

## About the International Comparison Program

The International Comparison Program (ICP) is the largest worldwide data collection initiative, implemented under the guidance of the United Nations Statistical Commission (UNSC) with the objective of producing comparable price and volume measures of national accounts aggregates across the economies of the world. Along with purchasing power parities (PPPs), the ICP produces price level indexes (PLIs) and other comparable aggregates of gross domestic product (GDP) expenditure and its components.

More specifically, the PPPs are used to compute real measures of GDP, its main aggregates, and selected expenditure aggregates at level below the main aggregates. The main aggregates include individual consumption expenditure by households (ICEH) and nonprofit institutions serving households (NPISH), individual consumption expenditure by government (ICEG), collective consumption expenditure by government (CCEG), government final consumption expenditure (GFCE), gross capital formation (GCF), gross fixed capital formation (GFCF), changes in inventories, acquisitions less disposals of valuables, and balance of exports and imports. These measures allow more meaningful inter-economy comparisons, as they correct for distortions due to differences in the price levels between economies.

### The International Comparison Program in Asia and the Pacific

The Asian Development Bank (ADB), through its Economic Research and Development Impact Department, has been the regional implementing agency (RIA) of the ICP for Asia and the Pacific since the 2005 ICP round. ADB in its capacity as the RIA was responsible for coordinating with the 21 economies that participated in the 2021 ICP. These 21 economies are: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; Fiji; Hong Kong, China; India; Indonesia; the Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Nepal; Pakistan; the People's Republic of China; the Philippines; Singapore; Sri Lanka; Taipei, China; Thailand; and Viet Nam. Myanmar was among the 22 participating economies in the 2017 ICP.

## Concepts and Measures

<b>Purchasing Power Parity</b>	The amount of currency units required to purchase a common basket of goods and services in an economy that can be purchased with one unit of the reference currency in the reference economy.
<b>Price Level Index</b>	The ratio of PPP to exchange rate with respect to a common reference currency. PLI expresses the general price level in an economy as percentage of reference economy's price level and shows how the price levels of economies compare with each other. The PLI of the reference economy is 100. A PLI greater than 100 means that when the national average prices are converted at exchange rates, the resulting prices tend to be higher on average than prices in the reference economy.
<b>Real Expenditure</b>	Expenditure in the currency units of an economy converted to a common currency by dividing the expenditure by its corresponding PPP, and hence, valued at a uniform price level across economies.
<b>Nominal Expenditure</b>	Expenditure in the currency units of an economy converted to a common currency using the exchange rate of a reference economy without adjusting for the differences in prices of goods and services across economies.
<b>Per Capita Expenditure</b>	Total expenditure divided by the total population of a given economy. Per capita expenditure measures the standard of living in an economy. This can be expressed either in real or nominal terms.
<b>Per Capita Relative Expenditure</b>	Per capita expenditure that has been converted to the relative units of the reference economy by (i) dividing the per capita expenditure of a given economy by the per capita expenditure of the reference economy and (ii) multiplying by 100.
<b>Transitivity</b>	An important property of PPP whereby the direct PPP between any two economies yields the same result as an indirect comparison via any other economy.
<b>Base Economy Invariance</b>	The property under which the relativities between the PPPs, PLIs, and volume indexes of economies are not affected by the choice of reference economy or currency.
<b>Economy Share to Asia and the Pacific</b>	An economy's real or nominal expenditures for an aggregate, expressed as a percentage of the total real or nominal expenditure of all participating economies in Asia and the Pacific.
<b>Shares of Nominal Expenditure</b>	An aggregate's nominal expenditure as a percentage of the total nominal expenditure within the economy.

## Data and Sources

This file has two tables: one for the 2021 ICP results and second for 2017 ICP (revised) results. The tables contain indicator for the 2021 and revised 2017 results of 21 and 22 participating economies of Asia and the Pacific, respectively. These include PPPs, PLIs, and GDP and its components such as ICEH and NPISH, ICEG, CCEG, GFCE, GCF, GFCF, changes in inventories, acquisitions less disposals of valuables, balance of exports and imports, and lower levels of national accounts aggregates. In addition to these, other real expenditure measures such as actual individual consumption by households (AICH), which is the aggregate of ICEH, NPISH, and ICEG, is also presented. The five components of AICH which include ICEH, NPISH, and ICEG are (i) housing, water, electricity, gas and other fuels; (ii) health; (iii) recreation and culture; (iv) education; and (v) miscellaneous goods and services. In contrast, expenditures for the other AICH components of food and nonfood household consumption are incurred by households only. Results are also presented for another broad aggregate called "domestic absorption," which represents the domestic expenditures as aggregate of AICH, CCEG, GFCF, changes in inventories, and acquisitions less disposals of valuables; and "total consumption," which represents the consumption of households, NPISH, and the government.

The ICP results are compiled with Hong Kong, China as the reference economy and the Hong Kong dollar as the reference currency. The PPPs for the expenditures aggregates at all levels were derived using the Gini-Éltető-Köves-Szulc (GEKS) method. The real expenditure for each aggregate is derived by dividing the expenditures in local currency units by a PPP that is specific to that aggregate, so real expenditure for such an aggregate may not equal the total of its components' real expenditures within an economy. For expenditures in local currency units, participating economies allocated statistical discrepancy (if any) to one or more basic headings based on their best judgment and financial year-based estimates for some economies were converted to calendar year. Due to these adjustments, the expenditures in local currency units in the table for some expenditure aggregates may differ from the published expenditure estimates by the economies. Some PPPs presented are reference PPPs. Detailed list of reference PPPs will be available in the forthcoming reports of 2021 ICP for Asia and the Pacific. When an economy is not able to provide prices for any of the items for any category corresponding to the available GDP expenditures, the PPP for this category is estimated using gap-filling techniques based on country-product-dummy (CPD) by the RIA.

The 2017 revised results are based on (i) revisions in the 2017 estimates of GDP, population, and exchange rates; (ii) implementation of a new, hybrid approach of estimating actual and imputed rentals for housing; (iii) revisions in the economy base information for government compensation; (iv) updates in the underlying data to estimate productivity adjustment factors; and (v) changes in some reference PPPs, including the adoption of the two-stage referencing.

The results presented in these tables are produced by ADB as the ICP Asia and the Pacific regional implementing agency, based on data supplied by all the participating economies, in accordance with the methodology recommended by the ICP Technical Advisory Group and endorsed by the 2021 ICP Asia and the Pacific Regional Advisory Board. As such, these results are not produced by participating economies as part of the economies' official statistics.

Expenditure Categories	
Gross domestic product	AICH at purchasers' prices <i>plus</i> CCEG at purchasers' prices <i>plus</i> GCF at purchasers' prices <i>plus</i> the FOB value of exports of goods and services less the FOB value of imports of goods and services.
Actual individual consumption by households	The total value of the ICEH, NPISH, and ICEG at purchasers' prices.
Food and nonalcoholic beverages	Household expenditure on food products and nonalcoholic beverages purchased for consumption at home. It excludes expenditures on food products and nonalcoholic beverages sold for immediate consumption away from home by hotels, restaurants, cafés, bars, kiosks, street vendors, automatic vending machines, and other vendors; cooked dishes prepared by restaurants for consumption off their premises; cooked dishes prepared by catering contractors, whether collected by the customer or delivered to the customer's home; and products sold specifically as pet foods.
Food	Household expenditure on food products purchased for consumption at home. It excludes food products sold for immediate consumption away from the home by hotels, restaurants, cafés, bars, kiosks, street vendors, automatic vending machines, etc.; cooked dishes prepared by restaurants for consumption off their premises; cooked dishes prepared by catering contractors, whether collected by the customer or delivered to the customer's home; and products sold specifically as pet food.
Bread and cereals	Household expenditure on rice; other cereals, flour, and other cereal products; bread; other bakery products; and pasta products and couscous, purchased for consumption at home.
Meat	Household expenditure on fresh, chilled, frozen, preserved or processed animals and poultry meat purchased for consumption as food at home. It also includes animals and poultry purchased live for consumption as food.
Fish and seafood	Household expenditure on fresh, chilled, frozen, preserved or processed fish and seafood purchased for consumption as food at home. It also includes fish and seafood (such as crustaceans, molluscs and other shellfish, sea snails, land crabs, land snails and frogs) purchased live for consumption as food.
Milk, cheese and eggs	Household expenditure on fresh or preserved milk, other milk products such as soya milk, cheese and curd; and egg including egg-based products purchased for consumption as food at home.
Oils and fats	Household expenditure on butter, margarine and other vegetable fats such as peanut butter; and other edible oils and fats purchased for consumption as food at home.
Fruit	Household expenditure on fresh, chilled, frozen, preserved or processed fruit and fruit-based products purchased for consumption as food at home.
Vegetables	Household expenditure on fresh, chilled, frozen, preserved or processed vegetable and vegetable-based products purchased for consumption as food at home.
Sugar, jam, honey, chocolate and confectionery	Household expenditure on sugar and artificial sugar substitutes; jams, marmalades and honey; and chocolate, confectionery and ice cream purchased for consumption at home.
Food products n.e.c.	Household expenditure on sauces and condiments; salt, spices and culinary herbs; baby food; ready-made meals when the price only covers the cost of the product; and other food products not elsewhere classified purchased for consumption at home.
Nonalcoholic beverages	Household expenditure on nonalcoholic beverages purchased for consumption at home. It excludes nonalcoholic beverages sold for immediate consumption away from home by hotels, restaurants, cafés, bars, kiosks, street vendors, automatic vending machines, and other vendors.
Alcoholic beverages, tobacco and narcotics	Household expenditure on alcoholic beverages purchased for consumption at home. It includes low or nonalcoholic beverages that are generally alcoholic such as nonalcoholic beer, and excludes alcoholic beverages sold for immediate consumption away from the home by hotels, restaurants, cafés, bars, kiosks, street vendors, automatic vending machines, and other vendors; and household expenditure on tobacco (which covers all purchases of tobacco, including purchases of tobacco in cafés, bars, restaurants, and service stations).
Alcoholic beverages	Household expenditure on alcoholic beverages purchased for consumption at home. It includes low or nonalcoholic beverages which are generally alcoholic such as nonalcoholic beer, and excludes alcoholic beverages sold for immediate consumption away from the home by hotels, restaurants, cafés, bars, kiosks, street vendors, automatic vending machines, and other vendors.
Tobacco and narcotics	Household expenditure on tobacco, including purchases of tobacco in cafés, bars, restaurants, service stations; and narcotics.
Clothing and footwear	Household expenditure on clothing materials; other articles of clothing and clothing accessories; garments for men, women, children, and infants; cleaning, repair, and hire of clothing; all footwear for men, women, children, and infants; and repair and hire of footwear.
Housing, water, electricity, gas and other fuels	Household expenditure on actual and imputed rentals for housing; maintenance and repair of the dwelling; water supply and miscellaneous services related to the dwelling; and electricity, gas, and other fuels <i>plus</i> expenditure by NPISH on housing <i>plus</i> ICEG on housing services provided to individuals.
Furnishings, household equipment and routine household maintenance	Household expenditure on furniture and furnishings; carpets and other floor coverings; repair of furniture, furnishings and floor coverings; household textiles; household appliances; glassware, tableware, and household utensils; tools and equipment for house and garden; and goods and services for routine household maintenance.
Health	Household expenditure on pharmaceuticals; medical products, appliances, and equipment; outpatient services; and hospital services <i>plus</i> expenditure of NPISH on health <i>plus</i> ICEG on health benefits and reimbursements, and the production of health services.
Transportation	Household expenditure on purchase of vehicles, operation of personal transport equipment, and transport services.
Purchase of vehicles	Household expenditure on purchase of new and second-hand motor cars; motor cycles of all types, scooters and powered bicycles; bicycles and tricycles of all types; and animal-drawn vehicles, which include animals required to draw the vehicles and related equipment such as yokes, collars, harnesses, bridles, and reins.
Transport services	Household expenditure on purchases of transport services classified by mode of transport; cost of meals, snacks, drinks, refreshments or accommodation services must be included if covered by the fare and not separately priced. It includes school transport services but excludes ambulance services and package holidays.

Expenditure Categories	
Communication	Household expenditure on postal services, telephone and telefax equipment, and telephone and telefax services.
Recreation and culture	Household expenditure on audiovisual, photographic, and information processing equipment; other major durables for recreation and culture; other recreational items and equipment; gardens and pets; recreational and cultural services; newspapers, books, and stationery; and package holidays <i>plus</i> expenditure by NPISH on recreation and culture <i>plus</i> ICEG on recreation and culture.
Education	Household expenditure on pre-primary, primary, secondary, post-secondary, and tertiary education <i>plus</i> expenditure of NPISH on education <i>plus</i> ICEG on education benefits and reimbursements and the production of education services.
Restaurants and hotels	Household expenditure on food products and beverages sold for immediate consumption away from the home by hotels, restaurants, cafés, bars, kiosks, street vendors, automatic vending machines, and other vendors (including cooked dishes prepared by restaurants for consumption off their premises and cooked dishes prepared by catering contractors, whether collected by the customer or delivered to the customer's home) and household expenditure on accommodation services provided by hotels and similar establishments.
Miscellaneous goods and services	Household expenditure on personal care, personal effects, social protection, insurance, and financial and other services <i>plus</i> expenditure by NPISH on social protection and other services <i>plus</i> ICEG on social protection.
Net purchases abroad	Purchases by residential households in the rest of the world (as tourists, people traveling on business, and government officials, crews, border and seasonal workers, diplomatic and military personal stationed abroad) <i>less</i> purchases by nonresidential households in the economic territory of the country (as tourists, people traveling on business, and government officials, crews, border and seasonal workers, diplomatic and military personal stationed abroad). Zero expenditure values for net purchases abroad may imply that this expenditure category is allocated under other GDP expenditure components based on the best judgments of the implementing agencies of the participating economies.
Individual consumption expenditure by government	The total value of actual and imputed final consumption expenditures incurred by government on individual goods and services. These include expenditures incurred by the government considered to be individual services such as housing, health, recreation and culture, education, and social protection.
Collective consumption expenditure by government	The final consumption expenditure of government on collective services or the service provided by the government simultaneously to all members of the community.
Gross capital formation	GFCF, changes in inventories, and acquisitions less disposals of valuables.
Gross fixed capital formation	The total value of acquisitions less disposals of fixed assets by resident institutional units during the accounting period <i>plus</i> the additions to the value of nonproduced assets realized by the productive activity of resident institutional units.
Machinery and equipment	Capital expenditure on fabricated metal products, electrical and optical equipment, general-purpose machinery, special-purpose machinery, and transport equipment.
Construction	Capital expenditure on the construction of new structures and renovation of existing structures. Structures include residential buildings, nonresidential buildings, and civil engineering works.
Other products	Capital expenditure on furniture and other manufactured goods; computer software that a producer expects to use in production for more than one year; plantation, orchard, and vineyard development; change in stocks including breeding stock, draught animals, dairy cattle, and animals raised for wool clippings; land improvement, including dams and dikes that are part of flood control and irrigation projects; mineral exploration; acquisition of entertainment, literary, or artistic originals; and other intangible fixed assets such as research and development, weapons and ammunition; and ownership transfer costs on nonproduced assets, including ownership transfer costs relating to land.
Changes in inventories	The value of physical change in inventories of raw materials, supplies and finished goods held by producers; inventories of goods acquired for resale by wholesalers and retailers; inventories of all goods stored by government; work-in-progress in manufacturing, construction and service industries; work-in-progress on cultivated assets (e.g., the natural growth prior to harvest of agricultural crops, vineyards, orchards, plantations and timber tracts and the natural growth in livestock raised for slaughter).
Acquisitions less disposals of valuables	Acquisitions of valuables (produced assets, such as nonmonetary gold, precious stones, antiques, paintings, sculptures and other art objects, that are not used primarily for production or consumption but purchased and held as stores of value) <i>less</i> disposals of valuables.
Balance of exports and imports	The FOB value of exports of goods and services <i>less</i> the FOB value of imports of goods and services.
Individual consumption expenditure by households	The total value of actual and imputed final consumption expenditures incurred by households for goods and services consumed by the households. In the context of ICP in Asia and the Pacific, also includes the individual consumption expenditure by NPISH.
Individual consumption expenditure by households without housing	ICEH and NPISH, without actual and imputed rentals for housing and excluding expenditure by NPISH on housing.
Government final consumption expenditure	The total value of actual and imputed final consumption expenditures incurred by government on individual goods and services and final consumption expenditure of government on collective services.
Domestic absorption	AICH at purchasers' prices <i>plus</i> CCEG at purchasers' prices <i>plus</i> GFCF at purchasers' prices <i>plus</i> changes in inventories, and acquisitions less disposals of valuables.
Total consumption	AICH at purchasers' prices <i>plus</i> CCEG at purchasers' prices.

AICH = actual individual consumption by households; CCEG = collective consumption expenditure by government; FOB = free on board; GCF = gross capital formation; GDP = gross domestic product; GFCF = gross fixed capital formation; ICEG = Individual consumption expenditure by government; ICEH = individual consumption expenditure by households; NPISH = nonprofit institutions serving households.  
Source: Asian Development Bank (Economic Research and Development Impact Department).



