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 2010 USD.

MVA per capita is calculated by dividing MVA in constant 2010 USD by population of a country or area.

#### 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.

### Concepts:

The gross value added is defined as output minus intermediate consumption and equals the sum of employee compensation, gross operating surplus of government and corporations, gross mixed income of unincorporated enterprises and taxes less subsidies on production and imports, except for net taxes on products (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 2010.

#### **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:**

MVA proportion to GDP = MVA/GDP\*100. MVA per capita = MVA/population

### Disaggregation:

No disaggregation available.

### 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 <a href="https://unstats.un.org/unsd/publication/seriesM/seriesm\_90e.pdf">https://unstats.un.org/unsd/publication/seriesM/seriesm\_90e.pdf</a>

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) <a href="https://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27">https://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27</a>

## **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 <a href="https://unstats.un.org/unsd/snaama/methodology.pdf">https://unstats.un.org/unsd/snaama/methodology.pdf</a>.

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:

1990 onwards with 2 year lag to the current calendar year

# 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