

Second Technical Meeting of the International Comparison Program (ICP)

Quaranta Tables Analysis

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Basic Data Validation process

- ▶ The Quaranta Tables is the tool for the validating of the information between countries,
- ▶ The goal is:
 - ▶ To evaluate the national average in order to detect some errors by comparing average prices for the same product in different countries
 - ▶ The possible mistakes are detected by different indicators.
- ▶ The results are obtained through a process of interaction between the information of all the countries, therefore, any problems with data of a country modify the results of the rest of the countries.

Steps of Validations

Intra
country

- Coefficients of Variation in National Currency at the product level

Between
countries

- Coefficients of Variation in National Currency.
- Comparison of average prices converted at exchange rate
- Comparison of average prices converted by PPP

Between
regions

- Comparison of average prices converted at exchange rate
- Comparison of average prices converted by PPP

Information at Basic Heading level.

Basic Heading (BH)

Period analyzed

Number of products in the BH

ICP-2017: QT

SURVEY: Q1 2018

Date: 4/30/2018

Page:

1101111 Rice

Av.Weight: 310

No.of It.: 5

CPD (weights: 3; 1). XR-,PPP-In limits = 80%, 125%,

Var.Coeff. (%): 57.5

XR 'NC/BC'	PPP 'NC/CUP'	PLI (%) PPP/XR	Weight/ 1000	No. of Items	Var. Coef.	XR 'NC/BC'	PPP 'NC/CUP'	PLI (%) PPP/XR	Weight/ 100000	No. of Items	Var. Coef.
ABW 1,7900	1,5279	85,4	309,8	3: *1	13,8	HND 1,0000	???	0,0	309,8	0: *0	0,0
1,0000	???	???	309,8	0: *0	0,0	HTI 64,570	43,718	67,7	309,8	0: *0	0,0
1,0000	2,32	???	309,8	0: *0	7,2	JAM 124,71	138,38	111,0	309,8	0: *0	0,0
1,0000	4,03	???	309,8	0: *0	5,2	KNA 2,7000	???	0,0	309,8	0: *0	0,0
1,0000	???	???	309,8	0: *0	0,0	LCA 2,7000	???	0,0	309,8	0: *0	0,0
1,0000	1,05	???	309,8	0: *0	7,0	MSR 1,0000	???	0,0	309,8	0: *0	0,0
1,0000	???	???	309,8	0: *0	0,0	NIC 30,600	???	0,0	309,8	0: *0	0,0
BOL 1,0000	???	0,0	309,8	0: *0	0,0	PAN 1,0000	???	0,0	309,8	0: *0	0,0
BRA 3,3000	???	0,0	309,8	0: *0	0,0	PER 3,2200	2,6868	83,4	309,8	5: *3	39,3
BRB 2,0000	2,3361	116,8	309,8	5: *1	48,1	PRY 5646,3	???	0,0	309,8	0: *0	0,0
CUW 1,7900	,98867	55,2	309,8	5: *0	124,6	SLV 8,7500	???	0,0	309,8	0: *0	0,0
CYM ,83000	1,4397	173,5	309,8	4: *0	70,1	SUR 7,4700	5,2048	69,7	309,8	5: *5	36,7
DMA 2,7000	2,6925	99,7	309,8	2: *0	27,7	SXM 1,0000	???	0,0	309,8	0: *0	0,0
DOM 49,020	47,071	96,0	309,8	5: *3	41,6	TCA 1,0000	1,8633	186,3	309,8	4: *2	23,2
ECU 1,0000	,71065	71,1	309,8	2: *2	5,0	TTO 6,7400	???	0,0	309,8	0: *0	0,0
GRD 2,7000	2,6972	99,9	309,8	2: *2	17,9	URY 1,0000	???	0,0	309,8	0: *0	0,0
GTM 1,0000	???	0,0	309,8	0: *0	0,0	VCT 2,7000	???	0,0	309,8	0: *0	0,0
GUY 206,50	154,67	74,9	309,8	3: *2	29,5	VGB 1,0000	1,8534	185,3	309,8	2: *2	4,9

Method of estimation

Accepted ranges in the PPP

Coefficient of variation of BH

Information at Basic Heading level.

ICP-2017: QT

SURVEY: Q1 2018

Date: 4/30/2018

1101111 Rice
CPD (weights: 3; 1). XR-,PPP-In limits = 80%, 125%,

Av.Weight: 310 No.of It.:
Var.Coeff. (%):

	XR 'NC/BC'	PPP 'NC/CUP'	PLI (%) PPP/XR	Weight/ 100000	No. of Items	Var. Coef.		XR 'NC/BC'	PPP 'C/CUP'	PLI (%) PPP/XR	Weight/ 100000	No. of Items	
ABW	1,7900	1,5279	85,4	309,8	3: *1	13,8	HND	1,0000	???	0,0	309,8	0: *0	0,0
ARG	1,0000	???	0,0	309,8	0: *0	0,0	HTI	64,570	2,718	67,7	309,8	1: *0	0,0
ATG	2,7000	2,3295	86,3	309,8	2: *1	17,2	JAM	124,71	13,38	111,0	309,8	1: *1	0,0
AXA	2,7000	4,0363	149,5	309,8	3: *1	55,2	KNA	2,7000	???	0,0	309,8	0: *0	0,0
BES	1,0000	???	0,0	309,8	0: *0	0,0	LCA	2,7000	???	0,0	309,8	0: *0	0,0
BHS	1,0000	1,0567	105,7	309,8	3: *3	7,0	MSR	1,0000	???	0,0	309,8	0: *0	0,0
BLZ	1,0000	???	0,0	309,8	0: *0	0,0	NIC	30,600	???	0,0	309,8	0: *0	0,0
BMU	1,0000	???	0,0	309,8	0: *0	0,0	PAN	1,0000	???	0,0	309,8	0: *0	0,0
BOL	1,0000	???	0,0	309,8	0: *0	0,0	PER	3,2200	2,6868	83,4	309,8	5: *3	39,3
BRA	3,3000	???	0,0	309,8	0: *0	0,0	PRY	5646,3	???	0,0	309,8	0: *0	0,0
BRB	2,0000	2,3361	116,8	309,8	5: *1	48,1	SLV	8,7500	???	0,0	309,8	0: *0	0,0
CUW	1,7900	,98867	55,2	309,8	5: *0	124,6	SUR	7,4700	5,2048	9,7	309,8	5: *5	36,7
CYM	,3000	1,4397	173,5	309,8	4: *0	70,1	SXM	1,0000	???	0,0	309,8	0: *0	0,0
DMA	,7000	2,6925	99,7	309,8	2: *0	27,7	TCA	1,0000	1,8633	6,3	309,8	4: *2	23,5
DOM	,9020	47,071	96,0	309,8	5: *3	41,6	TTO	6,7400	???	0,0	309,8	0: *0	0,0
ECU	,0000	,71065	71,1	309,8	2: *	5,0	URY	1,0000	???	0,0	309,8	0: *0	0,0
GRD	,7000	2,6972	99,9	309,8	2: *	17,9	VCT	2,7000	???	0,0	309,8	0: *0	0,0
GTM	,0000	???	0,0	309,8	2: *	0,0	VGB	1,0000	1,8534	3	309,8	2: *2	4,9
GU	206,50	154,67	74,9	309,8	2: *	29,5							

PPPs

Number of products:
Important products

Code ISO of
the country

Exchange rate

Coefficient of
variation at BH
level

PPP / XR = PLI

Weight

Some concepts

- ▶ When making a Quaranta table, it is necessary to choose a base country against which all countries are compared. Ecuador was chosen in this opportunity
- ▶ XR: Market exchange rates of the countries expressed as the number of units of national currency per unit of the numéraire currency (base country)
- ▶ PPP: Purchasing power parities for the basic heading calculated and expressed as the number of units of national currency per unit of the selected numéraire currency. This numeraire currency is the average for the region for presentation purposes

Some concepts.....continued

- ▶ **PLI: Price Level Indices.** The PPPs expressed as a percentage of the corresponding exchange rate. The base is the regional average.
- ▶ **Weight:**It is the weighting of the basic heading provided by the national accounts offices. It is used to have a notion of the importance of the basic heading. It represents the part of the GDP of each country that is spent in the EB when both figures are expressed in national currency and evaluated at national prices.
- ▶ **Var Coef:** Is the variation coefficient of the observations collected in one country for a specific product $CV = \frac{S}{\bar{X}}$

Information at the product level.

Product

Warning

Geometrical mean

1 110111201.ICP - Cornflakes, KELLOGG'S // Cornflakes, KELLOGG'S (ref. unit: 1000 g) T/R=[17: *12] Var.Co.: 42,3

	NC - price *	Qts.	Var.Co.	Wn	XR-pr.	Xr-In	Wn	CUP-price	CUP-In	Wn	Remarks
				GM =>	10,89		GM=>	10,73			
ABW	20,94 *	0	0,0		11,70	107		10,29	96		
ATG	32,74 *	4	7,2		12,13	111		11,97	112		
AXA	21,84 *	13	11,9		8,09	74	<	7,60	71	<	
BHS	6,80 *	10	41,7	>	6,80	62	<	8,32	78	<	
BMU	17,14 *	10	8,4		17,14	157	>	11,11	104		
CUW	12,84	9	34,0	>	7,17	66	<	2,19	20	<	
CYM	12,32	3	16,6		14,85	136	>	10,50	98		
DMA	56,91	1	0,0		21,08	194	>	9,53	89		
DOM	303,26 *	79	24,9		6,19	57	<	12,54	117		
ECU	11,88 *	32	11,6		11,88	109		17,52	163	>	
GRD	30,34 *	5	47,0	>	11,24	103		11,70	109		
GUY	3601,96	5	23,6		17,44	160	>	25,83	241	>	
HTI	199,50 *	1	0,0		3,09	28	<	7,93	74	<	
PER	27,94 *	41	20,1		8,68	80	<	12,67	118		
SUR	103,47 *	2	23,6		13,85	127	>	19,04	177	>	
TCA	17,26	2	10,6		17,26	159	>	12,24	114		
VGB	15,29 *	6	24,2		15,29	140	>	11,21	104		

Coefficient of variation < 30

Information at the product level

Average price at national currency

Coefficient of Variation < 30

National average price converted to PPP

National average price converted to PPP standardized by geometric mean

1 110111201.ICP - Cornflakes, KELLOGG'S				S // Cornflakes, KELLOGG'S (ref.Q = 1000 g)				R=[17: *12]		Var.Co.: 42,3	
	NC - price *	Qts.	Var.Co.	XR-pr.	XR-In	Wn	CUP-price	C	Wn	Remarks	
				=> 10,89		GM=>	10,73				
ABW	20,94 *	0	0,0	11,70	107		10,29		96		
ATG	32,74 *	4	7,2	12,13	111		11,97		112		
AXA	21,84 *	13	11,5	8,09	74	<	7,60		71	<	
BHS	6,80 *	10	41,5	6,80	62	<	8,3		78	<	
BMU	17,14 *	10	8,0	17,14	157	>	11,11		104		
CUW	12,84	9	34,0	7,17	66	<	2,19		20		
CYM	12,32	3	10,6	14,85	136	>	10,50		98		
DMA	56,91	1	0,0	21,08	194	>	9,53		89		
DOM	303,26 *	79	24,9	6,19	57	<	12,54		117		
ECU	11,88 *	32	11,6	11,88	109		17,52		163	>	
GRD	30,34 *	5	47,0	11,24	103		11,70		109		
GUY	3601,96	5	23,6	3,44	160	>			241	>	
HTI	199,50 *	1	0,0	3,09	28	<	7,93			<	
PER	27,94 *	41	20,1	3,68	80	<	12,67				
SUR	103,47 *	2	23,6	3,85	127	>	19,04		177		
TCA	17,26	2	10,6	7,26	159	>	12,24		114		
VGB	15,29 *	6	24,2	5,29	140	>	11,21		104		

Quantity of observations

Average prices at national currency converted to exchange rate.

National average price convert by exchange rate and standardized by geometric mean

For each product:

- ▶ Number of countries which have priced the product, and number of countries which consider this product important
- ▶ NC Price: Price in national currency
- ▶ Qts: Number of Price quotation for this item
- ▶ Var Co: Variation coefficient for a certain product within a certain country.
- ▶ Wn : Warning This column show which observations should be checked
- ▶ XR-Price: The average prices in national currency converted to the numéraire currency with the exchange rates.
- ▶ XR-Ratio: Standardized price ratios based on the exchange rate converted prices. The XR-Prices expressed as a percentage of their geometric mean
- ▶ **CUP-Price:** The average prices in national currency converted to the numéraire currency with the PPPs
- ▶ **CUP-Ratio:** Standardized price ratios based on the PPP converted prices. The PPP-Prices expressed as a percentage of their geometric mean.

▶ THANK YOU!!

- ▶ Should you have further questions please contact us at
PCI2017@cepal.org

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