## New Monthly Enterprises Survey

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## Authors of the report:

Oksana Kuziakiv, Executive Director at the Institute for Economic Research and Policy Consulting, Project Manager for the project "Support for the Public Initiative "For Fair and Transparent Customs"

Yevhen Anhel, Senior Research Fellow at the Institute for Economic Research and Policy Consulting Anastasia Gulik, Research Fellow at the Institute for Economic Research and Policy Consulting Iryna Fedets, Senior Research Fellow at the Institute for Economic Research and Policy Consulting

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INSTITUTE FOR ECONOMIC RESEARCH AND POLICY CONSULTING
Reytarska 8/5-A, 01054 Kyiv, Ukraine
tel.: +38(044) 278-63-42; +38 (044) 278-63-60; fax: +38(044) 278-63-36
institute@ier.kyiv.ua
www.ier.com.ua
Facebook IER
Facebook "For Fair and Transparent Customs"
Telegram channel "Fair Customs"

## THE NEW MONTHLY ENTERPRISES SURVEY "UKRAINIAN BUSINESS IN WARTIME"

Dear ladies and gentlemen, we present you with the thirteenth issue of the business managers' monthly survey "Ukrainian Business in Wartime."

The need for comprehensive information on the economic situation is crucial for economic policy in wartime. The Institute for Economic Research and Policy Consulting conducts a monthly enterprise survey using the Business Tendency Survey approach to quickly collect information on the current economic state at the enterprise level. The methodology is designed to assess the situation from the "base level": the judgments and expectations of key economic agents such as entrepreneurs and business managers.

The monthly survey consists of two parts: the regular one and the special one.
Respondents regularly answer questions on the changes in key activity indicators and short-term forecasts for future changes in the same indicators. This entails the dynamics of output (production), sales, exports, debt, new orders, employment, etc. We also focus on estimates and expectations of the changes in the business climate and business activity at the enterprise in the next six months. This part of the survey applies the business tendency survey methodology, harmonized according to the Joint Harmonized EU Program of Business and Consumer Surveys (BCS) requirements. Where applicable, we use comparisons with the data from the quarterly business survey "Business Opinion" that have been conducted since 1998.

The special part of the monthly enterprise survey is devoted to the war's impact on the production activity of enterprises and exports and the assessment of government policy on business support. The industry dimension in data analysis is used in the issue.

The monthly survey of business managers is a part of a change in the activities of the project "For Fair and Transparent Customs", funded by the European Union and co-financed by the International Renaissance Foundation, and the ATLAS Network (USA). Monthly trends will be presented in reports such as this one. Quarterly trends will continue to be published in the "Business Survey: Industry" reports, which have been published by the IER since July 2002.

We are grateful to the analytical system YouControl (https://youcontrol.com.ua/) for the opportunity to use the data to form a panel sample.

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## PRACTICAL QUESTIONS AND ANSWERS TO HELP TO READ THIS REPORT

Who do we survey? This survey uses a panel sample; that means we survey the same business entities. Building such a sample takes time. During the thirteenth wave of the survey, the answers of 563 respondents were received.

Fig. 1 Number of enterprises surveyed


They include mainly industrial enterprises (94\%) located in 22 of the 27 regions of Ukraine: Vinnytsya, Volyn, Dnipropetrovsk, Zhytomyr, Zakarpattya, Zaporizhzhya, Ivano-Frankivsk, Kyiv, Kirovohrad, Lviv, Mykolayiv, Odesa, Poltava, Rivne, Sumy, Ternopil, Khmelnytskyy, Cherkasy, Chernivtsi, Chernihiv and Kharkiv regions and in the Kyiv city. Enterprises of all sizes in terms of the number of workers are represented among the respondents.

Fig. 2 Number of enterprises surveyed by size

|  | Jul. 22 | Aug. 22 | Sep. 22 | Oct. 22 | Nov. 22 | Dec. 22 | Jan. 23 | Feb. 23 | Mar. 23 | Apr. 23 | May. 23 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Micro | 50 | 64 | 55 | 49 | 53 | 58 | 67 | 59 | 64 | 57 | 61 |
| Small | 128 | 142 | 138 | 133 | 138 | 156 | 161 | 158 | 189 | 180 | 171 |
| Medium | 169 | 183 | 191 | 172 | 203 | 214 | 212 | 190 | 208 | 214 | 212 |
| Large | 102 | 129 | 137 | 114 | 113 | 123 | 133 | 117 | 119 | 109 | 119 |

How do we collect data? Data was collected using a combination of several data collection methods: telephone interviews of business representatives filling out their responses into an online check-list, and, in some cases, selfcompletion of the online check-list by representatives of enterprises who expressed their desire during the previous telephone contact to enter data into the online check-list themselves.

How are our indices calculated? All indices are calculated according to a single methodology. We count responses as +1 when the company responds that the rate has increased, 0 if it has not changed, and -1 if it has decreased. For example, if out of 100 respondents, 20 indicated an increase in production, 50 respondents reported its reduction, and 30 said that everything remained unchanged, the corresponding value of the index will be -0.30 . A positive (negative) index value means that the share of enterprises where production has increased is larger (smaller) than the number of those where production has decreased. Each index bigger than +0.05 or less than 0.05 is statistically significant, and different from zero with a $5 \%$ error probability.

How to "read" our indicators? Our indicators are called "indices," which is a synonym of the term "balance index" or "balance indicator." All indices are the difference between the shares of respondents who reported a decrease and those who reported an increase in the indicator. The bigger the index value, the bigger the rate of indicator growth; the smaller the index value, the bigger the rate of indicator decline. For most indicators, a higher value of the index means a positive trend, except for indicators of debts, the number of workers on forced leave, and difficulties in finding personnel. Everything is the opposite here. The larger the index, the greater the rate of debt growth or the increase in the number of people on forced leave and hardships (this is bad), the smaller the index,
the greater the rate of debt reduction, the decrease in the number of people on forced leave or hardships (this is good).

When the survey was conducted? The field stage of the thirteenth wave lasted from May 16 to 31, 2023. The enterprises' managers compared the results of work in May 2023 with April 2023, assessed the state of the indicators at the time of the survey (April 2023), and gave forecasts for the next two, three, or six months, depending on the question. For some questions (where it was indicated), the results of the work were compared to ones in the pre-war period (before February 24, 2022). Respondents gave forecasts for the next three months of work.

## MAIN RESULTS

Against the backdrop of military escalation, business optimism remains high, while the long-term future remains uncertain. Assessments of the current business activity at the enterprise slightly worsened, while assessments of the overall economic situation in the country and expectations for the future remained unchanged. At the same time, uncertainty in the six- and three-month horizon has been decreasing for several months in a row. Additionally, two-year plans remain vague for business: uncertainty remains high. Also, the share of enterprises that do not plan changes for such a long term has increased. With the increase in missile attacks, the sharpness of "unsafe to work" and "power outages" as obstacles to doing business have increased again. Export activity remains without significant changes. And it indicates a certain stagnation of export recovery. Logistics problems remain the main challenge for exporters. Economic policy assessments are neutral and do not change in most cases.

## OVERALL INDICATORS OF BUSINESS CLIMATE AND ECONOMIC ENVIRONMENT

- In May 2023, compared to April, the BUSINESS ACTIVITY AT THE ENTERPRISE INDEX decreased from -0.02 to -0.07.
- Enterprises' expectations regarding changes in the business activity in the six-month horizon while remaining quite optimistic gradually worsened for the second month in a row. The indicator decreased from 0.46 to 0.43 .
- In May, the value of the OVERALL ECONOMIC ENVIRONMENT INDEX remained almost unchanged (-0.08 against 0.07 in April).
- Expectations regarding changes in the overall economic environment after half a year have not changed, and the INDEX OF THE EXPECTED CHANGES IN THE OVERALL ECONOMIC ENVIRONMENT is 0.43 , the same as last month.
- Two-year expectations regarding prospects for expansion of business activity also remained without significant changes. The value of the INDEX OF CHANGES IN BUSINESS ACTIVITY in the two years horizon decreased slightly in May, from 0.23 to 0.21 .
- The level of uncertainty in the two-year horizon has been almost unchanged for several months, and for the six-month and three-month periods, a gradual decrease in value is recorded.


## PRODUCTION

- PRODUCTION INDEX decreased from 0.24 to 0.20 in May 2023. It happened due to a slight increase in the share of enterprises where production decreased, while the share of enterprises that increased production almost did not change
- Business expectations for the next three months are high. And after a slight decrease last month, the index of expected changes in production volumes increased slightly, from 0.45 to 0.47 .


## DEMAND AND SALES

- The sales growth rate and the increase in the number of new orders slowed down somewhat. The SALES INDEX (from 0.23 in April to 0.20 in May) and the NEW ORDERS INDEX decreased (from 0.23 to 0.18 ).
- Enterprises' expectations regarding demand in the next three months remained unchanged. The value of the INDEX OF EXPECTED CHANGES IN SALES is 0.48 (It was 0.46 ). And the value of the index of expected changes IN NEW ORDERS is 0.45 as last month.


## DEBTS

- In May, compared to April 2023, the indicators of receivables and payables improved, while tax arrears indicator remained almost unchanged. Accounts receivable decreased from -0.20 to -0.26 , and accounts payable decreased from -0.24 to -0.26 . The indicator of tax arrears is -0.25 (last month, it was -0.26 ).
- No significant changes are expected in the three month. The index of expected changes in accounts receivable did not change and is -0.32 . The index of expected changes in accounts payable also did not change from last month ( -0.33 ), and the indicator of tax arrears increased slightly, from -0.30 to -0.28 .


## EMPLOYMENT

- The rates of employment reduction at enterprises remain unchanged, although they have accelerated somewhat; the NUMBER OF WORKERS INDEX increased from -0.07 to -0.03.
- In the next three months, enterprises do not expect any changes; the INDEX OF EXPECTED CHANGES is 0.03 (it was 0.04).
- The rate of reduction in the number of workers on forced leave slowed down, and the INDEX remained almost unchanged ( -0.22 in May versus -0.23 in May); in three months, enterprises do not plan to change anything, and the INDEX is -0.25 (two months in a row, the value of the index was -0.26 ).
- After a significant increase in the difficulty in finding workers of various qualifications in April, in May, the value of the corresponding index for skilled workers decreased slightly, from 0.25 to 0.21 , while the index of difficulty in finding unskilled workers did not change, and is 0.11 .


## AVAILABILTY OF ORDERS

- In May 2023, the order portfolio for the surveyed enterprises decreased: for the first time in 5 months of 2023, the average term of new orders decreased to 2 months (median).
- The share of enterprises with orders for only up to 2 months increased from 44\% in April 2023 to 52\% in May.


## OBSTACLES TO DOING BUSINESS IN WARTIME

- Rising prices for raw materials and goods remain at the top of the list of war-related business obstacles, despite a decline in the value of this indicator.
- Logistical issues also retained the 2 nd place, although the absolute value of this obstacle decreased.
- The importance of power outages and work hazards as obstacles increased somewhat after the intensity of Russian missile strikes increased in May.
- $1 / 3$ of respondents felt a lack of personnel. The importance of this obstacle remains unchanged.


## PRODUCTION CAPACITIES DURING THE WAR PERIOD

- In May 2023, one of the highest levels of production capacity utilization was recorded for the entire survey period. The total share of enterprises operating at almost full and full capacity was $57 \%$ - almost at the record level of April 2023 (58\%).
- Despite the challenges of the war, only $2 \%$ of surveyed enterprises reported they stopped their activities during the war. Also, only $2 \%$ of enterprises operate at less than $25 \%$ of pre-war capacity.
- Medium-sized businesses are the best at keeping production close to full and at full capacity compared to the pre-war period at $68 \%$ in May (also $68 \%$ in April). It is the highest indicator since the survey began.
- The food industry remains a leader in industrial recovery. In May, 73\% of food industry enterprises were operating at near full and full capacity. It is a repeat of the highest figure for the industry during the observation period in April (also 73\%). In light industry, a decrease in capacity utilization was recorded from 65\% in April to 55\% in May.
- A difficult situation remains in metallurgy and metalworking, where only $29 \%$ of enterprises are operating at almost full and full capacity ( $20 \%$ in April).


## EXPORTING ENTERPRISES

- In May, 63\% of respondents reported that they were exporters before the war, continued exporting during the war, or started exporting during the war for the first time.
- Most businesses managed to keep exports in wartime conditions. $80 \%$ of respondents indicated that they exported before the war, and continued to export during the last 12 months ( $87 \%$ in March and $84 \%$ in April).
- Some businesses cannot overcome new challenges for export activities. $19 \%$ of enterprises were exporting before the start of the war but could not resume exports during the last 12 months. Such results indicate the stagnation of the export activity recovery.
- Only a small share of enterprises was able to start exporting for the first time. $1 \%$ of enterprises among all exporters first started exporting precisely during the war (during the last 12 months).
- Among micro-businesses, $44 \%$ of enterprises exported before the war but had no export activity during the last 12 months.
- The most difficult situation with the export recovery is in construction materials production sector. For example, $46 \%$ of the industry's enterprises exported before the war but had no exports in the last 12 months.
- The best situation was in the chemical industry, where all enterprises had exports during the last 12 months.
- The recovery of export volumes slowed down in May. The value of the EXPORT INDEX decreased from 0.11 to 0.06 . The share of enterprises whose export volume decreased slightly increased (from 17.9\% in April to $19.8 \%$ in May), while the share of enterprises that increased export volume remained almost unchanged ( $24.0 \%$ in May versus $24.5 \%$ in April).
- The main obstacles for exporters in May 2023 were logistical problems (queues at the western borders of Ukraine, the impossibility of exporting by sea, and the lack of railway wagons/trucks/drivers) and complex customs formalities.


## GOVERNMENT POLICY

- In May 2023, positive assessments of state policy regarding business support increased slightly to $16 \%$, while the percentage of negative assessments did not change: $11 \%$.
- As before, business mostly neutrally assesses government policy regarding business support: 60\% of respondents.


## AND EXPECTATIONS FOR THE HALF-YEAR PERIOD <br> BUSINESS ACTIVITY AT THE ENTERPRISE

In May 2023, the five-month trend of gradual improvement in indicators interrupted. In April, the value of the BUSINESS ACTIVITY INDEX, albeit slightly, decreased from -0.02 to -0.07. The share of respondents who assessed the current business activity at the enterprise as bad increased from $13.0 \%$ to $16.3 \%$. At the same time, the share of those who positively assess the business activity at the enterprise decreased (slightly, from $7.8 \%$ to $6.6 \%$ ), as well as the share of those who consider the business activity at the enterprise satisfactory (from 79.2\% to 77.0\%).

Expectations for the future within six months, remaining among the highest for the entire survey period, are gradually decreasing. The value of the INDEX OF EXPECTED CHANGES IN BUSINESS ACTIVITY decreased from 0.46 to 0.43 , although this cannot be considered a statistically significant change. It happened due to more significant changes in the share of "optimists" and those who believe nothing will change. Changes in the share of "pessimists" are insignificant (from $3.2 \%$ to $2.6 \%$ ), and the share of "optimists" decreased from $50.1 \%$ to $45.7 \%$. The share of those who do not expect any changes increased from $46.6 \%$ to $51.6 \%$.

The share of respondents who could not give a forecast about changes in the business activity at the enterprise for six months has been gradually decreasing for several months in a row and is $18.3 \%$ (it was $20.7 \%$ ).

Fig.3. Business activity at the enterprise, indices


## BUSINESS ACTIVITY AT THE ENTERPRISE COMPARED TO A SIMILAR PERIOD OF THE LAST YEAR

A comparison of the business activity at the enterprise with the same period last year shows significant improvement in the situation. The value of the CURRENT BUSINESS ACTIVITY INDEX (YEAR TO YEAR) doubled in May, from 0.23 to 0.43 . It was due to a significant decrease in the share of those for whom the situation is worse, while changes in the share of those for whom the situation has become better is less significant. The share of respondents who indicated the worsening of the situation decreased from $30.0 \%$ to $11.0 \%$. At the same time, the share of respondents whose business activity improved increased from $49.5 \%$ to $52.7 \%$. The share of those who believe nothing has changed compared to last year has increased from $20.5 \%$ to $36.3 \%$.

Size. Business activity assessments depend on the size of the enterprise. Small businesses feel the best compared to last year, with the indicator of 0.48 . The indicator of medium and large enterprises is slightly lower and the same and is 0.43 . The indicator of micro-enterprises is the worst ( 0.17 ).

Region. Ternopil and Poltava regions have the highest indicator ( 1.00 for each), as well as Lviv ( 0.89 ) and Odesa (0.84) regions. The indicator of Khmelnytskyy, Dnipropetrovsk and Kirovohrad regions is zero. The lowest indicator is in the Zhytomyr region, which is the only one with a negative value $(-0.05)$.

Sector. The highest value of the index was recorded for printing (0.67) and light industry (0.49). Metalworking $(0.25)$ and machine building ( 0.06 ) have the worst indicators.

Fig.4. How do you assess the business activity at the enterprise compared to last year?, \% of respondents


## EXPANSION PLANS FOR THE NEXT TWO YEARS

Expectations regarding business activity for the next six months remain unchanged for the third month in a row. The index of expected changes in business activity in the two years in May is 0.21 (it was 0.23 in April and March). At the same time, there were some changes in the percentage distribution. Both the percentage of those who plan to expand their activities in the next two years (from $29.7 \%$ to $24.4 \%$ ) and the percentage of those who plan to reduce their activities decreased in March (from 6.9\% to $4.1 \%$ ). The share of those who plan to stay at the current level has significantly increased, from $63.4 \%$ to $71.4 \%$.

It is important to note that the percentage of those who could not give a forecast for such a distant period remains unchanged and amounts to $56.5 \%$ (it was $57.7 \%$ ).

Fig.5. Do you plan to expand the company's activities in the next two years?, $\%$ of respondents


Size. Among enterprises of all sizes, large (0.28) and small (0.25) enterprises are most optimistic about the future. The indicator of medium-sized enterprises is 0.18 . The worst is the indicator of micro-enterprises, which is 0.04 .

Region. Significant regional differences were registered. Enterprises of Chernihiv (0.79), Zakarpattya (0.67), Volyn (0.53) and Kyiv (0.36) regions have the highest expectations. Zhytomyr ( -0.05 ) and Sumy ( -0.15 ) regions have the lowest and only negative values.

Sector. Expectations depend on industry. The printing industry (0.40) and metalworking (0.36) have the highest values. The indicator for the production of construction materials is the lowest and is equal to zero.

## OVERALL ECONOMIC ENVIRONMENT

The assessment of the overall economic environment remained almost unchanged. The value of the corresponding INDEX in May is -0.08 (it was -0.07 in April). The share of those who assess the overall economic environment as bad (17.8\% in April and 18.9\% in May) and the share of those who give positive assessments ( $7.5 \%$ versus $6.9 \%$ in April) has almost not changed). The share of those who consider the overall economic environment to be satisfactory decreased slightly, from $75.3 \%$ to $73.6 \%$.

Enterprise forecasts regarding changes in the overall economic environment for the next six months remained stable: the value of the INDEX OF EXPECTED CHANGES IN THE OVERALL ECONOMIC ENVIRONMENT as of last month is 0.43. The share of "optimists" regarding changes in the overall economic environment decreased slightly from $46.9 \%$ to $43.8 \%$, as did the share of "pessimists," which fell from $3.9 \%$ to $1.8 \%$. The share of those who believe the overall economic environment will not change during the next six months increased from $49.3 \%$ to $54.4 \%$.

The share of those who could not give forecasts about the overall economic environment decreased from $23.4 \%$ to $19.7 \%$.

Fig.6. Overall economic environment, indices


Current overall economic environment ——Expected overall economic environment

## UNCERTAINTY

Half-year expectations
The level of uncertainty in forecasts of both the business activity at the enterprise and the overall economic environment continues to decrease for several months in a row. The share of respondents who could not predict changes in the business activity at the enterprise in six months decreased from $20.7 \%$ to $18.3 \%$. And those unable to predict the overall economic environment in the country shortened from $23.4 \%$ to $19.6 \%$.

Fig.7.The level of the business activity and the overall economic environment uncertainty, \% of respondents


The level of uncertainty regarding the business activity at the enterprise and its dynamics depends on the size of the enterprise. In May, the uncertainty indicator of micro-enterprises increased significantly (from 26\% to $36 \%$ ), while the index of small enterprises remained unchanged at $22 \%$. The indicator of medium-sized enterprises significantly decreased (from $22 \%$ to $15 \%$ ). The uncertainty indicator for large enterprises is the lowest and decreased in May compared to April from 13\% to 10\%.

Fig.8. The share of respondents unable to answer the question about the change in the business activity in six months


Uncertainty about the overall economic environment, as in the case of business activity, depends on the size of the enterprise. The uncertainty indicator for micro-enterprises increased significantly (from $30 \%$ to $41 \%$ ), while the indicator for small enterprises remained unchanged and amounted to $23 \%$ in May. The indicator of mediumsized enterprises decreased significantly, from $26 \%$ to $15 \%$, and the indicator of large enterprises, after a significant increase in April, slightly decreased in May (from 16\% to 13\%) and is the lowest.

Fig.9.The share of respondents unable to answer the question regarding the change in the overall economic environment in the six months


## Three-month expectations

In the three months, the gradual decrease in uncertainty continued for all production indicators. After a slight increase in April in uncertainty for the number of workers, the number of workers on forced leave, and finished goods stocks, these indicators decreased again in May, along with further reductions in uncertainty for other production indicators. Uncertainty indicators remain the highest for debts. The percentage for the uncertainty of accounts payable decreased from $16.3 \%$ to $13.7 \%$. The percentage of uncertainty for accounts receivable and the number of workers on forced leave is the same at $13.1 \%$ (It was $16.4 \%$ and $15.9 \%$, respectively). The lowest level of uncertainty in the three-month horizon remains for exports (the value decreased from $7 \%$ to $4.3 \%$ ).

Fig.10.The share of enterprises unable to forecast the change of the indicator in three months, $\%$ of respondents

|  | May. 22 | Jun. 22 | Jul. 22 | Aug. 22 | Sep. 22 | Oct. 22 | Nov. 22 | Dec. 22 | Jan. 23 | Feb. 23 | Mar. 23 | Apr. 23 | May. 23 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accounts payable | 26.6 | 15.0 | 11.4 | 16.2 | 14.2 | 25.9 | 36.9 | 35.4 | 23.2 | 23.9 | 16.7 | 16.3 | 13.7 |
| Accounts receivable | 27.8 | 15.8 | 11.4 | 16.6 | 14.4 | 25.9 | 37.5 | 35.0 | 23.7 | 24.4 | 17.4 | 16.4 | 13.1 |
| Workers on forced leave | 21.1 | 9.8 | 10.0 | 13.7 | 11.1 | 17.7 | 14.0 | 15.6 | 15.0 | 17.2 | 15.3 | 15.9 | 13.1 |
| Tax arrears | 0.0 | 13.6 | 12.7 | 14.5 | 12.5 | 24.6 | 35.7 | 33.0 | 22.9 | 21.8 | 15.2 | 15.2 | 12.3 |
| Number of workers | 14.7 | 7.6 | 10.7 | 15.6 | 12.9 | 17.5 | 15.4 | 14.3 | 14.0 | 13.4 | 12.8 | 14.1 | 10.3 |
| Stocks of raw materials | 21.4 | 10.6 | 10.9 | 14.1 | 12.7 | 16.0 | 14.4 | 13.6 | 12.4 | 11.6 | 10.5 | 9.8 | 8.3 |
| Stocks of finished goods | 25.7 | 11.4 | 10.2 | 13.5 | 12.7 | 23.1 | 13.8 | 13.6 | 13.4 | 11.3 | 10.0 | 10.4 | 8.0 |
| New orders | 19.3 | 9.3 | 11.1 | 15.3 | 14.0 | 17.3 | 14.8 | 13.6 | 12.2 | 11.6 | 10.0 | 10.0 | 8.0 |
| Sales | 17.4 | 9.3 | 9.4 | 15.1 | 12.1 | 17.3 | 14.2 | 13.6 | 11.3 | 11.5 | 10.2 | 9.3 | 7.1 |
| Production | 16.5 | 10.1 | 8.2 | 14.3 | 11.7 | 17.1 | 14.6 | 13.6 | 12.2 | 11.5 | 10.0 | 8.6 | 7.1 |
| Export | 19.4 | 13.9 | 6.2 | 13.9 | 12.9 | 15.2 | 11.8 | 13.6 | 8.4 | 7.8 | 6.9 | 7.0 | 4.3 |

## ENTERPRISE PERFORMANCE INDICATORS AND SHORT-TERM EXPECTATIONS

 PRODUCTIONChanges compared to the previous month
In May, compared to April, the performance of enterprises slightly deteriorated. The PRODUCTION INDEX decreased from 0.24 to 0.20 . The share of enterprises that reduced production increased slightly, from $11.4 \%$ to $13.7 \%$, while the share of enterprises that increased production remained almost unchanged ( $31 \%$ in May and $30.9 \%$ in April). The share of industries with no changes slightly decreased, from $57.7 \%$ to $55.3 \%$.

Size. A significant difference between enterprises of different sizes was recorded. Among enterprises of different sizes, middle ( 0.24 ) enterprises, whose index is the highest, felt the best. The indicator of small (0.17) and large (0.18) enterprises is approximately the same. Micro-enterprises have the worst indicators; their index is the only one with a negative value ( -0.07 ).

Region. Regional differences are significant (the highest value is 1.00 , and the lowest is -0.25 ). The best results were obtained by enterprises of Poltava (1.00) and Ternopil (0.53) regions and Kyiv city (0.43). The lowest values of the index were recorded for the enterprises of Kharkiv ( -0.25 ), Kirovohrad ( -0.07 ), Chernivtsi, and Zaporizhzhya (-0.03 for each) regions, whose indicators have a negative value.

Sector. Index values vary among sectors and industries. The situation is the best in the chemical (0.25) and food (0.22) industries. The printing industry's index is zero. Metalworking has the lowest and only negative indicator (0.17).

Fig.11. Production indices


## Expected changes in production

The indicator of production plans changed only slightly after last month's decline. The INDEX OF EXPECTED CHANGES IN PRODUCTION increased slightly, from 0.45 to 0.47 . The share of enterprises planning to increase production (from $50.2 \%$ to $48.9 \%$ ) and the share of those planning to reduce it (from $6.1 \%$ to $4.0 \%$ ) decreased. The share of those who do not expect changes increased from $43.8 \%$ to $47.0 \%$.

Size. Production expectations depend on the size of the enterprises. The highest indicator of expectations is for medium enterprises (0.54). The indicator of small (0.46) and large (0.40) enterprises is approximately the same. Microenterprises have the lowest expectations for production volumes, the index of which is 0.14 .

Region. Enterprise plans depend significantly on the region of location. Poltava and Ivano-Frankivsk (1.00 for each), Rivne (0.97), Lviv (0.96), and Ternopil (0.95) regions have the most optimistic plans for production growth. The lowest indicators of expectations are in the Zakarpattya and Zaporizhzhya regions, where the index value is zero.

Sector. Production expectations for three months depend on the industry. The printing (0.57) and food (0.54) industries have the highest indicators. Construction materials production (0.15) and metal processing (0.13) have the lowest indicators.

## SALES

Changes compared to the previous month
In March, the sales REDUCTION rate did not change significantly. The SALES INDEX decreased from 0.23 to 0.20 , which is not a statistically significant change. Both the share of enterprises that decreased sales (from $11.6 \%$ to $13.9 \%$ ) and the share of enterprises that increased sales (from $30.8 \%$ to $31.9 \%$ ) increased slightly. The share of enterprises where there were no changes slightly decreased in May, from 57.5\% to 54.2\%.

Size. The SALES INDEX of medium enterprises (0.24) is higher. The indicator of small (0.18) and large (0.19) enterprises is approximately the same. Micro-enterprises have the lowest and only negative value of the index: 0.03.

Region. The highest value of the SALES INDEX was recorded for the Poltava (1.00), Kyiv (0.62), Ternopil (0.53), and Zakarpattya (0.43) regions. Indicators of Kharkiv (-0.25), Chernivtsi (-0.06), Kirovohrad (-0.04), Volyn, and Zaporizhzhya (-0.03 for each) regions have a negative value.

Sector. The chemical ( 0.33 ) industry, the machine building ( 0.24 ), and the food $(0.23)$ industries have the highest sales index. The lowest and only negative value is for metalworking ( -0.21 ).

## Expected changes in sales

Sales expectations, as well as production expectations, remained unchanged. The EXPECTED CHANGES IN THE SALES INDEX increased only slightly, from 0.46 to 0.48 . The share of respondents who plan to increase sales volumes in the next three months decreased from $51.5 \%$ to $49.8 \%$, and the share of those who expect them to decrease decreased from $6.9 \%$ to $3.8 \%$. At the same time, the percentage of respondents who believe nothing will change has increased from 41.6\% to 46.4\%.

Size. Indicators of expectations for medium (0.54) and small (0.49) enterprises are higher and approximately the same. The indicator of large enterprises is 0.41 . The indicator of micro-enterprises is the lowest and is 0.15 .

Region. The best expectations were recorded in Poltava and Ivano-Frankivsk (1.00 for each), Rivne (0.97), Lviv (0.96), and Ternopil (0.95) regions. On the other hand, the indicators for the Zaporizhzhya and Zakarpattya regions are the lowest and equal to zero.

Sector. Printing (0.57), food industry (0.55), and machine building (0.54) have the highest sales expectations. The expectation index for construction materials production (0.19) and metalworking (0.13) is the lowest.

Fig.12. Sales indices


## EXPORT

## Changes compared to the previous month

In May, compared to April, export indicators decreased slightly. The value of the EXPORT INDEX decreased from 0.11 to 0.06. The share of respondents whose export volume decreased increased from $17.9 \%$ to $19.8 \%$ in April, while the share of enterprises that increased export volume remained almost unchanged at $24.0 \%$ (it was $24.5 \%$ in April). The share of those enterprises whose export volumes did not change is $56.3 \%$ (it was $57.6 \%$ ).

Size. Medium enterprises have the highest and positive values of the EXPORT INDEX ( 0.13 ). The indicator of small ( 0.03 ) and large ( 0.010 ) enterprises is approximately the same. The lowest and only negative is the indicator for micro-enterprises ( -0.44 ).

Region. Poltava ( 0.80 ), Ternopil ( 0.67 ), and Lviv ( 0.55 ) regions have the highest indicators. The lowest value is for Kyiv city ( -0.58 ), Kharkiv ( -0.35 ), and Sumy ( -0.25 ) regions.

Sector. The chemical (0.26) and food (0.11) industries have the highest values of the export index. The printing industry ( -0.29 ) and construction materials production $(-0.27)$ have the lowest index values.

## Expected changes in export

Entrepreneurs do not expect any changes for the next three months. The value of THE INDEX OF THE EXPECTED CHANGES in export is 0.37 , as in the previous month. At the same time, there were some changes in the percentage distribution. The share of those who plan to increase exports (from $39.6 \%$ to $37.4 \%$ ) and the share of companies who plan to reduce it decreased (from $6.2 \%$ to $3.4 \%$ ). The share of those who do not expect changes increased from $54.3 \%$ to $59.2 \%$.

Size. Medium (0.47) and large (0.32) enterprises have the highest rate of export expectations. The indicator of small enterprises is 0.24 . The lowest value is for micro-enterprises and is equal to zero.

Region. The highest value of the INDEX OF EXPECTED EXPORT CHANGES was recorded for enterprises in Ivano-Frankivsk (1.00), Lviv ( 0.91 ), Poltava, and Rivne regions ( 0.90 for each). The business representatives of Zakarpattya, Dnipropetrovsk, Cherkasy, Kirovohrad, and Zaporizhzhya regions have the worst expectations (zero for each).

Sector. The woodworking $(0.43)$ and food $(0.40)$ industries have the highest value of the index of expected changes in exports. The construction materials production, whose index is zero, has the lowest index value.

Fig. 1. Export indices


## STOCKS OF RAW MATERIALS

Changes compared to the previous month
The rate of reduction of raw material stocks remained unchanged. The value of the INDEX OF RAW MATERIALS STOCKS was 0.04 in May (in April, it was 0.02). The share of respondents who reported an increase in raw material stocks over the past month is $20.2 \%$ (it was $21.9 \%$ ). At the same time, the share of respondents who indicated its reduction decreased slightly from $21.1 \%$ to $18.9 \%$. The share of entrepreneurs for whom nothing changed compared to last month increased slightly from $57.0 \%$ to $60.9 \%$

Size. The index of raw materials stocks is higher and positive for medium ( 0.09 ) and large ( 0.03 ) enterprises. The indicator of small enterprises is -0.03 . The lowest is the indicator of micro-enterprises -0.16 .

Region. Poltava (1.00), Ternopil (0.53), and Lviv (0.36) regions have the highest indicators. The indicators of Kyiv city ( -0.48 ) and Vinnytsya region $(-0.460)$ are the lowest.

Sector. The food ( 0.09 ) and light ( 0.07 ) industries have a positive index value; the indicator of the chemical industry is zero. Indicators of other sectors have a negative value, but the lowest are the indicators of the printing industry ( -0.02 ) and machine building ( -0.35 ).

## Expected changes in stocks of raw material

The indicator of expectations for the next three months has remained unchanged for several months in a row: THE INDEX OF EXPECTED CHANGES IN RAW MATERIALS STOCKS is 0.31 (for two months in a row, the value was 0.30 ). The number of respondents who expect the accumulation of raw material stocks has almost not changed and is $36.0 \%$ (it was $37.9 \%$ ), while the share of those who believe that raw material stocks will decrease decreased from $10.2 \%$ to $6.5 \%$. The share of those who believe the situation will not change has increased from $51.9 \%$ to $57.5 \%$.

Size. THE INDEX OF EXPECTED CHANGES IN RAW MATERIALS STOCKS is higher for medium-sized ( 0.41 ) enterprises, while the indicator for small ( 0.28 ) and large ( 0.24 ) is about the same. Microenterprises have the lowest value of the indicator, which is zero.

Region. Poltava, Ivano-Frankivsk (1.00 for each), Ternopil (0.95), Lviv (0.93), and Odesa (0.79) regions have the highest INDEX OF THE EXPECTED CHANGES IN RAW MATERIALS STOCKS. The lowest value of the index is for Kyiv city ( -0.40 ) and Sumy region (-0.11).

Sector. The food ( 0.42 ) and light ( 0.22 ) industries have the highest rate of expectations regarding changes in raw material stocks. The lowest and only negative is the index value of machine building $(-0.08)$.

Fig.14. Stocks of raw material indices


## STOCKS OF FINISHED GOODS

## Changes compared to the previous month

The indicator of stocks of finished goods remained unchanged. The value of the corresponding index in May is 0.31 (it was -0.35 in April). At the same time, there were no significant changes in the percentage distribution. The share of respondents who reported a decrease in stocks of finished goods is $40.6 \%$ (it was $40.0 \%$ in April), and the share of respondents whose stocks increased is $5.5 \%$ (it was $5.2 \%$ ). The share of respondents who did not feel any changes at all is 54.5\% (it was 54.2\%).

Size. The value of the index is the highest for large enterprises ( -0.18 ). The average indicator is -0.33 . The small and micro enterprises have the lowest index value ( -0.43 ).

Region. The value of the index depends on the region. For Kyiv enterprises, the indicator is 0.10 . The indicator of the Chernihiv and Poltava regions is zero. The indicators of all other regions have a negative value, but the lowest is the index of Ivano-Frankivsk (-1.00), Ternopil (-0.95), and Lviv (-0.93) regions.

Sector. Only metalworking has an indicator with a positive (0.09) value. Indicators of the food (-0.47) and printing $(-0.75)$ industries have the lowest value.

## Expected changes in stocks of finished goods

In the future, entrepreneurs do not expect significant changes in the indicator. The INDEX OF EXPECTED CHANGES IN FINISHED GOODS STOCKS changed little, increasing from -0.31 to -0.29 . The share of respondents who believe that finished goods stocks will decrease in the next three months decreased (from $37.7 \%$ to $33.5 \%$ ), and so did the share of those who expect them to increase (from $5.1 \%$ to $2.9 \%$ ). The percentage of those who believe that nothing will change has increased from 57.3\% to 63.7\%.

Size. The value of the indicator depends on the size of the enterprise. Micro-enterprises have the highest value of the index is for $(-0.16)$. The indicator for large enterprises is -0.23 and for medium enterprises -0.31 . The lowest value of the index is for small enterprises $(-0.40)$.

Region. Sumy (0.17) and Chernihiv (0.09) regions have the highest indicator of expectations. The indicator of the Poltava, Cherkasy, Kirovohrad, Zakarpattya, and Vinnytsya regions is zero. The indicator of expectations for all other regions has a negative value and is the lowest for Ivano-Frankivsk and Ternopil regions (-1.00 for each region).

Sector. The value of the index is the highest for machine building ( -0.13 ). Indicators of food ( -0.41 ), printing, and light ( -0.33 for each sector) industries are the lowest.

Fig.15. Stocks of finished goods indices


## NEW ORDERS

Changes compared to the previous month
The growth dynamics of new orders worsened. The NEW ORDERS INDEX in May, compared to April, decreased from 0.23 to 0.18 . It happened due to a decrease in the share of those who had an increase in the number of new orders from $31.1 \%$ to $29.4 \%$ and a simultaneous increase in those who reported a decrease in their number from $11.5 \%$ to $13.9 \%$. The share of those who did not feel any changes almost did not change and is $56.8 \%$ (it was 57.5\%).

Size. The value of the index is approximately in the same range for large ( 0.22 ), medium ( 0.18 ), and small (0.16) enterprises. At the same time, the indicator of micro-enterprises has a negative value and is -0.05 .

Region. The new orders grew the most in Poltava (1.00), Kyiv (0.55), and Ternopil (0.53) regions, while in Sumy (0.15 ), Kharkiv and Volyn regions ( -0.12 for each) there is the greatest decline in new orders.

Sector. The best situation with new orders in the previous month was for the machine building (0.21) and food $(0.20)$ industries. Metal processing has the lowest indicator with a negative index value (-0.12).

## Expected changes in new orders

Entrepreneurs do not expect any changes in the next three months. The VALUE OF THE INDEX OF THE EXPECTED CHANGES IN NEW ORDERS is 0.45 for the second month in a row. It also means no significant changes in percentage distribution. The share of those who expect an increase in new orders is $47.6 \%$ (it was $48.8 \%$ ). At the same time, the share of respondents expecting a reduction in the volume of new orders decreased slightly from $5.2 \%$ to $3.7 \%$. The share of those who do not expect any changes in the next three months increased from $46.0 \%$ to 48.7\%.

Size. The indicator of expectations is the highest for small (0.47) and medium (0.51) enterprises. The indicator of large enterprises is 0.41 . The indicator of expectations of micro-enterprises is the lowest and is 0.11 .

Region. Index values have significant regional differences. In Poltava and Ivano-Frankivsk (1.00 for each) regions, the business expects an increase in new orders to a greater extent than in other regions. At the same time, the indicators of the Zakarpattya and Zaporizhzhya regions are the lowest and equal to zero.

Sector. Food (0.52) and light (0.42) industries and machine building (0.41) have the best expectations for new orders. The production indicators of construction materials production (0.19) and metalworking (0.24) are the lowest.

Fig.16. New orders indices


## ENTERPRISE PERFORMANCE INDICATORS AND SHORT-TERM EXPECTATIONS

## NEW ORDERS

## Availability of orders

In May 2023, the average term of new order availability for surveyed enterprises decreased for the first time in 2023 and amounted to two months (median value). For comparison, in January-April 2023, this term was longer and amounted to three months on average.

The share of enterprises with orders for only up to 2 months increased from 44\% in April 2023 to 52\% in May. These are, in particular, enterprises with orders for less than one month (10\%) and those with orders for 1-2 months (42\%).

Fig.17. Period for which enterprises are provided with orders (\% of respondents)


Size. Medium and large enterprises are provided with orders for a longer period than small and micro enterprises. Thus, the average term of order availability for medium and large enterprises in May was three months. About a third of these enterprises have orders for six months or more. At the same time, for small enterprises, the average time for order availability was two months, and for micro-businesses - 1.5 months. About two-thirds of these enterprises have orders for up to two months only.

Sector. In May 2023, the longest average term for order availability was recorded in the chemical industry and machine building: an average of four months (median value) ${ }^{1}$.

Instead, the shortest terms for order availability - one month on average - were recorded in the metal production, metalworking, and woodworking industry. It is also worth noting that more than $75 \%$ of enterprises in the woodworking industry and in construction materials production have orders for only up to two months. These shares are larger than among other sectors.

Region. There are significant differences in order availability among enterprises in different regions ${ }^{2}$. The average term for order availability is the longest for enterprises of the Kyiv region, where it was ten months on average (median value).

Also, these terms are relatively long for enterprises of Vinnytsya ( 6 months), Volyn ( 6 months), and Poltava ( 5.5 months) regions. On the other hand, the shortest average period of orders - only one month - was recorded in Rivne, Kharkiv, Khmelnytskyy, Chernivtsi, and Chernihiv regions, and only one and a half months - in Dnipropetrovsk and Zhytomyr regions and Kyiv city.

## ACCOUNT RECEIVABLES

## Changes compared to the previous month

The accounts receivable indicator improved. The value of the ACCOUNTS RECEIVABLE INDEX decreased from -0.20 to 0.26. The share of businesses reporting account receivables reduction increased from $33.4 \%$ to $35.7 \%$, while the share of those reporting increased debt decreased significantly from $12.4 \%$ to $8.8 \%$. The share of those for whom nothing has changed remained almost unchanged at 55.4\% (it was $54.2 \%$ last month).

Size. The situation with receivables is approximately the same and significantly better for micro-, small ( -0.31 each), and medium-sized ( -0.27 ) enterprises. The indicator of large enterprises is the highest and is -0.19 .

Region. Significant regional differences in the values of this indicator were recorded. The highest increase in account receivables was recorded in Kyiv city (0.33), Vinnytsya, and Kyiv ( 0.19 for each) regions. At the same time, in Ternopil and Ivano-Frankivsk regions (-1.00 each), the indicator of account receivables decreased the most.

Sector. The machine building (0.07) and woodworking (0.05) industries have the highest and positive index values. The food ( -0.37 ) and chemical $(-0.27)$ industries have the lowest indicators.

## Expected changes in account receivables

In three months, entrepreneurs do not expect changes in the indicator. The INDEX OF EXPECTED CHANGES IN ACCOUNT RECEIVABLES is -0.32 as last time. The share of respondents who expect an increase in this indicator has not changed and is $4.8 \%$, as well as the share of those who expect it to decrease ( $38.2 \%$ as the last month). The share of those who believe nothing will change also remained unchanged - 57.0\%.

Size. The large ( -0.22 ) and micro-enterprises $(-0.23)$ have a higher indicator. The index of medium ( -0.35 ) and small companies ( -0.44 ) is significantly lower and better.

Region. The Vinnytsya (0.21) and Kirovohrad (0.13) regions, Kyiv city (0.10), and Zaporizhzhya (0.03) region have the highest, and positive values are the indicator. The indicators of Sumy, Ternopil, and Ivano-Frankivsk regions are the lowest (-1.00 for each).

Sector. The highest indicator of expectations for an increase in account receivables is for the printing industry (0.14 ), and the lowest indicator is for the chemical ( -0.32 ) and food ( -0.39 ) industries.

[^0]Fig.18. Account receivables indices


May. 22 Jun. 22 Jul. 22 Aug. 22 Sep. 22 Oct. 22 Nov. 22 Dec. 22 Jan. 23 Feb. 23 Mar. 23 Apr. 23 May. 23 Jun. 23
$\longrightarrow$ Accounts receivable $\longrightarrow$ Accounts receivable exp.

## ACCOUNT PAYABLES

## Changes compared to the previous month

In May, compared to April, the payables index improved, as did the receivables index. The ACCOUNT PAYABLES InDEX decreased from -0.29 to -0.24 . The share of respondents who reported an increase in debt almost halved from $8.3 \%$ to $4.7 \%$. At the same time, the share of those for whom account payables decreased almost did not change and amounted to $34.5 \%$ (it was $33.0 \%$ ). The share of those for whom nothing has changed over the past month has slightly increased from $58.6 \%$ to $60.9 \%$.

Size. The indicator of small enterprises $(-0.39)$ is much better. The indicator of large ( -0.22 ), medium-sized $(-0.29)$ and micro-enterprises $(-0.25)$ is approximately in the same range.

Region. Significant regional differences were recorded. The situation with the accumulation of account payables is the worst in Kyiv ( 0.23 ), Cherkasy, Zaporizhya ( 0.03 for each), and Kirovohrad ( 0.02 ) regions. The best situation is in the Ivano-Frankivsk and Ternopil regions (-1.00 for each).

Sector. The highest indicator is for machine building ( -0.07 ). The lowest value is for the food ( -0.39 ) and printing (0.31 ) industries.

## Expected changes in account payables

Entrepreneurs do not expect changes in the indicator for the next three months. The INDEX OF THE EXPECTED CHANGES IN ACCOUNT PAYABLES is -0.33 as the last month. The share of companies who expect a reduction in payables increased slightly from $36.8 \%$ to $37.2 \%$. And the share of those who expect an increase in account payables has not changed and is $2.5 \%$. The share of respondents who believe nothing will change is $60.3 \%$ (it was $60.8 \%$ ).

Size. The indicator of expected payables is higher for large ( -0.22 ) and micro-enterprises ( -0.26 ). The indicator of medium ( -0.37 ) and small ( -0.44 ) enterprises is lower and significantly better.

Region. The indicator of expectations for account payables is positive and higher than zero for Vinnytsya (0.21), Kirovohrad (0.05), and Zaporizhzhya (0.03) regions. The indicator of expectations for the Cherkasy, Poltava, and Zakarpattya regions is zero. The Sumy, Ivano-Frankivsk, and Ternopil regions (-1.00 for each) have the lowest indicators.

Sector. The metalworking ( -0.16 ) and chemical ( -0.19 ) industries have the highest indicators. The food industry ( 0.41 ), production of construction materials, and woodworking industries ( -0.33 for each) have the lowest value of the indicator.

Fig.19. Account payables indices


## TAX ARREARS

## Changes compared to the previous month

The rate of tax arrears reduction has slowed down. The tax arrears index in May compared to April almost did not change and is -0.25 (it was -0.26 ). At the same time, there were some changes in the percentage distribution. The share of enterprises reporting a reduction in tax arrears over the past month decreased slightly from $30.1 \%$ to $28.8 \%$, while the share of respondents who indicated an increase in tax arrears remained almost unchanged at 2.0\% (it was $2.7 \%$ ). The share of those who believe there were no changes has slightly increased from $67.2 \%$ to 69.2\%.

Size. Tax arrears indicators are the highest for large enterprises ( -0.12 ). The indicator for medium ( -0.29 ) and micro-enterprises $(-0.28)$ is approximately the same. The lowest value is for small enterprises $(-0.35)$.

Region. There are significant differences in the value of this indicator by region. Khmelnytskyy (0.20), Volyn (0.06), and Poltava (0.05) regions have the highest and positive index values. The Ivano-Frankivsk and Ternopil regions (1.00 for each) have the lowest indicators.

Sector. The woodworking industry has the highest value of the tax arrears indicator, which is equal to zero. The index values of the printing $(-0.0)$ and food $(-0.35)$ industries are the lowest.

## Expected changes in tax arrears

For the next three months, entrepreneurs expect a slight deterioration of the indicator. The index of the EXPECTED CHANGES IN TAX ARREARS increased slightly from -0.30 to -0.28 . The share of those predicting a decrease in tax arrears decreased from $33.2 \%$ to $31.2 \%$. And the share of those expecting it to increase slightly decreased from $2.0 \%$ to $1.2 \%$. The share of those who do not expect changes increased from $64.8 \%$ to $67.6 \%$.

Size. Indicators of expectations regarding tax arrears are better for small ( -0.39 ) and medium ( -0.33 ) enterprises. The indicator of microenterprises is -0.24 . The index of large enterprises $(-0.15)$ is higher and worse than others.

Region. The indicator of expectations of Vinnytsya (0.19) and Kirovohrad (0.05) regions is the highest and positive. The indicator of the Ivano-Frankivsk and Ternopil regions and Kyiv city is the lowest (-1.00 for each).

Sector. The highest indicator of tax arrears expectations is for metalworking, which has a positive (0.06) value. Indicators of other industries have a negative value, but the lowest is the indicator for the printing ( -0.40 ) and food (-0.39) industries.

Fig.20. Tax arrears indices


## NUMBER OF WORKERS

Changes compared to the previous month
The employment reduction rate slightly accelerated, although no significant changes were observed. The number of workers index increased from -0.07 in April to -0.03 in May. The share of respondents who reported a reduction in the number of workers involved in all enterprise operations decreased from $11.2 \%$ to $8.8 \%$. And the share of those who indicated an increase increased slightly from $2.3 \%$ to $4.5 \%$. The share of those for whom nothing has changed remained almost unchanged at $86.7 \%$ (it was $86.5 \%$ ).

Size. The indicator is the highest for medium-sized enterprises and is equal to zero. The indicator of small and large enterprises is the same, -0.05 . For micro-enterprises, the index value is the lowest and is -0.17 .

Region. The indicators of the Chernihiv region (0.18), Kyiv city (0.14), Kyiv (0.07), and Odesa (0.06) regions are higher than zero. Kharkiv ( -0.39 ), Volyn ( -0.21 ), and Chernivtsi $(-0.20)$ regions have the lowest index values.

Sector. Indicators of the chemical (0.08), woodworking (0.07), and metalworking ( 0.04 ) industries are the highest. Indicators of machine building ( -0.18 ) and light ( -0.12 ) industries are the lowest.

## Expected changes in the number of workers

In the next three months, entrepreneurs do not expect significant changes in the indicator: the INDEX OF THE expected changes in the number of workers is 0.03 (it was 0.04 last month). Changes in the percentage distribution are insignificant. The share of respondents who believe that the number of workers at the enterprise will increase has almost not changed ( $5.2 \%$ in May against $5.6 \%$ in April), as well as the share of those who expect a reduction in the number of workers, which is $3.6 \%$ (it was $3.1 \%$ ). The share of those who believe nothing will change has not changed since last month (91.2\%).

Size. The indicator of medium enterprises (0.07) is the highest. The indicator of large enterprises is slightly lower but also positive ( 0.03 ). The indicators of small ( -0.03 ) and micro-enterprises $(-0.10)$ have a negative value.

Region. The value of the index of expected changes in the number of workers significantly depends on the region where the enterprise is located. The highest indicator of expectations was recorded in the city of Kyiv ( 0.19 ), Kyiv, and Kharkiv ( 0.11 for each) regions. The three regions have the lowest and negative values of the indicator: Zhytomyr ( -0.05 ), Sumy ( -0.012 ), and Khmelnytskyy ( -0.13 ).

Sector. The woodworking (0.13) industry has the highest index of expectations. Light industry ( -0.02 ) and construction materials production $(-0.08)$ have the lowest and negative indicator.

Fig.21. Number of workers indices


## WORKERS ON FORCED LEAVE

## Changes compared to the previous month

Indicators of the number of workers on forced leave remain unchanged. The number of workers on forced leave INDEX in May is -0.22 (It was -0.23 in April). The share of business representatives who reported an increase in the number of workers on forced leave slightly increased (from $2.5 \%$ to $3.7 \%$ ), and so did the share of those who indicated a decrease (from $25.3 \%$ to $26.6 \%$ ). At the same time, the share of those for whom the situation has not changed over the past month has slightly decreased from $72.2 \%$ to $69.7 \%$.

Size. Expectations indicators for micro ( -0.05 ) and large ( -0.13 ) enterprises are higher and about the same. At the same time, the indicators of medium ( -0.26 ) and small ( -0.32 ) enterprises are significantly lower.

Region. Among the various regions, the growth of the indicator is observed to the greatest extent for enterprises of Khmelnytskyy (0.20), Vinnytsia (0.19), and Kyiv (0.05) regions, which have a positive value. And a decrease in the number of workers on forced leave was most often reported in Ivano-Frankivsk and Ternopil regions (-1.00 for each).

Sector. Machine building, whose index value is the only positive one (0.04), has worse indicators regarding the number of workers on forced leave. The indicators of the printing $(-0.36)$ and food $(-0.34)$ industries are the lowest.

Fig.22. Number of workers on forced leave indices


## Expected change in the number of workers on forced leave

Enterprises with workers on forced leave do not expect significant changes in the next three months. The INDEX OF EXPECTED CHANGES IN THE NUMBER OF WORKERS ON FORCED LEAVE is -0.25 (for two months in a row, it was -0.25 ). No significant changes were recorded in the percentage distribution. The share of enterprises at which an increase in the number of workers on forced leave is expected is $0.9 \%$ (it was $0.5 \%$ ). The share of those who believe that the number of such workers at their company will decrease is $27.3 \%$ (it was $27.3 \%$ ). The share of those who believe there will be no changes is $71.8 \%$ (it was $72.4 \%$ ).

Size. Indicators of micro ( -0.10 ) and large ( -0.16 ) enterprises are higher and about the same. At the same time, the indicators of medium $(-0.27)$ and small ( -0.38 ) enterprises are significantly lower.

Region. The indicator of Poltava (0.05) and Kyiv (0.04) regions has the highest and positive value. The indicators of Lviv, Ternopil, and Ivano-Frankivsk regions (-1.00 for each) are the lowest.

Sector. Metalworking and machine building have the highest expectation for the number of workers on forced leave which is zero for each industry. The lowest is the indicator of the food ( -0.38 ) and printing ( -0.36 ) industries.

## SKILLED AND UNSKILLED WORKERS

The indicator of difficulty in finding skilled workers decreased after a substantial increase in April, while the indicator of difficulty in finding unskilled workers remained unchanged. The value of the INDEX OF FINDING SKILLED WORKERS decreased from 0.25 to 0.21 . The value of the INDEX OF FINDING UNSKILLED WORKERS is 0.11 as the previous month.

The share of company managers who indicated that it is more difficult to find skilled workers decreased from $26.9 \%$ to $24.0 \%$. At the same time, the share of those who find it more difficult to find unskilled workers changed slightly ( $14.3 \%$ versus $13.7 \%$ ). The percentage of those who find it easier to find skilled workers remained almost unchanged at $3.1 \%$ (from 4.3\%), as well as the share of those who find it easier to find unskilled workers, which is $5.6 \%$ (it was $4.9 \%$ ). The share of those who do not feel any changes in the search for skilled workers increased from $68.8 \%$ to $72.9 \%$, and for unskilled workers, the percentage is $80.1 \%$ (it was $81.3 \%$ ).

Fig.23. Skilled and unskilled workers indices


## Skilled workers

Size. Depending on the size of the enterprise, the indicator is lower and about the same for micro (0.16) and medium (0.18) enterprises. For small and large enterprises, the value of the index is higher, the same, and is 0.24 .

Region. Significant regional differences in the labor market were recorded. It is easiest to find skilled workers in Lviv (-0.04) and Odesa (-0.15) regions, whose indicators have a negative value. Chernihiv and Poltava regions have the greatest difficulty in finding skilled workers (1.00 for each).

Sector. The food (0.02) and chemical (0.13) industries have fewer difficulties in finding skilled workers. It is more difficult to find skilled workers in the machine building (0.42) and woodworking (0.32) industries.

## Unskilled workers

Size. It is easiest to find unskilled workers for micro-enterprises whose indicator has a negative value (-0.09). The indicator of small enterprises is 0.05 . The index value for medium ( 0.12 ) and large ( 0.13 ) enterprises is about the same.

Region. It is easiest to find unskilled workers in the city of Kyiv (-0.05), Chernivtsi (-0.07), and Sumy (-0.67) regions, whose indicators have a negative value. The biggest difficulties with finding unskilled workers are in Zhytomyr (0.77), Dnipropetrovsk (0.95), and Poltava (0.55) regions.

Sector. The worst indicators for finding unskilled workers are observed in the metalworking (0.24) and food (0.15) industries; construction materials production has the lowest indicator value (-0.04).

# SPECIAL PART OF THE SURVEY <br> THE IMPACT OF WAR ON ENTERPRISES <br> Challenges for businesses in wartime 

The main problem for business related to the full-scale Russian invasion in May 2023 was the increase in the prices of raw materials and supplies. This issue comes out on top for the third month in 2023: as in March and April, in May, it was the most common problem for businesses surveyed. However, in May, the absolute value of this obstacle decreased: 59\% of enterprises complained about it, while during the previous six months, the corresponding share of respondents did not fall below $68 \%$.

Difficulties transporting raw materials or goods through the territory of Ukraine took second place in the rating of obstacles. This problem affected $38 \%$ of surveyed enterprises. It is slightly less than in March and April, when there were $43 \%$ of such enterprises.

The problem of reduced demand for products or services remains relevant for about a third of enterprises, as it has been since January 2023. In May, it was indicated by $36 \%$ of respondents, as a result of which it took third place in the rating of obstacles.

The share of enterprises that pointed to electricity, water, or heat supply outages has slightly increased compared to the previous month. If in April 2023 they hindered the activity of $29 \%$ of surveyed businesses, then in May-32\%.

It is significantly less than the period between November 2022 and January 2023, when this number reached its maximum value as of today. These outages prevented the operation of approximately $80 \%$ of the businesses surveyed. But due to a decrease in the frequency of reports of other obstacles, the problem of power, water, or heat supply cuts rose to fourth place in the ranking of obstacles caused by a full-scale Russian invasion.

It shared this place with the issue of work hazards, which also took fourth place in the ranking of obstacles in May. $32 \%$ of respondents said that it is dangerous to work. In April, there was a decrease in the frequency of reports about work hazards - up to $25 \%$ of respondents. But in May, when Russia intensified its missile attacks, the share of respondents talking about this problem increased again.

Disruption of supply chains ranked sixth in the ranking of obstacles to business activity in May: 30\% of respondents pointed to this problem. With a minimal difference, the seventh place was occupied by labor shortage due to conscription and migration of workers, which was reported by $29 \%$ of enterprises.

Both of these issues were mentioned somewhat less frequently in May than in April 2023, when disruption of supply chains was an obstacle for $33 \%$ of respondents and a lack of workers for $31 \%$.

The eighth place in this rating was occupied by the lack of working capital, which became a problem for $13 \%$ of respondents, and the ninth place by state regulation of the exchange rate, which $8 \%$ complained about. It is worth noting that the lack of working capital was reported significantly less often in May 2023 than in April, when $23 \%$ of surveyed enterprises indicated this problem.

Damage to property or goods due to military actions and lack of fuel shared the tenth place in the ranking of business obstacles. Each of these problems was reported by $7 \%$ of respondents. Up to $6 \%$ of enterprises indicated the remaining problems - blocking of tax invoices and corruption. Additionally, $9 \%$ of businesses surveyed in May 2023 said they had not faced any obstacles.

Challenges for businesses by size. Large enterprises more often than smaller businesses report difficulties transporting raw materials or goods through the territory of Ukraine ( $46 \%$ of these enterprises). Also, as the size of the surveyed enterprises increases, the negative impact on them of such obstacles as work hazards and disruption of supply chains increases.

Fig.24.The most important problems for the surveyed businesses


Thus, the share of enterprises that said in May that it was dangerous to work increased from $28 \%$ among micro and $25 \%$ among small enterprises to $45 \%$ among large ones. And the share of those who faced supply chain disruption ranges from $18 \%$ among micro-enterprises to $35 \%$ among large ones.

Instead, micro-enterprises more often than larger ones report such obstacles as a decrease in demand (48\%), electricity, water, or heat supply cuts (62\%), and damage to property or goods due to military actions (15\%). At the same time, micro-business is noted by a smaller share of respondents who are hindered by a lack shortage (16\%).

Challenges for businesses by sector. The top concern for businesses surveyed in May 2023 - rising prices for raw materials or supplies - had the strongest impact on the printing and woodworking industries, with more than $70 \%$ of businesses in these industries pointing to this issue ${ }^{3}$.

Representatives of the chemical industry also most often report difficulties transporting raw materials or goods through the territory of Ukraine (54\%). A decrease in demand and electricity, water, or heat supply outages were felt in the machine building industry to a greater extent than in others $58 \%$ and $52 \%$ of respondents, respectively). In May, representatives of metallurgy and machine building spoke most often about the fact that it is dangerous to work (more than $40 \%$ of respondents in each of these industries).

Challenges for businesses by region. The surveyed businesses of the Dnipropetrovsk, Zhytomyr, Ivano-Frankivsk, Lviv, Sumy, and Khmelnytskyy regions and Kyiv city most often complain about the increase in prices for raw materials or supplies. In these regions, $90 \%$ or more of the respondents reported this problem ${ }^{4}$.

Difficulties transporting raw materials or goods through the territory of Ukraine were the most significant problem for business in the Vinnytsya and Zaporizhzhya regions (more than 80\%).
Enterprises of the Vinnytsya and Poltava regions most often reported a decrease in demand (more than $80 \%$ ). Additionally, in the same areas and Kharkiv and Chernivtsi regions, enterprises most often reported electricity, water, or heat supply outages in May (more than $80 \%$ of respondents).

The war impact on capacity/production volumes
In May 2023, one of the highest levels of capacity utilization over the entire survey period was recorded. In May, $8 \%$ of enterprises reported they were operating at full capacity ( $100 \%$ or more), which was at the level of the previous month ( $8 \%$ ). At the same time, the share of enterprises operating at almost full capacity ( $75 \%-99 \%$ ) remained almost at the level of the previous month - $49 \%$ (it was $47 \%$ in March and $50 \%$ in April). As a result, the combined share of enterprises operating at near full and full capacity was $57 \%$. It is one of the highest figures for all waves of the survey. For comparison, the corresponding indicator was the highest for all survey waves in April - 58\%. Thus, in May, capacity utilization remained at the previous month's level.

In May, 2\% of surveyed enterprises reported they stopped their activities during the war. This indicator remains low from July 2022, in the range of $2 \%-4 \%$. Also, the share of enterprises operating at less than $25 \%$ of pre-war capacity remains low - only $2 \%$ in May ( $2 \%$ in April). Additionally, $11 \%$ of enterprises worked in May at $25 \%-49 \%$ of pre-war production capacities ( $14 \%$ in April). As a result, in May, the lowest share of enterprises operating at less than half the capacity compared to the pre-war period was recorded - only $\mathbf{1 6 \%}$ of enterprises.

[^1]Fig.25.The impact of the war on the work of enterprises (\% of respondents)


Results for businesses by size. Medium-sized businesses continue to show the best production recovery rate. Compared to the pre-war period, $68 \%$ of medium-sized enterprises worked at almost full and full capacity in May, which is the highest figure since the beginning of the survey (also $68 \%$ in April). The corresponding indicator is also high for large businesses - $56 \%$ ( $60 \%$ in April). Small businesses also showed the highest results during the survey in May - 56\% of enterprises worked almost at full and full capacity ( $54 \%$ in April). However, for microbusinesses, the indicator remains low - only 25\% in May (29\% in April). Thus, the corresponding indicator for micro-enterprises remains significantly lower than in the peak of recovery in autumn 2022.

Fig.26.The share of enterprises operating almost at full and full capacity (75-99\%, 100\%, and more) compared to the pre-war period (by enterprise size, \%)


As of May, $15 \%$ of micro business representatives were not working ( $20 \%$ in April, $11 \%$ in March). Microenterprises are more sensitive to changes in the business environment, which results in worse scores for most indicators. For comparison, large and medium-sized businesses have fully resumed work (0\% of respondents did not work in May). Among small enterprises, $2 \%$ of respondents did not renew operations. Thus, micro-business remains more sensitive to the challenges of wartime.

Results for businesses by sector. The food industry remains the leader in the recovery of the processing industry. In May, $73 \%$ of food industry enterprises were operating at near full and full capacity, the highest figure for the sector over the entire observation period (also 73\% in April). The printing industry occupies second place with $60 \%$ ( $62 \%$ in April and $58 \%$ in March). At the same time, the capacity of light industry enterprises decreased significantly from $65 \%$ in April to 55\% in May. In contrast, capacity utilization in construction materials production increased from 30\% in April to $38 \%$ in May. That's a good sign for an industry demonstrating the worst recovery results overall. The most difficult situation is in metallurgy and metalworking, where only $29 \%$ of enterprises worked at almost full and full capacity ( $22 \%$ in March and $20 \%$ in April).

Fig.27.The share of industrial enterprises operating almost at full and full capacity (75-99\%, 100\% and more) compared to the prewar period, \% of respondents by sector


Results by region. As during the previous waves of the survey, $100 \%$ of enterprises in Ivano-Frankivsk, Lviv, Ternopil and Poltava regions continued to work almost at full capacity in May. The indicator is also high in Rivne (100\%), Odesa (97\%) and Vinnytsya regions (88\%).

At the same time, the situation remains the most difficult in the front-line Zaporizhzhya and Kharkiv regions, where only $3 \%$ and $15 \%$ of enterprises, respectively, worked at high capacity utilization. The enterprises of Kyiv city ( $24 \%$ ), Sumy (35\%), Cherkasy (33\%), and Kirovohrad (31\%) regions also worked at low capacity. Thus, recovery challenges depend not only on a business's geographic location and proximity to the front lines but also on logistical, energy, and other challenges that vary somewhat by region.

## THE WAR IMPACT ON THE ENTERPRISES' EXPORT ACTIVITIES

Within the thirteenth wave of the survey, $63 \%$ of respondents (among those who were able to answer) were or are exporters. At the same time, $33 \%$ of enterprises have never exported, and another $4 \%$ could not answer the question.

As of May 2023, among exporters, $80 \%$ of respondents indicated that they exported before the war and continued to export during the last 12 months. Another $1 \%$ of enterprises started exporting for the first time during the war (during the last 12 months). At the same time, $19 \%$ of enterprises exported before the war started but had no exports during the last 12 months. Thus, the trend of recent months continues that part of the business cannot overcome new challenges for export activity and resume exports.

Fig.28. The impact of the war on export activity as of May 2023 (\% of the exporters surveyed)


Results for businesses by size. According to the results of May, a regularity was again recorded regarding the export activity dependence on the size of the enterprise. Among micro-businesses, $44 \%$ of enterprises exported before the war but had no export activity during the last 12 months. There is also a high share of enterprises that cannot resume exports among small businesses - $25 \%$. The situation is somewhat better among middle-sized exporters $-19 \%$ of respondents did not export in the last 12 months. The best situation was among large businesses, where the corresponding indicator was $9 \%$. Thus, large business is traditionally the leader in the recovery of export activity.

Fig.29. Share of exporters who did not export during the last 12 months, by size of enterprises (\% of exporters surveyed) ${ }^{5}$


Results for businesses by sector. The obtained data indicate that the most difficult situation with the export recovery remains in construction materials production. For example, $46 \%$ of the industry's enterprises exported before the war but had no exports during the last 12 months ( $50 \%$ in March and April). The situation is also difficult in metallurgy and machine building, where the corresponding figure is $26 \%$. In contrast, the best situation is in the chemical industry, where all respondents had exports during the last 12 months. In the woodworking industry, only $12 \%$ of enterprises had no exports during the last 12 months, although they exported before the war.

[^2]Fig.30. Share of exporters who did not export during the last 12 months, by industry (\% of surveyed exporters)


Results by region. Throughout all waves of the monthly survey, the available data do not allow us to draw conclusions about clear regional patterns due to insufficient subsamples in certain regions. However, in some regions, all enterprises (among those who were able to respond) resumed exports, including the Vinnytsya, IvanoFrankivsk, Lviv, Poltava, Ternopil, and Chernihiv regions. The most difficult situation is in the Dnipropetrovsk and Zhytomyr regions, where $72 \%$ and $65 \%$, respectively, had no exports during the last 12 months, although they had it before the war.

## Export problems after February 24, 2022

Most of the surveyed exporters face obstacles while exporting. In May, obstacles were absent in only $16 \%$ of respondents. Issues of logistical obstacles dominate among the main problems for exporters. Logistical problems occupy the top 3 of the ranking of obstacles: queues at the western borders of Ukraine ( $68 \%$ ), the impossibility of exporting by sea (44\%), and the lack of railway cars/trucks/drivers (33\%).

Fig.31. Obstacles faced by the enterprise during export after February 24, $2022^{6}$


[^3]At the same time, the issue of complex customs formalities also ranks third (33\%). It shows that the problems related to the work of customs remain urgent. At the same time, $13 \%$ of exporters indicated corruption at customs.

The problem of demand remains important - $24 \%$ of exporters indicate a drop in demand for the company's products/services. Another 14\% complain about the need for reorientation from the CIS markets. However, $12 \%$ of respondents report that they cannot meet demand in foreign markets.

Results for business by size ${ }^{7}$. The relevance of some problems in May differs for exporters of different sizes. Queues at the western borders of Ukraine are the biggest challenge for big business $-74 \%$ of respondents. At the same time, $56 \%$ of micro, $63 \%$ of small, and $66 \%$ of medium-sized enterprises complain about the problem. Also, large businesses feel the problem of the maritime blockade the most $-62 \%$ of respondents compared to $33 \%$ of micro, $31 \%$ of small, and $37 \%$ of medium-sized businesses. At the same time, micro-businesses complain more often than others about complicated customs formalities (44\%) and the need to reorient from the CIS markets (22\%). The inability to produce enough goods to meet demand in foreign markets is relevant for companies of different sizes (from 11\% for micro and large to $13 \%$ for medium-sized enterprises).

Results for business by sector. The relevance of obstacles differs for enterprises of different industries. Queues at the western borders are a problem for $82 \%$ of light industry exporters and $72 \%$ of food industry exporters. The inability to export by sea is more important for representatives of machine building (61\%) and the food industry (48\%). Woodworking enterprises often complain about the lack of wagons/trucks/drivers (43\%).

Complex customs formalities hinder the food industry the most (a similar situation existed before the change in the methodology of the question). $44 \%$ of enterprises in the industry complain about formalities. Additionally, $18 \%$ of food exporting enterprises complain about corruption at the Ukrainian customs. It is one of the highest indicators among all industries (the highest in the chemical industry-27\%). It may reflect the high complexity of formalities for the export of food products.

Chemical and machine-building enterprises report more often than others that it is difficult for them to reorient themselves from the CIS markets to other markets ( $27 \%$ and $22 \%$, respectively). Machine-building enterprises also felt a drop in demand for products the most ( $56 \%$ of respondents). Thus, machine building is most affected by demand problems. At the same time, woodworking enterprises are often unable to meet demand in foreign markets (43\% of respondents).

## The main export directions

According to the results of May, the European Union is undoubtedly the main export destination for Ukrainian business. Over the past three months, $76 \%$ of surveyed active exporters exported to EU countries ( $76 \%$ in January 2023). At the same time, another $3 \%$ supplied their products to the countries of the European Free Trade Association ( $9 \%$ in January). Such results confirm that Ukrainian companies, taking into account the logistical challenges during the war, still have the greatest opportunities to preserve the European export direction. In addition, $32 \%$ of enterprises exported to Moldova ( $30 \%$ in January).

Exports to China remain low: only 3\% of those surveyed as of May (5\% of those surveyed in January). Also, $8 \%$ of enterprises export to Turkey. And another 30\% of respondents export to other countries.

[^4]Fig.32. Please indicate to which countries your company exported during the last three months? (\% of surveyed exporters who were able to answer)

|  | Jun. 22 | Sep. 22 | Jan. 23 | May. 23 |
| :---: | :---: | :---: | :---: | :---: |
| European Union | 89 | 81 | 76 | 77 |
| Moldova | 22 | 28 | 30 | 32 |
| Other countries | 14 | 26 | 30 | 30 |
| Eurasian Economic Union except Russia | 24 | 13 | 24 | 13 |
| Turkey | 2 | 5 | 14 | 8 |
| China | 4 | 3 | 5 | 3 |
| EFTA | 2 | 4 | 9 | 3 |

Results for business by size. It should be noted that the European Union remains the main export destination for enterprises of various sizes ${ }^{8}$. At the same time, as the size of the entities increases, the export diversification also increases. For example, $70 \%$ of micro-, $75 \%$ of small, $75 \%$ of medium and $82 \%$ of large enterprises exported to EU countries. Large businesses are more likely to have partners in China ( $4 \%$ large versus $0 \%$ micro, $3 \%$ small, and $2 \%$ medium) and Moldova ( $37 \%$ of microenterprises versus $20 \%$ micro, $31 \%$ small, and $29 \%$ medium).

Results for business by sector. The EU is the main export destination for all country's industrial sectors. In the woodworking industry all 100\% of exporters export to the EU (as in January). Exports to the EU in light industry are also high - $96 \%$ of respondents. At the same time, the products of the Ukrainian chemical industry ( $22 \%$ of the industry's exporters) and machine building (38\%) were most often exported to the countries of the Eurasian Economic Union, except for Russia. Food industry products are exported to China (8\% of respondents) and Turkey (13\%) more often than in other industries.

## Number of trading partners

In May, respondents were asked for the fourth time to estimate the number of countries to which they exported products during the last three months. More surveyed exporters (58\%) export to two-five countries (54\% in January). $14 \%$ of exporter respondents supplied their products to six-ten countries ( $15 \%$ in January). The share of enterprises that exported to 11 or more countries decreased somewhat - to $5 \%$ in May ( $10 \%$ in January). At the same time, the share of enterprises exporting to only one country increased from $21 \%$ in January to $24 \%$ in May. It may reflect some slowing of recovery.

Fig.33. Number of countries to which the company exported during the last three months (\% of surveyed exporters who were able to answer)


[^5]Results for business by size ${ }^{9}$. May's results confirm that the wartime companies' export capabilities increase as their size increases. SMEs often have more customers in just one country. For example, $34 \%$ of small, $25 \%$ of medium, and $15 \%$ of large enterprises indicated that they supply products to only one country. At the same time, medium-sized enterprises export to six-ten countries most often - $18 \%$ of respondents. Large businesses often have trading partners in eleven or more countries - 11\%.

Results for business by sector. In May, enterprises of the woodworking industry had the widest export geography. Among them, $14 \%$ of enterprises exported to eleven or more countries, and $21 \%$ to six-ten countries. There is also a wide geography of exports in the food industry - $9 \%$ of enterprises exported to eleven or more countries and $14 \%$ to six-ten countries. In the chemical industry, the highest share of enterprises export to only one country ( $38 \%$ of respondents). There are no enterprises in metallurgy that export to 11 or more countries.

## GOVERNMENT POLICY <br> Assessment of government policy to support business

In May 2023, positive assessments of government policy regarding business support increased slightly from $13 \%$ in April to $16 \%$. At the same time, this share is smaller compared to the positive assessments of $20 \%-24 \%$ recorded in the previous five months: from November 2022 to March 2023.

As before, businesses mostly neutrally assess government policy regarding business support: 60\% of respondents. The percentage of negative assessments did not change: $11 \%$. And $13 \%$ of respondents could not assess the state policy on business support.

Fig.34. Assessment of government policy to support business


Assessment of government policy to support business by business size. Among the micro-enterprises, the lowest share of respondents gave a positive assessment of the state policy on business support (3\%). For comparison, among larger business groups, the respective shares are from $17 \%$ to $19 \%$. Also, among micro-enterprises, the largest share of respondents with negative assessment of this policy (21\%) and the largest share of those who could not assess it (31\%) were recorded.

Assessment of government policy to support business by sector. Most often, representatives of the printing industry ( $27 \%$ of respondents) give positive assessments to the state policy on business support ${ }^{10}$. At the same time, respondents of machine building (21\%), construction materials production (21\%), and light industry (20\%) have the largest share of negative assessments.

[^6]Assessment of government policy to support business by region. The highest level of state business support policy positive assessments was recorded in May 2023 in Ivano-Frankivsk, Lviv, Ternopil, and Odesa regions (more than 40\%). At the same time, the largest shares of negative assessments are among businesses in Sumy (70\%) and Vinnytsya (50\%) regions.

## SURVEY METHODOLOGY

This report presents the results of the thirteenth New Monthly Enterprises Survey "Ukrainian Business in the Wartime". The data was collected using a combination of several methods of data collection: a telephone interview of business representatives filling their responses into the online checklist by the interviewers, and in a small number of cases, self-completion of the checklist by representatives of enterprises who, during the previous telephone contact, expressed a desire to independently enter data in the online checklist. All responses (filled by the respondents themselves and provided to the interviewers) were collected in one database. After the survey, IER experts monitored and cleaned up the data and analyzed the responses.

In this survey, we continue examining the indicators of the business climate and conditions studied by the IER in the quarterly surveys of industrial enterprises within the project "Business Survey". It includes indices that in numerical terms show monthly changes in such important business indicators as production and sales, exports, raw materials and supplies stocks, the new orders number, etc., and business expectations for their changes for the next three- and six-month periods.

These indices are calculated according to a single methodology. We count responses as +1 when the company responds that the rate has increased, 0 if it has not changed, and -1 if it has decreased. For example, if out of 100 respondents, 20 indicated an increase in production, 50 respondents its reduction, and 30 said that everything remained unchanged, the corresponding value of the index will be -0.30. A positive (negative) index value means that the share of enterprises where production has increased is larger (smaller) than the number of those where production has decreased. For a more accurate measurement at the micro-data level, each answer is weighted, taking into account the enterprise size by the number of workers.

Such indices help control the dynamics of changes in these indicators, compare them over time and quickly assess the general direction of changes in business conditions and the situation at the enterprises.

The field phase of the survey lasted from May 16 to May 31, 2023.

## SAMPLE

A total of 563 enterprises were surveyed in the thirteenth wave. The companies are located in Vinnytsya, Volyn, Dnipropetrovsk, Zakarpattya, Zaporizhzhya, Zhytomyr, Ivano-Frankivsk, Kyiv, Kirovohrad, Lviv, Mykolayiv, Odesa, Poltava, Rivne, Sumy, Ternopil, Kharkiv, Khmelnytskyy, Cherkasy, Chernivtsi and Chernihiv regions and in Kyiv city. In each of these regions, from 3 to 45 enterprises were surveyed ${ }^{11}$.

The majority of the sample consisted of industrial enterprises - 529 enterprises or $94 \%$ of the sample. Among them, the food industry, light industries and machine building, prevail. Six enterprises belong to the agricultural sector ( $1.1 \%$ of the sample) and 15 to trade ( $2.7 \%$ of the sample). Nine enterprises, or $1.6 \%$ of the sample, work in the service sector. And four enterprises ( $0.7 \%$ ) belong to the construction sector.

These are companies of various sizes, determined by the number of workers among the enterprises surveyed. Among them: micro-enterprises (up to 10 workers) - 61 or $11 \%$ of the sample, small (from 11 to 50 workers) 171 or $30 \%$ of the sample, medium-sized (from 51 to 250 workers) - 212 or $38 \%$ of the sample, and large (more than 250 workers) -119 or $21 \%$ of the sample.

[^7]
## APPENDIX 1. Survey results in figures

## Sample

Enterprises' size

|  | Number | Share of sample |
| :--- | :---: | :---: |
| Micro- | 61 | $11 \%$ |
| Small | 171 | $30 \%$ |
| Middle | 212 | $38 \%$ |
| Large | 119 | $21 \%$ |
| TOTAL | 563 | $100 \%$ |

Sector/ industry

|  | Number | Share of sample |
| :--- | :---: | :---: |
| Agriculture | 6 | $1,1 \%$ |
| Metal production and metalworking | 24 | $4 \%$ |
| Chemical industry | 24 | $4 \%$ |
| Machine building | 33 | $6 \%$ |
| Woodworking industry | 27 | $5 \%$ |
| Construction materials production | 29 | $5 \%$ |
| Food industry | 193 | $34 \%$ |
| Light industry | 49 | $9 \%$ |
| Printing industry | 15 | $3 \%$ |
| Other industries | 135 | $24 \%$ |
| Construction | 4 | $0,7 \%$ |
| Trade | 15 | $2,7 \%$ |
| Services | 9 | $1,6 \%$ |
| TOTAL | 563 | $100 \%$ |

Performance indicators of enterprises and business environment by size, indices of change (May2023)

|  | Total | Micro | Small | Middle | Large |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Production | 0,20 | $-0,07$ | 0,17 | 0,24 | 0,18 |
| Expected changes in production | 0,47 | 0,14 | 0,46 | 0,54 | 0,40 |
| Sales | 0,20 | $-0,03$ | 0,18 | 0,24 | 0,19 |
| Expected sales changes | 0,48 | 0,15 | 0,49 | 0,54 | 0,41 |
| Export | 0,06 | $-0,44$ | 0,03 | 0,13 | 0,01 |
| Expected changes in exports | 0,37 | 0,00 | 0,24 | 0,47 | 0,32 |
| Account receivables | $-0,26$ | $-0,31$ | $-0,31$ | $-0,27$ | $-0,19$ |
| Expected changes in account receivables | $-0,32$ | $-0,23$ | $-0,44$ | $-0,35$ | $-0,22$ |
| Account payables | $-0,29$ | $-0,25$ | $-0,39$ | $-0,29$ | $-0,22$ |
| Expected changes in accounts payable | $-0,33$ | $-0,26$ | $-0,44$ | $-0,37$ | $-0,22$ |
| Tax arrears | $-0,25$ | $-0,28$ | $-0,35$ | $-0,29$ | $-0,12$ |
| Expected changes in tax arrears | $-0,28$ | $-0,24$ | $-0,39$ | $-0,33$ | $-0,15$ |
| Stocks of raw materials | 0,04 | $-0,16$ | $-0,03$ | 0,09 | 0,03 |
| Expected changes in stocks of raw material | 0,31 | 0,00 | 0,28 | 0,41 | 0,24 |
| Stocks of finished goods | $-0,31$ | $-0,43$ | $-0,43$ | $-0,33$ | $-0,18$ |
| Expected changes in stocks of finished goods | $-0,29$ | $-0,16$ | $-0,40$ | $-0,31$ | $-0,23$ |
| New orders | 0,18 | $-0,05$ | 0,16 | 0,18 | 0,22 |
| Expected changes in new orders | 0,45 | 0,11 | 0,47 | 0,51 | 0,41 |


| Number of workers | $-0,03$ | $-0,17$ | $-0,05$ | 0,00 | $-0,05$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Expected changes in the number of workers | 0,03 | $-0,10$ | $-0,03$ | 0,07 | 0,03 |
| Number of workers on forced leave | $-0,22$ | $-0,05$ | $-0,32$ | $-0,26$ | $-0,13$ |
| Expected changes in the number of workers on <br> forced leave | $-0,25$ | $-0,10$ | $-0,38$ | $-0,27$ | $-0,16$ |
| Skilled workers | 0,21 | 0,16 | 0,24 | 0,18 | 0,24 |
| Unskilled workers | 0,11 | $-0,09$ | 0,05 | 0,12 | 0,13 |
| Business activity assessment | $-0,07$ | $-0,33$ | $-0,09$ | $-0,05$ | $-0,06$ |
| Expected changes in business activity | 0,43 | 0,23 | 0,54 | 0,43 | 0,37 |
| Assessment of the business environment | $-0,08$ | $-0,39$ | $-0,15$ | $-0,02$ | $-0,09$ |
| Expected changes in the business environment | 0,43 | 0,24 | 0,49 | 0,41 | 0,40 |
| Do you plan to expand your company's activities in <br> the next two years | 0,21 | 0,04 | 0,25 | 0,18 | 0,28 |
| How do you assess your company's business <br> activity in the current month, compared to the <br> same period last year in 2022? | 0,43 | 0,17 | 0,48 | 0,43 | 0,43 |

Performance indicators of enterprises and business environment by sector, indices of change (May 2023)

|  | Total | Metal producti on and metalw orking | Chemical Industry | Machine building | Woodwor king industry |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Production | 0,20 | -0,17 | 0,25 | 0,09 | 0,08 |
| Expected changes in production | 0,47 | 0,13 | 0,22 | 0,50 | 0,39 |
| Sales | 0,20 | -0,21 | 0,33 | 0,24 | 0,04 |
| Expected sales changes | 0,48 | 0,13 | 0,22 | 0,54 | 0,43 |
| Export | 0,06 | 0,07 | 0,26 | -0,18 | -0,07 |
| Expected changes in exports | 0,37 | 0,20 | 0,29 | 0,28 | 0,43 |
| Account receivables | -0,26 | -0,23 | -0,27 | 0,07 | 0,05 |
| Expected changes in account receivables | -0,32 | -0,20 | -0,32 | -0,23 | -0,29 |
| Account payables | -0,29 | -0,25 | -0,19 | -0,07 | -0,15 |
| Expected changes in accounts payable | -0,33 | -0,16 | -0,19 | -0,28 | -0,33 |
| Tax arrears | -0,25 | -0,06 | -0,12 | -0,10 | 0,00 |
| Expected changes in tax arrears | -0,28 | 0,06 | -0,12 | -0,16 | -0,19 |
| Stocks of raw materials | 0,04 | -0,04 | 0,00 | -0,35 | -0,04 |
| Expected changes in stocks of raw material | 0,31 | 0,14 | 0,04 | -0,08 | 0,13 |
| Stocks of finished goods | -0,31 | 0,09 | -0,21 | -0,22 | -0,09 |
| Expected changes in stocks of finished goods | -0,29 | -0,19 | -0,22 | -0,13 | -0,26 |
| New orders | 0,18 | -0,12 | 0,17 | 0,21 | 0,07 |
| Expected changes in new orders | 0,45 | 0,24 | 0,27 | 0,41 | 0,35 |
| Number of workers | -0,03 | 0,04 | 0,08 | -0,18 | 0,07 |
| Expected changes in the number of workers | 0,03 | 0,00 | 0,00 | 0,04 | 0,13 |
| Number of workers on forced leave | -0,22 | -0,12 | -0,15 | 0,04 | -0,11 |
| Expected changes in the number of workers on forced leave | -0,25 | 0,00 | -0,17 | 0,00 | -0,06 |
| Skilled workers | 0,21 | 0,24 | 0,13 | 0,42 | 0,32 |
| Unskilled workers | 0,11 | 0,24 | 0,08 | 0,08 | 0,00 |
| Business activity assessment | -0,07 | -0,26 | -0,04 | -0,45 | -0,11 |


| Expected changes in business activity | 0,43 | 0,27 | 0,24 | 0,32 | 0,24 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Assessment of the business environment | $-0,08$ | $-0,30$ | $-0,17$ | $-0,41$ | $-0,22$ |
| Expected changes in the business environment | 0,43 | 0,24 | 0,18 | 0,30 | 0,33 |
| Do you plan to expand your company's <br> activities in the next two years | 0,21 | 0,36 | 0,25 | 0,16 | 0,33 |
| How do you assess your company's business <br> activity in the current month, compared to the <br> same period last year in 2022? | 0,43 | 0,25 | 0,36 | 0,06 | 0,27 |


|  | Total | Construction <br> materials <br> productions | Food <br> Industry | Light <br> industry | Printing <br> industry |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Production | 0,20 | 0,21 | 0,22 | 0,20 | 0,00 |
| Expected changes in production | 0,47 | 0,15 | 0,54 | 0,42 | 0,57 |
| Sales | 0,20 | 0,21 | 0,23 | 0,20 | 0,07 |
| Expected sales changes | 0,48 | 0,19 | 0,55 | 0,42 | 0,57 |
| Export | 0,06 | $-0,27$ | 0,11 | 0,07 | $-0,29$ |
| Expected changes in exports | 0,37 | 0,00 | 0,40 | 0,21 | 0,22 |
| Account receivables | $-0,26$ | $-0,24$ | $-0,37$ | $-0,19$ | $-0,15$ |
| Expected changes in account receivables | $-0,32$ | $-0,29$ | $-0,39$ | $-0,21$ | $-0,14$ |
| Account payables | $-0,29$ | $-0,27$ | $-0,39$ | $-0,25$ | $-0,31$ |
| Expected changes in accounts payable | $-0,33$ | $-0,33$ | $-0,41$ | $-0,21$ | $-0,29$ |
| Tax arrears | $-0,25$ | $-0,13$ | $-0,35$ | $-0,29$ | $-0,40$ |
| Expected changes in tax arrears | $-0,28$ | $-0,19$ | $-0,39$ | $-0,19$ | $-0,40$ |
| Stocks of raw materials | 0,04 | $-0,07$ | 0,09 | 0,07 | $-0,20$ |
| Expected changes in stocks of raw material | 0,31 | 0,08 | 0,42 | 0,22 | 0,07 |
| Stocks of finished goods | $-0,31$ | $-0,28$ | $-0,47$ | $-0,41$ | $-0,75$ |
| Expected changes in stocks of finished goods | $-0,29$ | $-0,15$ | $-0,41$ | $-0,33$ | $-0,33$ |
| New orders | 0,18 | 0,17 | 0,20 | 0,12 | 0,00 |
| Expected changes in new orders | 0,45 | 0,19 | 0,53 | 0,42 | 0,38 |
| Number of workers | $-0,03$ | $-0,07$ | $-0,03$ | $-0,12$ | 0,00 |
| Expected changes in the number of workers | 0,03 | $-0,08$ | 0,01 | $-0,02$ | 0,00 |
| Number of workers on forced leave | $-0,22$ | $-0,13$ | $-0,34$ | $-0,15$ | $-0,36$ |
| Expected changes in the number of workers <br> on forced leave | $-0,25$ | $-0,10$ | $-0,38$ | $-0,19$ | $-0,36$ |
| Skilled workers | 0,21 | 0,25 | 0,20 | 0,30 | 0,21 |
| Unskilled workers | 0,11 | $-0,04$ | 0,15 | 0,09 | 0,07 |
| Business activity assessment | $-0,07$ | $-0,24$ | $-0,02$ | $-0,14$ | $-0,07$ |
| Expected changes in business activity | 0,43 | 0,22 | 0,52 | 0,44 | 0,50 |
| Assessment of the business environment | $-0,08$ | $-0,25$ | 0,02 | $-0,19$ | $-0,20$ |
| Expected changes in the business <br> environment | 0,43 | 0,23 | 0,54 | 0,23 | 0,57 |
| Do you plan to expand your company's <br> activities in the next two years | 0,21 | 0,00 | 0,12 | 0,13 | 0,40 |
| How do you assess your company's business <br> activity in the current month, compared to <br> the same period last year in 2022? | 0,43 | 0,41 | 0,40 | 0,49 | 0,67 |
|  |  |  |  |  |  |

The impact of war

Challenges faced by business in wartime
Challenges faced by the business during wartime, by business size (May 2023), \% of respondents by group

|  | Total | Micro | Small | Middle | Large |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Damage to property/goods due to <br> hostilities | $7 \%$ | $15 \%$ | $6 \%$ | $6 \%$ | $7 \%$ |
| Unsafe to work | $32 \%$ | $28 \%$ | $25 \%$ | $31 \%$ | $45 \%$ |
| Electricity, water or heat supply <br> outages | $32 \%$ | $62 \%$ | $36 \%$ | $21 \%$ | $31 \%$ |
| Decrease in demand for <br> products/services <br> Lack of fuel | $36 \%$ | $48 \%$ | $38 \%$ | $31 \%$ | $35 \%$ |
| Difficulties transporting raw <br> materials or finished goods <br> throughout Ukraine | $7 \%$ | $8 \%$ | $8 \%$ | $6 \%$ | $8 \%$ |
| Labor shortage due to conscription <br> and/or migration | $29 \%$ | $16 \%$ | $29 \%$ | $31 \%$ | $33 \%$ |
| Rising prices for raw <br> materials/supplies/goods | $59 \%$ | $57 \%$ | $58 \%$ | $61 \%$ | $59 \%$ |
| Disruption of supply chains | $30 \%$ | $18 \%$ | $30 \%$ | $30 \%$ | $35 \%$ |
| Lack of working capital | $13 \%$ | $18 \%$ | $14 \%$ | $11 \%$ | $12 \%$ |
| Corruption | $2 \%$ | $2 \%$ | $1 \%$ | $4 \%$ | $3 \%$ |
| State regulation of the exchange <br> rate | $8 \%$ | $8 \%$ | $11 \%$ | $8 \%$ | $2 \%$ |
| Blocking of tax invoices | $6 \%$ | $8 \%$ | $8 \%$ | $37 \%$ | $4 \%$ |
| Did not face problems | $9 \%$ | $3 \%$ | $6 \%$ | $13 \%$ | $9 \%$ |

Challenges facing business in wartime, by sector (May 2023), \% of respondents by group

|  | Metal <br> production <br> and <br> metalworking | Chemical <br> Industry | Machine <br> building | Woodworking <br> industry |
| :--- | :---: | :---: | :---: | :---: |
| Damage to property/goods due <br> to hostilities | $50 \%$ | $58 \%$ | $64 \%$ | $70 \%$ |
| Unsafe to work | $38 \%$ | $54 \%$ | $36 \%$ | $26 \%$ |
| Electricity, water or heat supply <br> outages | $42 \%$ | $25 \%$ | $58 \%$ | $52 \%$ |
| Decrease in demand for <br> products/services | $29 \%$ | $29 \%$ | $52 \%$ | $30 \%$ |
| Lack of fuel | $46 \%$ | $33 \%$ | $45 \%$ | $19 \%$ |
| Difficulties transporting raw <br> materials or finished goods <br> throughout Ukraine | $33 \%$ | $50 \%$ | $36 \%$ | $15 \%$ |
| Labor shortage due to <br> conscription and/or migration | $25 \%$ | $33 \%$ | $36 \%$ | $41 \%$ |
| Rising prices for raw <br> materials/supplies/goods | $0 \%$ | $8 \%$ | $24 \%$ | $19 \%$ |
| Disruption of supply chains | $8 \%$ | $17 \%$ | $15 \%$ | $22 \%$ |
| Lack of working capital | $21 \%$ | $8 \%$ | $18 \%$ | $4 \%$ |
| Corruption | $0 \%$ | $8 \%$ | $12 \%$ | $0 \%$ |


|  | Metal <br> production <br> and <br> metalworking | Chemical <br> Industry | Machine <br> building | Woodworking <br> industry |
| :--- | :---: | :---: | :---: | :---: |
| State regulation of the exchange <br> rate | $8 \%$ | $0 \%$ | $12 \%$ | $7 \%$ |
| Blocking of tax invoices | $0 \%$ | $13 \%$ | $3 \%$ | $0 \%$ |
| Did not face problems | $8 \%$ | $0 \%$ | $3 \%$ | $11 \%$ |

Challenges facing business in wartime, by sector (May2023), (continued) \% of respondents by group

|  | Construction materials production | Food industry | Light industry | Printing industry |
| :---: | :---: | :---: | :---: | :---: |
| Damage to property/goods due to hostilities | 55\% | 63\% | 65\% | 73\% |
| Unsafe to work | 45\% | 41\% | 45\% | 27\% |
| Electricity, water or heat supply outages | 52\% | 33\% | 31\% | 40\% |
| Decrease in demand for products/services | 41\% | 27\% | 35\% | 20\% |
| Lack of fuel | 24\% | 31\% | 20\% | 13\% |
| Difficulties transporting raw materials or finished goods throughout Ukraine | 24\% | 24\% | 31\% | 33\% |
| Labor shortage due to conscription and/or migration | 28\% | 27\% | 35\% | 13\% |
| Rising prices for raw materials/supplies/goods | 21\% | 9\% | 22\% | 27\% |
| Disruption of supply chains | 3\% | 5\% | 6\% | 0\% |
| Lack of working capital | 10\% | 6\% | 8\% | 7\% |
| Corruption | 10\% | 8\% | 8\% | 7\% |
| State regulation of the exchange rate | 3\% | 2\% | 10\% | 0\% |
| Blocking of tax invoices | 0\% | 1\% | 4\% | 0\% |
| Did not face problems | 7\% | 10\% | 12\% | 13\% |

## Assessment of the government policy on business support

Assessment of the government policy on business support by business size (May 2023), \% of respondents

|  | Total | Micro | Small | Middle | Large |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Positive | $16 \%$ | $3 \%$ | $17 \%$ | $19 \%$ | $17 \%$ |
| Neutral | $60 \%$ | $44 \%$ | $56 \%$ | $62 \%$ | $68 \%$ |
| Negative | $11 \%$ | $21 \%$ | $15 \%$ | $8 \%$ | $7 \%$ |
| Don't know / Didn't answer | $13 \%$ | $31 \%$ | $12 \%$ | $10 \%$ | $8 \%$ |

Assessment of the government policy on business support by sector (May 2023), \% of respondents by group

|  | Metal <br> production <br> and <br> metalworking | Chemical <br> Industry | Machine <br> building | Woodworking <br> industry |
| :--- | :---: | :---: | :---: | :---: |
| Positive | $8 \%$ | $4 \%$ | $12 \%$ | $4 \%$ |
| Neutral | $58 \%$ | $88 \%$ | $61 \%$ | $52 \%$ |
| Negative | $17 \%$ | $4 \%$ | $21 \%$ | $15 \%$ |
| Don't know / Didn't answer | $17 \%$ | $4 \%$ | $6 \%$ | $30 \%$ |

Assessment of the government policy on business support by sector (May 2023), (continued) \% of respondents by group

|  | Construction <br> materials <br> production | Food industry | Light industry | Printing <br> industry |
| :--- | :---: | :---: | :---: | :---: |
| Positive | $14 \%$ | $19 \%$ | $16 \%$ | $27 \%$ |
| Neutral | $66 \%$ | $62 \%$ | $53 \%$ | $60 \%$ |
| Negative | $21 \%$ | $4 \%$ | $20 \%$ | $7 \%$ |
| Don't know / Didn't answer |  | $15 \%$ | $10 \%$ | $7 \%$ |

Availability of orders
Availability of orders, by size (May2023), \% of respondents by group

|  | Total | Micro | Small | Middle | Large |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Less than 1 month | $10 \%$ | $29 \%$ | $13 \%$ | $5 \%$ | $6 \%$ |
| 1-2 months | $42 \%$ | $35 \%$ | $54 \%$ | $41 \%$ | $30 \%$ |
| 3-5 months | $26 \%$ | $21 \%$ | $26 \%$ | $25 \%$ | $32 \%$ |
| $\mathbf{6 - 1 1}$ months | $15 \%$ | $8 \%$ | $4 \%$ | $19 \%$ | $28 \%$ |
| $\mathbf{1 2}$ months or more | $7 \%$ | $6 \%$ | $4 \%$ | $11 \%$ | $4 \%$ |

Availability of orders, by sector (May 2023), \% of respondents by group

|  | Metal <br> production <br> and <br> metalworking | Chemical <br> Industry | Machine <br> building | Woodworking <br> industry |
| :--- | :---: | :---: | :---: | :---: |
| Less than 1 month | $14 \%$ | $0 \%$ | $7 \%$ | $16 \%$ |
| 1-2 months | $46 \%$ | $22 \%$ | $39 \%$ | $60 \%$ |
| 3-5 months | $23 \%$ | $61 \%$ | $26 \%$ | $12 \%$ |
| 6-11 months | $14 \%$ | $17 \%$ | $26 \%$ | $8 \%$ |
| $\mathbf{1 2}$ months or more | $5 \%$ | $0 \%$ | $3 \%$ | $4 \%$ |

Availability of orders, by sector (May 2023) (continued), \% of respondents by group

|  | Construction <br> materials <br> production | Food industry | Light industry | Printing <br> industry |
| :--- | :---: | :---: | :---: | :---: |
| Less than 1 month | $8 \%$ | $10 \%$ | $13 \%$ | $0 \%$ |
| 1-2 months | $68 \%$ | $44 \%$ | $45 \%$ | $60 \%$ |
| 3-5 months | $24 \%$ | $32 \%$ | $11 \%$ | $20 \%$ |
| 6-11 months | $0 \%$ | $9 \%$ | $32 \%$ | $20 \%$ |
| 12 months or more | $0 \%$ | $6 \%$ | $0 \%$ | $0 \%$ |


[^0]:    ${ }^{1}$ This analysis does not consider enterprises in the agriculture, construction, trade, and services sectors and enterprises included in the "Other production" category.
    ${ }^{2}$ Regions in which no enterprises were surveyed are not included in the comparison. Mykolayiv region is also not included in the comparison due to the insufficient number of respondents. For more details, see the "Sample" section.

[^1]:    ${ }^{3}$ This analysis does not consider enterprises in the sectors of agriculture, construction, trade, and services, as well as enterprises included in the category "Other production."
    ${ }^{4}$ Regions in which no enterprises were surveyed are not included in the comparison. Mykolayiv region is also not included in the comparison due to an insufficient number of respondents. For more details, see the "Sample" section.

[^2]:    ${ }^{5}$ Data for May are not available for micro-enterprises due to insufficient sub-sample size.

[^3]:    ${ }^{6}$ The sum of responses may exceed $100 \%$, as respondents were able to choose several answers.

[^4]:    ${ }^{7}$ The sub-sample size is insufficient for micro-enterprises, so there is no analysis of the results for enterprises of this size.

[^5]:    ${ }^{8}$ The sub-sample size is insufficient for micro-enterprises, so there is no analysis of the results for enterprises of this size.

[^6]:    ${ }^{9}$ Results for micro-enterprises are not available due to insufficient sub-sample size.
    ${ }^{10}$ This analysis does not consider enterprises in agriculture, construction, trade, and services and companies included in the "Other production" category.

[^7]:    ${ }^{11}$ The survey indicated the region in which the enterprise was located at the time of the survey.

