

## 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 (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 results of an indicator for the 22 participating economies of Asia and the Pacific. These include 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 2011 revised results 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

# Real Expenditure, 2017 (billion Hong Kong dollars)

Expenditure Category	BAN	BHU	BRU	CAM	FIJ	HKG	IND	INO	LAO	MAL	MLD	MON	MYA	NEP	PAK	PHI	PRC	SIN	SRI	TAP	THA	VIE	AP
Gross Domestic Product	4,272	52	156	378	71	2,663	48,395	17,394	303	4,916	55	212	1,409	503	5,954	4,902	117,929	3,171	1,621	6,688	7,232	4,069	232,344
Actual Individual Consumption by Householdsa	3,285	31	42	335	53	1,887	32,884	10,578	173	3,070	24	131	865	434	5,495	4,083	57,692	1,081	1,114	4,097	4,202	2,729	134,284
Food and non-alcoholic beverages	1,412	8	5	123	14	192	8,316	2,335	56	606	4	31	352	208	1,458	1,460	8,641	77	216	417	881	656	27,470
Food	1,415	8	4	119	14	180	8,343	2,100	48	587	4	29	346	208	1,407	1,328	8,422	67	215	389	775	637	26,645
Bread and cereals	551	2	1	37	3	19	1,762	469	12	78	1	4	65	70	327	422	1,250	11	69	81	150	174	5,558
Meat and fish	263	1	2	35	3	92	706	726	20	191	2	13	117	29	158	542	3,391	22	32	126	208	272	6,951
Fruits and vegetables	266	2	1	18	4	26	2,972	328	8	128	1	1	93	54	249	142	2,419	14	33	109	269	96	7,233
Other food and non-alcoholic beverages	306	3	2	32	4	55	3,028	833	16	215	2	14	79	58	710	359	1,788	31	82	101	252	111	8,082
Clothing and footwear	156	2	1	5	2	90	2,236	255	3	71	1	5	25	11	319	27	1,384	29	37	155	64	114	4,992
Clothing	144	1	1	3	2	59	1,829	215	3	65	1	4	23	9	266	21	1,094	26	35	141	65	100	4,104
Housing, water, electricity, gas and other fuels	743	6	8	54	6	295	5,408	1,545	26	614	4	18	205	71	1,469	571	9,596	141	162	627	533	587	22,692
Health and education	516	10	16	111	11	278	8,246	2,521	51	540	9	52	208	92	1,387	784	22,460	217	357	1,172	1,348	1,080	41,467
Health	218	7	3	45	3	157	4,124	859	15	220	6	18	104	39	738	212	15,269	99	149	795	574	436	24,090
Education	298	4	14	66	8	121	4,075	1,707	38	325	4	36	104	52	630	614	8,110	118	216	415	787	661	18,405
Transportation and communication	137	4	5	19	7	170	4,680	1,516	9	518	2	13	31	13	336	435	7,850	146	172	567	472	277	17,379
Transportation	121	3	4	18	5	125	3,984	1,222	7	361	1	10	23	7	232	373	5,931	112	158	432	416	248	13,794
Recreation and culture	38	1	1	6	1	194	199	280	2	127	1	3	7	13	147	51	2,169	128	76	277	127	85	3,933
Restaurants and hotels	72	1	2	15	1	167	491	961	12	325	2	2	34	8	123	135	2,089	122	30	310	376	125	5,402
Other consumption expenditure items	254	3	4	28	11	501	4,980	1,464	34	443	3	19	55	28	604	698	9,166	209	154	797	670	353	20,481
Individual Consumption Expenditure by Government	81	6	15	30	5	102	1,523	961	20	378	6	32	69	15	312	316	12,874	113	220	693	883	405	19,058
Collective Consumption Expenditure by Government	222	10	49	14	9	160	2,701	1,273	63	341	6	27	278	40	409	305	7,283	258	145	512	652	394	15,152
Gross Fixed Capital Formation	1,070	19	57	36	12	576	12,227	5,264	83	1,186	25	41	373	116	698	1,028	47,428	850	327	1,225	1,500	795	74,936
Machinery and equipment	153	3	11	8	5	161	2,130	434	12	203	5	8	83	15	138	224	6,465	175	95	327	489	104	11,250
Construction	1,276	22	51	32	5	360	9,603	6,588	63	1,045	23	28	306	102	469	750	43,267	399	226	548	812	879	66,852
Change in Inventories and Net Acquisitions of Valuables	6	-0	-3	2	1	11	2,058	61	0	14	1	12	16	56	86	5	1,935	56	122	-14	-20	95	4,499
Balance of Exports and Imports	-144	-4	13	-0	-1	29	-573	80	-3	170	1	2	-38	-66	-250	-241	1,643	665	-49	571	491	49	2,344
Individual Consumption Expenditure by Households and NPISH	3,120	26	31	303	47	1,785	31,360	9,551	152	2,707	19	107	784	410	5,135	3,738	46,611	969	929	3,484	3,466	2,364	117,100
Government Final Consumption Expenditure	318	17	64	41	15	261	4,312	2,241	88	712	12	58	374	59	727	617	19,609	372	347	1,191	1,487	788	33,711
Actual Individual Consumption by Householdsa	3,285	31	42	335	53	1,887	32,884	10,578	173	3,070	24	131	865	434	5,495	4,083	57,692	1,081	1,114	4,097	4,202	2,729	134,284
All goods	1,893	16	14	163	25	641	14,128	4,587	92	1,305	9	55	474	239	2,766	1,886	21,720	271	364	1,497	1,582	1,390	55,119
Non-durables	1,845	13	10	162	22	322	12,433	3,738	86	1,103	8	50	496	245	2,626	1,914	16,025	132	291	915	1,350	1,149	44,934
Semi-durables	172	2	2	7	2	160	2,072	574	5	123	1	6	26	14	318	71	2,229	55	103	309	144	134	6,528
Durables	55	1	2	8	3	158	702	479	7	143	1	3	7	7	76	80	3,821	70	6	289	166	162	6,248
Services	849	8	12	100	17	1,061	17,359	4,457	57	1,453	10	43	228	120	2,051	1,705	23,753	717	649	1,890	1,755	1,018	59,314
Reference Data																							
Exchange rate (Local Currency Units/Hong Kong dollar)	10.32	8.36	0.18	519.75	0.27	1.00	8.36	1,716.98	1,071.64	0.55	1.97	313.06	174.56	13.41	13.53	6.47	0.87	0.18	19.56	3.91	4.36	2,870.44	
Total Population (in million)	161.80	0.73	0.43	15.85	0.88	7.39	1,309.20	261.89	6.90	32.02	0.49	3.15	53.15	28.83	199.11	104.92	1,386.40	5.61	21.44	23.56	67.65	94.24	

<sup>0 =</sup> magnitude is less than half of unit employed; AP = Asia and the Pacific; BAN = Bangladesh; BHU = Bhutan; BRU = Brunei Darussalam; CAM = Cambodia; FIJ = Fiji; HKG = Hong Kong, China; IND = India; INO = India; I

Sources: Asian Development Bank estimates. For exchange rates: 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 economies 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

## Real Expenditure, 2011 (Revised)

(billion Hong Kong dollars)

Expenditure Category	BAN	BHU	BRU	CAM	FIJ	HKG	IND	INO	LAO	MAC	MAL	MLD	MON	MYA	NEP	PAK	PHI	PRC	SIN	SRI	TAP	THA	VIE	AP
Gross Domestic Product	2,203	27	173	199	40	1,934	28,688	11,667	140	347	3,254	27	129	877	299	4,017	2,807	72,641	2,171	961	4,943	4,776	2,104	144,425
Actual Individual Consumption by Households <sup>a</sup>	1,762	15	28	176	31	1,289	18,921	7,022	88	77	1,811	10	81	577	259	3,705	2,301	32,179	734	775	3,139	3,169	1,409	79,559
Food and non-alcoholic beverages	723	4	3	63	10	137	5,177	1,677	24	5	314	2	18	250	127	1,295	823	5,744	49	167	316	663	336	17,927
Food	727	4	3	61	9	132	5,166	1,551	21	5	302	2	17	249	127	1,263	750	5,604	43	166	295	589	325	17,410
Bread and cereals	287	1	1	19	2	12	1,162	421	5	1	38	0	2	56	48	249	245	1,061	7	53	57	108	90	3,927
Meat and fish	126	0	1	18	2	74	394	457	10	2	113	1	7	83	20	117	302	1,953	15	24	93	167	127	4,106
Fruits and vegetables	157	1	0	10	3	16	1,633	261	4	1	59	0	1	75	28	263	79	1,666	8	20	102	213	58	4,663
Other food and non-alcoholic beverages	151	1	1	15	3	35	1,994	517	5	1	109	1	8	43	30	661	194	1,148	18	65	68	180	57	5,308
Clothing and footwear	73	1	1	3	1	60	1,082	152	2	3	31	0	2	17	6	119	19	1,410	17	33	110	81	56	3,278
Clothing	63	1	0	1	1	41	892	130	1	2	27	0	2	14	5	95	13	1,124	14	31	93	75	46	2,671
Housing, water, electricity, gas and other fuels	451	3	4	28	5	210	3,596	1,234	13	13	403	2	12	122	41	1,172	371	5,914	106	115	498	449	313	15,075
Health and education	305	5	11	60	6	183	4,340	1,523	19	14	398	3	33	135	52	847	347	10,502	129	167	803	853	619	21,356
Health	118	3	3	27	2	98	2,100	434	6	6	146	2	10	58	24	534	80	7,249	59	81	509	393	280	12,220
Education	189	2	8	33	4	85	2,172	1,214	15	8	259	1	24	76	28	319	291	3,709	72	87	326	465	342	9,732
Transportation and communication	64	2	5	10	3	117	2,289	946	8	8	272	1	13	17	6	216	229	3,090	101	103	451	396	87	8,431
Transportation	52	1	5	10	2	90	2,051	802	7	6	221	0	14	13	4	183	226	2,155	82	104	349	380	89	6,846
Recreation and culture	7	1	1	3	0	145	120	230	1	6	86	0	1	5	7	27	27	1,560	112	49	206	93	46	2,733
Restaurants and hotels	37	0	1	8	0	125	307	533	8	12	182	0	1	28	5	28	81	1,758	81	16	230	288	63	3,794
Other consumption expenditure items	171	1	2	15	6	311	2,928	877	17	9	310	2	9	31	24	334	422	4,376	134	130	633	481	200	11,422
Individual Consumption Expenditure by Government	51	4	10	21	3	65	1,188	739	8	10	297	2	21	19	14	171	138	7,953	71	108	455	538	209	12,096
Collective Consumption Expenditure by Government	95	6	38	10	4	103	2,305	861	19	14	260	6	14	134	17	345	142	4,524	140	77	416	421	190	10,140
Gross Fixed Capital Formation	529	14	46	20	8	455	7,882	3,522	41	40	678	8	51	231	51	389	495	31,892	608	193	1,120	1,166	529	49,968
Machinery and equipment	73	4	15	5	4	200	1,604	445	4	8	195	2	21	64	8	75	106	7,141	183	72	400	511	90	11,228
Construction	604	12	31	16	3	214	6,784	3,751	33	35	423	7	23	162	41	297	366	25,892	342	122	489	554	532	40,733
Change in Inventories and Net Acquisitions of Valuables	14	-0	-2	1	1	12	1,338	175	2	4	33	0	10	1	42	54	43	1,787	28	53	12	42	90	3,739
Balance of Exports and Imports	-80	-4	57	-0	-2	74	-788	172	-2	166	361	2	-18	-16	-36	-114	-63	1,515	599	-67	254	59	-44	2,026
Individual Consumption Expenditure by Households and NPISH	1,665	12	20	157	28	1,224	17,575	6,298	79	68	1,557	9	66	538	242	3,473	2,146	25,675	664	676	2,729	2,708	1,229	68,836
Government Final Consumption Expenditure	150	10	49	28	7	169	3,577	1,592	28	24	547	8	34	171	31	528	277	11,941	212	177	865	927	390	21,739
Actual Individual Consumption by Households <sup>a</sup>	1,762	15	28	176	31	1,289	18,921	7,022	88	77	1,811	10	81	577	259	3,705	2,301	32,179	734	775	3,139	3,169	1,409	79,559
All goods	997	7	9	87	16	468	8,835	3,080	45	19	763	4	33	319	146	2,063	1,126	13,913	194	292	1,236	1,328	704	35,685
Non-durables	1,012	6	6	83	14	231	7,986	2,442	38	10	656	4	29	329	153	2,056	1,117	9,996	96	250	715	1,073	611	28,914
Semi-durables	79	1	1	4	1	108	1,067	317	3	4	57	0	3	17	7	143	43	1,924	37	57	230	143	68	4,314
Durables	24	0	2	5	1	128	387	401	5	4	84	0	3	5	4	56	50	2,108	56	6	287	154	63	3,835
Services	486	4	7	49	9	701	8,411	2,934	31	40	886	4	29	173	71	1,142	946	10,639	489	398	1,413	1,279	531	30,673
Reference Data																								
Exchange rate (Local Currency Units/Hong Kong dollar)	9.53	6.00	0.16	521.39	0.23	1.00	6.00	1,126.73	1,031.61	1.03	0.39	1.88	162.58	105.08	9.51	11.09	5.56	0.83	0.16	14.20	3.79	3.92 2	2,634.86	
Total Population (in million)	149.70	0.68	0.39	14.31	0.85	7.07	1,216.15	241.99	6.12	0.55	29.06	0.41	2.79	49.66	26.49	177.10	94.18	1,344.13	5.18	20.20	23.19	66.21	88.11	

<sup>0 =</sup> magnitude is less than half of unit employed; AP = Asia and the Pacific; BAN = Bangladesh; BHU = Bhutan; BRU = Brunei Darussalam; CAM = Cambodia; FIJ = Fiji; HKG = Hong Kong, China; INO = India; INO = Indonesia; LAO = Lao People's Democratic Republic; MAC = Macau, China; MAL = Malaysia; MLD = Maldives; MON = Mongolia; MYA = Myanmar; NEP = Nepal; NPISH=nonprofit institutions serving households; PAK = Pakistan; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei, China; THA = Thailand; VIE = Viet Nam.

Source: Asian Development Bank estimates. For exchange rates: 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 economies for the International Comparison Program.

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