



... 🏠 ... 🏠 Penn World Table

The Database

Penn World Table version 9.1

PWT version 9.1 is a database with information on relative levels of income, output, input and productivity, covering 182 countries between 1950 and 2017. Access to the data is provided below:

Excel



Stata



Online data access tool



User information

(DOI: [10.15141/S50TOR](https://doi.org/10.15141/S50TOR))

If you are new to PWT, please consult the [User Guide to PWT 9.1](#) for further information and a guide to the available documentation. This [Vox column](#) is a good starting point as well. If you are an experienced PWT user, please consult [What is new in PWT 9.1](#).

To stay informed about new releases, follow us on Twitter [@PennWorldTable](#).

Attribution requirement - When using these data (for whatever purpose), please make the following reference:

- Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2015), "The Next Generation of the Penn World Table" American Economic Review, 105(10), 3150-3182, available for download at www.ggdg.net/pwt

For questions not covered in the documentation, please contact pwt@rug.nl.



License and funding

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Selective data access



Query	Variable Name and Use	Example
RGDP^{NA}	Real GDP using national-accounts growth rates, for studies comparing (output-based) growth rates across countries	Dependent variable in (cross-country) growth regressions
CGDP^e	Expenditure-side real GDP at current PPPs, to compare relative living standards across countries at a single point in time	Initial level in growth regressions requiring relative living standards
CGDP^o	Output-side real GDP at current PPPs, to compare relative productive capacity across countries at a single point in time	Initial level in growth regressions requiring productive capacity or productivity
RGDP^e	Expenditure-side real GDP at chained PPPs, to compare relative living standards across countries and over time	Living standards of China today compared to the US at some point in the past
RGDP^o	Output-side real GDP at chained PPPs, to compare relative productive capacity across countries and over time	Productive capacity of China today compared to the US at some point in the past

DA	Development accounting, the sources of differences in living standards at a point in time	Is the US richer because of more inputs, higher productivity, or both?
GA	Growth accounting, the sources of economic growth over time	Analysis of the sources of economic growth over time

Notes: Real GDP variables are in (millions) of US dollars, not in per-capita terms. A population variable (acronym pop), which can be used to convert GDP into per-capita terms, is included in the relevant queries.

Documentation



Document	Content
The Next Generation of the Penn World Table	Paper introducing new concepts and new results of PWT, starting with version 8.
Capital Services in PWT 9.1	The composition of capital and cross-country productivity comparisons

Additional data and programs



File	Content
NA data (Stata , Excel)	The National Accounts data in current and constant national prices and exchange rate and population data
Trade detail	Exports and imports by Broad Economic Category, including shares in CGDP ⁰ and price levels
Labor detail	Details on the sources and methods for compiling employment, educational attainment and labor share data
Capital detail	Investment, capital stock and capital consumption data by assets.
Program package (<i>coming soon</i>)	The Stata data files and do-files necessary to replicate and customize PWT
Expenditure share	Bilateral correlations between expenditure (budget) shares

correlations	in the different global benchmark years
NA vintages (2009 , 2010 , 2011)	Older vintages of NA data with data up to the indicated year
ICP benchmark data (1970 , 1975 , 1980 , 1985 , 1996)	PPPs and expenditure at the most detailed level for publicly available benchmark years

All information that was previously hosted by the [Center for International Comparisons at the University of Pennsylvania](#), is now available on this site.

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- Overview Projects**