International Comparison Program

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Owner Occupied Housing

Housing in Western Asia

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HOUSING

For most basic headings in the comparison, it is possible to derive the PPP based on the prices of items for the basic heading. This is the direct price approach. When countries have regular rental surveys, the price approach can be used for rented housing and rental equivalence for owner-occupied housing. PPPs are calculated from already existing statistics drawn from comprehensive rent surveys. With this approach, the dwellings have to be specified broadly because the basic information in the rent surveys will vary between countries with regard to the types of dwellings covered. It is to be noted that the direct price approach should only be used when rents actually paid can be considered to be representative of the entire stock of dwellings, i.e., of both rented and owner-occupied dwellings.

When rental data is not available, direct quantity comparisons are made instead. In this method, volume relatives are calculated by comparing the volume of dwellings in each country. PPPs are derived indirectly by dividing volume relatives (ratios of the volumes of dwelling services in each country) into value relatives (ratios of expenditure on dwelling services in each country).

In Western Asia, a combination of both approaches was used to derive Housing PPPs. Rental data was supplemented with physical quantity indicators in order to come up with an average PPP for every country.

Rental data was collected from the comprehensive rental surveys that countries conduct as part of their CPI programs. UN-ESCWA and the ICP Global Office developed a rental data questionnaire to obtain information on the average rent (per 1 m2) paid for specific chosen types of dwelling. Countries agreed that national dwelling stocks could be divided into three major types of dwellings:

a. Villa

b. Two-bedroom apartment

c. Typical/traditional Arabic house

All dwelling types were specified to have the three following amenities: electricity, running water, and private toilet. Information was also collected on the weight of these three types in the total national dwelling stock.

Table 1: Rental Data Questionnaire

	Country I		Country II		Country III		Country IV	
Type of Dwelling	**Average Yearly Rent**	**% Weight**	**Average Yearly Rent**	**% Weight**	**Average Yearly Rent**	**% Weight**	**Average Yearly Rent**	**% Weight**
Villa								
Two-bedroom Apartment								
Typical/ Traditional Arabic House								

Two types of PPPs were computed from the information provided in the rental data questionnaire. The first is a simple CPD-PPP, the other is a weighted CPD-PPP that weighs the average yearly rent of various dwelling types by their respective weight in the total dwelling stock. [...]

The quantity approach uses both quantitative and qualitative data to construct a volume index.

- The quantitative data are, in order of preference, the useable surface of dwellings; the number of rooms; the number of dwellings. One or other of these quantities is taken as the quantity index.

- The qualitative data are the percentages of dwellings with facilities such as electricity, inside water supply, inside toilets, air-conditioning or central heating. The percentages of dwellings with these various facilities are averaged to produce a quality index.

- The quantity index is multiplied by the quality index to obtain the volume index, which is used to measure the relative volumes of dwelling services provided in each country.

To collect the quantitative indicators required for the quantity approach, the ICP Global Office developed a questionnaire on dwelling stock to obtain detailed data underlying the estimates in the national accounts for both rented dwellings and owner-occupied dwellings (that is, imputed rent). The details of particular interest were the numbers of dwellings of each different type (detached houses, apartments, and so forth), classified by size, region, or locality (urban or rural), as well as the facilities available (electricity, running water, and private toilet).

Table 2: Quantity and Quality Indicators Questionnaire

FORM A ICP Dwelling Services Questionnaires: Total Housing Volume of Housing								
1	**Reference Year for Benchmark**							
2	**Country**							
		1. Total of all Dwellings	2. Type of Construction of Dwellings			3. Location of Dwellings		
			a. Modern Construction		b.Traditional	a. Size of Urban Area		b. Rural
			(1) Houses	(2) Flats		(1) Large	(2) Other	
3	Number of Dwelling Units							
4	Number of Rooms							
5	Total Area in sqm of the Unit							
	Percent of dwelling units with							
6	1 - 2 Rooms							
7	3 - 4 rooms							
8	5+ Rooms							
	Percent of dwelling units with							
9	Electricity							
10	Inside water							
11	Private toilet							
	Percent of dwelling units							
12	Rented							
13	Owner Occupied							
14	Assumed growth rate from benchmark period to 2005							

Responses by the countries in Western Asia to the housing questionnaire have facilitated a comparison of volume measures of housing adjusted for quality within the region. However, the data obtained have included many gaps that limited the richness of the comparison. A major shortfall in the data was that the only volume measure available for all countries was the number of residences. Only a few countries provided number of rooms or area in square meters.

The volume measures derived are then adjusted for quality. The main indicators of housing quality that have been collected were share of dwellings with electricity, water and toilet. Two quality measures have been considered:

1. Quality I measure is a geometric mean of the percent of residences with water, electricity and toilet.

2. Quality II measure weights the combination of all three amenities, and gives space 1/3 the weight of amenities, based upon several studies of the relationship of rents to size and amenities of dwellings using hedonic regression models.

A PPP could be imputed using these real values of dwelling services in each country, adjusted for quality, and the total values of rents recorded in each country's national accounts. In Western Asia, two indirect PPPs were derived for each country; one computed with Quality I adjustment, the other with Quality II adjustment.

Thus, for each country, four PPPs were available:

1. Direct unweighted CPD-PPP

2. Direct weighted CPD-PPP

3. Indirect Quality I measure PPP

4. Indirect Quality II measure PPP

For each country in the region, a geometric mean of these four PPPs was computed and considered to be the housing PPP for the country in question.

	Rental Data				Quantity Approach						
	CPD PLIs Unweighted	CPD PLIs Weighted	CPD Unweighted PPPs	CPD Weighted PPPs	Q1 PLIs	Q2 PLIs	Q1 PPPs	Q2 PPPs	PPP Geomean	XR (LCU/Rials Omani)	PLI Geomean
Bahrain	221	219	2.163	2.142	138	144	1.349	1.408	1.72	0.978	176.11
Egypt	13	10	1.963	1.505	10	10	1.526	1.538	1.62	15.049	10.78
Iraq	30	52	1166.707	1992.094	24	24	932.135	911.018	1185.28	3830.949	30.94
Jordan	90	57	1.654	1.051	81	67	1.494	1.243	1.34	1.844	72.69
Kuwait	268	200	2.032	1.519	105	109	0.794	0.829	1.19	0.759	157.20
Lebanon	0	0	0.000	0.000	9	8	337.526	331.327	334.41	3920.676	8.53
Oman	100	100	1.000	1.000	100	100	1.000	1.000	1.00	1.000	100.00
Qatar	483	461	45.715	43.642	291	295	27.595	27.931	35.21	9.467	371.98
Saudi Arabia	94	82	9.203	7.991	78	74	7.572	7.259	7.97	9.745	81.82
Syria	60	66	80.995	89.499	24	22	32.502	30.154	51.63	135.605	38.07
Yemen	50	45	249.171	224.029	22	17	110.152	82.896	150.26	497.841	30.18