# **USAID** Data Services

# **SOURCE AND INDICATOR GUIDE**

Brought to you by the Bureau for Management Office of the Chief Information Officer (M/CIO) USAID Data Services



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# WHAT IS THE BEST SOURCE AND INDICATOR FOR THE INFORMATION I AM LOOKING FOR?

USAID's International Data and Economic Analysis (IDEA) website brings to one location over **10,000 indicators collected from around 100 sourc**es for easy access by USAID and its partners. As a consequence, in querying our data, you may find multiple indicators for what you are trying to measure. The values reported by these indicators for a given country and year may differ among sources and among indicators within the same source. Differences may be attributable to a number of factors including definition, time of measurement, methodology, geographic area or others. In cases where values reported by similar indicators differ among sources or within a source, which indicator should you use?

# We recommend you first take a look at the indicators in our country dashboard. These are commonly used indicators selected in consultation with USAID specialists and pulled from sources often used within USAID.

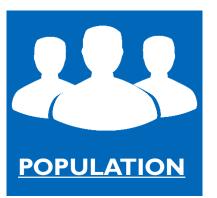
However, we recognize that the choice of an indicator may depend on what your objective is: do you need the indicator disaggregated by specific sub-categories? These sub-categories may only be available in one source and not others. Or will you use the indicator in combination with another indicator only available in one of the sources? Do you need the indicator for certain countries and a certain period for which data is not available in all sources? Sometimes, when the value is actually the same among sources, one source is the reference for the others and you may prefer to refer to that reference source. Other times, different indicators within the same source are very similar, and a close inspection of indicator definitions and methodologies may be needed to decide for one or another.

To facilitate the use of the IDEA query tool by our users, M/CIO is developing comparative tables of common indicators reported by various sources. These tables summarize differences and similarities in data availability and methodology among sources and in indicator definitions, to assist users in their choice. The first of these comparative tables are shown below. We will be gradually adding others.

#### If you need further assistance, please contact us at dataservicesrequest@usaid.gov.

This publication was produced for the United States Agency for International Development (USAID). The authors' views do not necessarily reflect the views of USAID or the United States Government.

# START BY CHOOSING A CONCEPT





Additional concepts are being added. Please check back soon.

# POPULATION

#### **AUTHORS' NOTES:**

Total country population estimates are typically derived from local country censuses but may differ from source to source depending on definitions and on how estimates for years in between censuses and projections are done.

Main sources for population estimates are produced by the UN Population Division, the World Bank and the U.S Bureau of Census. Within these organizations, estimates sometimes differ among sources (publications) depending on the time of last update of the data used. For example, the 2014 UN World Urbanization Prospects applies urban and rural population rates to total population estimates from the UN World Population Prospects of 2012. Therefore, total population estimates in the 2014 publications of the UN World Population Prospects and the World Urbanization Prospects differ.

## WHAT SOURCE SHOULD YOU USE?

This will depend on your purpose:

A. Consider the definition used by each source: UN sources estimate de facto population. The World Bank sources exclude non-permanent refugees. Between 1950 and 1999, the US Bureau of Census International Database includes armed forces overseas;

**B.** Consider the availability of data for the year and area you are interested in. For example: the World Bank sources typically do not have population projections. In contrast, the UN World Population Prospects, or the US Bureau of Census International Database do. Also, the number of areas covered varies from source to source.

**C.** Consider whether your main indicator of interest is not population but rather a different indicator contained in only one or a few of the sources. In that case, you may want to chose the population estimate of the source for your main indicator of interest, to avoid missing potential inconsistencies.

### Please see a comparison of sources and indicators on the following page

Definition of Population	Types of Demographic Indicators Available	Countries Covered	Years of Data	Publication Frequency	Methodological Notes
	UNITED NATIC	NS, WORLD PO	PULATION	PROSPECTS	·
De facto population in a country, area or region as of I July of the year indicated. Figures are presented in thousands.	Total population by age and gender; sex ratio by age group; median age; fertility rate; births and crude birth rate; deaths by gender, death rate, projections of deaths and crude death rate; infant deaths and infant mortality rate; net number of migrants and migration rate; natural change in population and annual population change rate; life expectancy at birth by gender; population density.	mates for 201 countries or areas with 90,000 in habitants or more in 2015; total population and growth rates for 233 countries or areas.	1950-2100	Biennial	Prepared by the Population Division of the Department of Economics and Social Affairs of the United Nations Secretariat. Estimates of past population are based on national statistical sources, starting with a base population by age and sex for 1 July 1950, and using existing population counts from periodic censuses as benchmarks. Projections are based on a base year (2015 for the 2016 release).
		NS, WORLD URB	ANIZATIO	N PROSPECTS	
De facto population in a country, area or region as of I July of the year indicated. Figures are present- ed in thousands.	Total population and break down by urban and rural; annual rate of change of urban and rural population WORLD HEALTH ORGANIZATIO	1	r		i
The de facto resident population (and not the de jure population), as supplied by the United Nations Population Division	Total population; population aged less than 5; population at risk of malaria; live expec- tancy; under-five mortality rate	193 countries and areas	1995-2014	Sporadic	Population figures taken from <b>UN Population Pros-</b> pects, OECD HD, and the EUROSTAT database
	WORLD BA	ANK, POVERTY A	-		
Total population is based on the de facto definition of population, which counts all residents re- gardless of legal status or citi- zenshipexcept for refugees not permanently settled in the country of asylum, who are generally con- sidered part of the population of their country of origin. The values shown are midyear estimates.	Total population	174 countries	1974-2015	Sporadic	Estimates come from a variety of sources including: (1) United Nations Population Division. World Population Prospects, (2) United Nations Statistical Division. Popula- tion and Vital Statistics Report (various years), (3) Census reports and other statistical publications from national statistical offices, (4) Eurostat: Demographic Statistics, (5) Secretariat of the Pacific Community: Statistics and Demography Programme, and (6) U.S. Census Bureau: International Database.

Definition of Population	Types of Demographic Indicators Available	Countries Covered	Years of Data	Publication Frequency	Methodological Notes
	WORLD BAN			INDICATO	RS
Total population is based on the de facto definition of population, which counts all residents regard- less of legal status or citizenship. The values shown are midyear estimates. (EADS note: as for other WB sources, excludes refugees)	Total population by gender and broad age groups; urban and rural population and population growth; population in urban agglomerations and in largest city; population in areas with elevation below 5 meters, rural and urban; birth rate; completeness of birth registration; number of neonatal, infant, under-5 and maternal deaths; death rate; mortality rate by gender, neonatal, infant, under-5 and adult; cause of death; completeness of death registration; completeness of death reporting; life expectancy at birth; net migration	217 econo- mies	1960-2015	Updated quar- terly	Population estimates are compiled and produced by the World Bank's Development Data Group, in consultation with its Health Global Practice, operational staff and country offices. Sources include the UN Population Division as well as national statistical offices, Eurostat's Population database, the UN Statistics Division's Population and Vital Statistics report and the U.S. Bureau of the Census's Interna- tional Data Base. Estimates are based on national censuses with estimates for years before and after based on interpolations and extrapolations based on demographic models. Underfive mortality from the UN Inter-Agency Group for Child Mortality Estimation. Maternal mortality estimated through models and based on work by the WHO, UNICEF, the UNPF, WB and UN Population Division using available country data.
	WORLD BANK, GLOP	BAL FINANCI	AL INCLUS	ION (FINDEX)	DATABASE
Total population is based on the de facto definition of population, which counts all residents re- gardless of legal status or citi- zenshipexcept for refugees not permanently settled in the country of asylum, who are generally con- sidered part of the population of their country of origin. The values shown are midyear estimates.	Total population; population age 15 and up	143 econo- mies	2014, 2011	Sporadic, less than annual	(Not Available)
,	U.S. BUREAU	OF CENSUS,	INTERNAT	IONAL DATAB	ASE
Total midyear population estimate for July 1 of the given year. Popula- tion estimates for 1950-1999 are based on the resident population plus the armed forces overseas. Population data in the IDB for 2000-2050 are projections based on the resident population.	Total population by age groups and gender; population change, growth rate and natural increase; fertility rate; births; crude birth rate; deaths; crude death rate; mortality rate by gender and infant, age 1-4 and under age 5; net number of migrants and net migration rate; life expectancy at birth by gender; popula- tion density.	228 countries or areas	1950-2050	Annual	<b>Produced by the U.S.Census Bureau</b> based on data collected from national censuses, surveys, vital registration and administrative records.
	POPULATION REFERE	NCE BUREAU	J, WORLD F	POPULATION D	DATA SHEET
(Not Available)	Total population, under 15, over 65; birth rate; death rate; fertility rate; mortality rate - infant, maternal; life ex- pectancy by gender; natural growth rate; net migration; population in urban areas; projected population change (to 2050); population density.	210 countries	2006-2015 and pro- jections to 2025, 2030 and 2050	Annual	Estimates based on a recent census, official national data, or PRB, UN and U.S. Census Bureau projections. The effects of refugee movements, large numbers of foreign workers, and popula- tion shifts due to contemporary political events are taken into account to the extent possible. Projections are based on official country projections, series issued by the UN or the U.S. Census Bureau, or PRB projections.

Definition of Population	Types of Demographic Indicators Available	Countries Covered		Publication Frequency	Methodological Notes		
	UNIVERSITY OF GRONINGEN, PENN WORLD TABLE						
(Not Available)	Total population	182 countries	1950-2014	Annual	(Not Available)		

# **ECONOMIC GROWTH**

### **AUTHORS' NOTES:**

I. The World Bank World Development Indicators (WDI) reports annual economic growth rates (for GDP and GNI) in constant 2010 dollars, and the IMF World Economic Outlook reports GDP growth in constant local currency units. Other sources do not report economic growth rates, but rather report annual estimates for the size of the economy (GDP or GNI), requiring the user to calculate annual growth rates. In calculating annual growth rates for the economy, the most common method is the use of compound growth rates ( $X_t = X_0 (1+r)^t$ ), where  $X_0$  is the size of the economy in the base year,  $X_t$  is the size of the economy in the final year and t is the number of years in between the base year and the final year. The resulting growth rate is  $r = [(X_r/X_0)^{(1/t)}]-1$ .

2. The main source for GDP and GNI estimates referred to by other sources in the EADS database is the World Bank World Development Indicators (WDI). The various World Bank sources pull data from World Bank national accounts data, and OECD National Accounts data files. Differences in estimates are likely attributable to updating schedules. The University of Groningen Penn World Tables (PWT) provides separate purchasing power parity (PPP) GDP estimates. The World Bank and the Penn World Tables both use the International Comparisons Program (ICP) cross -country price comparisons for estimation of purchasing power parities in generating their estimates. However, the PWT provide estimates under various methodologies and may be desired for specific uses (see details in the "Comparative Tables" tables. All sources rely largely on country statistical offices that produce basic GDP estimates in local currency.

## WHAT SOURCE SHOULD YOU USE?

#### This will depend on your purpose:

**A.** Consider whether your main indicator of interest is not an indicator of economic growth but rather a different indicator contained in only one or a few of the sources. In that case, you may want to chose the economic growth estimate of the source for your main indicator of interest to avoid potential inconsistencies.

**B.** Consider whether you want to measure growth in GDP or growth in GNI:

- GDP measures the value of all final goods and services produced in a country in one year, while GNI adds to GDP the income that residents have received from abroad and subtracts income claimed by nonresidents. In other words, GDP measures production within the borders of a country or geographic areas, GNI measures income of residents of a country or geographic area. The difference between the two is often minor, but can be substantial for some countries. As an illustration, see page 15 "GDP vs GNI." Net income includes the net labor income and net property and entrepreneurial income (interest, dividends, rent, patents, copyrights, etc.);
- GDP is often used to analyze growth components (consumption, investment, government expenditures and net exports);
- GNI is often used to look at savings rates.

**C**. Consider whether you want to measure growth in nominal terms (current U.S. dollars or local currency, not adjusting for inflation) or real terms (adjusting for inflation); whether you want to measure growth in local currency or in U.S. dollars; whether you want to smooth the impact of exchange rate fluctuations, and , if so, what method for smoothing this impact you want to use:

- You will need economic growth in real terms (constant U.S. dollars or local currency), if you are really attempting to measure the growth in economic activity and not changes in price levels;
- If you are comparing one country to others, you cannot use indicators in local currency. On the other hand if you are only looking at one country and comparing with other variables of that same country, choosing an indicator in local currency may be easiest and would avoid accounting for distortions that could be generated in conversion of values to U.S. dollars (e.g. if you are comparing variables that were converted to U.S. dollars using different procedures). If you are only looking at one country, there is little reason to use indicators measured through the Atlas or PPP methods;
- If you are comparing countries, you may want to consider indicators in U.S. dollars estimated through the Atlas or PPP methods to help smooth the impact of fluctuating exchange rates. The Atlas method is only used for GNI estimates. In choosing between GNI estimates that use the Atlas method and those that use PPP, there is no obvious rule. The Atlas method uses exchange rates over three years, while the PPP method attempts to estimate equal purchasing power among countries. In a sample of 120 countries with GNI data available from the WDI between 1990 and 2015 under both methods, GNI measured through the Atlas method had a variance approximately 50 percent larger than GNI measured through the PPP method (the data used for this calculation was a GNI index based on World Bank, World Development Indicators data). However, there is not a clear pattern when looking at individual countries. See page 17 for an illustration for two countries.

**D.** Consider whether you want to measure economic growth at purchaser prices, producer prices, basic prices or at factor costs (see page 18 for more explanation). The difference among these measurements may or may not matter for your purposes and not all sources explicitly discuss how their indicators are measured in readily available public metadata and methodologies. Some do, however, and those are noted in the comparative table starting on page 10. If you intend to use the World Bank WDI's break down of value added by sector (agriculture, industry and services) note that these sum up to the WB WDI's indicator for gross value added at factor cost, and not other GDP indicators in WB WDI.

## Please see a comparison of sources and indicators below

Source	Methodological Notes	Series	Currency Unit Used	Number of Countries Covered	Years of Data Available	Publication Frequency
	Indicators of Ecor	nomic Growth				
World Bank, World Develop- ment Indicators	"Growth rates are compound growth rates ( $X_t = X_0 (1+r)^t$ ) calculated from 2010 constant U.S. dollars estimates. Estimates are based on country national accounts. Local currency series are converted to constant U.S. dollars using an exchange rate in the common reference year (2010). Countries use different years to base their national accounts. The choice of year affects the weights assigned to various components to reflect patterns of production or uses of	GDP growth (an- nual percentage)	Constant 2010 U.S. dollars	264	1960-2016	Updated quar- terly
assigned to various components to reflect patterns of production or uses of output. To obtain comparable series of constant price data for computing aggregates, the World Bank rescales estimates and value added by industrial origin to a common reference year.		GNI growth (annu- al percentage)	Constant 2010 U.S. dollars	264	1960-2016	Updated quarterly
	Indicators of the Size	of the Econon	ny	<u> </u>	I	
United Nations Development Program (UNDP), Human Develop- ment Report	Sourced from World Bank, World Development Indicators. Differences in values with WDI data in IDEA likely reflects updating schedules	Gross domestic product (GDP), constant 2011 PPP, \$US billions	Constant 2011 PPP, \$US billions	188	1980-2015	Annual
World Bank, World Develop- ment Indicators	GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricat-	GDP (constant lo- cal currency units)	Constant local currency units	264	1960-2016	Updated quar- terly
	ed assets or for depletion and degradation of natural resources. The year used as a base or reference varies from country to country. Dollar figures for GDP are converted from domestic currencies using single year	GDP (current local currency units)	Current local currency units	264	1960-2016	Updated quar- terly
	official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used. Local currency series are converted to constant U.S. dollars using an exchange rate in the common reference year. PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. For most economies	GDP at market prices (constant 2010 US\$)	Constant 2010 US\$	264	1960-2016	Updated quar- terly
		GDP at market prices (current US\$)	Current US\$	264	1960-2016	Updated quar- terly
	PPP figures are extrapolated from the 2011 International Comparison Program (ICP) benchmark estimates or imputed using a statistical model based on the 2011 ICP. For 47 high- and upper middle-income economies conversion factors	GDP, PPP (con- stant 2011 interna-	Constant 2011 interna- tional \$	264	1960-2016	Updated quar- terly
	are provided by Eurostat and the Organisation for Economic Co-operation and Development (OECD).		Current inter- national \$	264	1960-2016	Updated quar- terly

Source	Methodological Notes	Series	Currency Unit Used	Number of Countries Covered	Years of Data Available	Publication Frequency
	GNI, calculated in national currency, is usually converted to U.S. dollars at offi- cial exchange rates for comparisons across economies, although an alternative rate is used when the official exchange rate is judged to diverge by an excep-	GNI (constant 2010 US\$)	Constant 2010 US\$	264	1960-2016	Updated quar- terly
	tionally large margin from the rate actually applied in international transactions. The purpose of the Atlas conversion factor is to reduce the impact of exchange rate fluctuations in the cross-country comparison of national in-	GNI (constant lo- cal currency units)	Constant local currency units	264	1960-2016	Updated quar- terly
	comes. The conversion factor averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation be- tween the country, and through 2000, the G-5 countries (France, Germany,	GNI (current local currency units)	Current local currency units	264	1960-2016	Updated quar- terly
	Japan, the United Kingdom, and the United States). From 2001, these coun- tries include the Euro area, Japan, the United Kingdom, and the United States. An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States. Estimates in international dollars are obtained by using	GNI (current US\$)	Current US\$	264	1960-2016	Updated quar- terly
	purchasing power parity (PPP) rates. PPP rates are calculated by simultaneously comparing the prices of similar goods and services among a large number of countries. For most economies PPP figures are extrapolated from the 2011 In-	GNI, Atlas method (current US\$)	Atlas method, current US\$	264	1960-2016	Updated quar- terly
	countries. For most economies PPP figures are extrapolated from the 2011 in- ternational Comparison Program (ICP) benchmark estimates or imputed using a statistical model based on the 2011 ICP. For 47 high- and upper middle-income economies conversion factors are provided by Eurostat and the Organisation for Economic Co-operation and Development (OECD).	GNI, PPP (con- stant 2011 interna- tional \$)	PPP, constant 2011 interna- tional \$	264	1960-2016	Updated quar- terly
		GNI, PPP (current international \$)	PPP, current international \$	264	1960-2016	Updated quar- terly
World Bank, Ed- ucation Statistics (EdStats)	tion Statistics GDP at purchaser's prices is the sum of gross value added by all resident produc-		Constant 2005 US\$	254	1970-2015	Sporadic, more or less than annual depending on the type of data
	actual foreign exchange transactions, an alternative conversion factor is used. PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.	GDP at market prices (current US\$)	Current US\$	254	1970-2015	Sporadic, more or less than annual depending on the type of data
		GDP, PPP (con- stant 2011 interna- tional \$)	PPP, constant 2011 interna- tional \$	254	1970-2015	Sporadic, more or less than annual depending on the type of data
		GDP, PPP (current international \$)	PPP, current international \$	254	1970-2015	Sporadic, more or less than annual depending on the type of data

Source	Methodological Notes	Series	Currency Unit Used	Number of Countries Covered	Years of Data Available	Publication Frequency
World Bank, Education Statis- tics (EdStats)	From World Bank national accounts data, and OECD National Accounts data files. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions	GDP at market prices (constant 2005 US\$)	Constant 2005 US\$	254	1970-2015	Sporadic, more or less than annual depending on the type of data
	for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2005 U.S. dollars. Dollar figures for GDP are converted from domestic currencies using 2000 official exchange rates. For a few countries where the official exchange rate does not reflect the rate effective does not reflect the rate effectiv	GDP at market prices (current US\$)	Current US\$	254	1970-2015	Sporadic, more or less than annual depending on the type of data
tively applied to actual foreign exchange transactions, an alternative conversion	GDP, PPP (con- stant 2011 interna- tional \$)	PPP, constant 2011 interna- tional \$	254	1970-2015	Sporadic, more or less than annual depending on the type of data	
	GDP, PPP (current international \$)	PPP, current international \$	254	1970-2015	Sporadic, more or less than annual depending on the type of data	
	From World Bank national accounts data, and OECD National Accounts data files. GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in current U.S. dollars.	Gross national income (GNI) , PPP (current international \$)	Current internation- al \$	254	1970-2015	Sporadic, more or less than annual depend- ing on the type of data
World Bank, Millennium Devel- opment Goals	World Bank national accounts data, and OECD National Accounts data files. The Atlas conversion factor for any year is the average of a country's exchange rate (or alternative conversion factor) for that year and its exchange rates for the two preceding years, adjusted for the difference between the rate of inflation in the country and that in Japan, the United Kingdom, the United States, and the Euro area. A country's inflation rate is measured by the change in its GDP deflator. The inflation rate for Japan, the United Kingdom, the United States, and the Euro area, representing international inflation, is measured by the change in the SDR deflator. (Special drawing rights, or SDRs, are the International Monetary Fund's unit of account.) The SDR deflator is calculated as a weighted average of these country's currency in one SDR unit. Weights vary over time because both the composition of the SDR and the relative exchange rates for each currency change. The SDR deflator is calculated in SDR terms first and then converted to U.S. dollars using the SDR to dollar Atlas conversion factor. The Atlas conversion factor is then applied to a country's GNI. The World Bank systematically assesses the appropriateness of official exchange rates as conversion factors. An alternative conversion factor is used in the Atlas formula when the official exchange rate is judged to diverge by an exceptionally large margin from the rate effectively applied to alternative of countries.	GNI, Atlas meth- od, current US\$	Atlas method, current US\$	263	1990-2014	Annual

Source	Methodological Notes	Series	Currency Unit Used	Number of Countries Covered	Years of Data Available	Publication Frequency
IMF, World Eco- nomic Outlook Database	Although national statistical agencies are the ultimate providers of historical data and definitions, international organizations are also involved in statistical issues, with the objective of harmonizing methodologies for the compilation of national statistics, including analytical frameworks, concepts, definitions, classifications, and valuation procedures used in the production of economic statistics. The WEO database reflects information from both national source agencies and international organizations	Gross domestic product, current prices (LCU billions)	Current local currency units, billions	191	1980-2021	Semi-annual
	Gross domestic product corresponding to fiscal year is the country's GDP based on the same period during the year as their fiscal data. In the case of countries whose fiscal data are based on a fiscal calendar (e.g., July to June), this series would be the country's GDP over that same period. For countries whose fiscal data are based on a calendar year (i.e., January to December), this series will be the same as their GDP in current prices.	Gross domestic product corre- sponding to fiscal year, current prices (LCU billions)	Current local currency units, billions	191	1980-2021	Semi-annual
	The constant price base year is not common for all countries. The information on base years for national accounts at constant prices is gathered from IMF country desk officers and is country-specific.	Gross domestic product, con- stant prices (LCU billions)	Constant local currency units, billions	191	1980-2021	Semi-annual
	Based on GDP in national currency and the exchange rate projections provided by the IMF country desk economists for developing and transition countries. Exchanges rates for advanced economies are set as one part of the World Economic Outlook (WEO) assumptions during the WEO exercise.	Gross domestic product, cur- rent prices (\$US billions)	Current \$US, billions	191	1980-2021	Semi-annual
	Calculated by dividing a country's nominal GDP in its own currency by the PPP exchange rate. The PPP exchange rate comes from a calculation that starts with the PPP exchange reported by the ICP (International Comparisons Program) for 2011, which is then extended backwards and forwards by the growth in relative GDP deflators (the deflator of a country divided by the deflator of the United States).	Gross domestic product based on purchasing-pow- er-parity (PPP) (current inter- national dollars, billions)	PPP, current international \$, billions	191	1980-2021	Semi-annual
IMF, Financial Access Survey	GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deduc- tions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current local currency.	Gross Domestic Product (LCUs)	Current local currency units	189	2004-2013	Annual

Source	Methodological Notes	Series	Currency Unit Used	Number of Countries Covered	Years of Data Available	Publication Frequency
University of Groningen, Penn World Table	Real GDP at constant national prices, obtained from national accounts data for each country. Based on national prices that are constant over time, converted to US dollars. <b>Useful for looking at growth of GDP over time in each country.</b>	Real GDP at constant 2011 national prices (in mil. 2011US\$)	Constant 2011 U.S. dollars	182	1950-2014	Annual
	Output side: output valued at prices of domestic absorption as well as prices of exports and imports Real GDP: prices kept constant across countries Current PPP: PPP dollar of the current year In constant U.S. dollars: corrected by inflation of the United States <b>Useful for: comparing output capacity across countries in a given year</b>	Output-side real GDP at current Purchasing Power Parity (in mil. 2011US\$)	Constant 2011 U.S. dollars	182	1950-2014	Annual
	Output side: output valued at prices of domestic absorption as well as prices of exports and imports Real GDP: prices kept constant across countries Chained PPP: PPP dollars corrected for inflation by taking the base period to be the immediately preceding time period In constant U.S. dollars: corrected by inflation of the United States Useful for: comparing output capacity across countries in a given year and over time	Output-side real GDP at chained Purchasing Power Parity (in mil. 2011US\$)	Constant 2011 U.S. dollars	182	1950-2014	Annual
	Expenditure side: output values at prices of domestic absorption Real GDP: prices kept constant across countries Current PPP: PPP dollar of the current year In constant U.S. dollars: corrected by inflation of the United States <b>Useful for: comparing living standards across countries in a given year</b>	Expenditure-side real GDP at current Purchasing Power Parity (in mil. 2011US\$)	Constant 2011 U.S. dollars	182	1950-2014	Annual
	Expenditure side: output values at prices of domestic absorption Real GDP: prices kept constant across countries Chained PPP: PPP dollars corrected for inflation by taking the base period to be the immediately preceding time period In constant U.S. dollars: corrected by inflation of the United States Useful for: comparing living standards across countries in a given year and over time	Expenditure-side real GDP at chained Purchasing Power Parity (in mil. 2011US\$)	Constant 2011 U.S. dollars	182	1950-2014	Annual

### **GDP** vs. **GNI**

Country	Net income from abroad as % of GDP	Net income from abroad as % of GNI
Equatorial Cuinco		
Equatorial Guinea	-45.2%	-82.6%
Luxembourg	-30.6%	-44.1%
Bahrain	-16.6%	-19.9%
Ireland	-15.1%	-17.8%
Liberia	-13.6%	-15.8%
Angola	-12.4%	-14.2%
South Sudan	-11.8%	-13.4%
Maldives	-10.5%	-11.7%
Тодо	-9.4%	-10.4%
Mongolia	-9.2%	-10.1%
Trinidad and Tobago	-9.1%	-10.0%
Congo, Dem. Rep.	-7.9%	-8.6%
Somalia	-7.8%	-8.5%
Belize	-7.6%	-8.3%
Dominica	-7.6%	-8.2%
Guinea	-7.1%	-7.6%
Honduras	-6.9%	-7.4%
Thailand	-6.7%	-7.2%
Panama	-6.7%	-7.2%
Kazakhstan	-6.2%	-6.7%
Gabon	-6.0%	-6.4%
Bhutan	-5.8%	-6.2%
Paraguay	-5.6%	-5.9%
Vietnam	-5.6%	-5.9%
Cambodia	-5.5%	-5.8%
Czech Republic	-5.4%	-5.8%
Zimbabwe	-5.4%	-5.7%
Lao PDR	-5.2%	-5.5%
Zambia	-5.0%	-5.3%
Serbia	-5.0%	-5.3%
Fiji	-5.0%	-5.2%
Singapore	-4.7%	-4.9%
Belarus	-4.6%	-4.9%
Swaziland	-4.6%	-4.8%
Dominican Republic	-4.5%	-4.8%
Cabo Verde	-4.5%	-4.7%
Turkmenistan	-4.5%	-4.7%
El Salvador	-4.4%	-4.6%
Bulgaria	-4.1%	-4.3%

Uruguay	-4.0%	-4.1%
Lithuania	-3.9%	-4.0%
Palau	-3.9%	-4.0%
Madagascar	-3.8%	-3.9%
Hungary	-3.7%	-3.9%
Kyrgyz Republic	-3.7%	-3.8%
Bahamas, The	-3.6%	-3.8%
Peru	-3.6%	-3.7%
New Zealand	-3.5%	-3.6%
Grenada	-3.5%	-3.6%
Samoa	-3.4%	-3.5%
Malawi	-3.3%	-3.4%
Antigua and Barbuda	-3.3%	-3.4%
Costa Rica	-3.3%	-3.4%
Indonesia	-3.3%	-3.4%
Nigeria	-3.2%	-3.3%
Chad	-3.0%	-3.1%
Mali	-3.0%	-3.1%
Ghana	-3.0%	-3.1%
Tunisia	-3.0%	-3.1%
Poland	-2.8%	-2.9%
Barbados	-2.8%	-2.9%
Malaysia	-2.8%	-2.9%
Russian Federation	-2.8%	-2.8%
Algeria	-2.7%	-2.8%
Georgia	-2.7%	-2.8%
St. Kitts and Nevis	-2.7%	-2.8%
Uganda	-2.7%	-2.8%
Nicaragua	-2.7%	-2.8%
Chile	-2.6%	-2.7%
Guatemala	-2.5%	-2.6%
South Africa	-2.5%	-2.6%
Macedonia, FYR	-2.4%	-2.5%
Slovak Republic	-2.3%	-2.4%
Oman	-2.3%	-2.4%
Romania	-2.3%	-2.4%
Rwanda	-2.3%	-2.3%
Sri Lanka	-2.2%	-2.3%
Jamaica	-2.2%	-2.3%

I	(	
Brazil	-2.2%	-2.2%
Portugal	-2.1%	-2.2%
Qatar	-2.1%	-2.2%
Sudan	-2.1%	-2.2%
Estonia	-2.1%	-2.1%
Australia	-2.1%	-2.1%
Colombia	-2.1%	-2.1%
United Kingdom	-1.9%	-1.9%
Egypt, Arab Rep.	-1.8%	-1.9%
Morocco	-1.8%	-1.8%
Ecuador	-1.7%	-1.8%
Tanzania	-1.7%	-1.7%
Senegal	-1.6%	-1.7%
St. Lucia	-1.5%	-1.6%
Mozambique	-1.5%	-1.5%
Cameroon	-1.5%	-1.5%
Albania	-1.4%	-1.5%
Burkina Faso	-1.4%	-1.4%
Israel	-1.4%	-1.4%
Turkey	-1.3%	-1.3%
Ukraine	-1.3%	-1.3%
Botswana	-1.3%	-1.3%
Jordan	-1.3%	-1.3%
Congo, Rep.	-1.0%	-1.0%
Mauritius	-1.0%	-1.0%
Slovenia	-0.9%	-1.0%
Niger	-0.9%	-0.9%
Iceland	-0.9%	-0.9%
Canada	-0.8%	-0.8%
Mexico	-0.7%	-0.8%
Kenya	-0.7%	-0.7%
Croatia	-0.7%	-0.7%
Austria	-0.6%	-0.7%
Suriname	-0.6%	-0.6%
China	-0.5%	-0.5%
Ethiopia	-0.4%	-0.4%
Guinea-Bissau	-0.4%	-0.4%
Benin	-0.3%	-0.3%
Namibia	-0.3%	-0.3%

St. Vincent and the Grenadir	-0.3%	-0.3%
Iraq	-0.3%	-0.3%
Latvia	-0.3%	-0.3%
Burundi	-0.2%	-0.2%
Italy	-0.1%	-0.1%
Netherlands	-0.1%	-0.1%
Spain	-0.1%	-0.1%
Haiti	0.1%	0.1%
Guyana	0.2%	0.2%
Belgium	0.2%	0.2%
Greece	0.4%	0.4%
Korea, Rep.	0.4%	0.4%
Central African Republic	0.5%	0.5%
United Arab Emirates	0.5%	0.5%
Finland	0.6%	0.6%
Bosnia and Herzegovina	1.0%	1.0%
United States	1.1%	1.1%
Lebanon	1.3%	1.3%
Коѕоvо	1.3%	1.3%
Nepal	1.6%	1.6%
Hong Kong SAR, China	1.6%	1.6%
Uzbekistan	1.8%	1.8%
Sweden	2.1%	2.0%
Germany	2.1%	2.1%
Switzerland	2.3%	2.2%
Saudi Arabia	2.4%	2.4%
Denmark	2.5%	2.4%
Montenegro	2.6%	2.5%
Afghanistan	3.1%	3.0%
Armenia	3.9%	3.8%
Japan	4.1%	4.0%
Norway	5.1%	4.8%
Pakistan	6.1%	5.8%
Moldova	6.2%	5.8%
Bangladesh	6.5%	6.1%
Libya	7.0%	6.5%
Kuwait	12.1%	10.8%
Tajikistan	19.4%	16.3%
Philippines	20.9%	17.3%
Timor-Leste	69.2%	40.9%
Kiribati	123.4%	55.2%

#### Source: World Bank, World Development Indicators

Obtained from data in current local currency units for year 2015, last updated: 08/10/2016

- Of the 264 countries or areas in the database, 106 are not shown for lack of an estimate for GDP, GNI or net income from abroad

- Of the 158 remaining countries, net income from abroad is negative for 124 and positive for 34

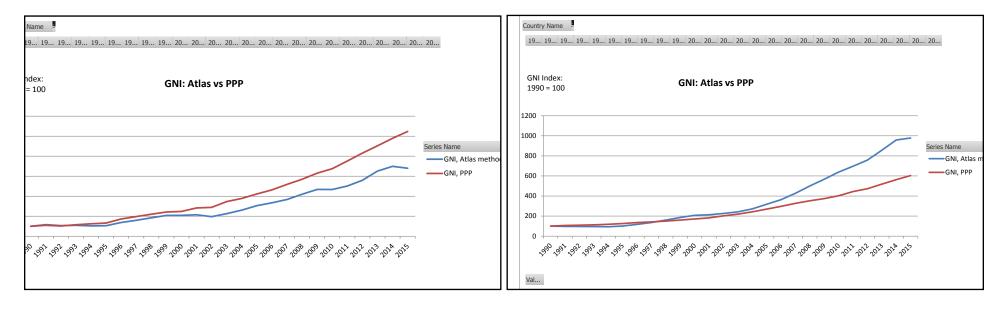
- Of the 34 countries that have positive net income from abroad, for 10 this represents at least 5% of its GNI

- Of the 124 countries that have negative net income from abroad, for 31 this represents at least 5% of its GNI

- Net income from abroad is a larger share of GDP than GNI in those countries with positive net income from abroad and a larger share of GNI in those countries with negative net income from abroad

#### **ATLAS VS. PPP**

In choosing between GNI estimates that use the Atlas method and those that use PPP to help smooth the impact of fluctuating exchange rates, there is no obvious rule. The Atlas method uses exchange rates over three years, while the PPP method attempts to estimate equal purchasing power among countries. The charts below show how, for Mozambique, GNI between 1990 and 2015 grew more when measured in PPP than through the Atlas method, while the reverse is true for Tanzania.



#### MOZAMBIQUE

#### **TANZANIA**

## **PRICE CONSIDERATIONS**

The following excerpts are from System of National Accounts 2008. Produced under the auspices of the United Nations, the European Commission, the Organization for Economic Co-operation and Development, the International Monetary Fund and the World Bank Group. Available at: <u>http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf</u>

#### BASIC PRICES X PRODUCER PRICES X PURCHASER PRICES



#### FACTOR COST

Gross value added at factor cost is not a concept used explicitly in the SNA. Nevertheless, it can easily be derived from either of the measures of gross value added presented above by subtracting the value of any taxes on production, less subsidies on production, payable out of gross value added as defined. For example, the only taxes on production remaining to be paid out of gross value added at basic prices consist of "other taxes on production." These consist mostly of current taxes (or subsidies) on the labour or capital employed in the enterprise, such as payroll taxes or current taxes on vehicles or buildings. Gross value added at factor cost can thus be derived from gross value added at basic prices by subtracting other taxes on production, less subsidies on production.

#### TAXES ON PRODUCTS X TAXES ON PRODUCTION

The detailed discussion of taxes related to production appears in section C of chapter 7, but it is important in the context of discussing alternative price measures to make the distinction between taxes (and subsidies) on products other than taxes (and subsidies) on production. As the name implies, taxes on products are payable per unit of the product. The tax may be a flat amount dependent on the physical quantity of the product or may be a percentage of the value at which the product is sold. Other taxes on production are taxes imposed on the producer that do not apply to products nor are levied on the profits of the producer. Examples include taxes on land or premises used in production or on the labor force employed. The distinction between subsidies on products and other subsidies on production is made on similar grounds.

#### M/CIO notes:

- I. The excerpts above help clarify the different prices at which GDP can be measured
- 2. Taxes and subsidies on products differentiate basic prices from producer prices; taxes and subsidies on production differentiate factor costs from other measures.