

The Data: Coverage, Periodicity, and Timeliness

Coverage characteristics

**Purpose of the study:** The Business Tendency Survey (BTS) intends to produce indicators that will show short-term tendencies in the manufacturing industry, by monitoring the assessments of the managers about the recent past, current situation and their expectations about the future course of business conditions.

**Data description:** The statistics cover indicators produced for predicting the course of economic activities by tracking the short-term tendencies in the manufacturing industry.

**Statistical concepts and definitions:**

**Balance:** The difference between the percentage of the "more optimistic" (increased, will increase, more optimistic, above normal, improved) responses and the percentage of "more pessimistic" (decreased, will decrease, more pessimistic, below normal, deteriorated) responses given to the survey questions.

**Real Sector Confidence Index (RSCI):** The RSCI acts as a summary indicator constructed by joint evaluation of the responses given to different questions of the BTS for the purpose of tracking general views of the real sector representatives about general economic outlook.

**Classification system:** "Statistical Classification of Economic Activities" (Nomenclature Statistique des Activités Économiques) (NACE Rev.2) is used for classification of the manufacturing enterprises covered by the survey.

Size groups code list is used for the number of employees working in production process. Code list categories are listed below:

**[SG1]:** Denotes enterprises of which the number of employees working in the production process is less than 50. This size group is excluded from the scope.

**[SG2]:** Denotes enterprises of which the number of employees working in the production process is between 50 and 249.

**[SG3]:** Denotes enterprises of which the number of employees working in the production process is between 250 and 499.

**[SG4]:** Denotes enterprises of which the number of employees working in the production process is greater than 500.

**Statistical population:** Manufacturing industry.

**Reference area:** Türkiye.

**Geographical level:** None.

**Sector coverage:** The survey covers two-digit manufacturing sub-sectors having codes between 10 and 33 defined by NACE Rev.2 sector classification.

**Time coverage:** The BTS has been conducted by the CBRT since 1987 and the results are available since that date. In 2007, after being harmonized with the international standards, the BTS became a part of "Joint Harmonised European Union (EU) Programme of Business and Consumer Surveys". It has been implemented and published as part of the Programme with the financing contribution of the EU since then.

**Coverage, n.e.s.:** The scope of the survey is formed by applying cut-off to the total production value of the local units at three-digit sectors in the frame of Industrial Production Index (IPI) and updated every year. The local units which are liquidated, which stop production or change their activities are excluded from the scope of the survey.

**Exceptional circumstances on coverage:** None.

**Statistical unit:** Enterprises in the manufacturing industry.

**Base period:** None.

	<b>Reference period:</b> Current month.						
	<b>Unit of measure:</b>						
	<table border="1"> <thead> <tr> <th>Variable/Indicator</th> <th>Unit of measure</th> </tr> </thead> <tbody> <tr> <td>All Variables</td> <td>Balance Value</td> </tr> <tr> <td>Real Sector Confidence Index</td> <td>Index</td> </tr> </tbody> </table>	Variable/Indicator	Unit of measure	All Variables	Balance Value	Real Sector Confidence Index	Index
Variable/Indicator	Unit of measure						
All Variables	Balance Value						
Real Sector Confidence Index	Index						

<b>Periodicity</b>	<b>Frequency of data collection:</b> Monthly.
	<b>Frequency of dissemination:</b> Monthly.

<b>Timeliness</b>	<b>Average production time for each release of data:</b> Approximately 25 days.
	<b>Time lag - first results (days):</b> -
	<b>Time lag - final results (days):</b> 5 days before the end of the reference month.

## Access by the Public

<b>Advance dissemination of release calendar</b>	<b>Data release calendar:</b> The release calendar is announced to the public in advance and published on the first business day of each year on the website of the CBRT.
	<b>Link to advance release calendar:</b> <a href="#">Data Release Calendar</a>
	<b>Data release policy:</b> The institutions and organizations which are the subscribers of the data delivery system are informed about the publication of the results just after they are made available on the website of the CBRT.
<b>Simultaneous release to all interested parties</b>	<b>Simultaneous release:</b> The results of the BTS are released simultaneously.
	<b>Pre-release data share with press or other specific users under special agreements:</b> Not shared.

## Integrity

<b>Dissemination of terms and conditions under which official statistics are produced, including those relating to the confidentiality of individually identifiable information</b>	<b>Responsibility for collecting, processing, and disseminating statistics:</b> The Surveys and Indices Division of the Data Governance and Statistics Department of the CBRT is responsible for collecting, processing and disseminating the statistics.
	<b>Data sharing and coordination among data producing agencies:</b> The RSCI which is one of the components of the "Economic Confidence Index" is shared with TurkStat, which is the responsible institution for compiling and publishing it.
	<b>Confidentiality of individual reporters' data:</b> In accordance with Article 43, Paragraph 5 of CBRT Law No. 1211, as amended on April 25, 2001 by the Law No. 4651, which states that "the Bank may not publish or disclose the statistical information having a private and personal nature nor may it submit these to any official authority or private body other than the Banking Regulation and Supervision Agency. This information shall not be used for purposes other than those of statistical nature nor as means of evidence.", the data shall be deemed as confidential and will not be exposed to third parties.
	<b>Staff, facilities, computing resources, and financing:</b> A total of 7 people of whom 2 graduated in statistics work in the process of collecting, processing, controlling, analyzing and publishing the statistics. When any technical problem is encountered during the preparation of the statistical data, IT Department supports immediately to solve the flaws.
	<b>Monitoring user requirements:</b> The "Statistics Users Survey" is conducted via the website of the CBRT.

**Quality policy:** Publishing up-to-date, reliable, timely, and transparent statistics in compliance with international standards.

**Quality monitoring:** The quality of the Business Tendency Statistics in terms of compliance with the international standards was evaluated and certified by a "Quality Logo" by TurkStat in 2015.

**Impartiality of statistics:** Necessary measures to produce unbiased statistics are taken and representativeness as well as adequate response rates is ensured in the sub-sectors.

**Data sources:** Information obtained from the Business Tendency Survey questionnaire applied to enterprises in the manufacturing industry.

**Frame of the Survey:** It comprises the survey units of the Turkish Statistical Institute's (TURKSTAT) monthly manufacturing industry production index (IPI). The frame of the survey is revised in accordance with updates in the IPI.

**Methodology:** The BTS has been conducted on a monthly basis. In January, April, July and October, a quarterly survey is applied in which additional questions are asked to 22 questions in the monthly survey form. The survey form consisting of 22 questions comprises the assessments of the senior managers related to production, volume of sales orders, level of employment, stocks of finished goods, selling prices, unit cost, capacity utilization rate, producer price inflation rate, consumer price inflation rate, interest rates on loans and general course of business conditions. 5 of these questions are related to assessments of the current situation, 15 are related to the past and future trends and 2 are about ratios. 6 additional questions are included in the survey form consisting of 28 questions which comprises assessments of the factors limiting production, the level of production capacity, period of production assured by the sales orders and domestic and foreign competitiveness. In the question of factors limiting production, it is asked to make a ranking in order of importance, while the remaining questions are concerned with the assessments on current situation and the last three months. In addition to the existing questions, in April and October questionnaires, questions about the investment tendency are also asked. For detailed information on questions regarding investment tendency, please click [here](#).

**Calculation of Extreme Values:** Tukey's Hinges method is used in the extreme value analysis applied to the producer and consumer price inflation expectation questions asked in the BTS. According to this method:

Values outside the range of  $Q_1 - 3*(Q_3 - Q_1)$  and  $Q_3 + 3*(Q_3 - Q_1)$ , where  $Q_1$  is the lower quartile and  $Q_3$  is the upper quartile, are accepted as extreme values and such data are not included in the analysis.

**Weighting:** Weighting procedure is performed at three stages in aggregating the survey results. Production values of the local units compiled as part of the industrial production index of the previous year are utilized as weights. Responses to the survey questions are weighted by the production values in the previous year and aggregated at the three-digit level, two-digit level and total manufacturing industry level of NACE Rev.2 classification at the first, second and third stages of the weighting procedure respectively. The weights are updated by using the data compiled as part of the industrial production index of the previous year once in a year.

**Calculation of the RSCI:**

The RSCI is calculated as a function of responses given to BTS questions regarding total volume of sales orders, stocks of finished goods, exports, production, employment and fixed capital investment expenditures.

The index for stocks of finished goods is calculated by subtracting aggregated balance value from 100 and the indices for other questions are calculated by adding up 100 to the aggregated balance values. The RSCI is then computed by taking the arithmetic average of these sub-indices. While choosing the appropriate questions, as well as economic significance, the statistical methods such as the performance for leading the IPI, low volatility and cross correlations is considered. No base-year adjustment for the index is made.

**Modes of dissemination:** The Business Tendency Statistics are published on the website of the CBRT under the menu "Statistics/Tendency Surveys" along with a report summarizing the monthly developments. The data are also available as a time series under the menu "Statistics/Electronic Data Distribution System (EDDS)".

**Commenting on erroneous interpretation and misuse of statistics:** After the data is published, media is tracked regularly in order to prevent misuse of data.

**Disclosure of terms and conditions for statistical collection, processing, and dissemination:** Responses to the survey are submitted between the 1st and 15th of each month, via web based system of the CBRT. The aggregated results of the survey are published in the last week of the reference month.

**Seasonal adjustment:** Seasonal adjustment procedure of the RSCI series is carried out by using TRAMO-SEATS method. The indirect method is implemented for seasonal adjustment of the series. In this procedure, the existence of seasonality

	<p>in all the sub-indices is examined and the indices having seasonality are seasonally adjusted. The RSCI-SA is computed as the arithmetic average of seasonally adjusted sub-indices.</p> <p><b>Legal acts and other agreements on collection, processing, and dissemination of statistics:</b></p> <ul style="list-style-type: none"> <li>• Article 43, CBRT Law No. 1211, as amended on April 25, 2001 by the Law No. 4651</li> <li>• Turkish Statistics Law No. 5429 - Official Statistics Program</li> </ul>
<b>Identification of internal government access to data before release</b>	None.
<b>Identification of ministerial commentary on the occasion of statistical releases</b>	Statistics are published along with a report without any interpretation.
<b>Provision of information about revision and advance notice of major changes in methodology</b>	<b>Revision schedule:</b> Results are not subject to revision, and therefore there is no revision schedule.
	<b>Identification of preliminary and/or revised data:</b> The responses received are not taken into consideration and the results are not revised after the survey period. In the seasonally adjusted results of the RSCI, model structure, model parameters and outlier observations are reviewed and updated every year but backward revision of the series is not applied.
	<b>Advance notice of major changes in methodology, source data, and statistical techniques:</b> Major changes in methodology and statistical techniques are announced on the website of the CBRT in advance.
<b>Quality</b>	
<b>Dissemination of documentation on methodology and sources used in preparing statistics</b>	The documentation on methodology used in preparing the statistics is available under the related heading on the website of the CBRT.
<b>Dissemination of component detail, reconciliations with related data, and statistical frameworks that support statistical cross-checks and provide assurance of reasonableness</b>	<b>Internal consistency:</b> Consistency checks are made systematically. Statistics in the same data set are internally consistent with each other.
	<b>Temporal consistency:</b> Comparable time series starts from 2007. Detailed information about the statistics for the period between 1987 and 2006 can be found at the following link: <a href="#">Methodological Changes</a>
	<b>Intersectoral and cross-domain consistency:</b> The Business Tendency Statistics are consistent with other data sources or statistics.
<b>Notes</b>	
<b>Last posted</b>	
<b>Last certified</b>	
<b>Last updated</b>	28/06/2024