

HCPI Templates: Benefits & Improvements

Majed Skaini Amman, Jordan December 6-7, 2023

Advantages of the HCPI Template

1. Simplified Workflow: The HCPI template is designed to simplify the data compilation process for all participating countries.

2. Error Reduction: By adopting the HCPI template, countries benefit from a significant reduction in data errors. These errors are minimized by having a structured design with automatic features that ensures the accuracy and reliability of collected data.

Advantages of the HCPI Template Cont.

3. Automatic Formulas: The HCPI template comes equipped with preprogrammed formulas that dynamically adjust as data is entered. This automation not only speeds up data entry but also eliminates the need for manual formula management.

4. Effortless Updates and Revisions: Should countries identify errors in their data entry, the HCPI template facilitates easy corrections, automatically adjusting all relevant components without the burden of reformatting or recalculating data.

Advantages of the HCPI Template Cont.

5. Data Consistency: Having a template ensures consistency across the years in the data collection process. This is important for maintaining the reliability of the HCPI, as inconsistencies can distort the inflation figures, which will then lead to misleading analysis.

6. Consistent Template Between Countries: A template helps standardize the format and structure of HCPI data, making it easier to compare and analyze inflation rates across different countries, since standardization is crucial for accurate cross-country comparisons.

The Methodology

Price Index

In response to countries' demand, price indices are requested rather than prices.

How to calculate the price index?

1. For January 2011: (Price of January 2011/Price of January 2011)*100 = 100

Given that 2011 is the base year => January 2011 is always equal to **100**. This is only the case for January 2011!!

2. For the other months:

Price Index = (Price of the Current Month/Price of the Previous Month)*100

Examples: Price Index for May 2011 = (Price of May 2011/Price of April 2011)*100

Price Index for January 2018 = (Price of January 2018/Price of December 2017)*100

Price Index Cont.

Weight	Code	Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.276837767		Rice												
	011100101	أرز حبة طويلة-انكل بنز-امريكا	99.83065	100.1743	99.9953	99.64249	100.9914	101.2537	98.51715	101.8347	102.2676	99.74689	98.81496	101.0426
	011100102	أرز حبة طويلة-ياسمين	99.28967	99.7496	99.20163	100.3054	98.94026	101.982	103.0644	100.7038	99.22344	102.4437	102.6084	99.064
	011100103	ارز حبة قصيرة شقحة- صن وايت - استراليا	99.06512	100.4819	97.0483	98.88487	98.82843	96.02361	100.3546	99.7362	102.8245	99.73126	100.5139	99.59403
	011100104	أرز حبة قصيرة - شقحة - صن وايت - استراليا	99.6449	99.66663	99.70341	100	99.95042	98.33003	100.2141	98.5153	97.32116	101.0547	100.3713	98.27161
Rice		Geo mean	99.45714	100.0176	98.98037	99.70677	99.6738	99.36869	100.5245	100.19	100.3839	100.738	100.5681	99.48794
Rice		НСРІ	99.45714	99.47462	98.46035	98.17164	97.8514	97.23366	97.7436	97.92935	98.3053	99.03075	99.59335	99.08338
1.857762927		Other cereals, flour and other cereal products												
	011100201	طحين ابيض فاخر -أوسم - اسرائيلي	103.3943	101.5657	97.16559	101.8424	100.6461	100.7103	94.82442	109.6461	97.13903	113.4734	96.1273	91.94391
	011100202	طحين أبيض حيفا-زيرو -إسرائيل	100.5231	99.04597	99.03678	99.01415	100.2813	99.57258	102.9631	102.0556	101.9347	101.6086	99.9014	102.4291
	011101101	سمید خشن نوع"أ"-سمید حیفا - اسرائیل	101.2424	99.00498	99.56449	106.1734	97.26407	101.3041	98.41544	105.9158	100.8871	101.3355	100.2867	100.5517
	011101201	برغل مجروش حلل - محل <mark>ي</mark>	101.3588	100.8441	100.0985	103.7383	99.7155	100.4375	91.5633	102.9343	110.9758	93.45932	100.8597	107.2509
	011101301	فريكة ناشفة مجروشة حلل-محلي	98.32572	98.94221	99.02216	103.0377	98.52136	97.39786	109.6962	97.01062	100.438	101.4639	101.32	97.00045
	011101401	نشا ناعم ابيض حلل -اسرائيل	100.2414	99.90366	97.54098	105.6352	104.1647	102.3435	87.21926	95.74534	108.8065	96.65862	101.9742	97.54942
	011101601	حبوب الافطار كورن فليكس NESTLA - بولندا	101.488	102.3894	98.78016	101.1275	98.68596	99.20646	116.7028	101.5799	101.3266	100.1806	100.4582	99.36449
Other cereals, flour and other	products	Geo mean	100.9291	100.2341	98.7393	102.9118	99.87634	100.1279	99.74611	102.03	102.9727	101.0098	100.1168	99.34318
Other cereals, flour and other products		НСРІ	100.9291	101.1654	99.89003	102.7986	102.6715	102.8028	102.5418	104.6234	107.7336	108.8215	108.9486	108.233

After calculating the price indices, they should be filled here for these specific items.

Price Index Cont.

Weight	Code	Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.276837767		Rice												
	011100101	أرز حبة طويلة-انكل بنز-امريكا	99.83065	100.1743	99.9953	99.64249	100.9914	101.2537	98.51715	101.8347	102.2676	99.74689	98.81496	101.0426
	011100102	أرز حبة طويلة-ياسمين	99.28967	99.7496	99.20163	100.3054	98.94026	101.982	103.0644	100.7038	99.22344	102.4437	102.6084	99.064
	011100103	ارز حبة قصيرة شقحة- صن وايت - استراليا	99.06512	100.4819	97.0483	98.88487	98.82843	96.02361	100.3546	99.7362	102.8245	99.73126	100.5139	99.59403
	011100104	أرز حبة قصيرة - شقحة - صن وايت - استراليا	99.6449	99.66663	99.70341	100	99.95042	98.33003	100.2141	98.5153	97.32116	101.0547	100.3713	98.27161
Rice		Geo mean	99.45714	100.0176	98.98037	99.70677	99.6738	99.36869	100.5245	100.19	100.3839	100.738	100.5681	99.48794
Rice		НСРІ	99.45714	99.47462	98.46035	98.17164	97.8514	97.23366	97.7436	97.92935	98.3053	99.03075	99.59335	99.08338
1.857762927		Other cereals, flour and other cereal products												
	011100201	طحين ابيض فاخر -أوسم - اسرائيلي	103.3943	101.5657	97.16559	101.8424	100.6461	100.7103	94.82442	109.6461	97.13903	113.4734	96.1273	91.94391
	011100202	طحين أبيض حيفا-زيرو -إسرائيل	100.5231	99.04597	99.03678	99.01415	100.2813	99.57258	102.9631	102.0556	101.9347	101.6086	99.9014	102.4291
	011101101	سميد خشن نوع"أ"-سميد حيفا - اسرائيل	101.2424	99.00498	99.56449	106.1734	97.26407	101.3041	98.41544	105.9158	100.8871	101.3355	100.2867	100.5517
	011101201	برغل مجروش حلل - محلي	101.3588	100.8441	100.0985	103.7383	99.7155	100.4375	91.5633	102.9343	110.9758	93.45932	100.8597	107.2509
	011101301	فريكة ناشفة مجروشة حلل-محلي	98.32572	98.94221	99.02216	103.0377	98.52136	97.39786	109.6962	97.01062	100.438	101.4639	101.32	97.00045
	011101401	نشا ناعم ابیض حلل -اسرائی <mark>ل</mark>	100.2414	99.90366	97.54098	105.6352	104.1647	102.3435	87.21926	95.74534	108.8065	96.65862	101.9742	97.54942
	011101601	حبوب الافطار كورن فليكس NESTLA - بولندا	101.488	102.3894	98.78016	101.1275	98.68596	99.20646	116.7028	101.5799	101.3266	100.1806	100.4582	99.36449
Other cereals, flour and other	products	Geo mean	100.9291	100.2341	98.7393	102.9118	99.87634	100.1279	99.74611	102.03	102.9727	101.0098	100.1168	99.34318
Other cereals, flour and other products		НСРІ	100.9291	101.1654	99.89003	102.7986	102.6715	102.8028	102.5418	104.6234	107.7336	108.8215	108.9486	108.233

This is the geometric mean. The formula is automatically generated for each basic heading after filling the price indices.

Price Index Cont.

Weight	Code	Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.276837767		Rice												
	011100101	أرز حبة طويلة-انكل بنز-امريكا	99.83065	100.1743	99.9953	99.64249	100.9914	101.2537	98.51715	101.8347	102.2676	99.74689	98.81496	101.0426
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The formula here ensures that all months of the year have a common base. Thus, January = (Geo Mean of Jan/100)*100 and then February = (Geo Mean of Feb/100)*Index of January etc. The formula is also automatically generated.

Expenditures

Name	Level	Weights	Please Insert The Expenditures Here
GROSS DOMESTIC PRODUCT	GDP	100	-
INDIVIDUAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS	Main Aggregate	#DIV/0!	-
FOOD AND NON-ALCOHOLIC BEVERAGES	Category	#DIV/0!	-
FOOD	Group	#DIV/0!	-
Bread and cereals	Class	#DIV/0!	-
Rice	Basic Heading	#DIV/0!	
Other cereals, flour and other cereal products	Basic Heading	#DIV/0!	
Bread	Basic Heading	#DIV/0!	
Other bakery products	Basic Heading	#DIV/0!	
Pasta products and couscous	Basic Heading	#DIV/0!	

Expenditures should be filled only at the basic heading level.

Expenditures Cont.

Everything else: the main aggregate, category, group, class, and weights, will be automatically generated through formulas.

Name	Level	Weights	Please Insert The Expenditures Here
GROSS DOMESTIC PRODUCT	GDP	100	-
INDIVIDUAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS	Main Aggregate	#DIV/0!	-
FOOD AND NON-ALCOHOLIC BEVERAGES	Category	#DIV/0!	
FOOD	Group	#DIV/0!	
Bread and cereals	Class	#DIV/0!	-
Rice	Basic Heading	#DIV/0!	
Other cereals, flour and other cereal products	Basic Heading	#DIV/0!	
Bread	Basic Heading	#DIV/0!	
Other bakery products	Basic Heading	#DIV/0!	
Pasta products and couscous	Basic Heading	#DIV/0!	

Expenditures Cont.

Expenditures of each year is filled based on the expenditures of the previous year. For instance, in 2013, enter the expenditures of 2012, in 2019, enter the expenditures of 2018 etc. Since 2011 is the first year, expenditures of 2011 are that of 2011, which means that 2011 and 2012 have the same expenditures.

Expenditures should be filled only for basic headings that have prices!!

Indices at Class Level

To get the indices at the class level we calculate the weighted average for each class (the formulas are automatically generated).

l		Level : Class												
	Weights	2nd level	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	#DIV/0!	Bread and cereals	#DIV/0!											
	#DIV/0!	Meat	#DIV/0!											
	#DIV/0!	Fish and seafood	#DIV/0!											
	#DIV/0!	Milk, cheese and eggs	#DIV/0!											
	#DIV/0!	Oils and fats	#DIV/0!											
	#DIV/0!	Fruit	#DIV/0!											
	#DIV/0!	Vegetables	#DIV/0!											
	#DIV/0!	Sugar, jam, honey, choo	#DIV/0!											
	#DIV/0!	Food products n.e.c.	#DIV/0!											
1														

Example: bread and cereals

Weights are filled automatically

							$\mathbf{\nabla}$							
/eight ,	Code	Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
#DIV/0!	Ľ	Rice												
	011100101	أرز حبة طويلة-انكل بنز-امريكا												
	011100102	أرز حبة طويلة-باسمين												
	011100103	ارز حبة قصبرة شقحة- صن وابت - استرالبا												
	011100104	أرز حبة قصيرة - شقحة - صن وايت - استراليا												
ice		Geo mean	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
ice	l	HCPI	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
#DIV/0!	L	Other cereals, flour and other cereal products												
	011100201	طحين ابيض فاخر -أوسم - اسرائيلي												
	011100202	طحين أبيض حيفا-زيرو-إسرائيل												
	011101101	سميد خشن نوع"أ"-سميد حيفا - اسرائيل												
	011101201	برغل مجروش حلل - محلى												
	011101301	فريكة ناشفة مجروشة حلل-محلى												
	011101401	نشا ناعم ابیض حلل -اسرائیل												
	011101601	حبوب الافطار كورن فليكس NESTLA - بولندا												
ther cereals, flour and otl	her products	Geo mean	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
ther cereals, flour and ot	her products	HCPI	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
#DIV/0!	Ľ	Bread												
	011100301	خبز ابیض کماج- محلی												
	011100302	خبز توست ابيض- اسرائيل												
read		Geo mean	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
read	<u>l</u>	HCPI	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
#DIV/0!	<u>I</u>	Other bakery products		-										
	011100401	قرشلة بسمسم اصابع-محلى												
	011100601	كتافة ناعمة نابلسية-محلى												
	011100602	بقلاوة محشية بفستق حلبى-محلى												
	011100701	جاتوه (تورتا)مطلى بالكريم و الشوكولاته-محلى												
	011100801	بسكويت ويفر بالشوكولاتة والحليب-على بابا محلى 24 قطعة												
	011100802	بسكويت ويفر محشى-عليت - عيدين -اسرائيل												
ther bakery products		Geo mean	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
ther bakery products	1	HCPI	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
#DIV/0!	<u>I</u>	Pasta products and couscous												
	011100901	معكرونة رفيعة نمرة3 - اوسم - اسرائيل												
	011100902	معكرونة طويلة - الغزال - محلى												
	011101001	شعيرية رفيعة نمرة0 -ابو عيطة - محلى												
	011101002	شعيرية رفيعة-اوسم-اسرائيل												
asta products		Geo mean	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
asta products		HCPI	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!

Indices at Group Level

	Level : Group	НСРІ												
Weights	3rd level	3rd level	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
#DIV/0!	FOOD	FOOD	#DIV/0!											
#DIV/0!	NON-ALCOHOLIC BEVERA	NON-ALCOHOLIC BEVERAGES	#DIV/0!											
#DIV/0!	ALCOHOLIC BEVERAGES	ALCOHOL BEVERAGES	#DIV/0!											
#DIV/0!	ТОВАССО	ТОВАССО	#DIV/0!											
#DIV/0!	CLOTHING	CLOTHING	#DIV/0!											
#DIV/0!	FOOTWEAR	FOOTWEAR	#DIV/0!											
#DIV/0!	ACTUAL RENTALS FOR HC	ACTUAL AND IMPUTED RENTAL	#DIV/0!											
#DIV/0!	MAINTENANCE AND REP.	MAINTENANCE AND REPAIR OF	#DIV/0!											
#DIV/0!	WATER SUPPLY AND MIS	WATER SUPPLY AND MISCELLAI	#DIV/0!											
#DIV/0!	ELECTRICITY, GAS AND O	ELECTRICITY, GAS AND OTHER F	#DIV/0!											
#DIV/0!	FURNITURE AND FURNIS	FURNITURE AND FURNISHINGS	#DIV/0!											
#DIV/0!	HOUSEHOLD TEXTILES	HOUSEHOLD TEXTILES	#DIV/0!											
#DIV/0!	HOUSEHOLD APPLIANCES	HOUSEHOLD APPLIANCES	#DIV/0!											
#DIV/0!	GLASSWARE, TABLEWAR	GLASSWARE, TABLEWARE AND	#DIV/0!											
#DIV/0!	Small tools and miscellar	Small tools and miscellaneous a	#DIV/0!											
#DIV/0!	Non-durable household	Non-durable household goods	#DIV/0!											
#DIV/01	TOOLS AND FOLLIPMENT													

The same process is done to get the indices at the group level, where the weighted average will be calculated automatically for each group.

Weights are filled automatically

#DIV/0! #DIV/0!

#DIV/0!

#DIV/0!

GOODS AND SERVICES F

MEDICAL PRODUCTS, A

OUT-PATIENT SERVICES PURCHASE OF VEHICLES

Indices at Category Level

	Level : Category
Weights	4th Level
#DIV/0!	FOOD AND NON-ALCOHOLIC BEVERAGES
#DIV/0!	ALCOHOLIC BEVERAGES, TOBACCO AND NARCOTICS
#DIV/0!	CLOTHING AND FOOTWEAR
#DIV/0!	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS
#DIV/0!	FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE
#DIV/0!	HEALTH
#DIV/0!	TRANSPORT
#DIV/0!	COMMUNICATION
#DIV/0!	RECREATION AND CULTURE
#DIV/0!	EDUCATION
#DIV/0!	RESTAURANTS AND HOTELS
#DIV/0!	MISCELLANEOUS GOODS AND SERVICES

The weighted average is also automatically calculated for each category.

Weights are filled automatically

НСРІ												
4th Level	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
FOOD AND NON-ALCOHOLIC BEVERAGES	#DIV/0!											
ALCOHOL BEVERAGES, TOBACCO AND NARCOTICS	#DIV/0!											
CLOTHING AND FOOTWEAR	#DIV/0!											
HOUSING, WATER, ELECTRICITY, GAS, AND OTHER FUELS	#DIV/0!											
FURNISHING, HOUSEHOLD EQUIPMENT AND ROUTINE MAINTENANCE OF THE HOUS	#DIV/0!											
HEALTH	#DIV/0!											
TRANSPORT	#DIV/0!											
COMMUNICATION	#DIV/0!											
RECREATION AND CULTURE	#DIV/0!											
EDUCATION	#DIV/0!											
RESTAURANTS AND HOTELS	#DIV/0!											
MISCELLANEOUS GOODS AND SERVICES	#DIV/0!											
									,			/



Results

The results are generated through the following steps:



First, we copy the data from the sheets at the category level for each year.



Second, by employing a formula, we linked the years, ensuring that each one references January 2011 as the base period.



Third, we conduct a rebasing process, setting the year 2011 as the base year with a value of 100.

Thank You!

