

2009 PPP UPDATE IN THE ASIA-PACIFIC REGION: METHODOLOGY AND SOME EMPIRICAL RESULTS

Y. Dikhanov
C. Palanyandy
E. Capilit

I. Background¹

The International Comparison Program (ICP) was established to estimate price levels and real expenditures around the world. The last benchmark [2005] included comparison of the activity levels for 146 countries. The Program is regionalized, with regional organizations coordinating work in their respective member countries. Thus, the Asian Development Bank (ADB) coordinated the 2005 ICP activities for 23 economies in the Asia and Pacific region. Currently, the work is underway on the next 2011 ICP round, which will provide another benchmark for international comparisons of economic activity, this time for about 160 countries.

PPPs are widely used in various economic analyses: from comparative studies on productivity and economic growth to those on living standards of

population. For example, one of major uses of PPP data around the world is to assist in analysing the incidence of poverty and to assess whether policies designed to alleviate poverty are achieving their aims. Poverty analysis is connected with the United Nations' Millennium Development Goals (MDGs). Having reliable PPPs to update the international poverty lines for economies world-wide would be an important step in evaluating progress towards such goals. Hence, there has been growing demands for PPPs and real GDP aggregates to be available on an annual basis.

As PPPs benchmarks are usually separated by 5 years or more [12 years between the 1993 and 2005 rounds!], PPPs have to be extrapolated. The most common method currently being adopted is the extrapolation of annual PPPs using time series national accounts data, particularly, the relative national GDP deflators versus the US deflator – the numeraire country for the ICP benchmarks, including that of 2005. This extrapolation method is simple, straightforward and practical but usually results in sizable amount of inconsistencies when compared with actual benchmark estimates. The magnitude of inconsistency grows as the extrapolated year moves away from the benchmark. There are many reasons for this inconsistency, the main ones being the following: (i) national GDP deflators are estimated using national expenditure structures which are different from comparable baskets of goods and services in other countries, moreover, the ICP comparison essentially averages the effect of national baskets by using transitive

¹ Yuri Dikhanov is Senior Economist at the World Bank in Washington D.C.; Chellam Palanyandy is Lead Professional and Eileen Capilit is Associate Economics and Statistics Officer in Development Indicators and Policy Research Division, Economics and Research Department, Asian Development Bank. The authors would like to thank Prasada Rao, Alan Heston and Paul McCarthy for their valuable comments. The paper also benefited from the discussions with the 2005 ICP National Implementing Agencies of the Philippines, Malaysia, India, Thailand and Indonesia during the country visits in 2008. This paper is based on the technical notes prepared by Mr. Dikhanov on behalf of the ADB "International Comparison Program (ICP) Asia-Pacific Region: 2009 Update" and represents the views of the authors. The 2009 results quoted in the paper are still preliminary and are to be finalised later in 2011. Any errors are of the authors.

index numbers; (ii) inconsistencies in index number formulae [both at the low and aggregate levels] used, both among countries, and between national SNA compilations and ICP, (iii) various other national differences in growth accounting methodology, e.g., using of hedonics for technology products, (iv) changes in ICP methodology, and (v) differences in treatment of the Terms-of-Trade effect. As the result, the inconsistencies between the ICP benchmarks and extrapolated numbers could reach 5-10% or more over several years even in the OECD regional comparisons which are considered more stable. For other regions the inconsistencies are expected to be higher.

Given the constraints and limitations of the current extrapolation methodology, the ADB undertook an update to the benchmark 2005 ICP results for Asia and the Pacific region to 2009 using a smaller set of prices than in the 2005 round and exploring alternative ways for adjusting capital city prices to national level. The Update is envisioned to provide a compromise between the statistical problems associated with extrapolating PPPs from a benchmark and the costs of conducting a full benchmark collection. The Update includes twenty-one economies: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; People's Republic of China (PRC); Fiji Islands; Hong Kong, China; India; Indonesia; Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Nepal; Pakistan; Philippines; Singapore; Sri Lanka; Taipei, China; Thailand and Vietnam .

The project is intended to capitalize on the synergy created in the 2005 ICP and provide concrete steps that shall sustain the collaborative work between ADB and national implementing agencies on ICP related work. It aims to: i) provide regional price and volume comparisons of Gross Domestic Product (GDP) and its component expenditures for 2009; ii) address some of the issues raised during ICP-CPI 2005 harmonization workshop which include the mainstreaming of ICP with national statistical work by integrating it as far as possible with the countries' national accounts and price collection programs; iii) continuously develop the expertise of both price and national accounts staff of countries; and iv) advocate

the PPP concepts and methodologies and use of CPI information for countries to develop their sub-national/intra-regional PPP.

Compared to the 2005 ICP Asia Pacific, the 2009 PPP Update can be considered as a relatively small-scale exercise in terms of data requirements and coverage. Core list of items was developed from the full list and is a subset of the latter; the price collection surveys for household were to be carried out once every quarter and in the capital city only. Nonetheless, the result of the project is crucial not only because it will provide PPP Updates that will allow cross country comparison of growth and poverty for Asia and the Pacific in 2009, but it can also become an input in the improvement/development of the future ICP methodologies. It is therefore, imperative for ADB to adopt measures that will increase the reliability of the PPPs derived from the updated price collection in 2009.

II. Main Features of the 2009 Update

The overall methodology of the 2009 Update is described elsewhere: see *"Updating 2005 Purchasing Power Parities to 2009 in the Asia and Pacific Region: Methodology and Empirical Results"* (published as ADB Working Paper No. 246), available at <http://www.adb.org/documents/working-papers/2011/Economics-WP246.pdf>. We just mention a few main features of the Update. It covers around 270 products, or approximately 40% of the original list for household final consumption expenditure in the 2005 ICP Asia-Pacific. However, unlike in the full ICP rounds, individual economies would need to collect prices for only a subset of the products and only in the capital cities in most cases, with some extra major cities being included in some large economies. The aim is for the Update to be much less resource intensive than a regular ICP benchmark exercise. Given the complexities involved in undertaking this exercise for all components of GDP, the main focus was on collecting price data for the household consumption and government consumption aggregates and the

construction component of gross fixed capital formation. PPPs for investment on machinery and equipment was estimated using simpler extrapolation methods. As was the case in the 2005 ICP Asia-Pacific, the PPPs for inventories, acquisition of valuables, and for exports and imports of goods and services was based on reference PPPs.

Thus, (i) a core list of products from the 2005 ICP Asia-Pacific product list whose prices will be collected in 2009 in the capital cities was identified; (ii) scaling factors to adjust PPPs generated from the Update core product list to the full 2005 product list were established, (iii) scaling factors for adjusting capital city prices to national average prices using the price data collected in 2005 were estimated.

III. Linking the 2005 and 2009 PPPs in One Time-Space Comparison

A unique feature of the Update is its linkages to the 2005 Benchmark comparison. The whole methodology of the Update is built around extending the base 2005 results, on utilizing commonalities of the product lists, on using synergy between the two comparisons. Thus, it is possible to link the two comparisons and to present the results at a common basis.

Linking principles

[1] **BH Level:** The BH PPPs were estimated from a joint CPD regression with the *core items* priced in the *capital city* in 2009 run together with the *core items* priced in the *capital city* in 2005. In this way, it is assumed that the relative position of the *capital city* within a nation would be constant over the 2005-2009 period², the same assumption is made for the relative position of the *core items* within the whole

² Analysis of CPIs for several countries in the region, made in connection with estimating sub-national PPPs supports that assumption: the changes found over time were found to be insignificant [see "Towards Integration of International Comparison Program and Consumer Price Index: The Case of the Philippines", ADB Working Paper to be published later in 2011].

list³. Thus, the 2009 Update can be considered as a true extension of the 2005 comparison. After that, the BH level changes [*inflation*] were estimated for each country from the joint 2005-09 regression, and then applied to the base 2005 BH PPPs, estimated on the basis of *nationally* collected prices for the *full* list of items⁴. For convenience, the combined 2005-2009 PPPs were expressed in 2005 *Hong Kong Dollars*. The stages of computation at the basic heading level are presented below in Tables 1-3.

Stages of computation:

a. BH PPPs are computed for 2005 on the basis of all items priced nationally. Table 1 shows one Basic Heading with 26 items priced in 2005 and the corresponding BH PPP estimated from CPD regression (#1.PPP 2005 total).

b. Table 2 shows only core item prices collected in the capital cities in 2005. Two BH PPPs are shown: PPP based on the core items [10 items] priced in capital cities, using only 2005 data (#2.PPP 2005 core capital), and the PPP based on the core items [10 items] priced in capital cities, only this time using both 2005 and 2009 data, estimated from the joint 2005-2009 CPD regression (#3.PPP 2005 core capital (2005-09 joint CPD)).

c. Table 3 shows core item prices collected in the capital cities in 2009. The first line under the table shows the PPP based on core items [10 items] priced in capital cities, using both 2005 and 2009 data, estimated from the joint 2005-2009 CPD regression (#4.PPP 2009 core capital(2005-09 joint CPD)), with Hong Kong in 2005 as the reference. The second line shows the implicit country inflation for that BH that occurred between 2005 and 2009 (#5.2005-09 inflation), and is obtained by dividing item #4 over item #3, which are

³ Not making that assumption, i.e., considering only the core items in 2009 vs. the full list in 2005 would alter the overall results only slightly, given a high degree of correlation between the two [see "Updating 2005 Purchasing Power Parities to 2009 in the Asia and Pacific Region: Methodology and Empirical Results" (ADB Working Paper No. 246), 2011.

⁴ It is important to note that the implicit inflation obtained from the joint 2005-09 CPD regression will be identical to

both referenced to Hong Kong 2005. Finally, the last line shows the resulting overall BH PPP for 2009 (#6.PPP 2009 total), computed as item #1 multiplied by item #5.

[2] Aggregate Level: In order to link the two comparisons at the aggregate level, a multilateral transitive index [GEKS-Fisher] was applied to the 23 countries in both years, treating a country in one year as a separate entity. Thus, effectively, the aggregation was run on the 46 country-years. This way the effect of the base country or year on the linking was minimized. Again, for convenience, the joint 2005-2009 PPPs described in the Table 3 above were expressed in 2005 *Hong Kong Dollars*.

Stages of computation:

- a. The BH PPPs estimated using the joint 2005-09 CPD regression (item #6 from the previous section) were used to compile the BH PPP matrix expressed in the same terms. The reference point of computation for BH PPPs was Hong Kong in 2005. The matrix consists of 46 country-years and 155 BHs.

Table A. Combined 2005-2009 BH PPP Matrix

	2005			2009		
	HKG	Country B	Country C	HKG	Country B	Country C
BH1	1	3	10	1.5	4	15
BH2	1	2	12	1.7	3	15
BH3	1	4	10	1.2	4	18
...						
BH155	1	2	15	1.5	4	20

- b. The above BH PPP matrix, along with the nominal expenditure matrix, was used in aggregation above the BH level. For convenience purposes, the aggregation results were expressed in 2005 *Hong Kong Dollars*. Thus, linking between 2005 and 2009 is done using all available binary comparisons, and not only the base country [Hong Kong].

Thus obtained 2005-09 results would differ somewhat from the aggregations carried out individually for 2005 and 2009, if we look at the two individual years separately. The differences are rather small [usually, within a fraction of one

percent at the GDP level]. However, it would be possible to retain fixity, if required, in linking years by using principles similar to those used in the ICP in linking the regions.

These results are consistent in time and space simultaneously. Dividing 2009 PPPs over 2005 PPPs produces a measure for “internationally-comparable inflation”, which is computed with the same index number for all countries, and with influence from national expenditure baskets removed [as it is done in a regular ICP within the space dimension, by using a multilateral transitive index number such as GEKS]. In other words, for any two countries A and B, changes in their relative position between 2005 and 2009 will be fully explained by changes in nominal GDP, and thus computed relative inflation. I.e., the nominal changes between the two years for any country can be decomposed into the real growth and inflation.⁵

IV. Main results of the 2009 Update

Results of the 2009 update show that the changes that occurred between 2005 and 2009 were significant, sometimes greatly affecting relative positions of Asian countries among themselves⁶. In *real GDP terms* [2005 *Hong Kong International Dollars converted with PPPs*] one can observe that China increased its share in Asia from 43.6% to 48.4% (see Figures 1 and 1a and Tables 5-6), effectively becoming one half of the region. At the same time, some countries experienced significant drops in shares, for example, Taipei (from 5.3% to 3.7%), Thailand (from 4.0% to 3.3%) and other countries. Note that these changes do not reflect absolute drops, but only relative ones against the background of the ascent of China and Asia as a whole.

⁵ The results of the linked 2005-09 computation will be presented in a separate ADB analytical working paper, to be published later this year.

⁶ The results are still preliminary are subject to later updates and revisions by the ADB.

Most changes, however, have been driven by national accounts *in nominal terms* [Current Hong Kong Dollars converted with Exchange Rates], rather than prices. Again, in nominal terms we see that China increased its share from 46.0% to 55.9% (see Figures 2 and 2a and Tables 5-6), contributing to over one half of the region in nominal GDP terms. Again, significant drops in shares experienced countries such as Taiwan (from 7.4% to 4.2%), Thailand (from 3.6% to 3.0%) and some other countries. Again, these changes do not reflect absolute drops, but only relative ones, as whole Asia increased significantly in nominal terms as well.

Similar changes occurred in country shares of major aggregates (Actual Final Consumption, General Government Expenditure, Gross Fixed capital Formation – AFC, GGE, GFCF, respectively): see Tables 5-6. Most drastic changes happened in Gross Fixed Capital Formation category, where China increased its regional share in real terms from 56.3% to 62.5%, and in nominal terms – from 57.2% to 69.0%.

The discrepancies between the real and nominal shares constitute *Price Levels Indices [PLIs⁷]* and they changed significantly as well. In particular, PLI of China increased from 1.057 to 1.154 [vs. regional average], or by 9.2%, and Hong Kong PLI decreased from 1.751 to 1.612, or by 7.9%, Indian PLI decreased even more drastically – from 0.812 to 0.721, or by 11.2% [see Table B below]:

Table B. Change in Relative Price Level, 2005 to 2009 vs. Regional Average

HKG MAC SIN TAP BRU BAN

⁷ The concept of the *regional average* used in this paper is very similar to the approaches employed in other ICP regional comparisons. For example, the OECD presents results at *international prices*, LAC and Africa use regional currency units [MAS and *Afric*, respectively], etc. The main principle of all these presentations is that the sum of the country GDPs in real terms expressed at *the regional average prices* [or, the regional currency] is made to be equal to the sum of the country GDPs in nominal terms expressed in reference currency [*Hong Kong Dollar* in Asia]. Then for any country the ratio of nominal to real GDP would signify its relative price level vis-à-vis the region. See ADB (2007).

0.921	0.786	0.980	0.822	0.951	0.917
BHU	IND	IRN	MLD	NEP	PAK
0.817	0.888	1.026	0.762	0.962	0.836
SRI	MON	CAM	FIJ	INO	LAO
1.028	0.915	0.996	0.857	0.912	1.113
MAL	PHI	PRC	THA	VIE	ASIA
0.972	1.054	1.092	0.992	0.932	1.000

Table C below shows relative real and nominal per capita GDP and HFCE (Household Final Consumption Expenditure) in 2005. Table D below shows the same indicators but for 2009. While some countries experienced decline in real terms [notably Brunei that experienced a significant drop even in absolute real terms], China, Macao, Maldives, Indonesia, Mongolia and Vietnam improved their positions. Again, Brunei's GDP experienced a significant drop in nominal terms when converted by the exchange rate, whereas China, Maldives, Indonesia, Mongolia and Vietnam improved their positions.

Table C. GDP and HFCE, per capita, real and nominal, 2005

Asia = 100

		Real (PPP)		Nom. (Exch. rate)	
		GDP	HFCE	GDP	HFCE
Hong Kong, China	HKG	1,018	1,015	1,783	2,094
Macao, China	MAC	1,088	515	1,651	909
Singapore	SIN	1,293	837	2,009	1,627
Taipei, China	TAP	784	862	1,097	1,337
Brunei	BRU	1,390	559	1,760	798
Bangladesh	BAN	36	54	30	46
Bhutan	BHU	106	86	87	78
India	IND	62	77	51	59
Iran	IRN	227	214	161	143
Maldives	MLD	113	94	174	158
Nepal	NEP	29	48	24	38
Pakistan	PAK	67	109	53	82
Sri Lanka	SRI	98	136	85	118
Mongolia	MON	66	74	62	69
Cambodia	CAM	42	64	32	54
Fiji	FIJ	131	131	252	261
Indonesia	INO	93	122	89	115
Lao PDR	LAO	52	52	33	40
Malaysia	MAL	336	265	361	326
Philippines	PHI	86	116	79	111
China	PRC	112	85	118	93
Thailand	THA	203	225	185	214
Vietnam	VIE	59	69	44	56
ASIA		100	100	100	100

Table D. GDP and HFCE, per capita, real and nominal, 2009

Asia = 100

		Real (PPP)		Nom. (Exch. rate)	
		GDP	HFCE	GDP	HFCE
Hong Kong, China	HKG	727	894	1,173	1,621
Macao, China	MAC	1,282	645	1,530	832
Singapore	SIN	951	713	1,447	1,301
Taipei, China	TAP	558	731	642	864
Brunei	BRU	863	419	1,039	551
Bangladesh	BAN	32	54	25	43
Bhutan	BHU	101	84	68	61
India	IND	54	71	39	50
Iran	IRN	281	245	204	178
Maldives	MLD	156	128	184	182
Nepal	NEP	26	45	20	35
Pakistan	PAK	61	110	40	72
Sri Lanka	SRI	68	85	60	86
Mongolia	MON	76	92	66	85
Cambodia	CAM	38	59	29	51
Fiji	FIJ	81	96	133	158
Indonesia	INO	105	132	91	119
Lao PDR	LAO	51	51	36	43
Malaysia	MAL	256	249	268	296
Philippines	PHI	70	113	69	112
China	PRC	127	92	147	115
Thailand	THA	171	204	155	183
Vietnam	VIE	64	75	45	61
ASIA	ASIA	100	100	100	100

V. Conclusion

The Asian 2009 PPP Update shows significant changes in the region occurred since the benchmark 2005 results. Compared to the 2005 benchmark the Update was a relatively small-scale exercise in terms of data requirements. By exploiting synergy between the two exercises, the Update can be merged with the benchmark in one joint time-space Asian comparison to show the GDP and its components in comparable terms [2005 Hong Kong International Dollars]. Thus obtained results will be consistent in time and space in both periods, and the changes in real terms between the two years can be interpreted as real changes net of internationally [Asian-wide] comparable inflation, as the effect on national baskets on national inflation has been removed by using a multilateral transitive index number [GEKS-Fisher]. Similar technique can be used in the future to interpret changes between the 2005 and the upcoming 2011 ICP benchmarks.

VI. References

1. "Updating 2005 Purchasing Power Parities to 2009 in the Asia and Pacific Region: Methodology and Empirical Results" (ADB Working Paper No. 246), 2011
2. "Towards Integration of International Comparison Program and Consumer Price Index: The Case of the Philippines", ADB Working Paper to be published later in 2011
3. "2005 International Comparison Program in Asia and the Pacific", Asian Development Bank, 2007

Table 1. Average prices and BH PPP, 2005, full list, national

	BAN	BHU	BRU	PRC	FJI	HKG	INO	IND	IRN	CAM	LAO	SRI	MAC	MLD	MON	MAL	NEP	PAK	PHI	SIN	THA	TAP	VIE
item1		109.3					69.6							42.80									
item2	316.6	253.6	8.34				59953	172.7		11200	24465	251.8				18.94			243.4		139.2		48265
item3	228.6	129.0					48968					388.9											
item4	257.5						38608		79806			293.4					293.6						64856
item5	239.9						35989					271.4	57.83										
item6	253.7					57.4						350.3											
item7	193.3					65.9							83.77			19.64					165.8		
item8	239.2				11.06	64.9																336.8	
item9	246.6				10.98	70.9											169.4					373.7	
item10	410.7	215.9		44.44		75.5	31953			14625			76.34		6128	23.67					150.0		
item11	470.2					110.0		387.6	147262	13114						35.56	480.3	360.2	226.4	16.13	249.6	356.6	
item12	384.6									12734												433.3	64451
item13	221.0		5.89		10.55	55.2	38598	180.3	67678		35584	151.2		60.00		15.89		145.8	133.9	7.85	111.1		
item14																10.19							
item15	94.5			13.30				60.6				153.5											
item16	90.5							68.8				166.8											
item17	99.5	128.5										138.2								11.14		183.5	
item18	376.3			36.44						13704		325.4			5695		252.4		179.1			272.3	43899
item19	213.6						153.7			12362	29488	272.6					194.2		220.3				
item20	22.6	15.8	1.69	4.62	0.97	9.5	4372	15.2	4584	2406	5270	34.6	8.52	10.55	548	1.69	21.2		71.8	1.40	29.7	31.9	6952
item21	21.3	12.3		3.34			3899	12.0	2086			28.2	7.16	4.48	451	1.38	20.3	14.5	29.5		22.3	29.0	6043
item22	18.9	12.6			0.92			11.8				68.3			390		18.8	15.4					
item23	23.0				1.67			13.2				61.3			652		22.4	18.1					
item24			1.36	3.03	2.82	6.1	4942		4560			97.7	6.18	12.29		3.92	31.8	42.4	27.2	1.27	27.8		7094
item25	0.73	5.68	1.12	4.0	3521	11.0				1547	2472	38.2	3.04			1.31	35.0	29.0	0.96	19.5	37.5	6096	
item26	75.1	3.14	9.78	3.56	18.9	10397			6200	5557	7629			19.62	1933	5.97		56.4	53.9	3.33	54.8	61.8	20006
#1.PPP 2005 total	4.03	2.79	0.15	0.59	0.20	1.00	651	2.48	719	219	547	5.85	0.98	1.19	88	0.30	3.73	3.46	3.86	0.18	2.87	4.90	920

Table 2. Average prices and BH PPP, 2005, core items, capital cities

	BAN	BHU	BRU	PRC	FJI	HKG	INO	IND	IRN	CAM	LAO	SRI	MAC	MLD	MON	MAL	NEP	PAK	PHI	SIN	THA	TAP	VIE	
item1																								
item2																								
item3																								
item4																								
item5																								
item6																								
item7																								
item8																								
item9																								
item10	420.5	220.9		46.07		75.5	33690			14718			76.34		6272	23.45					167.6			
item11																								
item12	431.2									13090												444.8	68462	
item13	227.6		5.72		12.24	55.2	41374	201.2	81001					59.43		17.03		145.4	142.4	7.85	123.6			
item14																								
item15																								
item16																								
item17	113.1	132.3										139.5								11.14		214.0		
item18	361.8			38.94						15136		326.8			5948		272.6		188.3			325.0	45391	
item19	233.0						153.1			13185	34672	284.2				204.0			212.8					
item20	24.6	16.8	1.92	4.82	0.97	9.5	5329	15.4	4976	2376	5846	34.0	8.52	10.58	604	1.67	20.6		69.8	1.40	31.5	30.8	6787	
item21																								
item22	20.9	13.4			1.05			12.1				72.1			412		19.8	15.7						
item23																								
item24			1.33	3.03	3.32	6.1	6232		5591			101.3	6.18	12.72		3.80	35.2	45.9	28.1	1.27	33.0		7169	
item25																								
item26	81.8	3.29	10.67	3.51	18.9	11444			7290	6520	8726			20.51	1889	6.29		57.0	53.8	3.33	52.6	73.4	21479	
#2.PPP 2005 core capital	4.42	2.80	0.17	0.55	0.21	1.00	649	2.66	711	249	626	6.41	0.93	1.26	88	0.32	3.64	3.39	3.75	0.19	3.01	4.92	885	
#3.PPP 2005 core capital (2005-09 joint CPD, HK\$05=1.0)	4.30	2.73	0.17	0.55	0.22	1.00	649	2.58	723	240	615	6.31	0.91	1.28	88	0.32	3.57	3.50	3.72	0.19	3.01	4.83	879	

Table 3. Average prices and BH PPP, 2009, core items, capital cities

	BAN	BHU	BRU	PRC	FJI	HKG	INO	IND	IRN	CAM	LAO	SRI	MAC	MLD	MON	MAL	NEP	PAK	PHI	SIN	THA	TAP	VIE	
item1																								
item2																								
item3																								
item4																								
item5																								
item6																								
item7																								
item8																								
item9																								
item10	800.9	213.9		49.83		154.5	63958			32751			129.78		18938	44.10					166.1			
item11																								
item12	642.6											31304											473.6	122235
item13	552.4		5.95		10.30	96.3	37813	206.5	115053							21.20		591.3	192.8	11.33	166.8			
item14																								
item15																								
item16																								
item17	148.7	248.3										299.3								15.00		190.0		
item18	693.9			39.10						25001		711.7			15098		326.5		247.9			326.7	70967	
item19	337.9						247.3			20704	65144	611.3				462.9		323.1						
item20	32.5	22.5	2.32	9.09	1.14	15.2	9066	26.1	7793	3396	11609	84.6	14.49	7.60	932	2.44	29.9		95.8	2.62	44.9	40.0	13925	
item21																								
item22	23.3	20.8						15.4				161.3			641		25.4	32.5						
item23																								
item24			1.67	3.48		7.1	10595		7752			159.9	10.50	17.41		5.79	29.3	70.0		1.97	33.2		12130	
item25																								
item26	97.3	2.34	11.30	5.38	2																			

Figure 1. 2005 Real GDP Shares, by Country (Asia = 100) **Figure 2. 2005 Nominal GDP Shares, by Country (Asia = 100)**

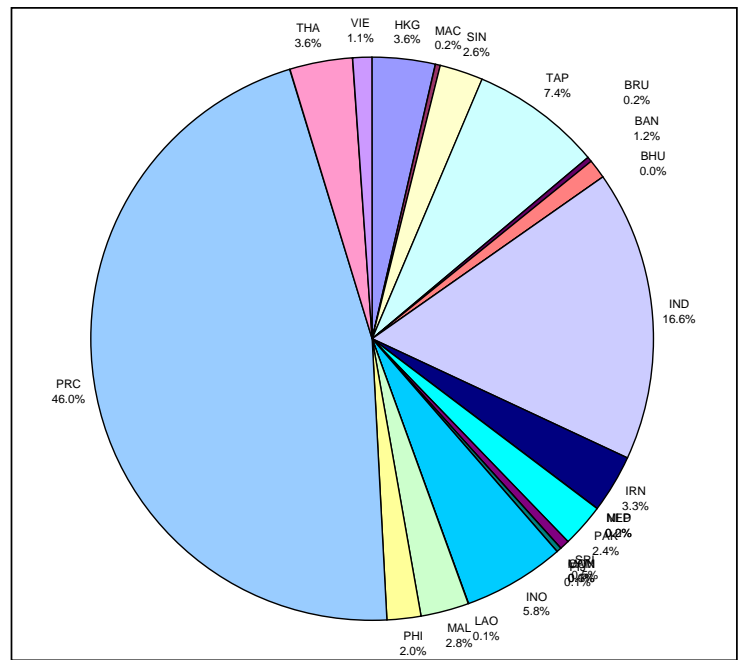
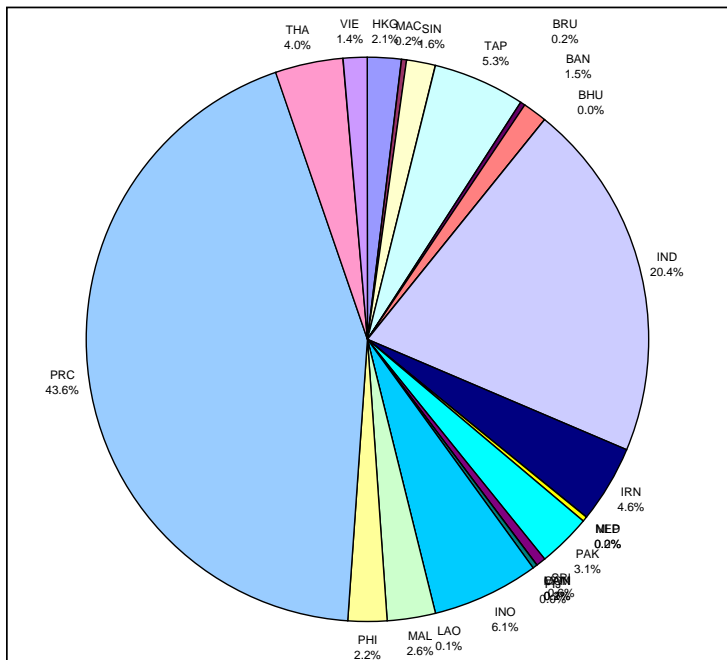


Figure 1a. 2009 Real GDP Shares, by Country (Asia = 100)

Figure 2a. 2009 Nominal GDP Shares, by Country (Asia = 100)

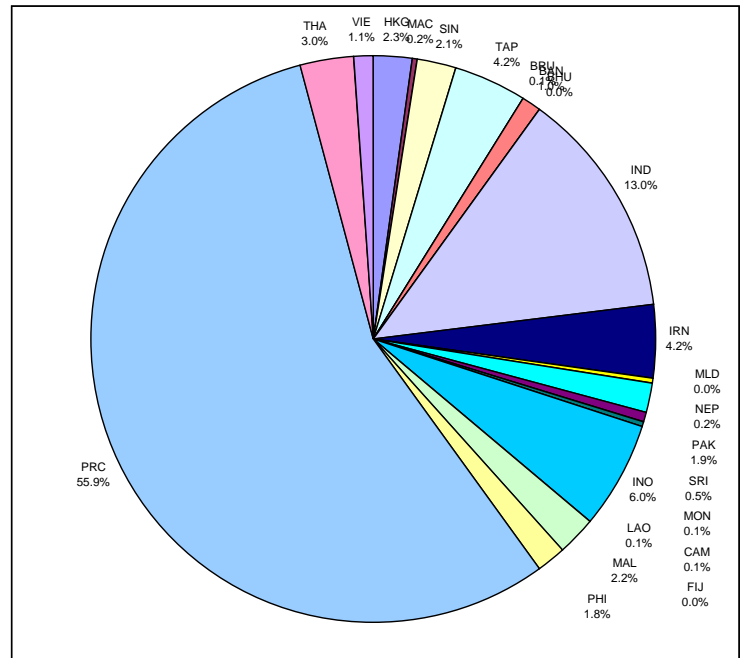
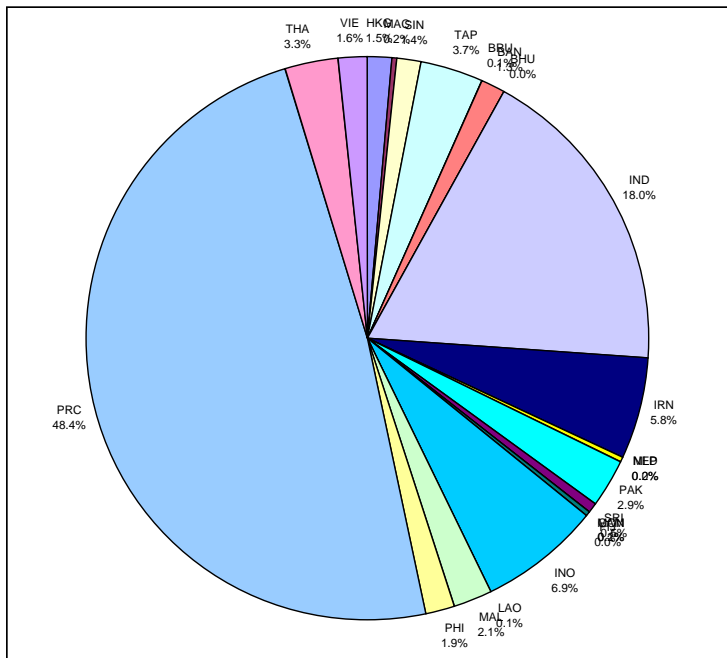


Figure 3. 2005 Real Actual Final Consumption Shares, by Country (Asia = 100)

Figure 4. 2005 Nominal Actual Final Consumption Shares, by Country (Asia = 100)

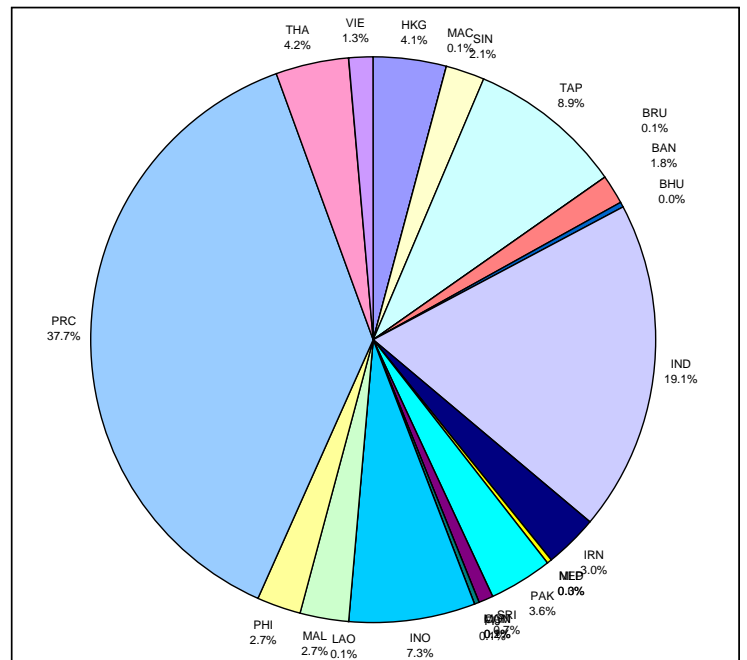
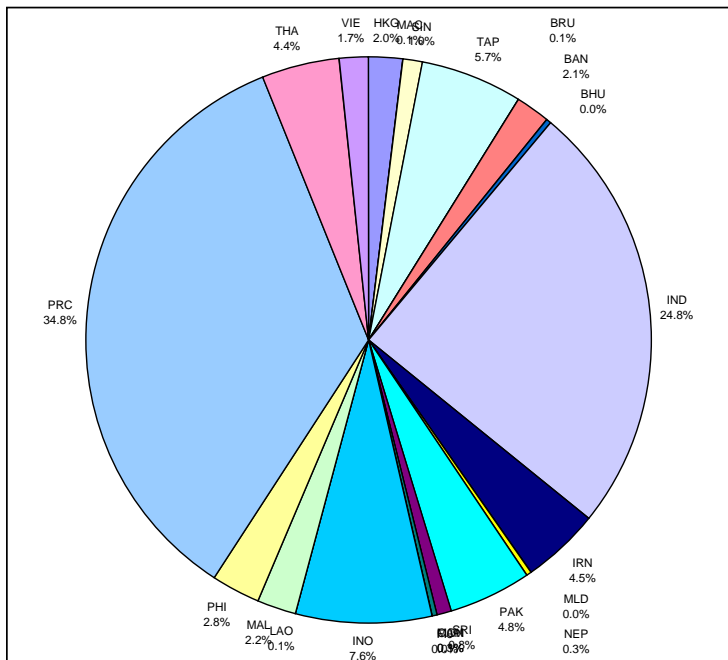


Figure 3a. 2009 Real Actual Final Consumption Shares, by Country (Asia = 100)

Figure 4a. 2009 Nominal Actual Final Consumption Shares, by Country (Asia = 100)

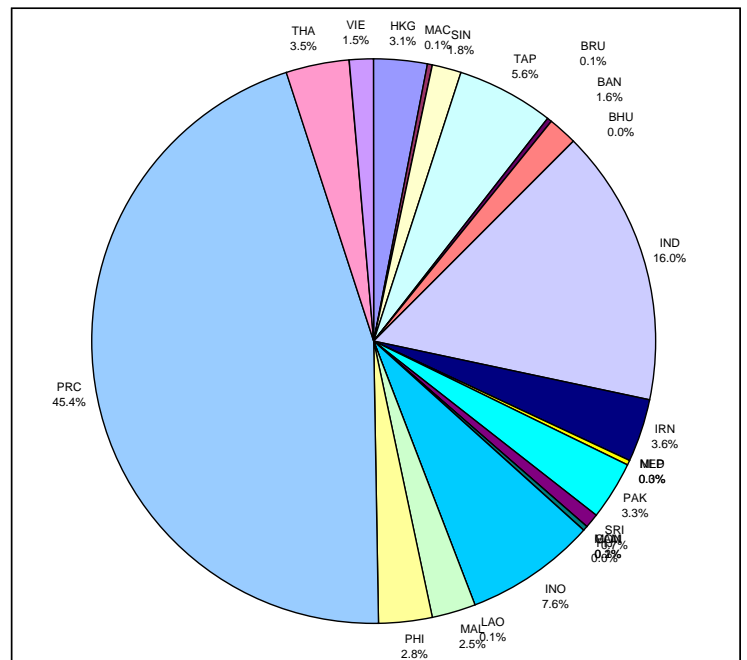
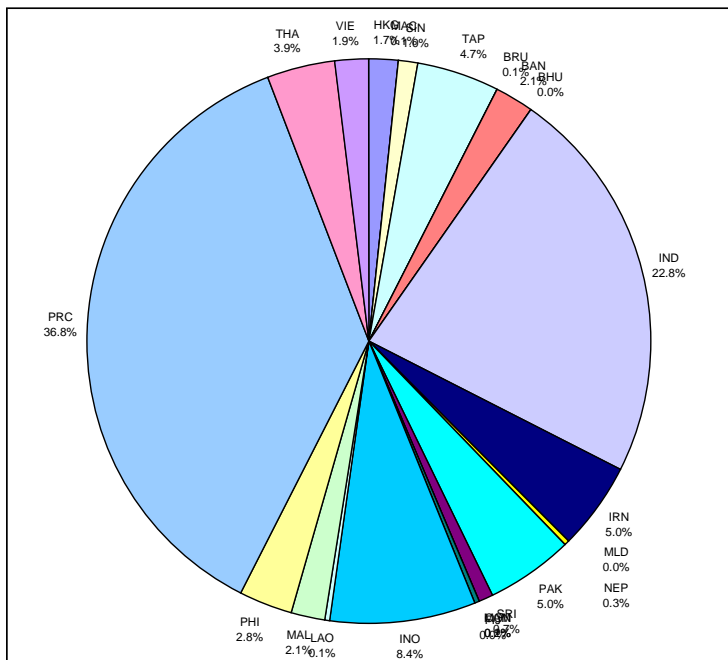


Figure 7. 2005 Real Gross Fixed Capital Formation Shares, by Country (Asia = 100)

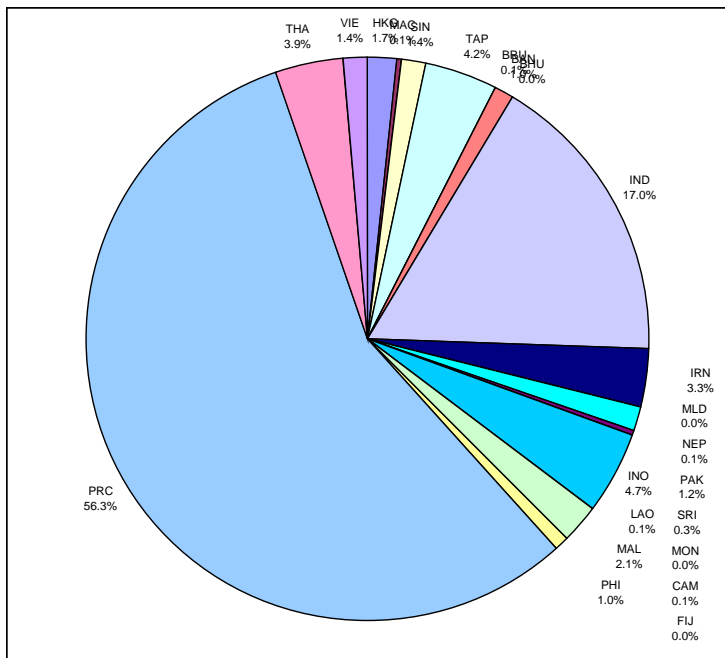


Figure 8. 2005 Nominal Gross Fixed Capital Formation Shares, by Country (Asia = 100)

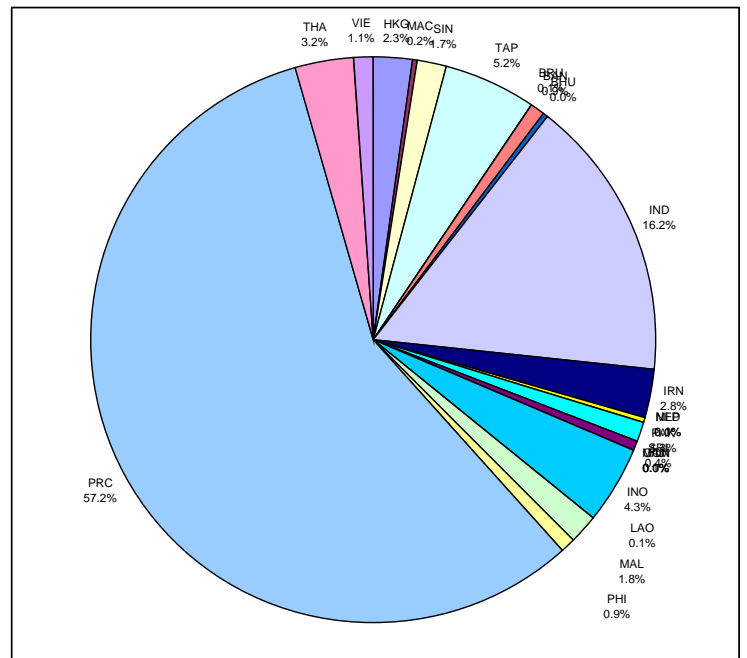


Figure 7a. 2009 Real Gross Fixed Capital Formation Shares, by Country (Asia = 100)

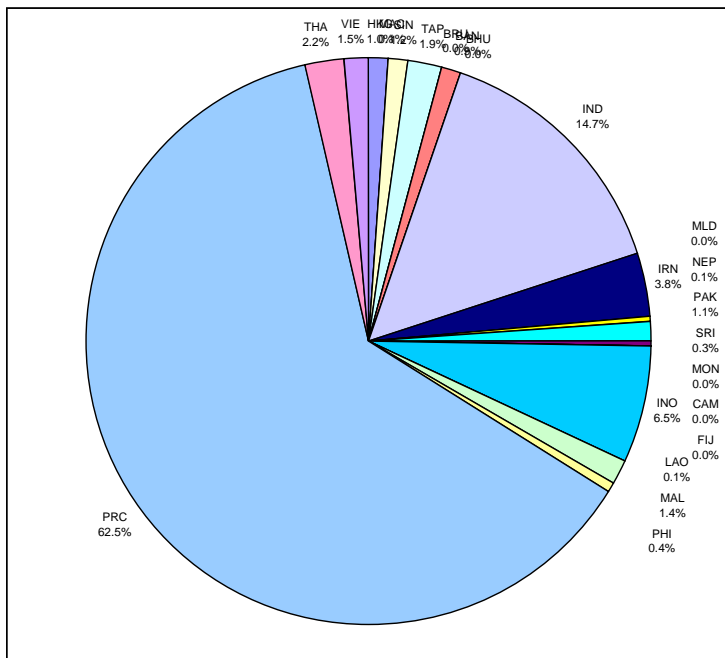


Figure 8a. 2009 Nominal Gross Fixed Capital Formation Shares, by Country (Asia = 100)

