

Freedonia Focus Reports
World Collection

World



Macroeconomy

September 2016



Highlights

World Overview and Forecasts

Gross Domestic Product by Region | Personal Consumption Expenditures by Region
Manufacturing Value Added by Region | Construction Expenditures by Region

Regional Overview and Forecasts

Asia | North America | Western Europe | Middle East | Central and South America
Eastern Europe | Africa | Pacific

Resources

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ABOUT THIS REPORT

Scope & Method

This report forecasts to 2020 the following world macroeconomic indicators in 2014 US dollars:

- gross domestic product (GDP)
- personal consumption expenditures (PCE)
- manufacturing value added (MVA)
- construction expenditures.

Forecasts for each indicator are also provided by region in terms of:

- Asia
- North America
- Western Europe
- Middle East
- Central and South America
- Eastern Europe
- Africa
- Pacific.

Further, each regional indicator is forecast for major countries within that region. Segments may not sum to total due to independent rounding.

In addition, average world and regional per-capita GDP are forecasted to 2020. Lastly, PCE, MVA, and construction expenditures are presented as a share of world and each region's GDP.

Forecasts are derived from a consensus of public agencies and private firms.

To illustrate historical trends all forecasted measures described above are provided in annual series from 2005 to 2015.

The estimates of GDP (and the other indicators) are made in terms of constant purchasing power parity in a benchmark year (2014) that is one year before the base year (2015). Purchasing power parity GDP estimates for the benchmark year are obtained from the Organisation for Economic Co-operation and Development (OECD), Eurostat, the World Bank, the International Monetary Fund (IMF), the US Central Intelligence Agency, and selected other sources. These purchasing power parity GDP estimates for the benchmark year are based on GDP data expressed in the individual countries' local currency, which are then converted to US dollars by valuing each country's output at US prices in the benchmark year. This approach values the same physical output at a consistent price for all countries, thereby reducing the distorting influence of different price levels in the different countries. The alternative approach of using exchange rates to convert local currency GDP to US dollars would tend to overvalue the output of countries with high average price levels and undervalue the output of countries with low average price levels, because exchange rate conversions only partially reflect the relative prices for goods and services that are domestically consumed and invested. Furthermore, factors other than relative prices – such as demand and supply in currency markets, interest rates, and capital flows – affect exchange rates.

Once the GDP values for a country are estimated for the benchmark year, we then calculate

inflation-adjusted GDP for all other years for that country based on historical and forecast growth rates of GDP expressed in inflation-adjusted units of that country's local currency. This approach ensures that the GDP series for any given country is an accurate index of changes in inflation-adjusted GDP for that country. However, it also implicitly assumes that the price structures across countries do not change from those of the benchmark year. Therefore, caution should be used in comparing the relative GDP of countries in years other than the benchmark year. If the ratio of prices across two countries in a given year differs from the ratio of prices across those countries in the benchmark year, then the change in the relative sizes of those two economies as measured will not accurately reflect changes in output.

This report quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or r^2 . The most stable data series relative to the trend carries an r^2 value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

A full outline of report items by page is available in the [Table of Contents](#).

Sources

World Macroeconomy (FW95051) represents the synthesis and analysis of data from various secondary sources including:

- country statistical bureaus
- IMF
- OECD
- Oxford Economics
- United Nations
- United States Census Bureau
- World Bank.

Specific sources and additional resources are listed in the [Resources](#) section of this publication for reference and to facilitate further research.

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Oxford Economics

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