enterprise survey participants in Q4 2021

Kostanay region
162 (4,9%)

North Kazakhstan region
205 (6,1%)

Pavlodar region
232 (7,0%)

West Kazakhstan region
171 (5,1%)

Akmola region
184 (5,5%)

Nur-Sultan city
184 (5,5%)

East Kazakstan region
218 (6,5%)

Aktobe region
177 (5,3%)

Karagandy region
312 (9,4%)

Atyrau region
242 (7,3%)

Almaty region
182 (5,5%)

Shymkent city
147 (4,4%)

Almaty city
263 (7,9%)

Mangystau region
140 (4,2%)

Kyzylorda region
213 (6,4%)

Jambyl region
233 (7,0%)

Turkistan region
69 (2,1%)

In Q4 of 2021 the number of respondents increased by 7 enterprises compared to the previous quarter and amounted to 3334. 14 small enterprises were involved in the survey, 4 medium and 3 large enterprises dropped out.

In the sectoral context, an increase in the number of enterprises was noted in the mining industry (4), agriculture, transport and warehousing, construction, manufacturing and other industries (1 in each).

Survey participants size structure

Large
670
20,1%

Small
1756
52,7%

Medium
908
27,2%

Survey participants sectorial structure

	2018-I	2018-II	2018-III	2018-IV	2019-I	2019-II	2019-III	2019-IV	2020-I	2020-II	2020-III	2020-IV	2021-I	2021-II	2021-III	2021-IV
Total	2973	3056	3116	3150	3190	3217	3244	3266	3224	3254	3276	3287	3302	3311	3327	3334
Trade	801	832	858	871	871	878	895	898	894	908	920	929	928	932	939	937
Manufacturing	694	695	697	699	705	705	709	706	690	699	704	704	703	699	708	709
Others	574	595	598	611	639	645	646	662	651	658	661	667	673	682	688	689
Construction	314	324	340	337	340	348	355	358	352	349	354	344	351	347	345	346
Transportation	235	241	244	247	250	257	255	256	248	252	248	250	254	254	253	254
Agriculture	187	193	198	198	198	195	196	197	199	200	200	196	196	198	195	196
Mining industry	168	176	181	187	187	189	188	189	190	188	189	196	197	199	199	203

Legend: Mining industry, Agriculture, Transportation, Construction, Others, Manufacturing, Trade

DYNAMICS OF DEMAND FOR FINAL PRODUCTS

Final goods demand, DI*

Answers of enterprises, %		2020				2021				2022
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1**
Increase	1	12,9	18,7	22,4	22,4	16,4	24,1	24,2	24,4	12,6
No changes	2	50,6	47,6	51,8	51,6	51,5	53,1	55,6	55,1	40,7
Decrease	3	33,8	30,7	22,6	22,9	28,5	19,1	16,4	17,3	13,7
Do not know	4	2,7	3,0	3,2	3,1	3,6	3,7	3,8	3,2	33,0
Diffusion index, DI=line1+0.5*(line2+line 4)	5	39,6	44,0	49,9	49,7	43,9	52,5	53,9	53,6	49,4
DI, seasonal adjusted	6	45,8	41,9	46,8	48,8	50,7	50,2	50,6	52,5	56,9
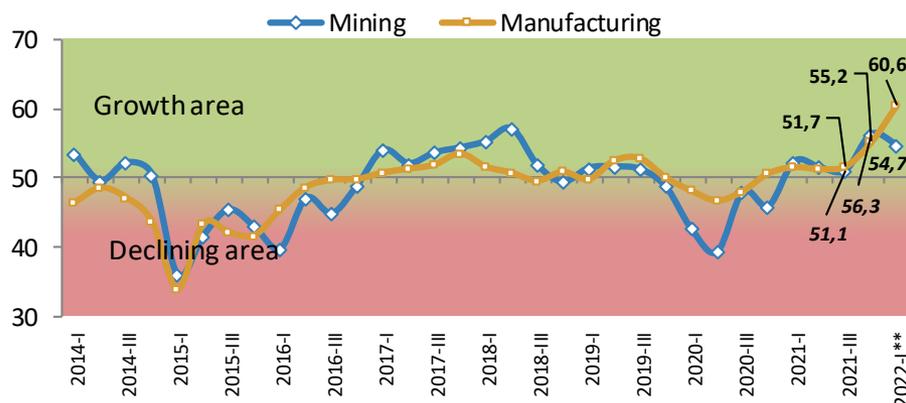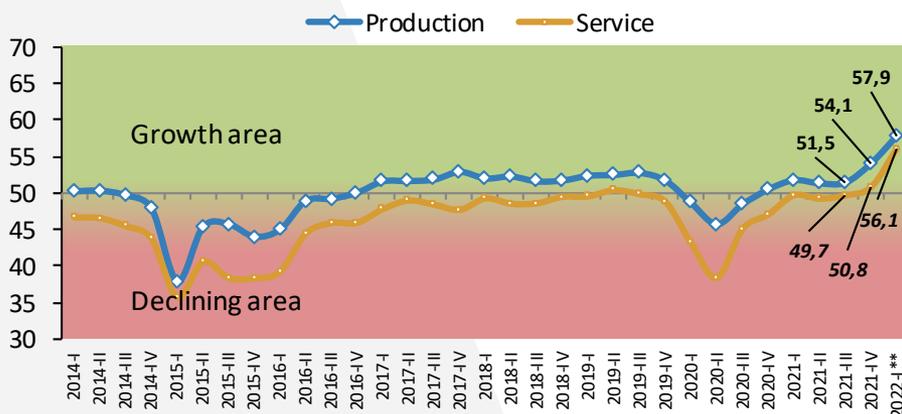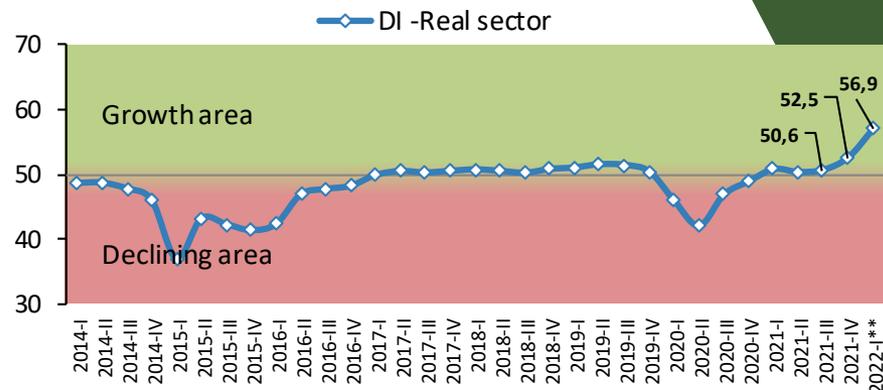
In Q4 of 2021 the demand for final products in the real sector increased. The diffusion index (hereinafter - DI) was **52,5.** The improvement in the indicator was noted in sectors of production of goods (54,1) and service (50,8), in mining (56,3) and manufacturing (55,2) industries.

According to the expectations of enterprises in the real sector in Q1 of 2022 the process of demand recovery will continue (DI=**56,9**).

Final goods prices, DI*
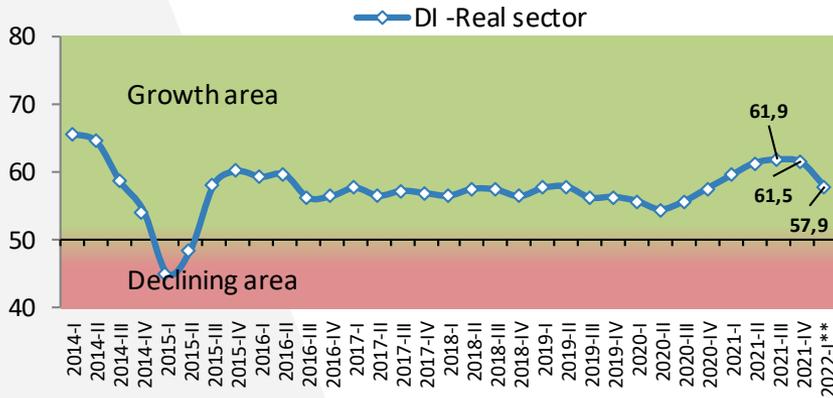
Raw materials prices, DI*
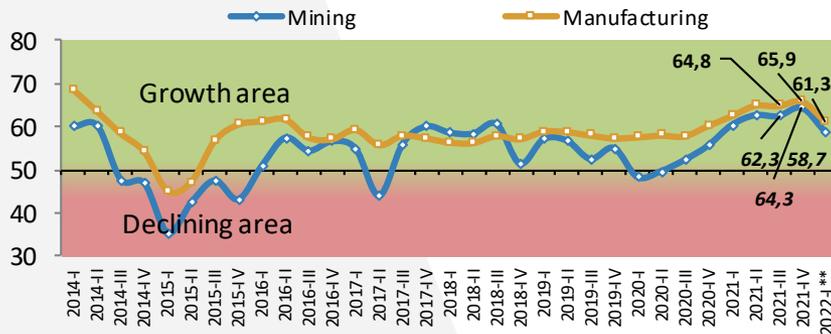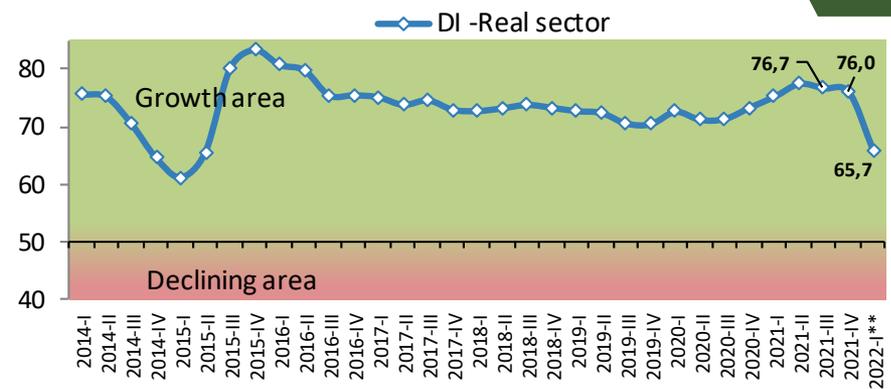
Assessment of pricing factors importance , answers in%

- Prices for raw materials — 82,0
- Demand — 81,4
- Taxes/fees — 72,3
- Labor costs — 69,5
- Productivity — 63,3
- Exchange rate — 59,0
- Competitor prices — 61,3
- Fuel prices — 64,8
- Other — 22,8
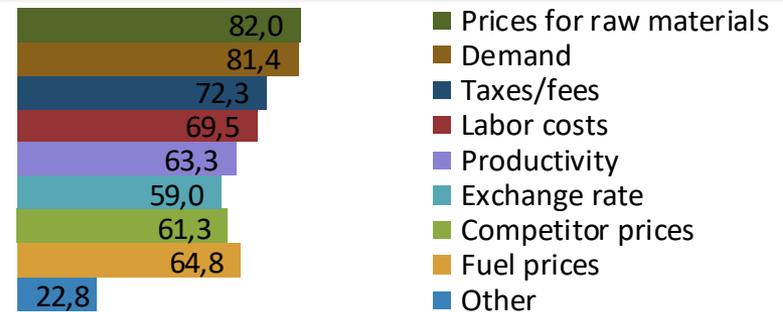
In Q4 of 2021 the growth rate of prices for final products of enterprises in the economy as a whole slowed down slightly (DI was **61,5**). At the same time there was a slight increase in prices in the mining and manufacturing industries (DI changed to 64,3 and 65,9, respectively).

For the vast majority of enterprises the most important factor in setting prices for final products is the price of raw materials (for 82,0% of enterprises) and demand (81,4%).

In Q1 of 2022 enterprises expect a slowdown in the growth rates of prices for raw materials (DI=65,7), and accordingly, for final products (DI=57,9).

Capacity utilization level

(share of respondents, %)

Legend:
- CU<50%
- 50%<CU<70%
- 70%<CU<90%
- CU>90%
- CU weighted average

Values shown (2021-III, 2021-IV): 11,4 / 11,2; 18,8 / 18,7; 30,5 / 31,6; 54,0 / 54,2; 39,3 / 38,5
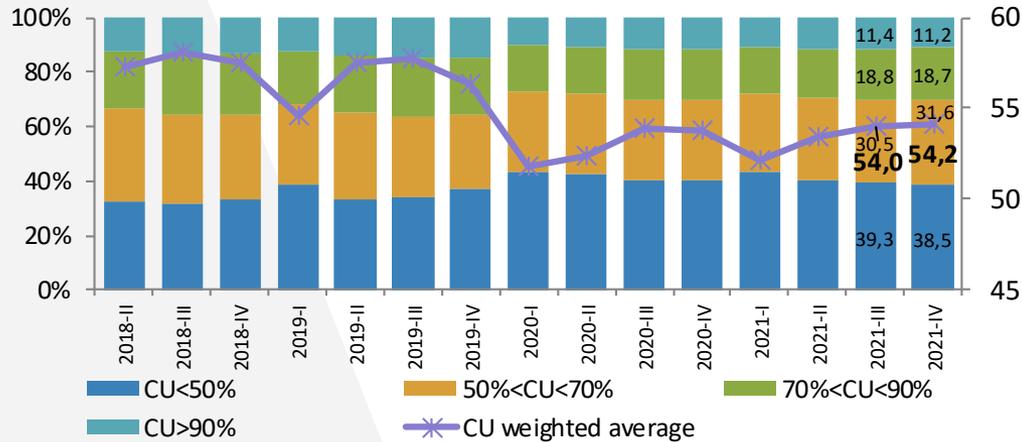
*DI changes in production output , DI***

Growth area

Declining area

Values: 51,2; 41,5; 51,4; 35,8; 40,5; 53,8; 53,4; 50,7; 47,0; 51,4
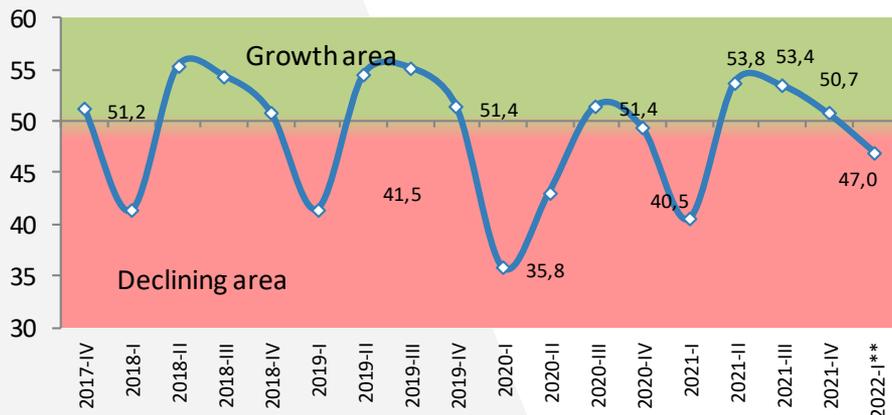
In Q4 of 2021 the capacity utilization (CU) of enterprises remained almost unchanged. The weighted average* level of the CU was **54,2%.**

However, the growth of production output slowed down in Q4 of 2021. DI was **50,7.**

In Q1 of 2022 enterprises expect a decrease in production volume. The expected DI is **47,0.**

BALANCE SHEET STRUCTURE: ASSETS

Assets structure

Long-term assets | Short-term assets
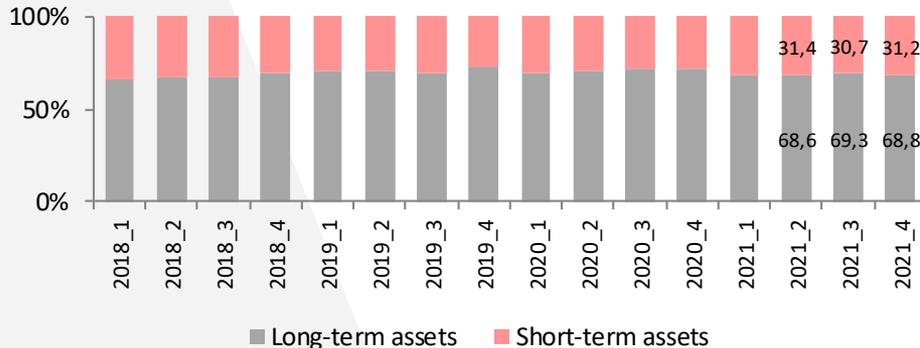
Short-term assets Structure

Inventory | Short-term receivables | Other short-term assets
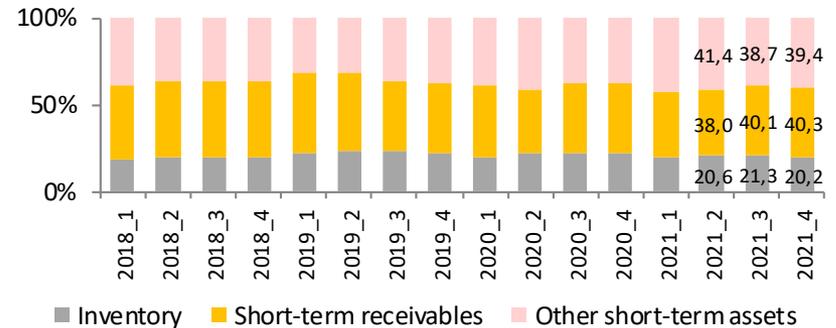
Assets turnover indicators

Assets turnover | Working capital turnover
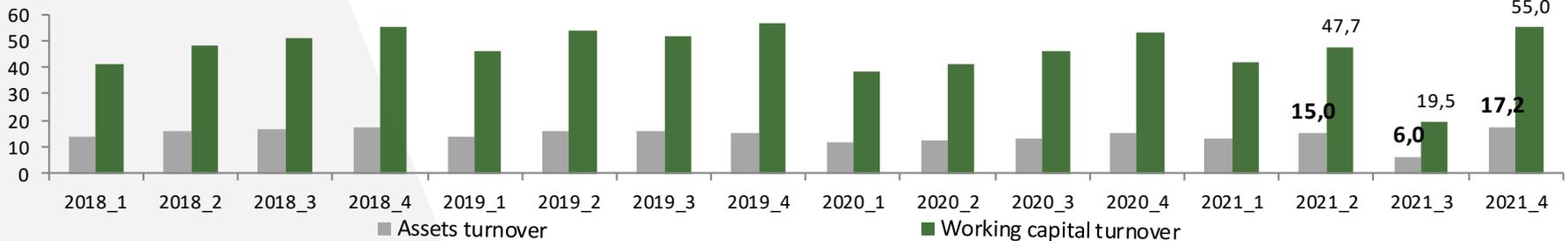
In Q4 quarter of 2021 in the structure of assets of companies in the real sector of the economy, the share of short-term and long-term assets remained almost unchanged, amounting **to 31,2%** and **68,8%** (in Q3 – 30,7% and 69,3%, respectively). Asset turnover* increased up to **17,2%**, working capital turnover** – up to **55,0%**.

In the structure of short-term assets in the past quarter, the share of receivables remained almost unchanged at **40,3%** (in Q3 – 40,1%), while the share of inventories slightly decreased to **20,2%** (21,3% in Q3).

Liabilities structure

Legend: Capital, Short-term liabilities, Long-term liabilities

Values shown: 30,8 30,9 31,8 / 22,4 19,8 20,1 / 46,7 49,3 48,0

Long-term liabilities structure

Legend: Long-term loans to banks, Other long-term liabilities

Values shown: 36,1 37,7 35,6 / 63,9 62,3 64,4

Short-term liabilities structure

Legend: Short-term accounts payable, Short-term bank loans, Other short-term liabilities

Values shown: 35,6 38,6 37,7 / 13,4 16,5 17,1 / 51,0 44,9 45,2

Share of enterprises with overdue debts

Legend: Accounts receivable, Accounts payable, Bank loans

Values shown: 22,6 21,4 / 20,7 20,1 / 7,4 7,2
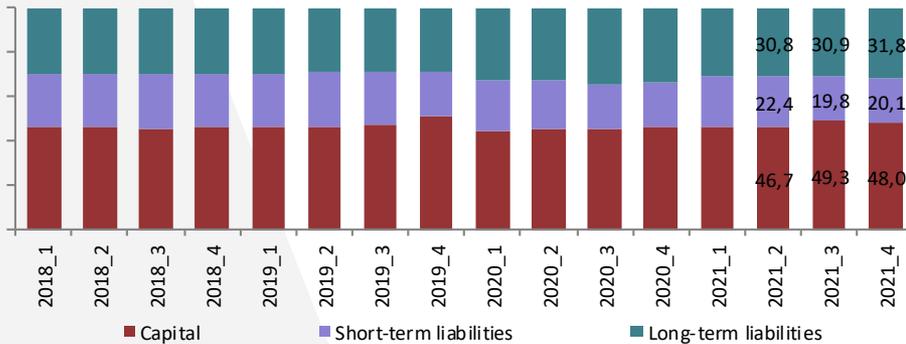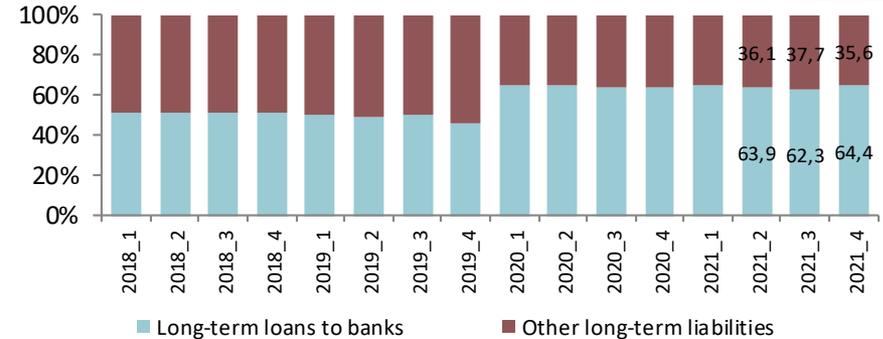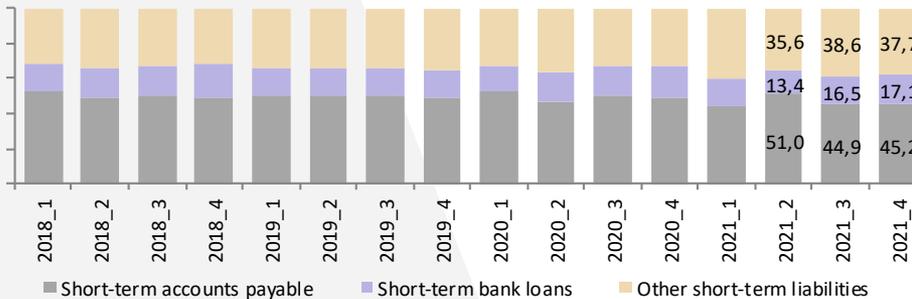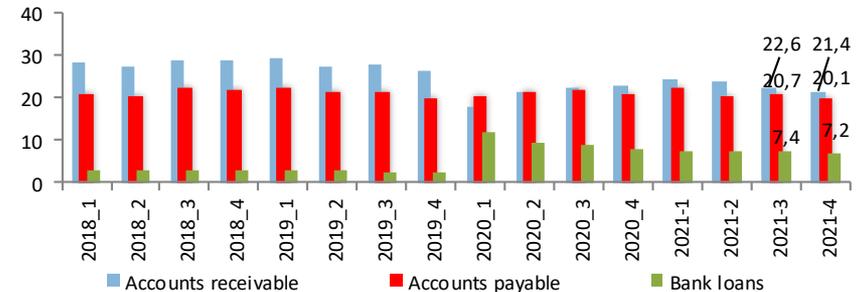
In Q4 of 2021 an increase in the share of short-term and long-term liabilities was noted, up to **20,1%** and **31,8%**, respectively, and a decrease in the share of equity, up to **48,0%**. In the structure of short-term liabilities the share of short-term accounts payable increased from 44,9% in Q3 to 45,2% in Q4 2021. The share of short-term bank loans increased to 17,1% (in Q3 – 16,5%).

The share of enterprises with overdue receivables and accounts payable, as well as debt on bank loans, decreased to **21,4%, 20,1%** and **7,2%**, respectively.

INVESTMENT ACTIVITY

Funding source for fixed assets, %

Bank loans ■ Own funds ■ Other sources ■ Not implemented
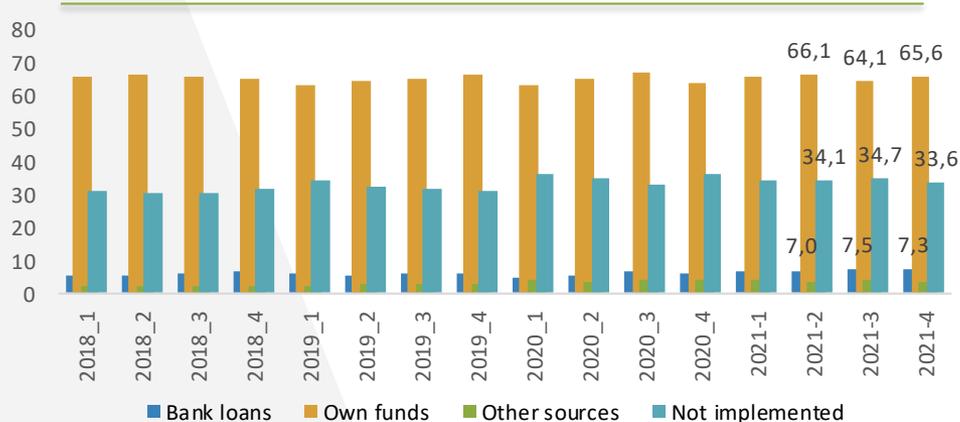
In Q4 of 2021 the investment activity of enterprises increased slightly. The share of enterprises that did not finance fixed assets decreased (to 33,6%), while the share of enterprises that financed fixed assets at their own expense increased (to 65,6%). As before, most enterprises use their own funds to finance fixed and working capital (65,6% and 85,2%, respectively).

Funding source for working capital, %

Bank loans ■ Own funds ■ Other sources ■ Not implemented
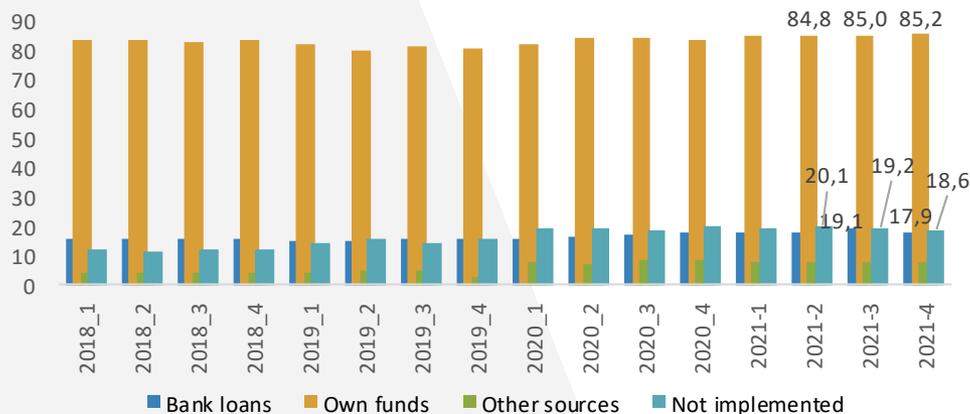
SOURCES OF WORKING CAPITAL FINANCING

Sources of working capital financing

2021_3

2021_4

Legend:
- Loans from banks and organizations engaged in microfinance activities
- Using a tranche of a previously opened credit line
- Shareholders'/participants' own funds
- Profit
- Government programs
- Other sources
- Not funded

2021_3: 8,1 · 10,2 · 43,1 · 41,9 · 2,8 · 5,8 · 19,2

2021_4: 7,6 · 9,7 · 42,5 · 42,7 · 3,1 · 5,5 · 18,6
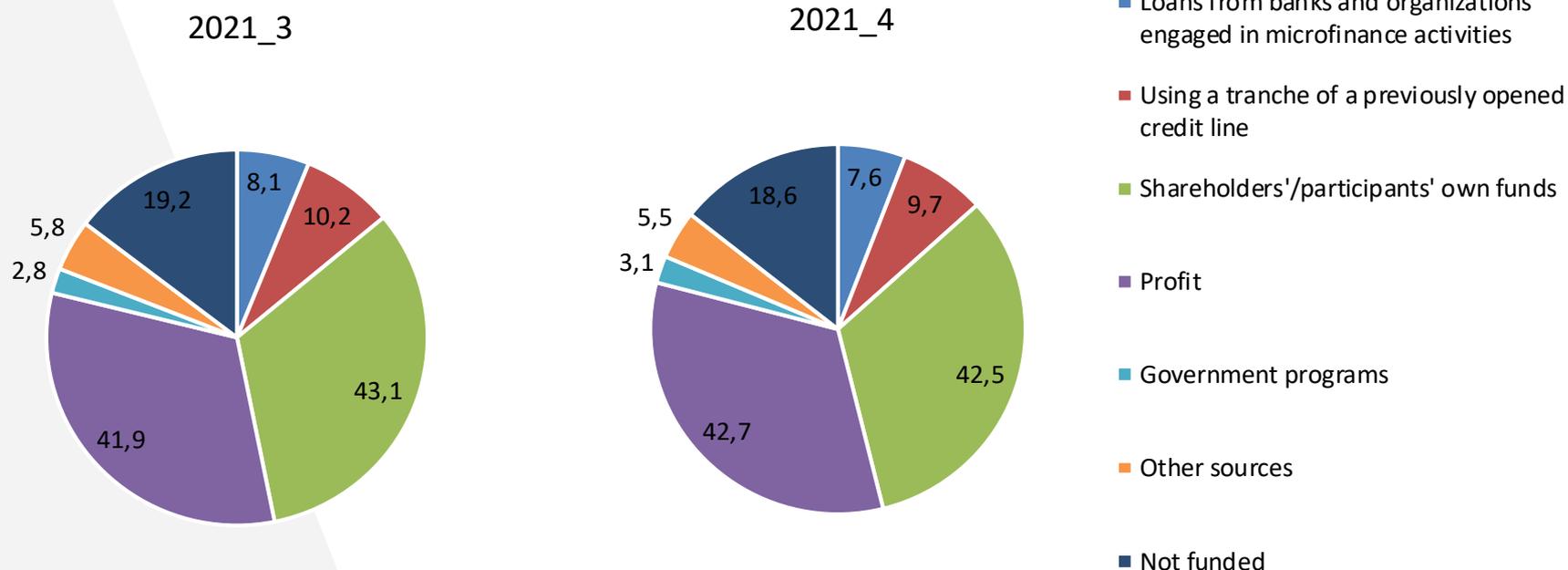
To finance **working capital** the majority of enterprises (**85,2%**) used their own funds, of which **42,7%** used profit and **42,5%** - own funds of shareholders/participants. Loans for these purposes were used by **18,0%** of enterprises (of which 9,7% used a tranche under a previously opened credit line, 7,6% - received new loans in Kazakhstan banks and organizations engaged in microfinance activities, 0,7% - loans abroad).

Among other sources, in addition to those presented in the graph, enterprises also indicate advances from customers, intra-group loans (between the parent company and affiliates) and subsidies.

OBSTACLES FOR DOING BUSINESS

Proportion of enterprises reporting obstacles

Legend:
- State of the Kazakh economy
- Market competition
- No obstacles
- Regulatory - level of tax burden
- Search for buyers (demand for the products, services)
- Lack of qualified personnel
- Receivables repayment difficulties
- Regulatory - complexity, frequent changes (licenses, permissions)
- Access to the financing (bank lending terms)
- Low profitability
- Underdeveloped infrastructure
- Other factors

Chart values: 35,5 | 29,0 | 27,0 | 22,4 | 21,9 | 19,0 | 12,4 | 11,0 | 10,9 | 10,8 | 10,3 | 3,7

According to the results of survey in Q4 of 2021, for **35,5%** of enterprises the state, that the economy of Kazakhstan is an obstacle to doing business (in Q3 the share of such enterprises was 34,9%). According to **41,6%** (in Q3 – 42,2%) of the respondents, the economic situation in Kazakhstan worsened in Q4 of 2021, **53,5%** believe that it has not changed.

The most important factors for enterprises, in addition to the state of the economy, are such factors as market competition (29,0%), tax burden (22,4%), demand (21,9%), the lack of qualified personnel (19,0%), receivables repayment difficulties (12.4%), regulatory measures - complexity, frequent changes (licenses, permits) (11.0%), while **access to financing is ranked 9th (10,9%).**

As other obstacles enterprises indicated quarantine measures, the political situation in the country, the exchange rate, raw material prices, as well as seasonality of their business.

In Q4 of 2021 the average* return on sales** of enterprises in the mining industry increased to **50,0%** from 45,0% in Q3. In manufacturing the return on sales slightly increased to **21,4**% from 21,1% in Q3. As a result, the average return on sales in the economy as a whole almost remained at the same level, amounting to **23,5%**.

The share of enterprises planning to close the year with profit amounted to **40,6%**, **13,5%** believe that the year will end with a loss. At the same time, **13,8%** of the surveyed enterprises think to close the year with a balanced budget (without profit and loss), the remaining **32,1%** have difficulties in giving assessment about their financial condition by the end of the year.

Return on sales *, in %

Legend: Economy — Manufacturing — Mining industry
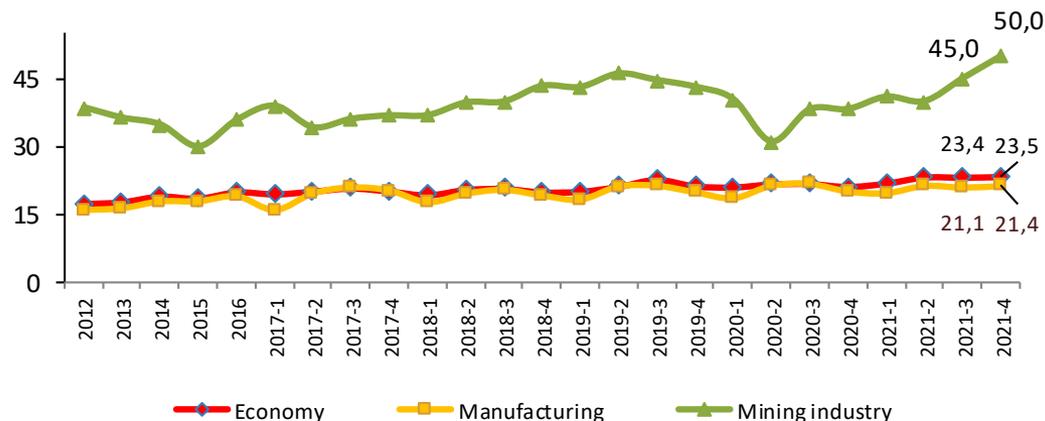
Share of enterprises planning to close the financial year with profit / loss, %

With a balanced budget
13,8%

With profit
40,6%

Do not know
**32,1%**

With loss
13,5%
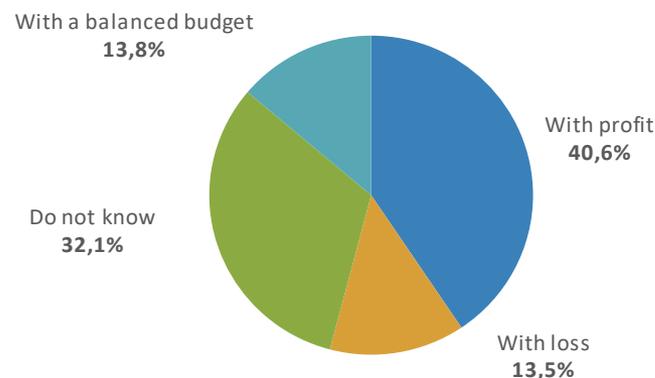
* Average median values are presented as they are less susceptible to extreme emissions than the arithmetic mean

** The sales profitability before expenses deduction on interest, taxes and depreciation is indicated

ASSESSMENT OF THE FINANCIAL CONDITION OF ENTERPRISES

**Dynamics of changes in the financial condition of enterprises *, share in %**

Legend: Normal financial condition ■ Stable financial condition ■ Critical financial condition
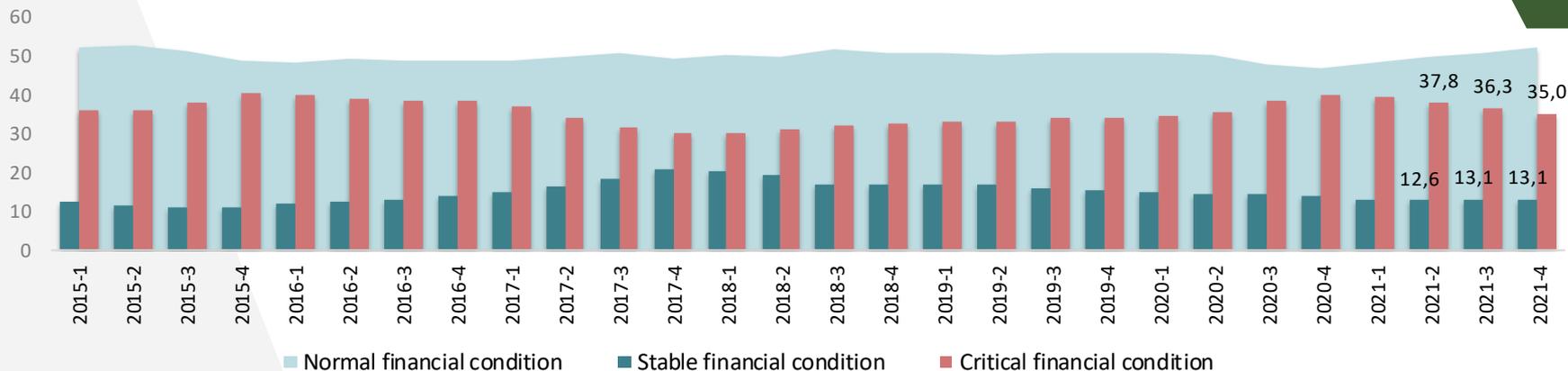
Enterprises distribution by degree of reliability by dimension in Q4 2021, share in %

Large enterprises: Stable 10,3; Critical 23,0; Normal 66,7

Medium enterprises: Stable 11,9; Critical 28,3; Normal 59,9

Small enterprises: Stable 14,3; Critical 40,9; Normal 44,8
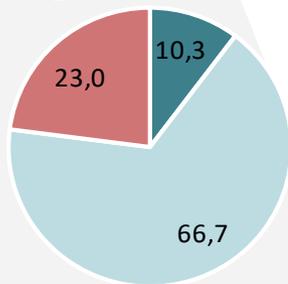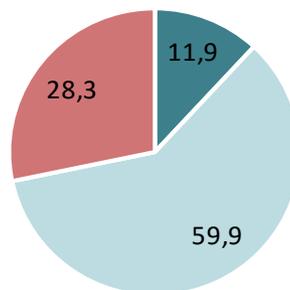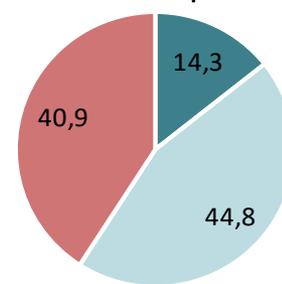
Legend: ■ Stable ■ Normal ■ Critical

According to the results of a discriminant analysis based on the assessment of the financial coefficients of enterprises, the share of enterprises with a critical financial condition continues to decrease: in Q4 their share was **35,0%.**

By dimensions, the share of enterprises with a critical financial condition among small enterprises is significantly higher (**40,9%**) than among large (23,0%) and medium-sized (28,3%). At the same time, the share of stable enterprises in the structure of large enterprises is lower than in medium and small ones.

* The respondent enterprises are distributed according to the degree of reliability based on the values of financial indicators according to the results of discriminant analysis. See the methodological commentary on slide 21.

ASSESSMENT OF THE FINANCIAL CONDITION OF ENTERPRISES

Enterprises distribution by degree of reliability by type of activity in Q4 2021, share in %

Number of enterprises*

| Type of activity	Stable	Normal	Critical	Number of enterprises*
Electricity, gas, steam and air conditioning	11,1	70,0	18,9	90 units
Transportation	6,8	54,6	38,6	207 units
Trade	12,7	48,4	39,0	703 units
Construction	18,5	41,7	39,9	271 units
Agriculture	19,6	50,6	29,8	168 units
Others	10,2	47,5	42,4	59 units
Professional, scientific and technical activities	12,9	50,0	37,1	124 units
Accommodation and food services	5,6	37,5	56,9	72 units
Manufacturing	14,4	57,0	28,6	612 units
Real estate operations	12,4	56,2	31,4	121 units
Information and communication	8,2	59,2	32,7	49 units
Mining industry	11,2	50,3	38,5	169 units
Water supply	6,3	90,6	3,1	32 units

■ Stable ■ Normal ■ Critical

In Q4 of 2021 in all sectors, except for water supply, the share of enterprises with a critical financial condition was greater than the share of enterprises with a stable financial condition. The largest share of stable enterprises is in agriculture (**19,6%**). The largest share of enterprises with a critical financial condition is in the "accommodation and food services" sector (**56,9%**). Water supply and electricity supply turned out to be the most stable sectors, where the share of enterprises with a normal financial condition was **90,6%** and **70,0%**, respectively.

BANKING SYSTEM IMPACT ON THE REAL SECTOR OF THE ECONOMY

Loans demand, %

(share of enterprises applying for a loan from a bank)

Legend: For economy (actual), For economy (exp.), Mining (exp.), Manufacturing (exp.)
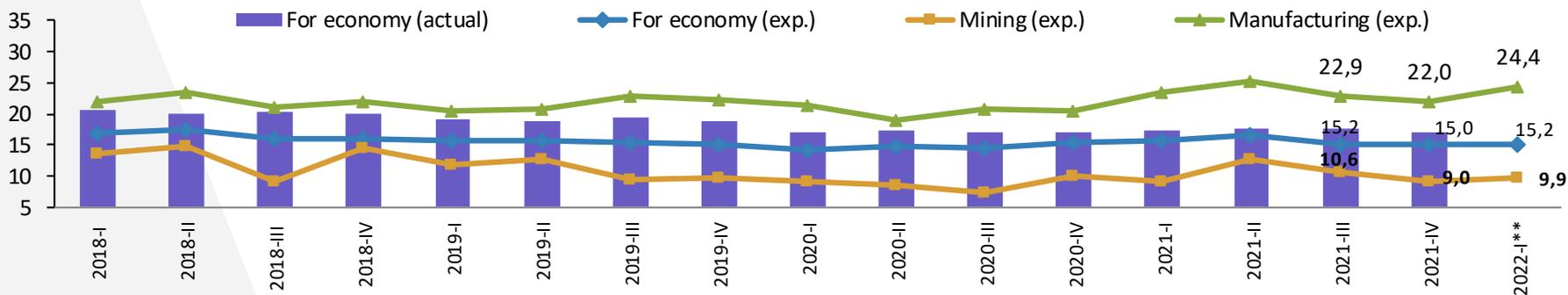
Lending applications consideration

Legend: Share of the enterprises that have been denied a loan; Share of enterprises that have received a loan*
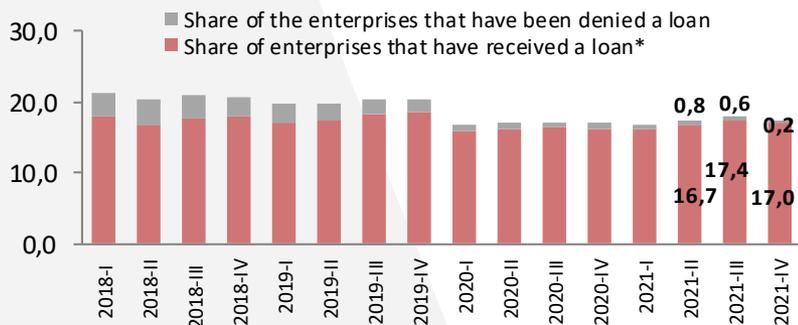
Share of enterprises that have been denied for a loan

Legend: Small and middle, Large, Economy
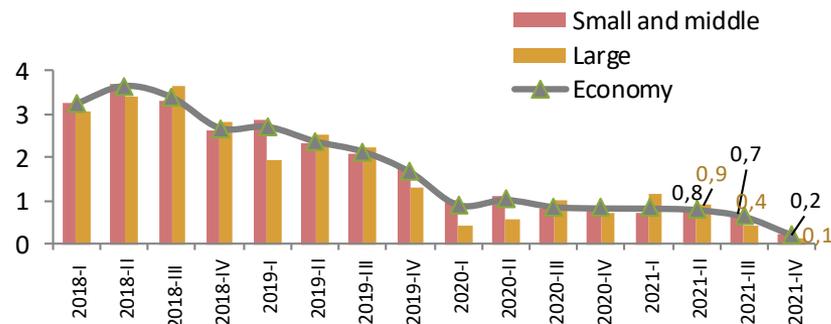
In Q4 of 2021 **17,2%** of the surveyed enterprises applied to the bank for a loan, 17,0% of enterprises received a loan (or 98,8% of the number of those who applied for a loan). The share of loan refusals amounted to 0,2% of the total number of survey participants (1,2% of those who applied for a loan).

In Q1 2022 **15,2%** of the surveyed enterprises intend to apply for a loan. In the manufacturing industry the share of such enterprises is **24,4%**, in the mining industry – **9,9%.**

# BANKING SYSTEM IMPACT ON THE REAL SECTOR OF THE ECONOMY

Debt burden estimations of enterprises *,%

Debt burden*	1%-20%	21%-30%	31%-40%	41%-50%	51%-60%	61%-70%	71%-80%	over 81%	no debt
share of enterprises, %	15,6	10,0	6,2	4,1	3,3	1,4	1,1	1,6	56,7

The weighted arithmetic mean value of the debt burden, %
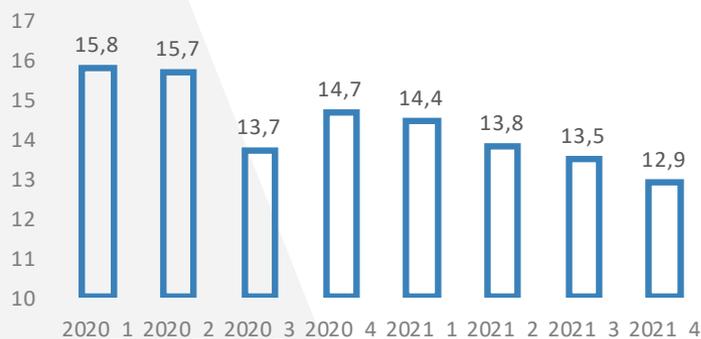
The objectives of applying for loan in the past quarter, in %

- Financing working capital
- Financing fixed assets
- Refinancing
- Business expansion
- Other purpose
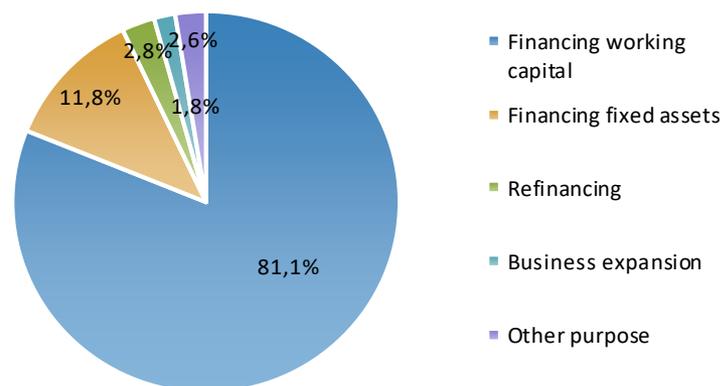
In Q4 of 2021 56,7% of the enterprises that took part in the surveys **had no debt**. Most of those who had loans (15,6%) have a debt burden* within 20%. The weighted arithmetic average** value of the debt burden is **12,9%**.

The vast majority of enterprises (**81,1%)** got loans to finance working capital (purchase of materials, raw materials, semi-finished products, etc.), 11,8% - to purchase fixed assets (purchase of buildings, structures, vehicles, equipment, 2,8% of enterprises - for refinancing purposes, 1,8% - for business expansion.

BANKING SYSTEM IMPACT ON THE REAL SECTOR OF THE ECONOMY

Price conditions
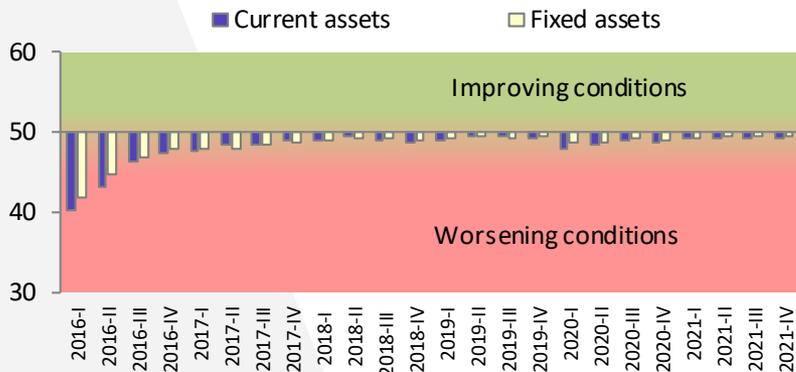
Loan terms and rates in tenge
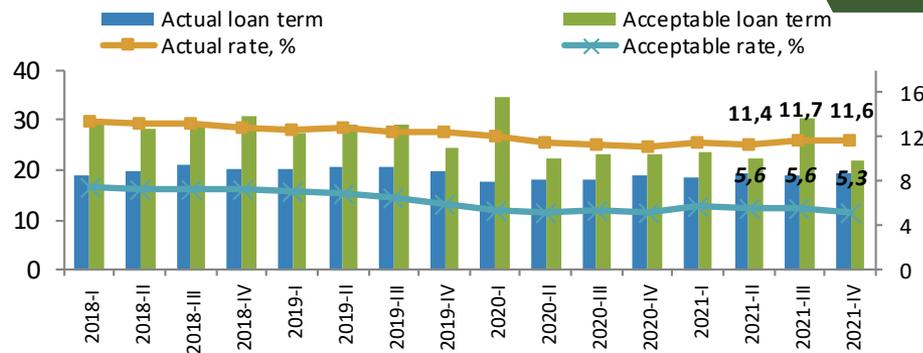
Non-price conditions
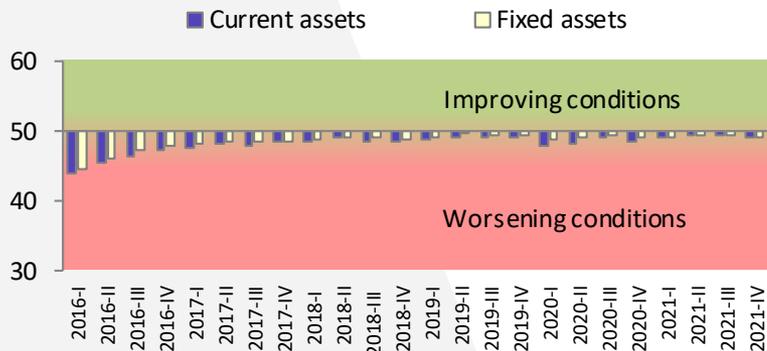
Loan terms and rates in foreign currency
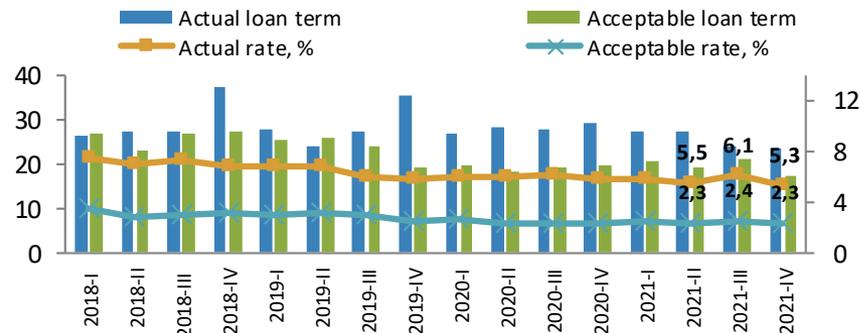
In Q4 of 2021 the assessments of enterprises regarding price (the level of interest rates on a loan, the amount of additional commissions) and non-price (the maximum size and term of the loan, requirements for the financial condition of the borrower, requirements for collateral) improved slightly, but remained negative.

The average interest rates on loans received by the survey participants were **11,6%** in tenge and **5,3%** in foreign currency (11,7% and 6,1% in the previous quarter, respectively). According to enterprises, the acceptable interest rate for them on loans in tenge should be 5,3%, and on loans in foreign currency – 2.3%.

FOREIGN ECONOMIC ACTIVITIES OF ENTERPRISES (FEA)

Implementation of foreign economic activity in the past quarter, the share of enterprises in %

- exported
- imported
- exported and imported
- did not carry out foreign economic activity

exported	6,7
imported	25,9
exported and imported	10,5
did not carry out foreign economic activity	56,8

Foreign economic activity by activity type, share of enterprises in %

Activity type	Exported	Exported and imported	Imported	Foreign activities were not proceeded
Power supply	0,0	3,0	17,2	79,8
Accommodation and food services		1,1	7,7	91,2
Transportation	4,7	7,5	11,8	76,0
Construction	2,3		20,5	75,1
Agriculture	4,6	7,7	14,8	73,0
Others	4,3	5,4	18,5	71,7
Prof., scientific activity	8,4	4,5	16,9	70,1
Trade	6,3	8,2	44,5	41,0
Real estate operations			10,7	88,6
Manufacturing	9,2	24,4	26,9	39,5
Information and communication	1,5	8,8	16,2	73,5
Mining industry	26,1	16,3	14,8	42,9
Water supply	2,2		8,9	82,2

Use of currency in calculations, share of enterprises in %

|	Exporters	Importers
USD	72,9	51,9
EUR	28,4	35,4
CNY	3,6	4,2
RUB	56,9	86,0
KZT	20,0	11,8
other currency	0,9	1,0

In Q4 of 2021 **25,9%** of respondents imported products to run their business, 6,7% exported, 10,5% exported and imported, and the vast majority (**56,8%**) had not foreign economic activity. The largest share of enterprises that exported products was in the mining industry (**26,1%**), the largest share of enterprises that imported products was in trade (**44,5%**). In the manufacturing industry the largest share of enterprises engaged in foreign economic activity.

In settlements with foreign partners, exporters more often use the US dollar (**72,9% of exporters**), importers use the Russian ruble more (**86,0 of importers**). The British pound sterling, Swiss franc, Kyrgyz som and Turkish lira were also indicated as other currencies used in the settlements.

IMPACT OF EXCHANGE RATE CHANGES

Dynamics of the impact of changes in the exchange rate, DI *

Legend: USD/KZT, answers in % — EUR/KZT, answers in % — RUB/KZT, answers in % — CNY/KZT, answers in %
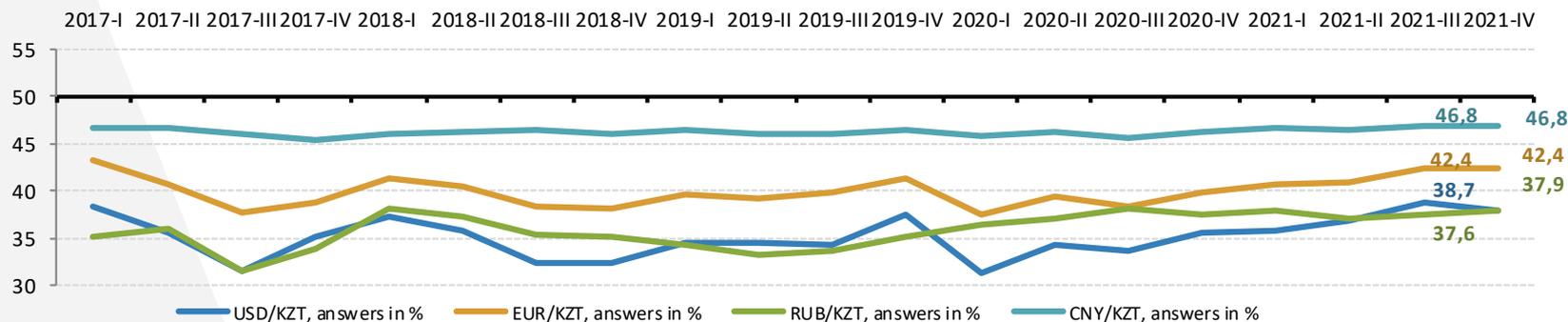
Impact of the exchange rate on the economic activities of exporters in Q4 2021

Legend: ■ Positive ■ Negative ■ No impact ■ I don't know
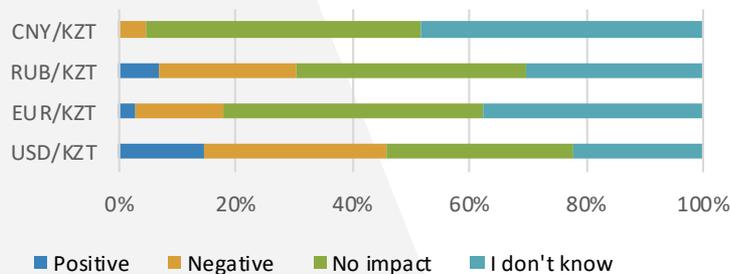
Impact of the exchange rate on the economic activity of importers in Q4 2021

Legend: ■ Positive ■ Negative ■ No impact ■ I don't know
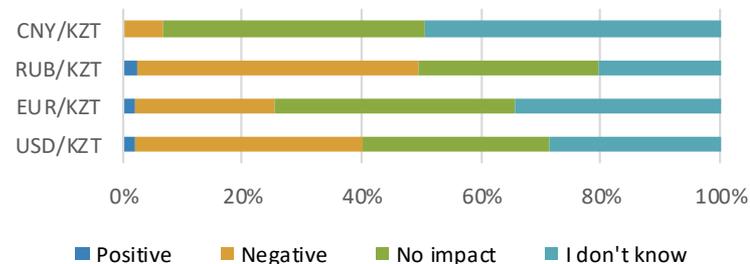
In Q4 of 2021 the negative impact on the economic activity of enterprises from exchanges in the RUB/KZT exchange rate decreased, while the impact of the EUR/KZT and CNY/KZT pairs remained unchanged. Enterprises experience the least negative impact on their economic activities from the CNY/KZT exchange rate. The positive impact from the exchange rate in Q4 was indicated by exporters rather importers. RUB/KZT exchange rate had a significant negative impact on importers.

COMPOSITE LEADING INDICATOR*
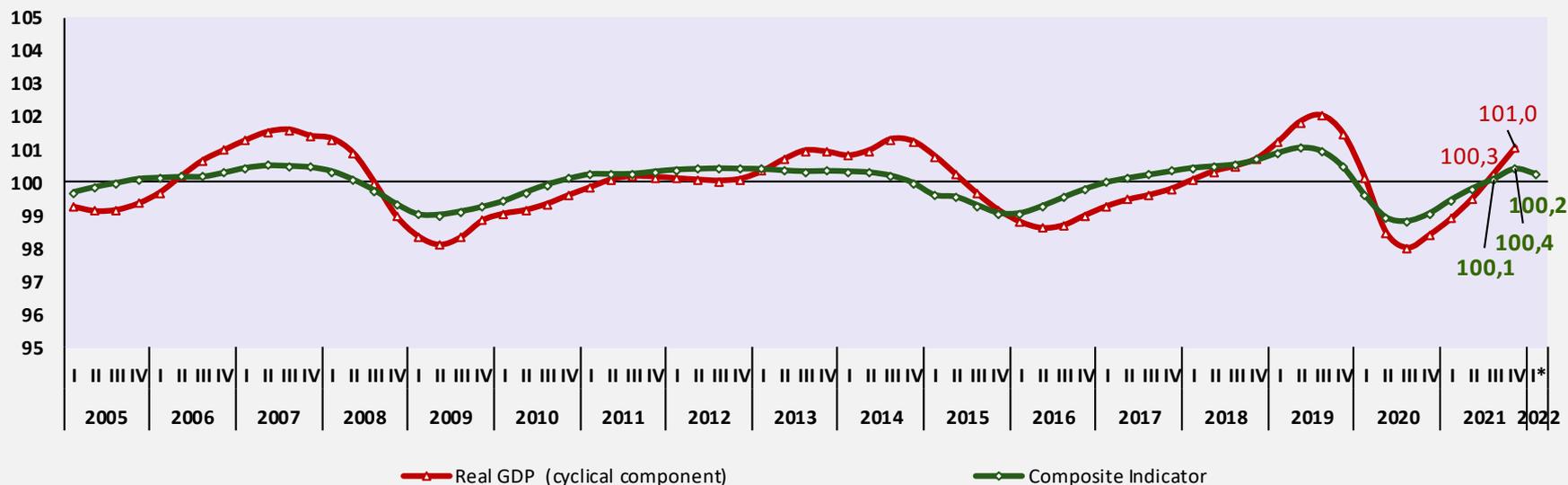
In Q4 of 2021 the dynamics of the composite leading indicator (CLI), which is an aggregated assessment of surveys of enterprises in the real sector, demonstrates that economic activity in the real sector is continuing to recover. CLI in increased compared to previous quarter and amounted to 100,4.

The dynamics of CLI was positively affected by the dynamics of world energy prices, demand for final products, and a decrease in the share of enterprises with a critical financial condition. In Q1 of 2022 a slowdown in the pace of recovery is expected (CLI is expected to be 100,2). Enterprises expect a slowdown in the growth of prices for raw materials and materials and an increase in demand for final products. At the same time, slowdown in demand in agriculture is expected.

- A composite leading indicator is used to identify turning points in the business cycle and provides good quality information about the state and directions of trends in the economic activity. A composite leading indicator reflects a summarized evaluation of opinions of managers of the interviewed enterprises regarding the existing and anticipated situation in their enterprises and possesses the forward-looking feature of the real GDP behavior for 1-2 quarters. Construction of CLI is based on the OECD methodology («OECD System of Composite Leading Indicators, Methodology Guideline», OECD 2012).

** The CLI parameters for Q1 2022 are calculated on the basis of expectations among enterprises in the real sector that participated in the survey.

➢ The diffusion index (DI) as reflected in tables and in figures is calculated as a sum of positive responses and a half of "no change" responses. This index is a generalized indicator which characterizes the behavior of the reviewed indicator. If its value is above 50 – this means a positive change, if it is below 50, then the change is negative. In doing so, the further (the higher) the value of the diffusion index deviates from 50, the higher are the rates of change (increase or decrease) of the indicator.

➢ The indicator of "an acceptable interest rate on bank loans" is calculated as the average of interest rates indicated by enterprises participating in the monitoring process as acceptable rates for these enterprises in terms of the existing level of profitability of production.

➢ Numbers reflecting financial ratios are provided as average values calculated based on the whole sample of interviewed enterprises as well as broken down by sector, where necessary, based on estimates of the quarter-end balance sheet numbers received from enterprises. In doing so, the evaluation data as well as the averages calculated on their basis are not aiming at obtaining the absolute precision of their values (since they are not the reporting ones) but rather serve for obtaining updated estimates and for analyzing the trends of the change in the state of the non-financial sector of the economy and its sectors.

➢ Discriminant analysis allows to identify the most informative indicators of the financial condition of the enterprise and determine the approach of a crisis situation at the enterprise, and thus classify them according to the degree of reliability. The distribution of enterprises into groups (stable, normal and critical) is carried out using classification functions, including 3 financial indicators: the income growth rate from sales of products per employee, the coefficient of financial independence and the equity capital growth rate. Details in the economic research

https://www.nationalbank.kz/file/download/9013

➢ The composite indicator (CLI) possesses the forward-looking feature of the real GDP behavior for 1-2 quarters. The time series of the CLI and the real GDP (in terms of prices of the year 2005) are cleared of seasonality and do not contain the trend, i.e. they only include a cyclical component as determined by short-term fluctuations of the economic market environment. For comparability purposes, the resulting cyclical components are standardized, i.e. they are reduced to one (non-dimensional) unit of measurement.

➢ The CLI serves to reflect short-term development trends in the real sector of the economy as a whole. It possesses the following features: 1) it has a forward-looking mature; 2) it reflects a cyclical nature in the development of the real sector of the economy; 3) it is quickly designed since it is built on the basis of on-the-spot interviews of enterprises.

➢ Out of indicators built up based on interviews of enterprises, the following leading indicators were included as the CI components:
   1) DI changes in demand for final products in sectors of the economy
   2) DI changes in prices for final products of enterprises in sectors of the economy
   3) Credit activity indicator: share of enterprises intending to obtain a loan
   4) DI changes in the level of utilization of production facilities;
   5) DI changes in average wages;
   6) DI changes in inventories

METHODOLOGICAL COMMENTS