





STATISTICAL RELEASE

In reply please quote: Our ref: NBS/S.40/21/488

Date: May, 2017

EXPORT AND IMPORT PRICE INDICES (XMPI) FOR MARCH, 2017

Background notes

Definition

The Export and Import Price Indices (XMPI) are measures of price changes of goods imported into or exported outside the country. The XMPI are used to analyse Terms of Trade (ToT) which is the ratio of Export Price Index (XPI) to the Import Price Index (MPI).

Weights and a reference period

The XMPI weights are based on values of imported and exported commodities for the years 2006 to 2010. A top-down approach was taken in the determination of the index structure and 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 March 2013.

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 2006 and 2010 were selected for direct inclusion in the indices. 12 chapters (2 digit HS codes) were selected for imports and 8

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; 56 items were selected for imports and 10 items were selected for exports. Finally the procedure was repeated at 8 digit level of the HS by selecting 170 items for imports and 18 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 trend of XPI and MPI in the selected quarters.

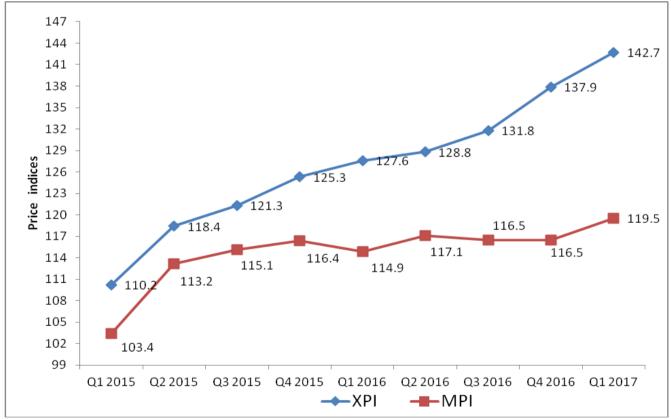


Chart 1: Quarterly Export and Import Price Indices (Q1 2013=100).

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

Export Price Indices

Structure of the XPI

The XPI covers 8 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 or melons, (iv) Coffee, tea, mate and spices, (v) Tobacco and manufactured tobacco substitutes, (vi) Ores, slag and ash, (vii) cotton and (viii) Natural/cultured pearls, precious stones and metals, coin, etc. The sampled eight chapters constitute 80 percent of total value of exports, aggregated from 2006 to 2010.

Quarterly Export Price Index

The overall export price index during the first quarter of 2017 increased by 3.5 percent to 142.7 compared to the level recorded in the preceding quarter. The rise was mainly due to an increase in prices of coffee, tea, fish and cotton. When compared to the corresponding quarter of 2016 the export price index increased by 11.9 percent (**Table1**).

| | | 16 | | 2017 | % Change on | % Change the same | | | |
|------|---------------------------------------|--------|-------|-------|----------------|----------------------|---------|----------|-----------|
| Chap | | | | | | | | Previous | Quarter |
| ter | Description | Weight | Q1 | Q2 | Q3 | Q4 | Q1 | Quarter | last year |
| r – | Fish & crustacean, mollusc & other | | | | | | | | |
| 03 | aquatic invertebrate | 9.5 | 133.6 | 139.9 | 145.1 | 149.6 | 154.9 | 3.5 | 15.9 |
| r – | Edible vegetables and certain roots | | | | | | | | |
| 07 | and tubers | 1.8 | 148.7 | 149.1 | 153.8 | 153.4 | 156.3 | 1.9 | 5.1 |
| | Edible fruit and nuts; peel of citrus | | | | | | | | |
| 08 | fruit or melons | 4.5 | 132.0 | 131.5 | 132.0 | 159.3 | 161.7 | 1.5 | 22.5 |
| 00 | | | 400 7 | 445.4 | 116.2 | 407 5 | 4 4 7 0 | 45.5 | 10.0 |
| 09 | Coffee, tea, mate and spices | 8.3 | 123.7 | 115.4 | 116.2 | 127.5 | 147.2 | 15.5 | 19.0 |
| ſ | Tobacco and manufactured tobacco | | | | | | | | |
| 24 | substitutes | 11.6 | 152.4 | 154.0 | 158.4 | 161.8 | 165.2 | 2.1 | 8.4 |
| 26 | Ores, slag and ash | 16.7 | 114.8 | 117.0 | 119.3 | 119.5 | 120.5 | 0.8 | 5.0 |
| 52 | Cotton | 4.6 | 116.9 | 119.1 | 120.4 | 131.8 | 135.0 | 2.4 | 15.5 |
| | Natural/cultured pearls, precious | | | | | | | | |
| 71 | stones & metals, coin etc | 43.0 | 98.5 | 104.0 | 109.5 | 100.4 | 101.0 | 0.6 | 2.5 |
| | Overall | 100 | 127.6 | 128.8 | 131.8 | 137.9 | 142.7 | 3.5 | 11.9 |

Table 1: Quarterly Export Price Indices by Chapter (Base year Q1 2013= 100)

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

Sub indices by Chapter

In order to understand movements of export price indices, chapter by chapter analysis has been undertaken.

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

During the first quarter of 2017, the index for "Fish and crustacean, mollusk and other aquatic invertebrate" which account for 9.5 percent of the total weight rose by 3.5 percent to 154.9. The increase was mainly due to a rise in prices of fresh and frozen fillet.

Chapter 07: Edible vegetables and certain roots and tubers

This chapter contributed 1.8 percent of the total weight of the exported commodities and the index for this chapter increased by 1.9 percent from 153.4 in the fourth quarter of 2016 to 156.3 in the first quarter of 2017. Likewise, when compared to the similar quarter of 2016 the export price index increased by 5.1 percent.

Chapter 08: Edible fruits and nuts

The export price index for "Edible fruits and nuts" went up by 1.5 percent to 161.7 in the first quarter of 2017 when compared to the preceding quarter. This was due to a rise in prices of raw cashewnut and cashewnut kernel. When compared to the corresponding quarter in 2016, the index increased by 22.5 percent.

Chapter 09: Coffee, tea, mate and spices

This chapter contributed 8.3 percent of the total weight of exported commodities. During the first quarter of 2017, "Coffee, tea, mate and spices" recorded XPI of 147.2, equivalent to 15.5 percent increase compared to XPI of 127.5 recorded during the fourth quarter of 2016. The increase was due to a rise in price of tea in the world market. When compared to the similar quarter in the previous year, the XPI increased by 19.0 percent.

Chapter 24: Tobacco and manufactured tobacco substitutes

During the first quarter of 2017, index for "Tobacco and manufactured tobacco substitutes" increased by 2.1 percent to 165.2 compared to the level recorded in the fourth quarter of 2016. The rise was mainly due to a slight increase in world market price of tobacco. When compared to the same quarter in the previous year, the XPI increased by 8.4 percent.

Chapter 26: Ores, slag and ash

The export price index for "Ores, slag and ash" slightly increased to 120.5 in the first quarter of 2017 which is an increase of 0.8 percent compared to XPI of 119.5 recorded in

the fourth quarter of 2016. When compared to the same quarter in the previous year, the index increased by 5.0 percent.

Chapter 52: Cotton

During the first quarter of 2017 the export price index for "Cotton" increased by 2.4 percent to 135.0 compared to 131.8 XPI recorded in the fourth quarter of 2016. The rise was mainly due to the increase of prices of cotton in the world market on account of strong global demand. When compared to the same quarter last year, the index rose by 15.5 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 account for 43.0 percent of the total of weight exported commodities slightly increased by 0.6 percent from 100.4 in fourth quarter of 2016 to 101.0 recorded in the first quarter of 2017. When compared to the similar quarter last year, the index went up by 2.5 percent.

Import Price Index

Structure of the MPI

The MPI covers 12 chapters out of 99 chapters, namely; (i) Cereals, (ii) Animal fats & oil & their cleavage product, (iii) Mineral fuels, oils & product of their distillation, (iv) Pharmaceutical products, (v) Fertilizers, (vi) Plastics and articles thereof, (vii) Rubber and articles thereof, (viii) Iron and steel, (ix) Articles of iron and steel, (x) Nuclear reactors, boilers, machinery and machinery appliance, parts, (xi) Electrical machinery equipments parts thereof; sound recorder etc, and (xii) Vehicles other than railway/transport way rool-stock, parts and accessories. The sampled twelve chapters constitute 80 percent of total value of imports aggregated from 2006 to 2010.

Quarterly Import Price Index

The overall import price index for the first quarter of 2017 increased by 2.6 percent to 119.5 compared to 116.5 recorded in the preceding quarter. Likewise, when compared to the same quarter of 2016 the index increased by 4.0 percent to 119.5 in the first quarter of 2017 (**Table 2**).

Table 2: Quarterly Import Price Indices by Chapter (Base year Q1 2013 = 100)

| | | | 2016 | | | | 2017 | | |
|-------------|---|--------|-------|-------|-------|-------|-------|--|---|
| Chapt er | Commodity Description | Weight | Q1 | Q2 | Q3 | Q4 | Q1 | % change on previou s Quarter | % change in the same Quarter last year |
| 10 | Cereals | 2.7 | 106.0 | 105.2 | 105.0 | 102.5 | 94.8 | -7.5 | -10.6 |
| 15 | Animal fats & oil & their cleavage product | 2.1 | 128.8 | 140.3 | 150.6 | 149.6 | 150.9 | 0.9 | 17.2 |
| 27 | Mineral fuels, oils & product of their distillation | 24.2 | 51.9 | 60.8 | 67.3 | 68.0 | 79.9 | 17.5 | 53.9 |
| 30 | Pharmaceutical products | 2.2 | 116.2 | 118.1 | 109.9 | 108.7 | 112.9 | 3.9 | -2.8 |
| 31 | Fertilizers | 1.3 | 108.3 | 106.1 | 100.2 | 102.9 | 105.4 | 2.4 | -2.7 |
| 39 | Plastics and articles thereof | 3.9 | 109.0 | 107.8 | 106.7 | 106.0 | 108.6 | 2.5 | -0.4 |
| 40 | Rubber and articles thereof | 1.9 | 112.7 | 112.4 | 111.9 | 110.4 | 113.0 | 2.4 | 0.3 |
| 72 | Iron and steel | 4.4 | 105.2 | 105.9 | 105.4 | 105.6 | 107.2 | 1.5 | 1.9 |
| 73 | Articles of iron and steel | 1.2 | 124.3 | 125.2 | 125.0 | 124.7 | 128.9 | 3.4 | 3.7 |
| 84 | Nuclear reactors, boilers, machinery & mechanical appliance; parts | 20.6 | 136.3 | 137.9 | 133.2 | 136.8 | 140.0 | 2.3 | 2.7 |
| 85 | Electrical machinery equipment parts thereof; sound recorder etc | 11.1 | 141.4 | 142.5 | 140.9 | 140.8 | 146.7 | 4.2 | 3.7 |
| 87 | Vehicles o/t railw/tranw rool-stock, pts & accessories | 20.3 | 138.2 | 142.6 | 141.9 | 141.7 | 145.7 | 2.8 | 5.4 |
| | Overall | 100 | 114.9 | 117.1 | 116.5 | 116.5 | 119.5 | 2.6 | 4.0 |

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

During the first quarter of 2017, the import price index for "Cereals" decreased by 7.5 percent to 94.8. This was mainly due to a fall in price of wheat. Similarly, when compared to the same quarter in the preceding year the index decreased by 10.6 percent.

Chapter 15: Animal fats and oil and their cleavage product

This chapter contributes 2.1 percent of the total weight of the imported commodities and recorded MPI of 150.9 in the first quarter of 2017, representing an increase of 0.9 percent from the level recorded in the fourth quarter of 2016. Likewise, when compared to the same quarter in the previous year the index increased by 17.2 percent.

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

During the first quarter of 2017, import price index for "Mineral fuels, oils and product of their distillation" which contributes 24.2 percent to the total weight of the imported commodities rose by 17.5 percent to 79.9 from 68.0 recorded in the fourth quarter of 2016. The increase was due to a rise in prices of petroleum products in the world market

following agreement reached among oil producers to cut production from the first of half of 2017. Likewise, when compared to the corresponding quarter in 2016, the index increased significantly by 53.9 percent.

Chapter 30: Pharmaceutical products

The index for "Pharmaceutical products" which represent about 2.0 percent of the total weight rose by 3.9 percent from 108.7 in the fourth quarter of 2016 to 112.9 recorded in the first quarter of 2017. Conversely, when compared to similar quarter in the previous year, the index decreased by 2.8 percent.

Chapter 31: Fertilizers

The index for "Fertilizers" which accounts for 1.3 percent of the total weight of the imported commodities went up by 2.4 percent to 105.4 during the first quarter of 2017 compared to 102.9 recorded in the fourth quarter of 2016. The increase in the prices of fertilizer was mainly due to high global demand. However, when compared with the same quarter in the preceding year the index decreased by 2.7 percent.

Chapter 39: Plastics and articles thereof

This chapter contributes 3.9 percent to the total weight of imported commodities. The index rose by 2.5 percent to 108.6 in the first quarter of 2017 on account of a rise in the prices of plastic products raw materials. However, when compared to the same quarter in the previous year the index slightly decreased by 0.4 percent.

Chapter 40: Rubber and articles thereof

During the first quarter of 2017, the index for "Rubber and articles thereof" which contributes 1.9 percent to the total weight of imported commodities, increased by 2.4 percent to 113.0 in the first quarter of 2017 largely driven by car tyre prices. Likewise, the index increased by 0.3 percent when compared to the same quarter in 2016.

Chapter 72: Iron and steel

In the first quarter of 2017, the index for "Iron and steel" increased by 1.5 percent to 107.2 from 105.6 registered in the fourth quarter of 2016. Similarly, when compared with

the corresponding quarter of 2016 the index rose by 1.9 percent from 105.2 in 2016 to 107.2 in 2017.

Chapter 73: Articles of iron and steel

During the first quarter of 2017, the index for "Articles of iron and steel" went up by 3.4 percent to 128.9 when compared to the preceding quarter. Likewise, when compared to the corresponding quarter in 2016, the index increased by 3.7 percent.

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

The index for "Boilers, machinery and machinery appliance" which accounts for 20.6 of total weight of imported commodities increased by 2.3 percent to 140.0 in the first quarter of 2017 compared to 136.8 recorded in the fourth quarter of 2016. Likewise, when compared to the same quarter in 2016, the index increased by 2.7 percent.

Chapter 85: Electrical machinery equipment and parts thereof

The index for "Electrical machinery equipment and parts thereof" increased by 4.2 percent to 146.7 in the first quarter of 2017 compared with 140.8 recorded in the preceding quarter. Similarly, when compared to the corresponding quarter of the year 2016 the index increased by 3.7 percent.

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

The index for "Vehicles other than railway/transport ways rool-stock" which accounts for 20.3 percent of total weight rose by 2.8 percent to 145.7 in the first quarter of 2017 compared to 141.7 recorded in the fourth quarter of 2016. Likewise, when compared to the same quarter in 2016 the index increased by 5.4 percent.

Terms of Trade

The term of trade index is the ratio of export price index to import price index. A rise in this ratio indicates that the terms of trade have moved in favour of Tanzania. During the first quarter of 2017, terms of trade index increased by 0.8 percent to 119.4 compared to 118.4 recorded in the preceding quarter. Similarly, when compared to the same quarter in 2016, terms of trade increased by 7.5 percent (**Table 3**).

| | | 20 | 14 | | 2015 | | | | 2016 | | | | 2017 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Indices | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 |
| EXPI | 102.3 | 104.3 | 105.6 | 107.8 | 110.2 | 118.4 | 121.3 | 125.3 | 127.6 | 128.8 | 131.8 | 137.9 | 142.7 |
| MPI | 102.1 | 103.8 | 104.4 | 103.7 | 103.4 | 113.2 | 115.1 | 116.4 | 114.9 | 117.1 | 116.5 | 116.5 | 119.5 |
| тот | 100.2 | 100.5 | 101.1 | 104.0 | 106.6 | 104.6 | 105.4 | 107.6 | 111.1 | 110.0 | 113.1 | 118.4 | 119.4 |

Table 3: Quarterly Terms of Trade (Base year Q1 2013 = 100)

Note;

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

EXPI = Export Price Indices

MPI = Import Price Indices

ToT = Terms of Trade

Contact person: Director General National Bureau of Statistics