





## **STATISTICAL RELEASE**

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## **EXPORT AND IMPORT PRICE INDICES FOR THE QUARTER ENDING SEPTEMBER 2023**

### **Background notes**

## Definition

The Export and Import Price Indices (XMPI) are average measures of price changes of goods exported outside or imported into the country. The XMPI are used in various areas to do analysis such as Terms of Trade (ToT) which is the ratio of Export Price Index (XPI) to the Import Price Index (MPI).

The Export and Import Price Indices, which are compiled on a quarterly basis, cover both exports and imports of merchandise trade. These quarterly specifications based XMPI have been compiled and disseminated since the first quarter of 2013 up to the last quarter of 2022 with reference base period being the quarter ending December 2017. The updated XMPI has the first quarter of 2023 as the reference base period. The updated weights and the product sample for the XMPI used customs data for the years 2019 to 2021. Price collection for the updated XMPI was carried out during the period November -December 2023. This allowed for the compilation of the XMPI for the first quarter of 2023 using the new product and enterprise samples.

## Weights and a reference period

The XMPI weights are based on values of imported and exported commodities for the period 2019 to 2021. A top-down approach was taken in the determination of the index structure, composition and the allocation of the weights. The aim was to maximise the indirect representation of un-priced commodities in the index, through a chain of representation. The price reference period is the quarter ending March 2023.

#### **Product Classification**

The products are classified according to the United Nations Harmonized Commodity Description and Coding System (HS). The HS is an international nomenclature for the classification of products.

#### Methodology

**Selection of items**: In the selection of items, a top - down procedure was applied in three steps. First, the major 2-digit HS chapters contributing to the total value of imports in terms of the sum of values for the year 2019 to 2021 were selected for direct inclusion in the indices. As a result, 16 chapters (2-digit HS codes) were selected for imports and 12 chapters for exports out of 99 chapters representing 80 percent or more depending on the degree of concentration. Secondly, the process was repeated at 4-digit level of HS; 76 items were selected for imports and 19 items were selected for exports. Finally, the procedure was repeated at the 8-digit level of the HS by selecting 165 items for imports and 25 items for exports. The result of these procedures was the derivation of the structure and composition of the indices.

The XMPI has incorporated a number of methodological improvements including the use of geometric means for compiling elementary index aggregates, the use of an improved index compilation system, and improved procedures for collecting and processing prices. The Laspeyres index formula was used to compute higher level aggregates for the XMPI. **Chart 1** depicts trends of XPI and MPI in the selected quarters.



## Chart 1: Quarterly Export and Import Price Indices (Q1 2023=100)

*Note: Q1=January-March, Q2=April-June, Q3=July-September, Q4=October-December* 

## **Export Price Index**

## **Structure of the XPI**

The XPI covers 12 chapters out 99 chapters, namely; (i) Fish and crustacean, mollusk and other aquatic invertebrate, (ii) Edible vegetables and certain roots and tubers, (iii) Edible fruits and nuts, peel of citrus fruit or melons, (iv) Coffee, tea, mate and spices, (v) Cereals (vi) Oil seed, oleagi fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder, (vii) Tobacco and manufactured tobacco substitutes,(viii) Ores, slag and ash, (ix) Salt; sulphur; earth & ston; plastering mat; lime & cem (xi) Cotton, (xii) Wadding, felt & nonwoven; yarns; twine, cordage, etc and (xii) Natural/cultured pearls, precious stones and metals, coin, etc. The sample of twelve chapters constitutes 80 percent of the total value of exports, aggregated from 2019 to 2021.

### **Quarterly Export Price Index**

The overall Export Price Index during the third quarter of 2023 increased by 2.9 percent to 104.7 from 101.7 recorded in the previous quarter. This development was largely attributed to the increase in prices of wadding & felt, fish, cotton, edible fruits & nuts (**Table 1**).

HS		Weight	Q1 2023	Q2 2023	Q3 2023	% Change Previous
Code	Description	Overall			Quarter	
		100.0	100.0	101.7	104.7	2.9
03	Fish & crustacean, mollusk & other	3.4	100.0	101.9	110.6	8.5
07	Edible vegetables and certain roots and	4.8	100.0	113.0	109.6	-3.1
08	Edible fruit and nuts; peel of citrus fruit or	6.6	100.0	98.4	101.7	3.4
09	Coffee, tea, mate and spices	4.8	100.0	97.9	96.9	-1.0
10	Cereals	4.7	100.0	101.2	102.5	1.3
12	Oil seed, oleagi fruits; miscell grain, seed,	4.7	100.0	102.2	103.9	1.7
24	Tobacco and manufactured tobacco	3.5	100.0	107.1	111.8	4.3
25	Salt; sulphur; earth & ston; plastering mat;	2.2	100.0	102.4	103.8	1.4
26	Ores, slag and ash	3.6	100.0	99.7	103.8	4.1
52	Cotton	2.0	100.0	99.1	104.4	5.3
56	Wadding, felt & nonwoven; yarns; twine,	0.6	100.0	92.8	102.7	10.7
71	Natural/cultured pearls, prec stones &	59.0	100.0	105.2	104.5	-0.7

## Table 1: Quarterly Export Price Indices by Chapter (Q1 2023= 100)

Note: Q1=January-March, Q2=April-June, Q3=July-September, Q4=October-December

### **Sub-indices by Chapter**

This section gives detailed analysis on the movements of export price indices by chapter:

### Chapter 03: Fish and crustacean, mollusk and other aquatic invertebrate

The index for "Fish and crustacean, mollusk and other aquatic invertebrates" which accounts for 3.4 percent of the total weight, increased by 8.5 percent to 110.6 in the third quarter of 2023 from 101.9 recorded in the second quarter of 2023. The performance was largely attributed to the increase in the prices of nile perch and frozen fillets in the world market.

### Chapter 07: Edible vegetables and certain roots and tubers

This chapter contributed 4.8 percent of the total weight of the exported commodities. During the third quarter of 2023, the index declined by 3.1 percent to 109.6 from 113.0 that was recorded in the second quarter of 2023. The performance was largely attributed to the decrease in world-market prices of beans due to elevated soybeans production in South America.

#### Chapter 08: Edible fruits and nuts, peel of citrus fruit or melons

During the third quarter of 2023, the export price index for "Edible fruits and nuts", which accounts for 6.6 percent of the total weight, increased by 3.4 percent to 101.7 from 98.4 recorded in the previous quarter. The performance was largely associated with the increase in prices of cashew nuts in the world market due to increased demand from China, United Arab Emirates (UAE) and Saudi Arabia.

#### Chapter 09: Coffee, tea, mate and spices

This chapter contributed 4.8 percent of the total weight of exported commodities. During the third quarter of 2023, the index for "coffee, tea, mate and spices" decreased by 1.0 percent to 96.9 from 97.9 recorded in the previous quarter. The performance was largely attributed to a decrease in tea prices in the world market owing to robust supply from major producers and exporters, including India and Kenya.

### **Chapter 10: Cereals**

The export price index for "cereal" accounts for 4.7 percent of the total weight for exports. During the third quarter of 2023, the index increased by 1.3 percent to 102.5 from 101.2 recorded in the preceding quarter. The performance was largely attributed to the increase in the prices of rice in the world market resulting from trade restrictions on rice from India.

# Chapter 12: Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder

This chapter accounts for 4.7 percent of the total weight. During the third quarter of 2023, the index for "Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder" increased by 1.7 percent to 103.9 from 102.2 recorded in the previous quarter. The performance was largely attributed by the increase in prices of sesamum seeds in the world market.

#### Chapter 24: Tobacco and manufactured tobacco substitutes

This chapter accounts for 3.5 percent of the total weight. During the third quarter of 2023, the index increased by 4.3 percent to 111.8 from 107.1 recorded in the previous quarter. The performance was largely attributed by the increase in the prices of VFC lamina in the world market.

#### Chapter 25: Salt; sulphur; earth & ston; plastering mat; lime & cem

The export price index for "Salt; sulphur; earth & ston; plastering mat; lime & cem", accounting for 2.2 percent of the total weight, increased by 1.4 percent to 103.8 in the third quarter of 2023 from 102.4 recorded in the previous quarter. The performance was largely attributed to the increase in the prices of cement in the world market.

#### Chapter 26: Ores, slag and ash

The export price index for "Ores, slag and ash", which accounts for 3.6 percent of the total weight, increased by 4.1 percent to 103.8 in the third quarter of 2023 from 99.7 recorded in the preceding quarter. The performance was largely attributed by the increase in prices of precious metal ores and concentrates in the world market.

#### Chapter 52: Cotton

During the third quarter of 2023, the export price index for "Cotton", which accounts for 2.0 percent of the total weight, increased by 5.3 percent to 104.4 compared to 99.1 in the second quarter of 2023. The performance was largely attributed to the increase in prices of cotton in the world market as a result of recovery in demand, due to the ongoing season that started in August, and increase in global production.

#### Chapter 56: Wadding, felt & nonwoven; yarns; twine, cordage, etc.

The chapter contributes 0.6 percent of the total weight of exported commodities. During the third quarter of 2023, the index increased by 10.7 percent to 102.7 from 92.8 recorded in the previous quarter. The performance was largely attributed to the increase in prices of rope and cables in the world market.

#### Chapter 71: Natural/cultured pearls, precious stones and metals, coin etc.

The export price index for "Natural/cultured pearls, precious stones and metals, coin etc", which accounts for 59.0 percent of the total weight of exported commodities, decreased

slightly by 0.7 percent to 104.5 in the third quarter of 2023 from 105.2 recorded in the preceding quarter. The performance was largely associated with the decrease in the world-market prices of gold due to a stronger U.S. dollar and concerns about higher for longer interest rates.

### **Import Price Index**

## **Structure of the MPI**

The MPI covers 16 chapters out of 99 chapters, namely; (i) Cereals, (ii) Animal fats and oil & their cleavage product, (iii) Sugars and sugar confectionery (iv) Mineral fuels, oils and product of their distillation, (v) Pharmaceutical products, (vi) Fertilisers, (vii) Miscellaneous chemical products, (viii) Plastics and articles thereof, (ix) Rubber and articles thereof, (x) Other made up textile articles; sets; worn clothing etc (xi) Iron and steel, (xii) Articles of iron and steel, (xiii) Nuclear reactors, boilers, machinery and machinery appliance, parts, (xiv) Electrical machinery equipment parts thereof; sound recorder etc, (xv) Vehicles other than railway/transport way roll-stock, parts and accessories and (xvi) Optical, photo, cine, meas, checking, precision, etc. The sampled sixteen chapters constitute 80 percent of total value of imports aggregated from 2019 to 2022.

## **Quarterly Import Price Index**

The overall Import Price Index for the third quarter of 2023 increased by 1.6 percent to 100.7 from 99.1 recorded in the second quarter of 2023. The increase was mainly attributed to a surge in global market prices of crude oil and petroleum products. (**Table 2**).

		Weight	Q1 2023	Q2 2023	Q3 2023	% Change Previous
HS Code	Description		Ove	erall		Quarter
		100.0	100.0	99.1	100.7	1.6
10	Cereals	3.2	100.0	94.0	90.6	-3.7
15	Animal/veg fats & oil & their cleavage products; etc	2.7	100.0	100.2	104.4	4.2
17	Sugars and sugar confectionery	1.6	100.0	101.1	111.3	10.1
27	Mineral fuels, oils & product of their distillation; etc	23.8	100.0	89.7	99.4	10.9
30	Pharmaceutical products	5.3	100.0	100.9	106.4	5.5
31	Fertilisers	2.4	100.0	95.8	96.4	0.7
38	Miscellaneous chemical products	3.3	100.0	96.3	82.7	-14.2
39	Plastics and articles thereof	7.1	100.0	100.2	100.6	0.3
40	Rubber and articles thereof	2.5	100.0	97.1	96.8	-0.3
63	Other made up textile articles; sets; worn clothing etc	1.9	100.0	106.6	103.9	-2.5
72	Iron and steel	7.0	100.0	101.6	102.2	0.7
73	Articles of iron and steel	4.4	100.0	97.2	102.3	5.3
84	Nuclear reactors, boilers, mchy & mech appliance; parts	13.6	100.0	103.5	107.0	3.3
85	Electrical mchy equip parts thereof; sound recorder etc	8.3	100.0	107.0	104.5	-2.4
87	Vehicles o/t railw/tranw rool-stock, pts & accessories	10.8	100.0	95.5	101.2	6.0
90	Optical, photo, cine, meas, checking, precision, etc	2.1	100.0	98.5	101.3	2.9

## Table 2: Quarterly Import Price Indices by Chapter (Q1 2023= 100)

Note: Q1=January-March, Q2=April-June, Q3=July-September, Q4=October-December

## **Sub-indices by Chapter**

This section analyses movements of import price indices for each chapter.

## **Chapter 10: Cereals**

This chapter accounts for 3.2 percent of the total weight. During the third quarter of 2023, the import price index for "Cereals" decreased slightly by 3.7 percent to 90.6 from 94.0 recorded in the previous quarter. The performance was attributed by the decrease of wheat prices in the world market due to ample supplies from the world's top producers and exporters.

## Chapter 15: Animal fats and oil and their cleavage product

This chapter contributes 2.7 percent of the total weight of the imported commodities. During the third quarter of 2023, the index increased by 4.2 percent to 100.2 from 104.4 that was recorded in the previous quarter. The performance resulted from a decrease in the supply of edible oils, coupled with low production figures and intense price competition, especially between Palm oil and alternative oils mainly Soybean Oil.

## **Chapter 17: Sugars and sugar confectionery**

This chapter contributes 1.6 percent of the total weight of the imported commodities. During the third quarter of 2023, the index increased by 10.1 percent to 111.3 from 101.1 that was recorded in the previous quarter. The performance was associated with the increase in sugar

prices in the world market due to a surge in demand during the ongoing and approaching holiday season.

#### Chapter 27: Mineral fuels, oils and product of their distillation

During the third quarter of 2023, import price index for "Mineral fuels, oils and product of their distillation" which contributes 23.8 percent to the total weight of the imported commodities, increased by 10.9 percent to 99.4 from 89.7 recorded in the second quarter of 2023. The performance was associated with the increase in prices of petroleum products in the world market due to supply cuts by the Organisation of petroleum exporting countries and other members (OPEC+).

#### **Chapter 30: Pharmaceutical products**

The index for "Pharmaceutical products", which represents about 5.3 percent of the total weight, increased by 5.5 percent to 106.4 in the third quarter of 2023 from 100.9 recorded in the previous quarter. The increase was attributed to voluntary hikes by pharmaceutical companies to bolster revenue and fund research. This development is a common occurrence in mid-year.

#### **Chapter 31: Fertilisers**

The index for "Fertilisers", which accounts for 2.4 percent of the total weight of the imported commodities, increased slightly by 0.7 percent, from 95.6 recorded in the previous quarter to 96.4 recorded in the third quarter of 2023.

#### **Chapter 38: Miscellaneous chemical products**

The index for "Miscellaneous chemical products" which accounts for 3.3 percent of the total weight, fell by 14.2 percent to 82.7 in the third quarter of 2023 from 96.3 recorded in the second quarter. The performance was attributed by the reduction in production costs.

#### **Chapter 39: Plastics and articles thereof**

In the Third quarter of 2023, the index for "Plastic and articles thereof" which contributes 7.1 percent to the total weight of imported commodities slightly increased by 0.3 percent to 100.6 from 100.2 recorded in the preceding quarter.

#### Chapter 40: Rubber and articles thereof

This chapter contributes 2.5 percent to the total weight of imported commodities. During the third quarter of 2023, the index slightly decreased by 0.3 percent to 96.8 from 97.1 recorded in the second quarter of 2023.

#### Chapter 63: Other Made up Textile Articles; Sets; worn Clothing etc

In the third quarter of 2023, the index for "Other Made up Textile Articles; Sets; worn Clothing etc" which contributes 1.9 percent to the total weight of imported commodities decreased by 2.5 percent to 103.9 from 106.6 recorded in the preceding quarter. The performance was largely associated with the decline of input prices in the world market.

#### Chapter 72: Iron and steel

During the third quarter of 2023, the index for "Iron and steel", which accounts for 7.0 percent of the total weight, slightly increased by 0.7 percent to 102.2 from 101.6 recorded in the second quarter of 2023.

#### Chapter 73: Articles of iron and steel

This chapter contributes 4.4 percent of the total weight. In the third quarter of 2023, the index for "Articles of iron and steel" increased by 5.3 percent to 102.3 from 97.2 recorded in the preceding quarter. The performance was mainly caused by increase of prices of articles of iron and steel in the world market.

# Chapter 84: Nuclear reactors, boilers, machinery and mechanical appliance and parts

The chapter accounts for 13.6 percent of the total weight of imported commodities. During the third quarter of 2023, the index for this chapter increased by 3.3 percent to 107.0 from 103.5 recorded in the preceding quarter. to the performance was associated with the increase in prices of copper in the world market due to the Ukraine - Russia war.

#### **Chapter 85: Electrical machinery equipment and parts thereof**

The index for "Electrical machinery equipment and parts thereof", which accounts for 8.3 percent of the total weight, decreased by 2.4 percent to 104.5 in the third quarter of 2023

compared to 107.0 recorded in the previous quarter. The performance was attributed to decrease in prices of electric machinery equipment in the world market.

## **Chapter 87: Vehicles other than railway/transport ways roll-stock**

The index for "vehicles other than railway/transport ways roll-stock" which accounts for 10.8 percent of total weight, increased by 6.0 percent to 101.2 in the third quarter of 2023 from 95.5 recorded in the previous quarter. The performance was associated with the rise in prices of various brands of motor vehicles in the world market.

## Chapter 90: Optical, photo, cine, meas, checking, precision, etc.

This chapter accounts for 2.1 percent of the total weight. During the third quarter of 2023, the index increased by 2.9 percent to 101.3 from 98.5 recorded in the previous quarter. The performance was attributed to the increase in prices of needles.

## **Terms of Trade**

The Terms of Trade Index is the ratio of Export Price Index to Import Price Index. The Exports Price Index was mostly influenced by prices of sisal, fish and cotton while the Imports Price Index was driven by prices of crude oil and petroleum products sugar and vehicles. Overall, during the third quarter of 2023, Terms of Trade remained favourable, increasing by 1.4 points to 101.9 from 102.4 recorded in the second quarter of 2023 (**Table 3**). This implies that for every unit of goods exported, the country can obtain more units of imports.

	2023				
Indices	Q1	Q2	Q3		
EXPI	100.0	101.7	104.7		
MPI	100.0	99.1	100.7		
ТОТ	100.0	102.6	104.0		

## Table 3: Quarterly Terms of Trade (Q1 2023 = 100)

#### Note;

Q1=January-March, Q2=April-June, Q3=July-September, Q4=October-December

XPI = Export Price Index

MPI = Import Price Index

ToT = Terms of Trade

## **Contact person: Statistician General. National Bureau of Statistics**