

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

Target 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

Indicator 9.2.1: Manufacturing value added as a proportion of GDP and per capita

Institutional information

Organization(s):

United Nations Industrial Development Organization (UNIDO)

Concepts and definitions

Definition:

Manufacturing value added (MVA) as a proportion of gross domestic product (GDP) is a ratio between MVA and GDP, both reported in constant 2015 USD.

MVA per capita is calculated by dividing MVA in constant 2015 USD by population of a country or area.

Concepts:

The gross value added measures the contribution to the economy of each individual producer, industry or sector in a country. The gross value added generated by any unit engaged in production activity can be calculated as the residual of the units' total output less intermediate consumption, goods and services used up in the process of producing the output, or as the sum of the factor incomes generated by the production process (System of National Accounts 2008). Manufacturing refers to industries belonging to the sector C defined by International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4, or D defined by ISIC Revision 3.

GDP represents the sum of gross value added from all institutional units resident in the economy. For the purpose on comparability over time and across countries MVA and GDP are estimated in terms of constant prices in USD. The current series are given at constant prices of 2015.

Rationale:

MVA is a well-recognized and widely used indicator by researchers and policy makers to assess the level of industrialization of a country. The share of MVA in GDP reflects the role of manufacturing in the economy and a country's national development in general. MVA per capita is the basic indicator of a country's level of industrialization adjusted for the size of the economy. One of the statistical uses of MVA per capita is classifying country groups according to the stage of industrial development.

Comments and limitations:

Differences may appear due to different versions of System of National Accounts (SNA) or ISIC revisions used by countries.

Methodology

Computation method:

$\text{MVA proportion to GDP} = \text{MVA}/\text{GDP} \times 100.$

$\text{MVA per capita} = \text{MVA}/\text{population}$

Treatment of missing values:

- **At country level:**

Boudt, Todorov, Upadhyaya (2009): Nowcasting manufacturing value added for cross-country comparison; Statistical Journal of IAOS

- **At regional and global levels**

No imputation used.

Regional aggregates:

Regional, global aggregation of direct summation of country values within the country groups.

Sources of discrepancies:

Minor differences may arise due to 1) exchange rates for conversion to USD 2) different base years used for constant price data 3) methods for recent period estimation and 4) different versions of SNA and ISIC revisions used by countries.

Methods and guidance available to countries for the compilation of the data at the national level:

International Recommendations for Industrial Statistics (IRIS) 2008
https://unstats.un.org/unsd/publication/seriesM/seriesm_90e.pdf

System of National Accounts (SNA) 2008
https://unstats.un.org/unsd/publication/seriesf/SeriesF_2Rev5e.pdf

International Standard Industrial Classification of All Economic Activities (ISIC)
<https://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27>

Quality assurance:

UNIDO (2009), UNIDO Data Quality: A quality assurance framework for UNIDO statistical activities <https://open.unido.org/api/documents/4814740/download/UNIDO-Publication-2009-4814740>

Data sources

Description:

UNIDO maintains MVA database. Figures for updates are obtained from national account estimates produced by UN Statistics Division (UNSD) and from official publications.

Collection process:

The MVA and GDP country data are collected through a national accounts questionnaire (NAQ) sent by UNSD. More information on the methodology is available on

<https://unstats.un.org/unsd/snaama/methodology.pdf>.

Missing or inconsistent values are verified with national sources and World Development Indicators (WDI). The preference is given to the data from national sources.

Population data are obtained from UN DESA Population Division. More information on the methodology is available on

https://esa.un.org/unpd/wpp/Publications/Files/WPP2015_Methodology.pdf.

Data availability

Description:

For more than 200 economies

Time series:

Data for this indicator are available as of 2000 in the UN Global SDG Database, but longer time series are available in the UNIDO MVA database.

Disaggregation:

No disaggregation available.

Calendar

Data collection:

Data collection is carried out by receiving data electronically throughout the year.

Data release:

UNIDO MVA database is updated between March and April every year.

Data providers

United Nations Statistics Division (UNSD) and official publications

UNSD from national statistical offices (NSOs)

Data compilers

United Nations Industrial Development Organization (UNIDO)

References

URL:

www.unido.org/statistics

<https://unstats.un.org/unsd/snaama/methodology.pdf>

https://esa.un.org/unpd/wpp/Publications/Files/WPP2015_Methodology.pdf

References:

International Yearbook of Industrial Statistics; UNIDO

International Standard Industrial Classification of All Economic Activities 2008

System of National Accounts 2008