

Indicator 9.b.1

Indicator Name, Target and Goal

Indicator 9.1.b Proportion of medium and high-tech industry value added in total value added

Target 9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Definition and Rationale

○ Definition

The proportion of medium-high and high-tech industry (MHT hereafter) value added in total value added of c (MVA hereafter) is a ratio value between the value added of MHT industry and MVA.

○ Concepts

- manufacturing

"Division E - Manufacturing Industry " as listed in the Japan Standard Industrial Classification (JSIC)

- high-tech industry

Industries in the Japan Standard Industrial Classification (JSIC) that correspond to "20 Manufacture of chemicals and chemical products", "21 Manufacture of basic pharmaceutical products and pharmaceutical preparations", "252 Manufacture of weapons and ammunition", "26 Manufacture of computer, electronic and optical products", "27 Manufacture of electrical equipment", "28 Manufacture of machinery and equipment n.e.c.", "29 Manufacture of motor vehicles, trailers and semi-trailers", "30* Manufacture of other transport equipment", and "325 Manufacture of medical and dental instruments and

supplies" in the fourth edition of the International Standard Industrial Classification (ISIC)

* Excluding 301 (Building of ships and boats)

• Value added (gross value added) is calculated as follows:

i. An establishment with 30 or more employees

Formula:

Value added =

Value of manufactured goods shipments + (Value of inventories at the end of the year – Value of inventories at the beginning of the year) + (Value of semi-manufactured goods and work-in-progress at the end of the year – Value of semi-manufactured goods and work-in-progress at the beginning of the year) – (Estimated internal tax on consumption (*) + Estimated consumption tax) – Cost of raw materials, fuels and electricity consumed, and subcontracting expenses for consigned production – Depreciation

ii. An establishment with 29 or fewer employees

Formula:

Gross value added =

Value of manufactured goods shipments – (Estimated internal tax on consumption (*) + Estimated consumption tax) – Cost of raw materials, fuels and electricity consumed, and subcontracting expenses for consigned production

* Estimated internal tax on consumption is a total of "estimated liquor tax, tobacco tax, gasoline tax, and local gasoline tax". Since the survey of internal tax on consumption has been abolished in 2016, estimated internal tax is calculated based on shipments etc.

○ Rationale and Interpretation:

The Economic Census for Business Activity, Annual Business

Survey, and Census of Manufacture used to calculate this ratio are surveys aimed at clarifying the actual state of Japan's industrial structure or manufacturing industry. In these surveys, value added, etc. are published by each detailed industry classification, and are conducted by the government.

Data Sources and Collection Method

Economic Census for Business Activity

Annual Business Survey

Census of Manufacture

Method of Computation and Other Methodological Considerations

- Computation Method

A ratio value between the value added of MHT industry (JSIC corresponding to ISIC 4th edition 20, 21, 252, 26, 27, 28, 29, 30, 325) and MVA.

- Comments and limitations

1) The values for 2015 and 2020 (Economic Census Economic Census for Business Activity) and the values for 2021 (Annual Business Survey) are not included privately owned establishments. The values for 2021 (Annual Business Survey) are the results for all establishments, including estimates, and are different from other years when calculations were made for establishments with four or more employees. For these reasons, a simple time-series comparison is not possible.

2) Since the concepts and definitions of JSIC and ISIC do not necessarily match, there are some items whose correspondence is not clear. So please use them with caution.

Data Disaggregation

None.

References

Economic Census for Business Activity

<https://www.meti.go.jp/english/statistics/tyo/census/index.html>

Annual Business Survey

<https://www.stat.go.jp/english/data/kkj/index.html>

Census of Manufacture

<https://www.meti.go.jp/english/statistics/tyo/kougyo/index.html>

Custodian Ministries of Data

Ministry of Economy, Trade and Industry

Custodian Ministries of Related Policies

Cabinet Office

International Organizations

United Nations Industrial Development Organization (UNIDO)