

### 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 goal of producing comparable price and volume measures of national accounts aggregates across economies of the world. Along with the purchasing power parities (PPPs), the ICP produces price level indexes (PLI) 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 and its components: individual consumption expenditure by households (ICEH), actual individual consumption by households (AICH), government final consumption expenditure (GFCE), gross fixed capital formation (GFCF), and lower levels of national accounts aggregates. These measures allow more meaningful inter-economy comparisons, as they correct for distortions due to differences in the price levels between economies.

#### ICP in Asia and the Pacific

The Asian Development Bank (ADB) through the Economic Research and Regional Cooperation 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 22 economies that participated in the 2017 ICP. These 22 economies are: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; Fiji; Hong Kong, China; India; Indonesia; the Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Myanmar; Nepal; Pakistan; the People's Republic of China; the Philippines; Singapore; Sri Lanka; Taipei, China; Thailand; and Viet Nam.

### Concepts and Measures

Purchasing Power Parity	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.
Price Level Index	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.
Real Expenditure	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.
Nominal Expenditure	Expenditures 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.
Per Capita Expenditure	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.
Per Capita Relative Expenditure	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 then (ii) multiplying by 100.
Transitivity	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.
Base Economy Invariance	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.
Economy Share to Asia and the Pacific	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.
Shares of Nominal Expenditure	An aggregate's nominal expenditure as a percentage of the total nominal expenditure within the economy.

### Data and Sources

This file has two sheets: one for the 2017 ICP results and second for 2011 ICP (revised) results. Each sheet contains indicators on PPPs, PLIs, GDP, and aggregates such as AICH, ICEH, nonprofit institutions serving households (NPISH), collective consumption expenditure by government, GFCE, GFCF, change in inventories and net acquisitions of valuables, balance of exports and imports, and subcomponents of these aggregates. The 2017 ICP and 2011 revised ICP results are compiled with Hong Kong, China as the reference economy and the Hong Kong dollar as the reference currency. Each real aggregate value is derived by using a purchasing power parity that is specific to that aggregate, so real aggregates may not sum up to the total of their real components for an economy.

The 2011 revised results are revisions of the 2011 original ICP results based on revisions in the 2011 GDP estimates; revisions in the population estimates; refinements in methods, such as for estimating the adjustment factors to account for the differences in productivity of government; changes in reference PPPs for some basic headings; and minor changes in ICP classification between 2017 and 2011. The annual average prices are the same as used for 2011 original results and remain unchanged. The methods used for estimating the results for 2011 revised are same as the methods used for 2017 ICP results.

The 2017 and 2011 revised results presented in these tables are produced by the ICP Asia Pacific regional implementing agency, based on data supplied by all the participating economies, and in accordance with the methodology recommended by the ICP Technical Advisory Group and approved by the Asia and the Pacific Regional Advisory Board. As such, these results are not produced by participating economies as part of the economies' official statistics.

## 2017 International Comparison Program for Asia and the Pacific

### Bhutan, 2017

Expenditure Category	Purchasing Power Parities (HK\$ = 1.00)	Real Expenditure		Per Capita Real Expenditure		Nominal Expenditure		Per Capita Nominal Expenditure		Nominal Expenditure Shares, (%)	PLIs	
		(HK\$ billion)	Economy Share to Asia and the Pacific, (%)	HK\$	Index (Asia and the Pacific = 100)	(HK\$ billion)	Economy Share to Asia and the Pacific, (%)	HK\$	Index (Asia and the Pacific = 100)		(HKG = 100)	(Asia and the Pacific = 100)
Gross Domestic Product	3.20	52	0.02	70,855	115	20	0.01	27,094	69	100.00	38	60
Actual Individual Consumption by Households <sup>a</sup>	3.05	31	0.02	43,196	122	11	0.01	15,752	76	58.14	36	62
Food and non-alcoholic beverages	3.92	8	0.03	11,369	157	4	0.02	5,337	129	19.70	47	82
Food	3.83	8	0.03	10,702	152	4	0.02	4,904	123	18.10	46	81
Bread and cereals	4.50	2	0.03	2,535	173	1	0.03	1,366	151	5.04	54	87
Meat and fish	3.58	1	0.01	1,367	74	0	0.01	585	53	2.16	43	72
Fruits and vegetables	3.92	2	0.03	2,791	146	1	0.03	1,308	139	4.83	47	95
Other food and non-alcoholic beverages	3.78	3	0.04	4,591	215	2	0.03	2,077	172	7.67	45	80
Clothing and footwear	3.87	2	0.04	2,564	194	1	0.02	1,187	121	4.38	46	62
Clothing	3.46	1	0.04	2,059	190	1	0.02	853	110	3.15	41	58
Housing, water, electricity, gas and other fuels	2.02	6	0.02	7,690	128	1	0.01	1,857	65	6.86	24	51
Health and education	1.29	10	0.02	14,074	128	2	0.01	2,166	48	7.99	15	38
Health	1.13	7	0.03	9,103	143	1	0.01	1,233	52	4.55	14	36
Education	1.42	4	0.02	5,470	113	1	0.01	933	44	3.44	17	39
Transportation and communication	4.35	4	0.02	4,862	106	2	0.02	2,530	95	9.34	52	90
Transportation	4.06	3	0.02	4,244	116	1	0.02	2,061	101	7.61	49	87
Recreation and culture	5.14	1	0.01	730	70	0	0.01	449	49	1.66	62	70
Restaurants and hotels	3.18	1	0.01	887	62	0	0.01	337	37	1.24	38	59
Other consumption expenditure items	3.62	3	0.02	4,355	81	1	0.01	1,889	48	6.97	43	59
Individual Consumption Expenditure by Government	1.50	6	0.03	8,087	161	1	0.01	1,455	49	5.37	18	30
Collective Consumption Expenditure by Government	1.74	10	0.07	14,383	359	2	0.02	2,998	116	11.07	21	32
Gross Fixed Capital Formation	4.53	19	0.02	25,672	130	10	0.02	13,903	96	51.31	54	74
Machinery and equipment	9.51	3	0.02	3,588	121	3	0.03	4,085	131	15.08	114	108
Construction	2.60	22	0.03	29,896	169	7	0.02	9,305	97	34.34	31	57
Change in Inventories and Net Acquisitions of Valuables	3.92	-0	-0.00	-31	-3	-0	-0.00	-15	-2	-0.05	47	72
Balance of Exports and Imports	8.36	-4	-0.17	-5,544	-895	-4	-0.17	-5,544	-895	-20.46	100	100
Individual Consumption Expenditure by Households and NPISH	3.28	26	0.02	36,422	118	10	0.02	14,296	80	52.77	39	68
Government Final Consumption Expenditure	1.62	17	0.05	22,991	258	3	0.02	4,453	80	16.44	19	31
Actual Individual Consumption by Households <sup>a</sup>	3.05	31	0.02	43,196	122	11	0.01	15,752	76	58.14	36	62
All goods	4.06	16	0.03	21,596	148	8	0.02	10,485	105	38.70	49	71
Non-durables	3.50	13	0.03	18,025	152	5	0.02	7,557	108	27.89	42	71
Semi-durables	4.43	2	0.03	3,009	175	1	0.02	1,595	108	5.89	53	62
Durables	6.33	1	0.02	1,760	107	1	0.02	1,332	90	4.92	76	85
Services	2.75	8	0.01	11,584	74	3	0.01	3,811	48	14.07	33	66

#### Reference Data

Exchange rate (Local Currency Units/Hong Kong dollar)	8.36
Total Population (in million)	0.73

0 or 0.00 = magnitude is less than half of unit employed; HK\$ = Hong Kong dollar; HKG = Hong Kong, China; NPISH=nonprofit institutions serving households; PLI = price level index.

<sup>a</sup> Includes individual consumption expenditure by households, nonprofit institutions serving households, and government.

Sources: Asian Development Bank estimates. For exchange rate: International Monetary Fund. International Financial Statistics. <http://data.imf.org/> (accessed 17 September 2019). Data for population refers to mid-year estimates supplied by the participating economy for the International Comparison Program.

## 2017 International Comparison Program for Asia and the Pacific

### Bhutan, 2011 (Revised)

Expenditure Category	Purchasing Power Parities (HK\$ = 1.00)	Real Expenditure		Per Capita Real Expenditure		Nominal Expenditure		Per Capita Nominal Expenditure		Nominal Expenditure Shares, (%)	PLIs	
		(HK\$ billion)	Economy Share to Asia and the Pacific, (%)	HK\$	Index (Asia and the Pacific = 100)	(HK\$ billion)	Economy Share to Asia and the Pacific, (%)	HK\$	Index (Asia and the Pacific = 100)		(HKG = 100)	(Asia and the Pacific = 100)
Gross Domestic Product	3.13	27	0.02	39,896	98	14	0.01	20,851	74	100.00	52	75
Actual Individual Consumption by Households <sup>a</sup>	2.88	15	0.02	21,456	96	7	0.01	10,321	73	49.50	48	76
Food and non-alcoholic beverages	3.25	4	0.02	5,525	110	2	0.02	2,998	91	14.38	54	83
Food	3.20	4	0.02	5,345	109	2	0.02	2,851	90	13.67	53	82
Bread and cereals	3.59	1	0.02	1,326	120	1	0.02	794	100	3.81	60	83
Meat and fish	2.91	0	0.01	701	61	0	0.01	340	42	1.63	49	69
Fruits and vegetables	2.78	1	0.02	1,641	125	1	0.02	761	105	3.65	46	84
Other food and non-alcoholic beverages	3.60	1	0.02	1,836	123	1	0.02	1,103	112	5.29	60	91
Clothing and footwear	3.53	1	0.03	1,275	139	1	0.02	752	93	3.61	59	67
Clothing	3.54	1	0.02	863	115	0	0.01	510	76	2.44	59	66
Housing, water, electricity, gas and other fuels	2.51	3	0.02	4,299	102	1	0.02	1,802	91	8.64	42	89
Health and education	1.69	5	0.02	7,539	126	1	0.01	2,128	78	10.20	28	62
Health	1.76	3	0.02	4,033	118	1	0.02	1,185	80	5.68	29	68
Education	1.59	2	0.02	3,555	130	1	0.01	942	76	4.52	27	58
Transportation and communication	3.19	2	0.02	2,292	97	1	0.01	1,221	72	5.85	53	74
Transportation	3.06	1	0.02	1,905	99	1	0.01	973	77	4.66	51	78
Recreation and culture	4.53	1	0.02	838	109	0	0.02	634	94	3.04	76	86
Restaurants and hotels	2.67	0	0.00	263	25	0	0.00	117	16	0.56	45	65
Other consumption expenditure items	3.29	1	0.01	1,222	38	0	0.01	671	29	3.22	55	75
Individual Consumption Expenditure by Government	1.76	4	0.03	5,635	166	1	0.02	1,654	87	7.93	29	52
Collective Consumption Expenditure by Government	1.82	6	0.06	8,315	292	2	0.03	2,530	137	12.13	30	47
Gross Fixed Capital Formation	4.11	14	0.03	20,649	147	10	0.02	14,163	131	67.92	69	89
Machinery and equipment	6.28	4	0.03	5,182	164	4	0.03	5,429	172	26.04	105	105
Construction	2.72	12	0.03	18,128	159	6	0.02	8,227	125	39.46	45	79
Change in Inventories and Net Acquisitions of Valuables	3.69	-0	-0.00	-92	-9	-0	-0.00	-57	-7	-0.27	62	83
Balance of Exports and Imports	6.00	-4	-0.20	-6,106	-1,074	-4	-0.20	-6,106	-1,074	-29.28	100	100
Individual Consumption Expenditure by Households and NPISH	3.02	12	0.02	17,216	89	6	0.01	8,666	70	41.56	50	79
Government Final Consumption Expenditure	1.79	10	0.04	14,038	230	3	0.02	4,184	112	20.07	30	49
Actual Individual Consumption by Households <sup>a</sup>	2.88	15	0.02	21,456	96	7	0.01	10,321	73	49.50	48	76
All goods	3.48	7	0.02	10,481	105	4	0.02	6,076	80	29.14	58	76
Non-durables	3.13	6	0.02	8,888	110	3	0.02	4,640	87	22.25	52	79
Semi-durables	3.89	1	0.02	1,401	116	1	0.01	908	78	4.36	65	67
Durables	4.53	0	0.01	699	65	0	0.01	528	49	2.53	76	76
Services	2.77	4	0.01	5,606	65	2	0.01	2,590	55	12.42	46	85

#### Reference Data

Exchange rate (Local Currency Units/Hong Kong dollar)	6.00
Total Population (in million)	0.68

0 or 0.00 = magnitude is less than half of unit employed; HK\$ = Hong Kong dollar; HKG = Hong Kong, China; NPISH=nonprofit institutions serving households; PLI = price level index.

<sup>a</sup> Includes individual consumption expenditure by households, nonprofit institutions serving households, and government.

Sources: Asian Development Bank estimates. For exchange rate: International Monetary Fund. International Financial Statistics. <http://data.imf.org/> (accessed 17 September 2019). Data for population refers to mid-year estimates supplied by the participating economy for the International Comparison Program.