

#### R-RDTA 9238: 2017 International Comparison Program for Asia and the Pacific Regional Results

#### **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; 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

# Singapore, 2017

	Purchasing	Real Expenditure		Per Capita Real Expenditure		Nominal Expenditure		Per Capita Nominal Expenditure		Nominal	PLIs	
Expenditure Category	Power Parities (HK\$ = 1.00)	(HK\$ billion)	Economy Share to Asia and the Pacific, (%)	нк\$	Index (Asia and the Pacific = 100)	(HK\$ billion)	Economy Share to Asia and the Pacific, (%)	НК\$	Index (Asia and the Pacific = 100)	Expenditure Shares, (%)	(HKG = 100)	(Asia and the Pacific = 100)
Gross Domestic Product	0.15	3,171	1.36	564,960	921	2,637	1.77	469,907	1,195	100.00	83	130
Actual Individual Consumption by Households <sup>a</sup>	0.17	1,081	0.81	192,614	543	1,043	1.32	185,763	892	39.53	96	164
Food and non-alcoholic beverages	0.15	77	0.28	13,644	188	63	0.40	11,264	271	2.40	83	144
Food	0.15	67	0.25	11,938	170	56	0.37	10,024	252	2.13	84	149
Bread and cereals	0.16	11	0.19	1,922	131	10	0.29	1,764	195	0.38	92	149
Meat and fish	0.16	22	0.32	3,959	216	20	0.49	3,599	328	0.77	91	152
Fruits and vegetables	0.15	14	0.20	2,542	133	12	0.34	2,147	229	0.46	84	172
Other food and non-alcoholic beverages	0.12	31	0.38	5,459	256	21	0.46	3,754	311	0.80	69	122
Clothing and footwear	0.17	29	0.57	5,114	388	28	0.75	4,975	506	1.06	97	131
Clothing	0.16	26	0.63	4,621	426	24	0.80	4,190	538	0.89	91	126
Housing, water, electricity, gas and other fuels	0.19	141	0.62	25,209	421	155	1.44	27,532	971	5.86	109	231
Health and education	0.15	217	0.52	38,718	353	186	1.10	33,228	740	7.07	86	209
Health	0.18	99	0.41	17,683	278	98	1.09	17,488	735	3.72	99	264
Education	0.13	118	0.64	21,049	433	88	1.11	15,740	746	3.35	75	172
Transportation and communication	0.21	146	0.84	26,027	567	176	1.76	31,420	1,185	6.69	121	209
Transportation	0.22	112	0.81	20,003	549	138	1.78	24,531	1,200	5.22	123	219
Recreation and culture	0.15	128	3.27	22,894	2,204	109	3.16	19,451	2,135	4.14	85	97
Restaurants and hotels	0.14	122	2.26	21,731	1,523	97	2.77	17,256	1,872	3.67	79	123
Other consumption expenditure items	0.20	209	1.02	37,263	689	232	1.55	41,283	1,042	8.79	111	151
Individual Consumption Expenditure by Government	0.15	113	0.59	20,109	399	96	0.85	17,062	571	3.63	85	143
Collective Consumption Expenditure by Government	0.12	258	1.70	45,883	1,146	181	1.86	32,322	1,252	6.88	70	109
Gross Fixed Capital Formation	0.15	850	1.13	151,506	765	696	1.27	124,067	855	26.40	82	112
Machinery and equipment	0.21	175	1.55	31,125	1,047	206	1.74	36,788	1,177	7.83	118	112
Construction	0.12	399	0.60	71,169	403	271	0.75	48,255	505	10.27	68	125
Change in Inventories and Net Acquisitions of Valuables	0.17	56	1.25	9,994	841	52	1.77	9,313	1,196	1.98	93	142
Balance of Exports and Imports	0.18	665	28.36	118,442	19,132	665	28.36	118,442	19,132	25.21	100	100
Individual Consumption Expenditure by Households and NPISH	0.17	969	0.83	172,694	558	947	1.40	168,702	945	35.90	98	169
Government Final Consumption Expenditure	0.13	372	1.10	66,233	744	277	1.31	49,384	887	10.51	75	119
Actual Individual Consumption by Households <sup>a</sup>	0.17	1,081	0.81	192,614	543	1,043	1.32	185,763	892	39.53	96	164
All goods	0.19	271	0.49	48,365	332	294	0.78	52,337	525	11.14	108	158
Non-durables	0.18	132	0.29	23,554	198	132	0.49	23,433	334	4.99	99	168
Semi-durables	0.17	55	0.84	9,765	566	52	0.93	9,324	630	1.98	95	111
Durables	0.28	70	1.12	12,510	758	110	1.97	19,579	1,329	4.17	157	175
Services	0.16	717	1.21	127,775	816	644	2.16	114,745	1,459	24.42	90	179

Reference Data	
Exchange rate (Local Currency Units/Hong Kong dollar)	0.18
Total Population (in million)	5.61

HK\$ = Hong Kong dollar; HKG = Hong Kong, China; NPISH=nonprofit institutions serving households; PLI = price level index.

Sources: Asian Development Bank estimates. For exchange rate: International Monetary Fund. International 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.

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

# 2017 International Comparison Program for Asia and the Pacific

# Singapore, 2011 (Revised)

	Purchasing	Real Expenditure		Per Capita Real Expenditure		Nominal Expenditure		Per Capita Nominal Expenditure		Nominal	PLIs	
	Power Parities (HK\$ = 1.00)	(HK\$ billion)	Economy Share to Asia and the Pacific, (%)	нк\$	Index (Asia and the Pacific = 100)	(HK\$ billion)	Economy Share to Asia and the Pacific, (%)	нк\$	Index (Asia and the Pacific = 100)	Expenditure Shares, (%)	(HKG = 100)	(Asia and the Pacific = 100)
Gross Domestic Product	0.16	2,171	1.50	418,895	1,034	2,175	2.16	419,491	1,486	100.00	100	144
Actual Individual Consumption by Households <sup>a</sup>	0.19	734	0.92	141,677	635	868	1.71	167,452	1,178	39.92	118	186
Food and non-alcoholic beverages	0.18	49	0.27	9,397	187	55	0.47	10,638	322	2.54	113	172
Food	0.19	43	0.24	8,205	168	49	0.44	9,520	299	2.27	116	178
Bread and cereals	0.20	7	0.17	1,316	119	9	0.31	1,669	211	0.40	127	176
Meat and fish	0.20	15	0.37	2,969	258	19	0.65	3,624	450	0.86	122	175
Fruits and vegetables	0.18	8	0.18	1,635	125	9	0.36	1,774	244	0.42	108	195
Other food and non-alcoholic beverages	0.16	18	0.35	3,555	239	19	0.53	3,571	364	0.85	100	153
Clothing and footwear	0.21	17	0.53	3,338	363	23	0.80	4,431	549	1.06	133	151
Clothing	0.21	14	0.53	2,742	366	18	0.77	3,541	530	0.84	129	145
Housing, water, electricity, gas and other fuels	0.21	106	0.70	20,359	481	138	1.95	26,645	1,339	6.35	131	278
Health and education	0.17	129	0.61	24,970	417	139	1.44	26,896	991	6.41	108	238
Health	0.18	59	0.48	11,303	330	64	1.22	12,352	839	2.94	109	254
Education	0.17	72	0.74	13,985	512	75	1.70	14,544	1,171	3.47	104	229
Transportation and communication	0.23	101	1.19	19,411	821	144	2.37	27,768	1,627	6.62	143	198
Transportation	0.21	82	1.19	15,773	821	104	2.31	20,073	1,592	4.79	127	194
Recreation and culture	0.16	112	4.11	21,666	2,825	114	4.74	21,900	3,258	5.22	101	115
Restaurants and hotels	0.16	81	2.14	15,690	1,474	80	3.10	15,429	2,131	3.68	98	145
Other consumption expenditure items	0.22	134	1.17	25,840	806	184	2.21	35,531	1,519	8.47	138	188
Individual Consumption Expenditure by Government	0.16	71	0.59	13,760	405	73	1.07	14,010	736	3.34	102	181
Collective Consumption Expenditure by Government	0.15	140	1.38	26,967	948	128	1.95	24,699	1,339	5.89	92	141
Gross Fixed Capital Formation	0.15	608	1.22	117,279	837	549	1.42	105,876	979	25.24	90	117
Machinery and equipment	0.15	183	1.63	35,363	1,123	176	1.57	33,908	1,077	8.08	96	96
Construction	0.13	342	0.84	65,905	577	284	1.21	54,837	832	13.07	83	144
Change in Inventories and Net Acquisitions of Valuables	0.18	28	0.75	5,402	515	31	1.11	5,985	766	1.43	111	149
Balance of Exports and Imports	0.16	599	29.54	115,480	20,315	599	29.54	115,480	20,315	27.53	100	100
Individual Consumption Expenditure by Households and NPISH	0.19	664	0.97	128,182	664	795	1.81	153,442	1,246	36.58	120	188
Government Final Consumption Expenditure	0.15	212	0.98	40,966	672	201	1.50	38,708	1,033	9.23	94	154
Actual Individual Consumption by Householdsa	0.19	734	0.92	141,677	635	868	1.71	167,452	1,178	39.92	118	186
All goods	0.22	194	0.54	37,496	375	260	0.96	50,232	661	11.97	134	176
Non-durables	0.21	96	0.33	18,535	229	123	0.64	23,756	443	5.66	128	194
Semi-durables	0.21	37	0.85	7,052	583	47	1.13	9,126	779	2.18	129	134
Durables	0.26	56	1.45	10,711	996	90	2.36	17,350	1,621	4.14	162	163
Services	0.18	489	1.60	94,394	1,097	534	3.19	103,096	2,196	24.58	109	200

Reference Data	
Exchange rate (Local Currency Units/Hong Kong dollar)	0.16
Total Population (in million)	5.18

HK\$ = Hong Kong dollar; HKG = Hong Kong, China; NPISH=nonprofit institutions serving households; PLI = price level index.

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.

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