

Gross Domestic Product by Industry - Provincial and Territorial – Data Accuracy -

The Provincial GDP by industry depends on the National GDP by industry (statistical program no. 1301) and the Input-Output Tables (statistical program no. 1401) to which it is anchored. The quality of the Provincial Input-Output Tables is matched where there are high quality projectors of provincial industrial production. When necessary, the provincial GDP by industry program may be required to use projectors of industrial production which are of lower quality than the underlying GDP from the Provincial Input-Output tables, in these cases quality of the measure is lessened but still acceptable. As well, the availability of appropriate prices affects the reliability of the real GDP. In general, the higher the level of aggregation, the more reliable are the estimates. There is a trade-off between timeliness and accuracy. As more robust data becomes available, estimates are revised and become more accurate until the benchmark Input-Output Tables are published, two and a half years after the estimates were first published in the Provincial GDP by industry.

In general, weaknesses in source data arise mainly from the following: a) undercoverage; b) inappropriate concepts and definitions. These are briefly discussed below:

a) Undercoverage - This weakness is normally corrected by inflating reported data by a factor that allows the data to represent the universe concerned.

b) Concepts and definitions not suitable for the SNA - For administrative records, the data are quite varied in coverage, details, definitions and concepts and often these factors do not coincide with those required for the Industry Accounts. They must be thoroughly examined and adjusted for consistency and coverage using carefully designed estimating procedures.

No direct measures of the margin of error in the estimates can be calculated. Data reliability ratings are a product of data integration and analysis inherent in the compilation of GDP by industry. They rely both on the quantitative attributes of the survey and administrative data sources that are used, such as sample size, response rate and coefficient of variation, and on the expert judgement of analysts who undertake data integration of various source data. In general, the highest quality rating 'A' is assigned to a data set that originates from a survey or administrative source with the largest sample size and smallest undercoverage that requires no indirect estimation of missing detail. A reliable or 'B' rating is assigned to a data set estimated from source data with some but not all of the above attributes. Finally, data sets with a 'C' rating involve significant application of indirect estimation techniques and rely on source data with small samples, undercoverage, or both.

The ranking of quality for GDP by industry have, in general been determined as follows:

Ratings

A - most reliable - 40% of the industries have this rating

B -- reliable - 40% of the industries have this rating

C -- acceptable - 20% of the industries have this rating

The quality ratings of the current dollar GDP of each Link or 'L' level industry for the latest benchmark year are published in Statistics Canada catalogue 15-201, "The Input-Output Structure of the Canadian Economy" Text table 2.

At the moment, there are no data reliability ratings for the provincial -- territorial GDP by industry in constant prices.