

MANUFACTURING – METHODOLOGICAL NOTES

1. Business tendency survey in industry was introduced in CSO of Poland in June 1992. Sample covers 3500 manufacturing entities pertaining to C section according NACE Rev.2. Due to introduction of NACE Rev.2 business tendency data were recalculated starting from January 2000. The survey is carried out on the basis of two questionnaires – monthly and quarterly (data collected and published in January, April, July, October).
2. Survey data are aggregated according to:
 - size classes: 10–49 persons employed, 50–249 persons employed, 250 and more persons employed;
 - divisions of the NACE Rev.2;
 - Main Industrial Groupings:
 - production of consumer goods (including production of durable consumer goods and non-durable consumer goods – the last one included production of food and beverages),
 - production of investment goods,
 - production of intermediate goods
 - voivodships (data are collected since 2011).Data by the NACE Rev. 2 divisions and by voivodships are compiled following the enterprise (entity) method.
3. The questionnaires comprise questions related to the basic features of economic situation in manufacturing: general economic situation of the unit, order-books, production, stocks, financial situation, employment, prices, production capacity, capacity utilization, duration of assured production, factors limiting activity, competitive position.
4. The questionnaires comprise diagnostic questions (concerning current month or last three months) and prognostic questions (concerning next three months).
5. On the basis of gathered replies there are calculated indicators that are weighted by the value of sold manufacturing production in current prices. Their range varies from -100 to +100. Positive value means good business situation, negative – bad business situation. Increase (decrease) of indicator means improving (worsening) of the business situation from the entities' point of view.
6. The business tendency indicators of the monthly questionnaire referring to questions number: 1, 2, 3, 4, 5, 6, 7, 9, 12, 13, 14, 15, 16, 17, 18 are calculated as balances (differences) between percentage of the entities choosing first variant of the answer

(advantageous from the entity point of view) and the third variant (disadvantageous from the entity point of view). Indicators referring to questions 8, 10 and 11 are calculated as balances (differences) between percentage of the entities choosing third variant and first variant.

7. General business climate indicator is a composite one. It is calculated as an arithmetic average of the balances of the answers to questions from the monthly questionnaire concerning current (question 2) and expected (question 12) economic situation. Economic climate is “good” when the value of the indicator is greater than 0. Otherwise the climate is assessed as “bad”.
8. The business tendency indicators of the quarterly questionnaire referring to questions: 19, 24, 25 and 26 are calculated as balances (differences) between percentage of the entities choosing the first variant of the answer (advantageous from the entity point of view) and the third variant (disadvantageous from the entity point of view). The indicator referring to question 20 is calculated as balance out of three variants of this answer: as the arithmetic average of percentage of the entities choosing first and second variant (advantageous from the entity point of view) minus percentage of the entities choosing third variant (disadvantageous from the entity point of view). The indicators referring to questions 21 and 22 are "quantitative" and they are calculated as arithmetic average of all answers to this question: in case of question 21 the percentage of capacity utilization is used, and in case of question 22 – the average number of months of the guaranteed production period. The indicators referring to question 23 are calculated separately for each variant as a percentage of the entities choosing given variant of all respondents pointing out particular factors limiting activity.
9. The indicator of domestic order-books does not originate directly from business tendency survey in industry but it is calculated according to the following formula based on the data collected in this survey:

$$\text{Domestic order-books} = 2 * \left(\begin{array}{c} \text{domestic and foreign} \\ \text{order-books} \\ \text{(diagnosis – question 3;} \\ \text{forecast – question 13)} \end{array} \right) - \left(\begin{array}{c} \text{foreign} \\ \text{order-books} \\ \text{(diagnosis – question 5;} \\ \text{forecast – question 14)} \end{array} \right)$$

10. Archival monthly and quarterly data according to (NACE Rev 1.1) comprise series up to the end of 2008.