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EXPORT AND IMPORT PRICE INDICES (XMPI) FOR MARCH, 2016

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 March quarter 2013 (January – 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: Quarterly Export and Import price indices (Q1 2013=100).

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

Export Price Indices (XPI)

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 exports.

Quarterly Export Price Index

The overall export price index during the first quarter of 2016 increased by 1.8 percent to 127.6 compared to the level recorded in the preceding quarter. The rise was mainly due to an increase in prices of fish, edible vegetables and precious stone. When compared to the similar quarter of 2015 the export price index increased by 15.7 percent (**Table1**).

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

				202	15	2016	% Change on	% Change the same	
Chap								Previous	Quarter
ter	Description	Weight	Q1	Q2	Q3	Q4	Q1	Quarter	last year
	Fish & crustacean, mollusc & other								
03	aquatic invertebrate	9.5	114.0	120.8	121.2	122.4	133.6	9.2	17.2
	Edible vegetables and certain roots								
07	and tubers	1.8	102.8	113.3	119.6	139.6	148.7	6.5	44.7
r	Edible fruit and nuts; peel of citrus								
08	fruit or melons	4.5	106.1	112.2	119.9	131.1	132.0	0.7	24.4
09	Coffee, tea, mate and spices	8.3	109.0	117.8	126.0	125.4	123.7	-1.4	13.5
	Tobacco and manufactured tobacco								
24	substitutes	11.6	132.6	139.7	146.7	156.9	152.4	-2.9	15.0
26	Ores, slag and ash	16.7	105.0	116.4	117.2	116.2	114.8	-1.2	9.3
52	Cotton	4.6	110.0	126.8	118.8	117.2	116.9	-0.3	6.3
	Natural/cultured pearls, precious								
71	stones & metals, coin etc	43.0	102.4	100.1	101.0	93.3	98.5	5.6	-3.8
	Overal	100	110.2	118.4	121.3	125.3	127.6	1.8	15.7

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 2016, the index for "Fish and crustacean, mollusk and other aquatic invertebrate" which account for 9.5 percent of the total weight increased by 9.2 percent to 133.6. The rise was mainly due to increase in prices of dried sardine, fresh fillet 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 6.5 percent from 139.6 in the fourth quarter 2015 to 148.7 in the first quarter 2016. Higher export price index was mainly due to increase in prices of pigeon peas.

Chapter 08: Edible fruits and nuts

The export price index for "Edible fruits and nuts" which stood at 131.1 in the fourth quarter of 2015 increased to 132.0 in the first quarter of 2016 representing an increase of 0.7 percent. When compared to the same quarter in the previous year, the index increased by 24.4. The rise was due to increase in prices of dried raw cashew nuts and cashew nut kernel.

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 2016, "Coffee, tea, mate and spices" recorded XPI of 123.7, equivalent to 1.4 percent decline compared to XPI of 125.4 recorded during the fourth quarter of 2015. The decline was due to a fall in prices of tea and coffee. However, when compared to the corresponding quarter in the previous year, the XPI increased by 13.5 percent.

Chapter 24: Tobacco and manufactured tobacco substitutes

During the first quarter of 2016, index for "Tobacco and manufactured tobacco substitutes" decreased by 2.9 percent to 152.4 compared to the level recorded in the fourth quarter of 2015. The decrease was mainly due to a fall in price of tobacco. However, when compared to the same quarter in the previous year, the XPI increased by 15.0 percent.

Chapter 26: Ores, slag and ash

The export price index for "Ores, slag and ash" stood at 114.8 in the first quarter of 2016 which is a decline of 1.2 percent compared to XPI of 116.2 recorded in the fourth quarter of 2015. The decline was contributed by a slight fall in export prices of ores, slag and ash. However, when compared to the same quarter in the previous year, the index increased by 9.3 percent.

Chapter 52: Cotton

During the first quarter 2016 the export price index for "Cotton" decreased by 0.3 percent to 116.9 compared to 117.2 XPI recorded in the fourth quarter of 2015. The decline was attributed to the decrease in the export prices of cotton products.

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 weight exported commodities increased by 5.6 percent from 93.3 in fourth quarter of 2015 to 98.5 recorded in the first quarter of 2016. The increase was mainly due to a rise in gold prices in the world market.

Import Price Index (MPI)

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 roolstock, parts and accessories. The sampled twelve chapters constitute 80 percent of total imports for the years 2006 - 2010.

Quarterly Import Price Index

The overall import price index for the first quarter of 2016 was 114.9 which was a decrease of 1.3 percent compared to the fourth quarter of 2015. The change was due to a fall in prices of mineral fuel (28.7), fertilizers (7.1%) and pharmaceutical products. However, when compared to the same quarter of the previous year 2015 the index increased by 11.2 percent (**Table 2**).

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

		2015				2016			
Chap ter	Commodity Description	Weight	Q1	Q2	Q3	Q4	Q4	% change on Previou s Quarter	% chang in the same Quarter last year
10	Cereals	2.7	93.4	104.5	98.8	99.3	106.0	6.7	13.5
15	Animal fats & oil & their cleavage product	2.1	102.2	122.3	123.0	122.5	128.8	5.1	26.0
27	Mineral fuels, oils & product of their distillation	24.2	72.9	80.2	77.9	72.8	51.9	-28.7	-28.8
30	Pharmaceutical products	2.2	110.2	112.2	119.3	122.9	116.2	-5.5	5.5
31	Fertilizers	1.3	104.2	116.6	111.6	116.6	108.3	-7.1	3.9
39	Plastics and articles thereof	3.9	104.3	106.3	108.9	109.7	109.0	-0.6	4.5
40	Rubber and articles thereof	1.9	103.2	108.6	107.3	110.7	112.7	1.8	9.2
72	Iron and steel	4.4	108.7	114.0	109.6	104.9	105.2	0.3	-3.2
73	Articles of iron and steel	1.2	112.4	121.8	122.9	126.4	124.3	-1.7	10.6
	Nuclear reactors, boilers, machinery & mechanical appliance; parts	20.6	110.6	123.1	132.3	134.8	136.3	1.1	23.2
	Electrical machinery equipment parts thereof; sound recorder etc	11.1	111.6	123.0	134.6	137.7	141.4	2.7	26.7
87	Vehicles o/t railw/tranw rool-stock, pts & accessories	20.3	106.5	125.9	134.8	138.3	138.2	-0.1	29.7
	Overall	100	103.4	113.2	115.1	116.4	114.9	-1.3	11.1

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

The import price index for "Cereals" increased by 6.7 percent during the first quarter of 2016 to 106.0 from 99.3 recorded during fourth quarter of 2015. The development was largely attributed to an increase in wheat price. Likewise, when compared to the same quarter in the preceding year the index increased by 13.5 percent. The increase was attributed to the rise in prices of cereals.

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 128.8 in the first quarter of 2016 which was an increase of 5.1 percent from 122.5 recorded in the fourth quarter of 2015. This was attributed to the rise in prices of crude palm oil and palm olein. Similarly, when compared to the same quarter in the previous year the index increased by 26.0 percent.

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

During the fourth quarter of 2015, import price index for "Mineral fuels, oils and product of their distillation" which contributes 24.2 percent of the total weight of the imported

commodities declined by 28.7 percent to 51.9 from 72.8 recorded in the fourth quarter of 2015. Similarly when compared to the corresponding quarter in 2015, the index decreased by 28.8 percent. The decrease was attributed to fall in prices of mineral fuels in the world market.

Chapter 30: Pharmaceutical products

The index for "Pharmaceutical products" which represent about 2 percent of the total weight decreased by 5.5 percent from 122.9 in the fourth quarter of 2015 to 116.2 recorded in the first quarter of 2016. This was mainly attributed to a fall in prices of pharmaceutical products. However, when compared to same quarter in the previous year, the index rose by 5.5 percent.

Chapter 31: Fertilizers

The index for "Fertilizers" which accounts for 1.3 percent of the total weight of the imported commodities decreased by 7.1 percent to 108.3 during the first quarter of 2016 compared to 116.6 recorded in the fourth quarter of 2015. The decline was mainly due to a decrease in prices of fertilizers. However, when compared with the same quarter in the preceding year the index increased by 3.9 percent.

Chapter 39: Plastics and articles thereof

This chapter contributes 3.9 percent to the total weight of imported commodities. The index recorded a slight decrease of 0.6 percent to 109.0 in the first quarter of 2016. However, when compared to the same quarter in the previous year the index increased by 4.5 percent.

Chapter 40: Rubber and articles thereof

During the fourth quarter of 2015, the index for "Rubber and articles thereof" which contributes 1.9 percent to the total weight of imported commodities, recorded 112.7 which is an increase of 1.8 percent compared to 110.7 recorded in the fourth quarter of 2015. Similarly the index increased by 9.2 percent when compared to the same quarter in 2015. The increase was due to a rise in import prices of tyres of vehicles and trucks.

Chapter 72: Iron and steel

In the fourth quarter of 2015, the index for "Iron and steel" stood at 105.2 which represent a slight increase of 0.3 percent compared to 104.9 recorded in the fourth quarter of 2015. However, the index decreased by 3.2 percent compared to the same

quarter in 2015. The decline was due to decrease in prices particularly in prime quality hot rolled steel sheet in coils and tin free steel sheets.

Chapter 73: Articles of iron and steel

During the first quarter of 2016 the index for "Articles of iron and steel" recorded a decrease of 1.7 percent to 124.3 compared to 126.4 recorded in the fourth quarter of 2015. However, when compared to the corresponding quarter in 2015, the index rose by 10.6 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 rose by 1.1 percent from 134.8 recorded in the fourth quarter of 2015 to 136.3 in the first quarter 2016. Similarly, when compared to the same quarter in 2015, the index increased by 23.2 percent.

Chapter 85: Electrical machinery equipment and parts thereof

The index for "Electrical machinery equipment and parts thereof" registered an increase of 2.7 percent to 141.4 in the first quarter of 2016 from 137.7 recorded in the fourth quarter of 2015. Likewise, when compared to the corresponding quarter of the year 2015 the index increased by 23.2 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 slightly decreased by 0.1 percent to 138.2 in the first quarter of 2016 from 134.3 recorded in the fourth quarter of 2015. However, when compared to the same quarter in 2015 the index increased by 29.7 percent.

Terms of Trade (base year Q1 2013 = 100)

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 2016, terms of trade index increased by 3.2 percent to 111.1 compared to the preceding quarter. Similarly, when compared to the same quarter in 2015, terms of trade increased by 4.2 percent (Table 3).

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

		20)13			20	14		2015				2016
Indices	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
EXPI	100.0	100.5	100.5	100.8	102.3	104.3	105.6	107.8	110.2	118.4	121.3	125.3	127.6
MPI	100.0	100.5	100.2	100.8	102.1	103.8	104.4	103.7	103.4	113.2	115.1	116.4	114.9
TOT	100.0	100.0	100.3	100.0	100.2	100.5	101.1	104.0	106.6	104.6	105.4	107.6	111.1

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

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