

News Release: OECD Growth and economic well-being

Methodological Note

Introduction

A key indicator of material or economic well-being is household income per capita after deducting taxes and social contributions and including social benefits. This provides a better picture of people's economic well-being than gross domestic product (GDP) per capita. It shows the resources that households have at their disposal to buy goods and services or save for the future.

Over the long term, average annual growth rates of household income per capita and GDP per capita tend to be similar, since incomes earned by households account for much of the total income generated through production in the economy, as recorded by GDP. However, over shorter periods, especially during economic recessions or expansions, trends in household income and GDP may differ significantly. Many factors can contribute to such a divergence; for instance, changes in taxes or social benefits (including pensions), or changes in how companies allocate their earnings between dividends, retained earnings and compensation of employees.

Definition of the indicators

Real GDP per capita

Gross domestic product (GDP) is the standard measure of the value added generated through the production of goods and services in a country during a certain period. The income measure of GDP measures the income earned from that production, or the amount spent on final goods and services (less imports). While GDP is the single most important indicator to capture economic activities, it does not provide a suitable measure of people's material well-being.

Real GDP per capita shows GDP, adjusted for inflation by the GDP deflator, per person in the population.

Real household income per capita

In this release, household income refers to the national accounts measure 'gross disposable income of households', which equals total income received by households after deduction of taxes on income and wealth and social contributions. It includes monetary social benefits (such as unemployment benefits and pension payments), but it does not include in-kind transfers, such as those related to health and education provided free or at economically insignificant prices by government.

Household disposable income may be used either for final consumption or for saving. Disposable income thus represents the maximum amount households can consume without reducing their net wealth (without taking into account holding gains or losses on assets).

Real household income per capita shows household disposable income, adjusted for inflation in household final consumption, per person in the population. Note that households in this release include 'non-profit institutions serving households' (e.g. non-profit sports membership clubs) as these cannot be separated from households in the national accounts of many countries.

The deflators used for these two measures (GDP and household income) may differ, sometimes significantly, particularly in resource rich and export intensive economies.

Country notes

The statistical data in this publication are supplied by and under the responsibility of the relevant statistical authorities. The use of such data by the OECD is without prejudice to the status of or sovereignty over any territory, or to the delimitation of international frontiers and boundaries.

For **Japan**, gross disposable income of households is not available for recent quarters. To compile the **OECD area** and **G7** economy aggregates, the OECD forecasts Japan's household income for the latest quarters



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using the measure of **net** disposable household income which is published quarterly by Japan's Cabinet Office.

The estimation method to compile the OECD area and the G7 aggregates is available in the methodological note (see below).

Note Outline

The objective of this note is to provide some more in-depth technical information on the compilation of the indicators highlighted in the OECD Growth and Economic Well-being News Release. Subsequently, attention is paid to:

- · geographical coverage;
- · compilation sources;
- definition of indicators;
- zones' aggregates;
- · seasonal adjustment;
- · revisions policy;
- data presentation.

Geographical coverage

The **OECD** area covers the following 38 OECD member countries: Australia, Austria, Belgium, Canada, Chile, *Colombia*, *Costa Rica*, Czech Republic, Denmark, *Estonia*, Finland, France, Germany, Greece, Hungary, *Iceland*, Ireland, *Israel*, Italy, Japan, *Korea*, *Latvia*, *Lithuania*, *Luxembourg*, Mexico, Netherlands, *New Zealand*, Norway, Poland, Portugal, *Slovak Republic*, Slovenia, Spain, Sweden, *Switzerland*, *Türkiye*, United Kingdom and United States.

While quarterly data on final consumption expenditure by households and non-profit institutions serving households (NPISHs) is available for all OECD member countries, household gross disposable income data is not compiled by the countries in *italics* above. Furthermore, income data for Japan is not available for the most recent quarters as it is currently only provided by the national statistical agency once a year.

The **G7** covers the following countries: Canada, France, Germany, Italy, Japan, United Kingdom and United States.

The estimation method to compile aggregates for the OECD area and for the G7 is further detailed in the section on "Zones' aggregates".

The **euro area** covers the following countries: Austria, Belgium, Cyprusⁱ, Estonia, Finland, France, Germany, Greece, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia and Spain.

The **European Union** covers the euro area plus Bulgaria, Croatia, the Czech Republic, Denmark, Hungary, Poland, Romania and Sweden.

The OECD news release on "OECD growth and economic well-being" presents time series which extend beyond the date of the United Kingdom's withdrawal from the European Union on 1 February 2020. In order to maintain consistency over time, the "European Union" aggregate presented here excludes the UK for the entire time series. Interested readers may refer to the <u>Eurostat website</u> for further information on Eurostat's plans for disseminating EU aggregates and to the <u>Eurostat database</u> for the actual series.

Compilation sources



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Data for all OECD member countries are compiled according to the latest international standards, the 2008 SNA (ESA 2010).

National data for the OECD member countries are mainly sourced from National Statistical Offices (sometimes National Central Banks) and Eurostat. The source for each country is provided in the OECD's main dissemination tool, OECD.Stat, in the metadata that accompanies the quarterly sector accounts data. Using Japan as an example, data can be found here. The relevant data are published and revised according to national/Eurostat schedules.

Nominal data on gross disposable income of households and NPISHs are derived from the Quarterly Sector Accounts dataset. Data on GDP and population are derived from the Quarterly National Accounts dataset.

The indicators for the euro area shown in this release are compiled by the OECD based on Eurostat data. In particular, the indicators shown here may slightly differ from the ones presented in the Eurostat release on households' real adjusted income per capita (<u>link</u>) as further detailed in the next section on "Definition of indicators".

Definition of indicators

Household real income per capita is derived as the gross disposable income of households (HHGDI) (including NPISHs), in nominal terms, divided by the total population, and by adjusting the resulting value in current prices with the implicit deflator (price index) of final consumption expenditure of households and NPISHs (based on national currency).

Real GDP per capita is derived as GDP, in volume terms, divided by the total population.

Ideally, one should look at the <u>adjusted</u> gross disposable income, to arrive at a better measure of households' actual material conditions. This latter indicator also takes into account transfers in kind to households, such as those related to health and education provided free or at economically insignificant prices by government. However, this data is not available for many non-European countries, so for comparability reasons and in order to compile zones' aggregates, data for countries and zones shown in this release do not include these transfers in kind. Because adjusted gross disposable income is the indicator used in the Eurostat release on households' real income per capita, the euro area numbers may slightly differ from the ones presented in the OECD release.

Zones' aggregates

Currency conversion

To compile zone aggregates, such as the OECD area and the G7, national data have to be converted into a single currency denomination. For this purpose, OECD national accounts data are converted from national currencies to US dollars using Purchasing Power Parities (PPPs) rather than exchange rates. PPPs reflect the price differentials between countries. For further reading on the measurement and uses of PPPs, see "2008 Benchmark PPPs, Measurement and Uses".

Annual series of PPPs are calculated through the "<u>Eurostat-OECD PPP Programme</u>". Quarterly PPPs for GDP are interpolated from the annual series using a quarterly indicator, *i.e.* the ratio between the quarterly price deflator of GDP for a given country and the quarterly GDP deflator for the United States.

GDP data reported by OECD member countries are converted to US dollars using current PPPs of GDP for nominal data and constant PPPs of a given reference year for volume estimates. The current OECD



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reference year for this purpose is 2015. For household income the conversion is done using the PPPs of private consumption.

Zones' estimates

National GDP data converted to US dollars are summed up to derive zones' estimates; for volume data this is done through the chain-linking method (see further details here).

National household income (HHGDI) at current prices is first deflated using the implicit deflator of final consumption expenditure of households and NPISHs (HHFCE) for the relevant country. Then real income in national currency is converted to US dollars with PPPs of private consumption as described in the paragraph above. National real household income converted to US dollars are then summed up to derive zones' estimates for the group of available countries. Indeed, as mentioned in the section on "Geographical coverage", quarterly data for household income is missing for a number of countries. Nevertheless, the cumulative weight of the countries for which HHGDI is available is quite high (89% of OECD-38 total HHFCE in 2020). Among the missing countries, two of them (Korea and Türkiye) represent together 7% of OECD-38 total HHFCE. So, it is worth deriving estimates for quarterly HHGDI for these countries and including them in the OECD-total calculation. This is achieved through a temporal disaggregation of the annual nominal HHGDI, using the quarterly seasonally adjusted nominal HHFCE as an indicator. While these national estimates are used in the OECD-total calculation, they are not released for the relevant individual countries.

Finally, to further refine the level of the OECD-38 total real HHGDI, the cumulative weight of HHFCE for the group of available countries is used to scale up the level of the partially available data for real HHGDI of the OECD.

In respect of the G7, for which Japanese HHGDI data is missing for the last quarters, the tail of the series is estimated up to the last quarter by regressing the growth rate of HHGDI for the G6 (G7 less Japan) on G7's (see further details here).

Seasonal Adjustment

Seasonally adjusted data for the OECD area and the G7 is calculated indirectly from seasonally adjusted data of the countries. When seasonally adjusted data is not available from the national source, national data is corrected for seasonal variations by the OECD Secretariat with the TRAMO/SEATS method.

Revisions Policy

The News Releases on OECD Growth and Economic Well-being is scheduled at around T+4.5 months after the end of the reference quarter.

National data and European aggregates are revised according to the revisions policy of the relevant country and area, respectively. Revisions to the initial estimates of OECD area and G7 aggregates are subsequently made every quarter with the release of the new data.

Data presentation

In the News Release and in the relevant databases, growth rates of GDP and households' income are presented as percentage changes on the previous quarter, seasonally adjusted. Doing so, growth over the previous quarter is not annualised.



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Footnote by all the European Union Member States of the OECD and the European Union: "The Republic of Cyprus is recognized by all members of the United Nations with the exception of Türkiye. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus".

¹ Footnote by Türkiye: "The information in this document with reference to « Cyprus » relates to the southern part of the Island. There is no single authority representing both Türkish and Greek Cypriot people on the Island. Türkiye recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye shall preserve its position concerning the 'Cyprus issue'".