

# Package ‘pwt’

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**Version** 7.1-1

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**Title** Penn World Table (Versions 5.6, 6.x, 7.x)

**Description** The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 189 countries for some or all of the years 1950-2010.

**LazyData** yes

**LazyDataCompression** xz

**Depends** R (>= 2.10.0)

**License** GPL-2

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**NeedsCompilation** no

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pwt5.6

*Penn World Table 5.6***Description**

Purchasing power parity (PPP) and national income accounts in international prices for 152 countries over 1950–1992 (1985 as base year).

**Usage**

```
data("pwt5.6")
```

**Format**

A data frame with 6,536 observations of 34 variables.

**country** factor with country name.

**wbcode** factor with World Bank country code.

**continent** factor indicating continent.

**benchmark** factor. Has the country ever participated in an international benchmark study?

**year** year.

**pop** population in 1000s.

**rgdpch** real GDP per capita (chain-weighted index, in constant US dollars).

**rgdpl** real GDP per capita (Laspeyres index, US dollars in 1985 prices).

**c** real consumption share of GDP (% in 1985 prices).

**i** real investment share of GDP (% in 1985 prices).

**g** real government share of GDP (% in 1985 prices).

**rgdptt** real GDP per capita in constant dollars adjusted for changes in terms of trade (1985 international prices for domestic absorption and current prices for exports and imports).

**y** per capita GDP relative to US (US=100, % in current prices).

**cgdp** real gross domestic product (GDP) per capita (US dollars in current prices).

**cc** real consumption share of per capita GDP (% in current prices).

**ci** real investment share of per capita GDP (% in current prices).

**cg** real government share of per capita GDP (% in current prices).

**p** price level of GDP (% PPP GDP/ US dollar exchange rate).

**pc** price level of consumption (% [PPP of c]/xrat).

**pi** price level of investment (% [PPP of i]/xrat).

**pg** price level of government (% [PPP of g]/xrat).

**xrat** exchange rate (US dollars).

**rgdpeqa** real GDP per equivalent adult (US dollars in 1985 prices).

**rgdpwok** real GDP per worker (US dollars in 1985 prices).  
**kapw** non-residential capital stock per worker (US dollars in 1985 prices).  
**kdur** producer durables (% of kapw) (in 1985 prices).  
**knres** non-residential construction (% of kapw in 1985 prices).  
**kother** other construction (% of kapw in 1985 prices).  
**kres** residential construction (% of kapw in 1985 prices).  
**ktranp** transportation equipment (% of kapw in 1985 prices).  
**open** openness (exports+imports)/nominal GDP.  
**rgnp** real gross national product (% of per capita GDP).  
**ipri** gross domestic private investment (% of gross domestic investment in current prices).  
**stliv** standard of living index (consumption plus government consumption minus military expenditure, % of GDP).

## Details

The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 152 countries for some or all of the years 1950–1992.

This version contains data from PWT version 5.6. As far as possible the original data from PWT has been preserved. For example, percentages have been maintained rather than converted to fractions.

## Source

Alan Heston and Robert Summers, Penn World Table Version 5.6. URL <http://pwt.econ.upenn.edu/>.

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pwt6.1

*Penn World Table 6.1*

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## Description

Purchasing power parity and national income accounts in international prices for 168 countries over 1950–2000 (1996 as base year).

## Usage

```
data("pwt6.1")
```

## Format

A data frame with 8,568 observations of 28 variables.

**country** factor with country name.

**isocode** factor with ISO 3166-1 alpha-3 country code.

**year** year.

**pop** population.

**xrat** exchange rate (US dollars).

**ppp** purchasing power parity over GDP.

**cgdp** real gross domestic product (GDP) per capita (US dollars in current prices).

**cc** consumption share of per capita GDP (% in current prices).

**cg** government share of per capita GDP (% in current prices).

**ci** investment share of per capita GDP (% in current prices).

**p** price level of GDP (US=100 in current prices).

**pc** price level of consumption (US=100 in current prices).

**pg** price level of government (US=100 in current prices).

**pi** price level of investment (US=100 in current prices).

**openc** openness (% in current prices).

**cgnp** ratio of GNP to GDP (% in current prices).

**csave** current savings (% in current prices).

**y** per capita GDP relative to the United States (US=100 in current prices).

**rgdpl** real GDP per capita (Laspeyres index, US dollars in 1996 prices).

**rgdpch** real GDP per capita (chain-weighted index, US dollars in 1996 prices).

**rgdpeqa** real GDP per equivalent adult (chain-weighted index, US dollars in 1996 prices).

**rgdpwok** real GDP per worker (chain-weighted index, US dollars in 1996 prices).

**rgdptt** real gross domestic income (rgdpl adjusted for terms of trade changes, US dollars in 1996 prices).

**openk** openness in constant prices (% in 1996 prices).

**kc** consumption share of rgdpl (% in 1996 prices).

**kg** government share of rgdpl (% in 1996 prices).

**ki** investment share of rgdpl (% in 1996 prices).

**grgdpch** growth rate of real GDP per capita (constant prices: chain series).

## Details

The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 168 countries for some or all of the years 1950–2000. The European Union or the OECD provide more detailed purchasing power and real product estimates for their countries and the World Bank makes current price estimates for most PWT countries at the GDP level.

This version contains data from PWT version 6.1. As far as possible the original data from PWT has been preserved. For example, percentages have been maintained rather than converted to fractions.

## Source

Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.1, Center for International Comparisons at the University of Pennsylvania (CICUP), October 2002. URL <http://pwt.econ.upenn.edu/>.

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pwt6.2

*Penn World Table 6.2*

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## Description

Purchasing power parity and national income accounts in international prices for 188 countries over 1950–2004 (2000 as base year).

## Usage

```
data("pwt6.2")
```

## Format

A data frame with 10,340 observations of 27 variables.

**country** factor with country name.

**isocode** factor with ISO 3166-1 alpha-3 country code.

**year** year.

**pop** population.

**xrat** exchange rate (US dollars).

**ppp** purchasing power parity over GDP.

**cgdp** real gross domestic product (GDP) per capita (US dollars in current prices).

**cc** consumption share of per capita GDP (% in current prices).

**ci** investment share of per capita GDP (% in current prices).

**cg** government share of per capita GDP (% in current prices).

**p** price level of GDP (US=100 in current prices).

**pc** price level of consumption (US=100 in current prices).

**pg** price level of government (US=100 in current prices).

**pi** price level of investment (US=100 in current prices).

**openc** openness (% in current prices).

**cgnp** ratio of GNP to GDP (% in current prices).

**y** per capita GDP relative to the United States (US=100 in current prices).

**rgdpl** real GDP per capita (Laspeyres index, US dollars in 2000 prices).

**rgdpch** real GDP per capita (chain-weighted index, US dollars in 2000 prices).

**rgdpeqa** real GDP per equivalent adult (chain-weighted index, US dollars in 2000 prices).

**rgdpwok** real GDP per worker (chain-weighted index, US dollars in 2000 prices).  
**rgdptt** real gross domestic income (rgdpl adjusted for terms of trade changes, US dollars in 2000 prices).  
**openk** openness in constant prices (% in 2000 prices).  
**kc** consumption share of rgdpl (% in 2000 prices).  
**kg** government share of rgdpl (% in 2000 prices).  
**ki** investment share of rgdpl (% in 2000 prices).  
**grgdpch** growth rate of real GDP per capita (constant prices: chain series).

### Details

The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 188 countries for some or all of the years 1950–2004. The European Union or the OECD provide more detailed purchasing power and real product estimates for their countries and the World Bank makes current price estimates for most PWT countries at the GDP level.

This version contains data from PWT version 6.2. As far as possible the original data from PWT has been preserved. For example, percentages have been maintained rather than converted to fractions.

### Source

Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.2, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September 2006. URL <http://pwt.econ.upenn.edu/>.

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pwt6.3

*Penn World Table 6.3*

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### Description

Purchasing power parity and national income accounts in international prices for 189 countries over 1950–2007 (2005 as base year).

### Usage

```
data("pwt6.3")
```

### Format

A data frame with 11,020 observations of 36 variables.

**country** factor with country name.

**isocode** factor with ISO 3166-1 alpha-3 country code.

**year** year.

**pop** population.

**xrat** exchange rate (US dollars).

**currency** factor with national currency unit.

**ppp** purchasing power parity over GDP.

**cgdp** real gross domestic product (GDP) per capita (US dollars in current prices).

**cc** consumption share of per capita GDP (% in current prices).

**cg** government share of per capita GDP (% in current prices).

**ci** investment share of per capita GDP (% in current prices).

**p** price level of GDP (US=100 in current prices).

**pc** price level of consumption (US=100 in current prices).

**pg** price level of government (US=100 in current prices).

**pi** price level of investment (US=100 in current prices).

**openc** openness (% in current prices).

**cgnp** ratio of GNP to GDP (% in current prices).

**y** per capita GDP relative to the United States (US=100 in current prices), Geary-Khamis method.

**yeks** per capita GDP relative to the United States (US=100 in current prices), EKS method.

**ycpdw** per capita GDP relative to the United States (US=100 in current prices), weighted CPD method.

**rgdpl** real GDP per capita (Laspeyres index, US dollars in 2005 prices), derived from growth rates of c, g, i.

**rgdpl2** real GDP per capita (Laspeyres index, US dollars in 2005 prices), derived from growth rates of domestic absorption.

**rgdpch** real GDP per capita (chain-weighted index, US dollars in 2005 prices).

**rgdptt** real gross domestic income (rgdpl adjusted for terms of trade changes, US dollars in 2005 prices).

**openk** openness in constant prices (% in 2005 prices).

**kc** consumption share of rgdpl (% in 2005 prices).

**kg** government share of rgdpl (% in 2005 prices).

**ki** investment share of rgdpl (% in 2005 prices).

**rgdpeqa** real GDP per equivalent adult (chain-weighted index, US dollars in 2005 prices).

**rgdpwok** real GDP per worker (chain-weighted index, US dollars in 2005 prices).

**rgdpl2wok** real GDP per worker (Laspeyres 2 index, US dollars in 2005 prices).

**rgdpl2pe** real GDP per person engaged (Laspeyres 2 index, US dollars in 2005 prices).

**rgdpl2te** real GDP per person counted in total employment (Laspeyres 2 index, US dollars in 2005 prices).

**rgdpl2th** real GDP per hour worked by employees (Laspeyres 2 index, US dollars in 2005 prices).

**grgdpch** growth rate of real GDP per capita (chain-weighted index).

**grgdpl2** growth rate of real GDP per capita (Laspeyres 2 index).

## Details

The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 189 countries for some or all of the years 1950–2007. The European Union or the OECD provide more detailed purchasing power and real product estimates for their countries and the World Bank makes current price estimates for most PWT countries at the GDP level.

This version contains data from PWT version 6.3. As far as possible the original data from PWT has been preserved. For example, percentages have been maintained rather than converted to fractions.

China is contained in two versions. For all details see the official documentation.

## Source

Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.3, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, August 2009. URL <http://pwt.econ.upenn.edu/>.

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pwt7.0

*Penn World Table 7.0*

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## Description

Purchasing power parity and national income accounts in international prices for 189 countries over 1950–2009 (2005 as base year).

## Usage

```
data("pwt7.0")
```

## Format

A data frame with 11,400 observations of 41 variables.

**country** factor with country name.

**isocode** factor with ISO 3166-1 alpha-3 country code.

**year** year.

**pop** population (in thousands).

**xrat** exchange rate to US dollar (national currency units per US dollar).

**currency** factor with national currency unit.

**ppp** purchasing power parity (PPP) over gross domestic product (GDP) (in national currency units per US dollar).

**tcgdp** total PPP converted GDP, Geary-Khamis method, at current prices (in million International dollar).

**cgdp** PPP converted GDP per capita, Geary-Khamis (G-K) method, at current prices (in International dollar).



- cgdp2** PPP converted GDP per capita, average GEKS-CPDW, at current prices (in International dollar).
- cda2** PPP converted domestic absorption per capita, average GEKS-CPDW, at current prices (in International dollar).
- cc** consumption share of PPP converted GDP per capita at current prices (cgdp), (%).
- cg** government consumption share of PPP converted GDP per capita at current prices (cgdp), (%).
- ci** investment share of PPP converted GDP per capita at current prices (cgdp), (%).
- p** price level of GDP, G-K method (US=100).
- p2** price level of GDP, average of GEKS-CPDW (US=100).
- pc** price level of consumption (PPP over consumption/xrat).
- pg** price level of government consumption (PPP over government consumption/xrat).
- pi** price level of investment (PPP over investment/xrat).
- openc** openness at current prices (%).
- cgnp** ratio of GNP to GDP (%).
- y** PPP converted GDP per capita relative to the United States, G-K method, at current prices, (cgdp), (US=100).
- y2** PPP converted GDP per capita relative to the United States, average GEKS-CPDW, at current prices, (cgdp2), (US=100).
- rgdpl** PPP converted GDP per capita (Laspeyres), derived from growth rates of c, g, i, at 2005 constant prices (2005 International dollar per person).
- rgdpl2** PPP converted GDP per capita (Laspeyres), derived from growth rates of domestic absorption, at 2005 constant prices (2005 International dollar per person).
- rgdpch** PPP converted GDP per capita (chain series), at 2005 constant prices (2005 International dollar per person).
- kc** consumption share of PPP converted GDP per capita at 2005 constant prices (rgdpl), (%).
- kg** government consumption share of PPP converted GDP per capita at 2005 constant prices (rgdpl), (%).
- ki** investment share of PPP converted GDP per capita at 2005 constant prices (rgdpl), (%).
- openk** openness at 2005 constant prices (%).
- rgdpeqa** PPP converted GDP chain per equivalent adult at 2005 constant prices (2005 International dollar per equivalent adult).
- rgdpwok** PPP converted GDP chain per worker at 2005 constant prices (2005 International dollar per worker).
- rgdpl2wok** PPP converted GDP Laspeyres per worker at 2005 constant prices (2005 International dollar per worker).
- rgdpl2pe** PPP converted GDP Laspeyres person engaged at 2005 constant prices (2005 International dollar per person engaged).
- rgdpl2te** PPP converted GDP Laspeyres per person counted in total employment at 2005 constant prices (2005 International dollar per person counted in total employment).
- rgdpl2th** PPP converted GDP Laspeyres per hour worked by employees at 2005 constant prices (2005 International dollar per hour).

**rgdptt** PPP converted Gross domestic income (RGDPL adjusted for Terms of Trade changes) at 2005 constant prices (2005 International dollar per person).

**grgdpch** growth rate of PPP converted GDP chain per capita (rgdpch), (%).

**grgdpl2** growth rate of PPP converted GDP Laspeyres2 per capita (rgdpl2), (%).

**grtgdp** growth rate of total PPP converted GDP Laspeyres2, (%).

**grda** growth rate of per capita PPP converted domestic absorption, (%).

## Details

The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 189 countries/territories for some or all of the years 1950–2009. The European Union or the OECD provide more detailed purchasing power and real product estimates for their countries and the World Bank makes current price estimates for most PWT countries at the GDP level.

This version contains data from PWT version 7.0. As far as possible the original data from PWT has been preserved. For example, percentages have been maintained rather than converted to fractions.

China is contained in two versions. For all details see the official documentation.

## Source

Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 7.0, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, May 2011. URL <http://pwt.econ.upenn.edu/>.

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pwt7.1

*Penn World Table 7.1*

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## Description

Purchasing power parity and national income accounts in international prices for 189 countries over 1950–2010 (2005 as base year).

## Usage

```
data("pwt7.1")
```

## Format

A data frame with 11,590 observations of 33 variables.

**country** factor with country name.

**isocode** factor with ISO 3166-1 alpha-3 country code.

**year** year.

**pop** population (in thousands).

**xrat** exchange rate to US dollar (national currency units per US dollar).

- currency** factor with national currency unit.
- ppp** purchasing power parity (PPP) over gross domestic product (GDP) (in national currency units per US dollar).
- tcgdp** total PPP converted GDP, Geary-Khamis method, at current prices (in million International dollar).
- cgdp** PPP converted GDP per capita, Geary-Khamis (G-K) method, at current prices (in International dollar).
- cgdp2** PPP converted GDP per capita, average GEKS-CPDW, at current prices (in International dollar).
- cda2** PPP converted domestic absorption per capita, average GEKS-CPDW, at current prices (in International dollar).
- cc** consumption share of PPP converted GDP per capita at current prices (cgdp), (%).
- cg** government consumption share of PPP converted GDP per capita at current prices (cgdp), (%).
- ci** investment share of PPP converted GDP per capita at current prices (cgdp), (%).
- p** price level of GDP, G-K method (US=100).
- p2** price level of GDP, average of GEKS-CPDW (US=100).
- pc** price level of consumption (PPP over consumption/xrat).
- pg** price level of government consumption (PPP over government consumption/xrat).
- pi** price level of investment (PPP over investment/xrat).
- openc** openness at current prices (%).
- y** PPP converted GDP per capita relative to the United States, G-K method, at current prices, (cgdp), (US=100).
- y2** PPP converted GDP per capita relative to the United States, average GEKS-CPDW, at current prices, (cgdp2), (US=100).
- rgdpl** PPP converted GDP per capita (Laspeyres), derived from growth rates of c, g, i, at 2005 constant prices (2005 International dollar per person).
- rgdpl2** PPP converted GDP per capita (Laspeyres), derived from growth rates of domestic absorption, at 2005 constant prices (2005 International dollar per person).
- rgdpch** PPP converted GDP per capita (chain series), at 2005 constant prices (2005 International dollar per person).
- kc** consumption share of PPP converted GDP per capita at 2005 constant prices (rgdpl), (%).
- kg** government consumption share of PPP converted GDP per capita at 2005 constant prices (rgdpl), (%).
- ki** investment share of PPP converted GDP per capita at 2005 constant prices (rgdpl), (%).
- openk** openness at 2005 constant prices (%).
- rgdpeqa** PPP converted GDP chain per equivalent adult at 2005 constant prices (2005 International dollar per equivalent adult).
- rgdpwok** PPP converted GDP chain per worker at 2005 constant prices (2005 International dollar per worker).
- rgdpl2wok** PPP converted GDP Laspeyres per worker at 2005 constant prices (2005 International dollar per worker).
- rgdptt** PPP converted Gross domestic income (RGDPL adjusted for Terms of Trade changes) at 2005 constant prices (2005 International dollar per person).

**Details**

The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 189 countries/territories for some or all of the years 1950–2010. The European Union or the OECD provide more detailed purchasing power and real product estimates for their countries and the World Bank makes current price estimates for most PWT countries at the GDP level.

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**Source**

Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 7.1, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, July 2012. URL <http://pwt.econ.upenn.edu/>.

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