

STATISTICAL RELEASE

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EXPORT AND IMPORT PRICE INDICES FOR THE QUARTER ENDING MARCH 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 2017 with reference base period being the quarter ending March 2013. The updated XMPI has the fourth quarter of 2017 as the reference base period. The updated weights and the product sample for the XMPI used customs data for the years 2014 to 2016. Price collection for the updated XMPI was carried out during the period October-December 2017. This allowed for the compilation of the XMPI for the fourth quarter of 2017 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 2014 to 2016. A top-down approach was taken in the determination of the index structure, composition and the allocation of the weights. The aim was to maximize the indirect representation of un-priced commodities in the index, through a chain of representation. The price reference period is the quarter ending December 2017.

Product Classification

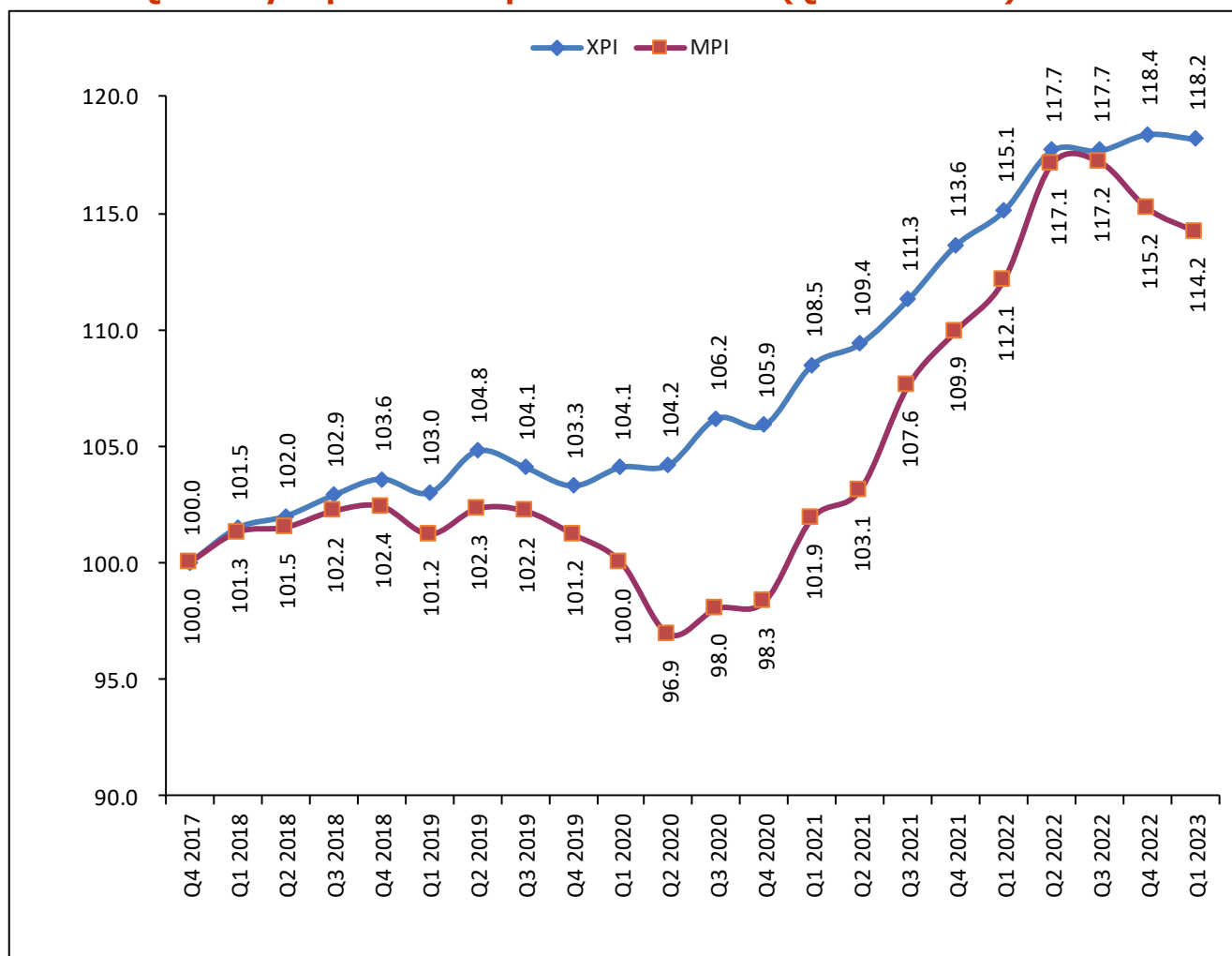
The products are classified according to the United Nations Harmonized Commodity Description and Coding System (HS). The HS is an international nomenclature for the classification of products.

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 2014 to 2016 were selected for direct inclusion in the indices. As a result, 14 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; 73 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 178 items for imports and 23 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 (Q4 2017=100)



1. 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 of 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) Oil seed, oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder, (vi) Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes, (vii) Residues & waste from the food industries; prepared animal fodder, (viii) Tobacco and manufactured tobacco substitutes, (ix) Cotton, (x) Wadding, felt & nonwoven; yarns; twine, cordage, etc, (xi) Glass and glassware 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 2014 to 2016.

Quarterly Export Price Index

The overall Export Price Index during the first quarter of 2023 decreased slightly by 0.1 percent to 118.2 from 118.4 recorded in the previous quarter. This development was largely attributed to the decrease in prices of edible fruits and nuts as well as those of coffee, tea mate, and spices. Nonetheless, when compared to the corresponding quarter of 2022, the index increased by 2.7 percent (**Table 1**).

Table 1: Quarterly Export Price Indices by Chapter (Q4 2017= 100)

HS Code	Description	Weight	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	% Change Previous Quarter	% Change the same quarter last year
		100.0	115.1	117.7	117.7	118.4	118.2	-0.1	2.7
03	Fish & crustacean, mollusk & other aquatic	6.2	111.8	111.9	112.2	112.9	112.4	-0.4	0.5
07	Edible vegetables and certain roots and	11.4	111.3	112.4	112.3	112.7	112.7	0.0	1.3
08	Edible fruit and nuts; peel of citrus fruit or	17.4	67.2	67.2	67.4	65.3	61.8	-5.4	-8.0
09	Coffee, tea, mate and spices	4.3	119.3	116.7	117.4	116.7	114.6	-1.8	-3.9
12	Oil seed, oleagi fruits; miscell grain, seed,	4.2	130.1	144.8	147.9	151.4	150.7	-0.4	15.8
15	Animal/veg fats & oil & their cleavage	7.4	132.9	160.1	161.1	162.2	161.5	-0.4	21.5
23	Residues & waste from the food indust;	6.2	105.5	105.1	105.4	112.1	111.2	-0.8	5.4
24	Tobacco and manufactured tobacco	5.9	104.5	104.6	104.8	104.6	104.1	-0.4	-0.3
52	Cotton	1.0	122.9	123.0	122.8	121.8	121.2	-0.4	-1.4
56	Wadding, felt & nonw oven; yarns; tw ine,	4.9	114.8	115.0	116.3	115.9	116.0	0.1	1.1
70	Glass and glassware	2.2	117.8	109.2	109.4	110.1	109.7	-0.4	-6.9
71	Natural/cultured pearls, prec stones &	28.9	143.2	142.3	134.9	135.1	142.9	5.7	-0.2

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 6.2 percent of the total weight, decreased marginally by 0.4 percent to 112.4 in the first quarter of 2023 from 112.9 recorded in the fourth quarter of 2022. However, when compared to the corresponding quarter of 2022, the index marginally increased by 0.5 percent.

Chapter 07: Edible vegetables and certain roots and tubers

This chapter contributed 11.4 percent of the total weight of the exported commodities. During the first quarter of 2023, the index remained constant at 112.7 as recorded in the fourth quarter of 2022. In comparison with the same quarter in the year 2022, the index increased by 1.3 percent.

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

During the first quarter of 2023, the export price index for "Edible fruits and nuts", which accounts for 17.4 percent of the total weight, decreased by 5.4 percent to 61.8 from 65.3 recorded in the previous quarter. The performance was largely associated with the decrease in prices of cashew nuts in the world market due to changes in demand, especially the consumption of cashew nuts (kernels) in the markets of India, China, Europe, and the United States. Likewise, when compared with the same quarter in the previous year, the index decreased by 8.0 percent.

Chapter 09: Coffee, tea, mate and spices

This chapter contributed 4.3 percent of the total weight of exported commodities. During the first quarter of 2023, the index for "coffee, tea, mate and spices" decreased by 1.8 percent to 114.6 from 116.7 recorded in the previous quarter. The performance was largely attributed to a decrease in tea prices in the world market owing to slowing demand in key tea consumption regions, especially in Central Asia. Likewise, when compared to the corresponding quarter of 2022, the index decreased by 3.9 percent.

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

This chapter accounts for 4.2 percent of the total weight. During the first quarter of 2023, the index for "Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder" decreased slightly by 0.4 percent to 150.7 from 151.4 recorded in the previous quarter. However, when compared with the corresponding quarter of 2022 the index increased by 15.8 percent.

Chapter 15: Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes

The export price index for "Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes", accounts for 7.4 percent of the total weight for exports. During the first quarter of 2023, the index decreased slightly by 0.4 percent to 161.5 from 162.2 recorded in the preceding quarter. However, in comparison with the corresponding quarter of 2022, the index increased by 21.5 percent.

Chapter 23: Residues & waste from the food industries; prepared animal fodder

The export price index for "Residues & waste from the food industries; prepared animal fodder", accounting for 6.2 percent of the total weight, decreased slightly by 0.8 percent to 111.2 in the first quarter of 2023 from 112.1 recorded in the previous quarter. However, when compared to the same quarter of 2022, the index increased by 5.4 percent.

Chapter 24: Tobacco and manufactured tobacco substitutes

This chapter accounts for 5.9 percent of the total weight. During the first quarter of 2023, the index decreased marginally by 0.4 percent to 104.1 from 104.6 recorded in the previous quarter. Likewise, when compared to the same quarter in 2022, the index decreased slightly by 0.3 percent.

Chapter 52: Cotton

During the first quarter of 2023, the export price index for "Cotton", which accounts for 1.0 percent of the total weight, decreased marginally by 0.4 percent to 121.2 compared to 121.8 in the fourth quarter of 2022, largely associated with a decrease in global consumption. Likewise, when compared with the same quarter in 2022, the index has decreased by 1.4 percent.

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

The chapter contributes 4.9 percent of the total weight of exported commodities. During the first quarter of 2023, the index increased slightly by 0.1 percent to 116.0 from 115.9 recorded in the previous quarter. Similarly, the index increased by 1.1 percent when compared with the same quarter in 2022.

Chapter 70: Glass and glassware

The export price index for "Glass and glassware", which accounts for 2.2 percent of the total weight, decreased slightly by 0.4 percent to 109.7 in the first quarter of 2023 from 110.1 recorded in the preceding quarter. Similarly, when compared to the same quarter of the previous year, the index decreased by 6.9 percent.

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 28.9 percent of the total weight of exported commodities, increased by 5.7 percent to 142.9 in the first quarter of 2023 from 135.1 recorded in the preceding quarter. The

performance was largely associated with the increase in the world-market prices of gold due to a weakening dollar and persistently high inflation, which drives some investors to buy gold—considered to be a safe-haven and a lower-risk asset. Nonetheless, when compared to the corresponding quarter of 2022 the index decreased by 0.2 percent.

Import Price Index

Structure of the MPI

The MPI covers 14 chapters out of 99 chapters, namely; (i) Cereals, (ii) Animal fats and oil & their cleavage product, (iii) Mineral fuels, oils and product of their distillation, (iv) Pharmaceutical products, (v) Fertilisers, (vi) Miscellaneous chemical products, (vii) Plastics and articles thereof, (viii) Rubber and articles thereof, (ix) Iron and steel, (x) Articles of iron and steel, (xi) Nuclear reactors, boilers, machinery and machinery appliance, parts, (xii) Electrical machinery equipment parts thereof; sound recorder etc, (xiii) Vehicles other than railway/transport way roll-stock, parts and accessories and (xiv) Optical, photo, cine, meas, checking, precision, etc. The sampled fourteen chapters constitute 80 percent of total value of imports aggregated from 2014 to 2016.

Quarterly Import Price Index

The overall Import Price Index for the first quarter of 2023 decreased by 0.9 percent to 114.2 from 115.2 recorded in the fourth quarter 2022. The decrease was mainly due to a fall in world market prices of crude oil and petroleum products. Meanwhile, when compared to the same quarter of 2022, the index increased by 1.8 percent (**Table 2**).

Table 2: Quarterly Import Price Indices by Chapter (Q4 2017= 100)

HS Code	Description	Weight	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	% Change	% Change
								Previous Quarter	same Quarter
		100.0	112.1	117.1	117.2	115.2	114.2	-0.9	1.8
10	Cereals	4.1	122.9	131.4	132.5	132.7	131.6	-0.8	7.1
15	Animal/veg fats & oil & their cleavage products	4.2	98.3	98.4	98.6	86.1	91.0	5.7	-7.4
27	Mineral fuels, oils & product of their distillation;	21.7	113.3	161.9	160.8	145.4	136.1	-6.3	20.1
30	Pharmaceutical products	5.2	104.6	104.7	104.9	105.5	105.1	-0.4	0.5
31	Fertilisers	1.8	146.7	152.3	151.4	149.9	149.3	-0.4	1.8
38	Miscellaneous chemical products	2.0	97.4	99.4	101.4	102.0	100.7	-1.3	3.4
39	Plastics and articles thereof	6.2	119.8	120.6	119.6	115.4	110.2	-4.5	-8.0
40	Rubber and articles thereof	2.8	111.4	111.3	112.4	113.5	112.1	-1.2	0.6
72	Iron and steel	5.3	105.9	106.0	105.4	104.9	104.3	-0.5	-1.5
73	Articles of iron and steel	4.0	121.0	121.2	121.3	119.3	118.4	-0.8	-2.2
84	Nuclear reactors, boilers, mchy & mech applic	15.2	118.3	119.7	118.7	120.7	122.1	1.2	3.2
85	Electrical mchy equip parts thereof; sound rec	10.9	110.4	112.0	113.1	114.4	115.1	0.5	4.2
87	Vehicles o/t railw/tranw rool-stock, pts & acce:	14.4	109.6	110.5	110.8	112.2	110.8	-1.2	1.2
90	Optical, photo, cine, meas, checking, precisio	2.1	90.1	90.2	90.4	91.0	91.3	0.3	1.3

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 4.1 percent of the total weight. During the first quarter of 2023, the import price index for “Cereals” decreased slightly by 0.8 percent to 131.6 from 132.7 recorded in the previous quarter. Price decrease was associated mainly with an increase in global supply of wheat and other granular commodities globally. However, when compared to the same quarter in the previous year, the index fell by 7.4 percent.

Chapter 15: Animal fats and oil and their cleavage product

This chapter contributes 4.2 percent of the total weight of the imported commodities. During the first quarter of 2023, the index increased by 5.7 percent to 91.0 from 86.1 that was recorded in the previous quarter. This development was due to a fall in supply of edible oils accompanied with low production numbers and price rivalry particularly between Palm oil and other substitute oils. Meanwhile, when compared to the same quarter in the previous year, the index increased by 12.3 percent.

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

During the first quarter of 2023, import price index for “Mineral fuels, oils and product of their distillation” which contributes 21.7 percent to the total weight of the imported commodities, decreased by 6.3 percent to 136.1 from 145.4 recorded in the fourth quarter of 2022. The decline was attributed to a weaker demand on account of a stronger US dollar associated with

increase in interest rates. On the other hand, when compared to the corresponding quarter of 2022, the index increased by 20.1 percent.

Chapter 30: Pharmaceutical products

The index for "Pharmaceutical products", which represents about 5.2 percent of the total weight, decreased slightly by 0.4 percent to 105.1 in the first quarter of 2023 from 105.5 recorded in the previous quarter. When compared to the corresponding quarter of 2022, the index increased slightly by 0.5.

Chapter 31: Fertilisers

The index for "Fertilisers", which accounts for 1.8 percent of the total weight of the imported commodities, decreased slightly by 0.4 percent, from 149.9 recorded in the previous quarter to 149.3 in the first quarter of 2023. The decrease is associated with a fall in raw material prices particularly oil and gas prices—vital inputs to fertiliser production. Nonetheless, when compared with the similar quarter in 2022, the index increased by 1.8 percent.

Chapter 38: Miscellaneous chemical products

The index for "Miscellaneous chemical products" which accounts for 2.0 percent of the total weight, fell by 1.3 percent to 100.7 in the first quarter of 2023 from 102.0 recorded in the fourth quarter. Nonetheless, when compared with the same quarter last year, the index increased by 3.4 percent.

Chapter 39: Plastics and articles thereof

In the first quarter of 2023, the index for "Plastic and articles thereof" which contributes 6.2 percent to the total weight of imported commodities decreased by 4.5 percent to 110.2 from 115.4 recorded in the preceding quarter. The decrease was driven by the decline of input prices in the world market. Likewise, when compared to the corresponding quarter in 2022, the index decreased by 8.0 percent.

Chapter 40: Rubber and articles thereof

This chapter contributes 2.8 percent to the total weight of imported commodities. During the first quarter of 2023, the index decreased by 1.2 percent to 112.1 from 113.5 recorded in the

fourth quarter of 2022. When compared to the same quarter last year the index slightly increased by 0.6 percent.

Chapter 72: Iron and steel

During the first quarter of 2023, the index for "Iron and steel", which accounts for 5.3 percent of the total weight, slightly decreased by 0.5 percent to 104.3 from 104.9 recorded in the fourth quarter of 2022. Similarly, the index decreased by 1.5 percent when compared with the same quarter of 2022.

Chapter 73: Articles of iron and steel

This chapter contributes 4.0 percent of the total weight. In the first quarter of 2023, the index for "Articles of iron and steel" slightly decreased by 0.8 percent to 118.4 from 119.3 recorded in the preceding quarter. However, when compared to the corresponding quarter of 2022, the index increased by 2.2 percent.

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

The chapter accounts for 15.2 percent of the total weight of imported commodities. During the first quarter of 2023, the index for this chapter increased by 1.2 percent to 122.1 in the first quarter of 2023 from 120.7 recorded in the preceding quarter of 2022. Similarly, when compared to the same quarter of 2022, the index increased by 3.2 percent.

Chapter 85: Electrical machinery equipment and parts thereof

The index for "Electrical machinery equipment and parts thereof", which accounts for 10.9 percent of the total weight, increased marginally by 0.5 percent to 115.1 in the first quarter of 2023 compared to 114.4 recorded in the previous quarter. Likewise, when compared to the same quarter of 2022, the index increased by 4.2 percent.

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

The index for "vehicles other than railway/transport ways roll-stock" which accounts for 14.4 percent of total weight, decreased by 1.2 percent to 110.8 in the first quarter of 2023 from 112.2 recorded in the previous quarter. Nonetheless, when compared to the corresponding quarter of 2022, the index increased by 1.2 percent.

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

This chapter accounts for 2.1 percent of the total weight. During the first quarter of 2023, the index increased slightly by 0.3 percent to 91.3 from 91.0 recorded in the previous quarter. Similarly, when compared with the same quarter of 2022, the index increased by 1.3 percent.

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 edible fruits and nuts as well as those of coffee, tea mate and spices while the Imports Price Index was driven by prices of crude oil and petroleum products. Overall, during the first quarter of 2023, Terms of Trade remained favourable, increasing by 0.7 points to 103.5 from 102.8 recorded in the fourth quarter of 2022 (**Table 3**). This implies that for every unit of goods exported, the country can obtain more units of imports.

Table 3: Quarterly Terms of Trade (Q4 2017 = 100)

Indices	2020				2021				2022				2023
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
EXPI	104.1	104.2	106.2	105.9	108.5	109.4	111.3	113.6	115.1	117.7	117.7	118.4	118.2
MPI	100.0	96.9	98.0	98.3	101.9	103.1	107.6	109.9	112.1	117.1	117.2	115.2	114.2
TOT	104.1	107.5	108.4	107.7	106.5	106.1	103.5	103.4	102.7	100.5	100.4	102.8	103.5

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

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