# **Import Price Index – 1<sup>st</sup> Quarter 2004**

## 1. Background

The Central Statistics Office (CSO) compiles Import and Export Unit Value Indices since 1965 to measure changes in import and export prices respectively. Unit value indices do not require much additional resources for compilation since they can be derived from available customs data. However, they do not reflect genuine price changes since they are greatly influenced by new products, changes in product specifications and quality as well as countries of origin or destination.

On the other hand, Import and Export Price indices attempt to measure pure price changes of a fixed representative basket of imported and exported commodities whose specifications and country of origin or destination are clearly spelled out. However, they require much more resources than unit value indices. A technical note on the construction of the index is annexed.

The number of export commodities and their destinations is relatively small, and the CSO has been able to compile and publish a quarterly Export Price Index (EPI) since 1993. Work on the Import Price Index (IPI) started in 2002 so that a set of import price indices could be available as from 2003, the year in which the existing EPI was to be updated.

This issue of Economic and Social Indicators presents the IPI for 2003 and the first quarter of 2004.

#### 2. Structure of the IPI

The IPI covers eight out of the 10 Standard International Trade Classification (SITC, Rev. 3) sections, namely "Food and live animals", "Crude materials, inedible, except fuels", "Mineral fuels, lubricants and related materials", "Animal and vegetable oils, fats and waxes", "Chemical materials and related products, n.e.s", "Manufactured goods classified chiefly by materials", "Machinery and transport equipment" and "Miscellaneous manufactured articles".

The two SITC sections not covered are "Beverages and tobacco" and "Commodities and transactions not classified elsewhere". Goods in these sections represent one per cent of all imports in 2002. They are not included because of the heterogeneity of the products and the inherent difficulties in pricing the items to a constant quality.

Thus, the index, either directly or indirectly, covers about 99% of merchandise imported during 2002. Sixty one per cent of the items are directly represented; of those

items which are not directly represented, the prices are considered to move similarly to those represented directly.

# 3. Changes in Import Price Index – 1st quarter 2004

## 3.1 Overall Index

The Import Price Index (IPI) for the first quarter of 2004 stood at 100.8, representing a slight decrease of 0.1% over the figure of 100.9 registered in the previous quarter. This change was mainly the combined effect of a 12.2% increase in the import prices of petroleum and petroleum products and a 2.4% decrease in the prices of textile yarn and fabrics (Table 1).

Compared to the corresponding period of 2003, this index showed an increase of 0.2%, resulting mostly from a 1.1% increase in prices of textile yarn and fabrics coupled with a 6.5% fall in prices of petroleum and petroleum products.

## 3.2 Sub-indices by SITC section and division

## Section 0: Food and live animals

The index for the section "Food and live animals", representing about 16% of total weight, fell by 1.9% from 102.2 in the fourth quarter of 2003 to 100.2 in the first quarter of 2004. This fall was mainly the consequence of a 6.4% decrease in the import prices of dairy products and a 5.4% decrease in the prices of "Cereals and cereal preparations", partly offset by a 3.5% increase in the import prices of vegetables and fruits.

Compared to the first quarter of 2003, the index showed a rise of 0.8%, mainly attributable to increases of 19.6% in prices of "Meat and meat preparations" and 11.5% in those of vegetables and fruits, coupled with decreases of 7.6% in prices of "Cereals and cereal preparations" and 4.1% in those of "Fish, crustaceans, etc.".

#### Section 2: Crude materials, inedible, except fuels

The index for "Crude materials, inedible, except fuels" (about 2% of total weight) went down from 113.8 in the fourth quarter of 2003 to 107.8 in the first quarter of 2004 (-5.3%) as a result of an 8.9% decrease in import prices of textile fibres. However, compared to the corresponding period of last year, the index shows an increase of 17.6%, being the combined effect of price increases of 23.6% in textile fibres and 11.2% in "Cork and wood".

### Section 3: Mineral fuels, lubricants and related materials

The index for the section "Mineral fuels, lubricants and related materials", with nearly 18% of the total weight, stood at 106.5, that is 10.4% higher than the previous quarter. The main contributor to this change was a 12.2% increase in import prices of petroleum and petroleum products, which account for 87% of the weight for this section.

When compared to the first quarter of 2003, the index shows a decrease of 5.8%, resulting from a 6.5% drop in prices of petroleum and petroleum products.

# Section 4: Animal and vegetable oils, fats and waxes

The section "Animal and vegetable oils, fats and waxes" covers only about one per cent of the total weight. Its index increased by 9.0% over the previous quarter to reach 102.3. However, compared to the corresponding quarter of 2003, it shows a fall of 2.3%.

# Section 5: Chemical materials and related products, not elsewhere specified (n.e.s)

The index "Chemical materials and related products, n.e.s" (about 5% of total weight) stood at 98.2 in the first quarter of 2004, showing a decrease of 3.2% over the previous quarter. During this quarter all divisions under this section registered falls in their import prices: "Medical and pharmaceutical products" (- 3.0%), "Essential oils, perfume materials, etc." (-1.5%) and "Chemical materials and products, n.e.s" (-5.1%).

The index increased only slightly by 0.5% when compared to the corresponding period of last year.

#### Section 6: Manufactured goods classified chiefly by material

This is the most important section, carrying about 38% of the total weight. The index declined by 0.9% from the fourth quarter of 2003 to reach 100.4. Import prices of "Textile yarn, fabrics, made-up-articles n.e.s", accounting for 69% of this section, went down by 2.4%.

The index shows a 2.6% increase when compared to the first quarter of 2003, resulting from increases of 1.1% in the prices of "Textile yarn, fabrics, made-up-articles n.e.s" and 7.6% in "Non-metallic mineral manufactures, n.e.s"

# Section 7: Machinery and transport equipment

The index for "Machinery and transport equipment" was 96.3 in the first quarter of 2004, showing a 3.6% fall over the previous quarter. This decline was the result of price decreases in all divisions, namely "Telecommunications and sound recording and reproducing apparatus" (-8.5%), "Office machines and automatic data processing machines" (-7.4%), "General industrial machinery & equipment, n.e.s" (-3.3%).

Compared to the corresponding quarter of last year, the index went down by 1.4% mainly as a result of a 11.2% decrease in prices of "Office machines and automatic data processing machines", a 5.8% decrease in "Telecommunications and sound recording and reproducing apparatus" and an increase of 4.1% in prices of road vehicles.

## Section 8: Miscellaneous manufactured articles

The index for "Miscellaneous manufactured articles" went down by 7.5% from the fourth quarter of 2003 to reach 96.8 in the first quarter of 2004. This fall was the result of an 18.6% drop in the import prices of "Professional, scientific and controlling instruments and apparatus" and another of 4.5% in "Miscellaneous manufactured articles, n.e.s".

The index shows a 0.5% increase over the first quarter of 2003, mainly attributable to a 6.1% increase in the prices of "Professional, scientific and controlling instruments and apparatus".

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Table 1: Quarterly Import Price Index by SITC¹ section, 2003 - 2004

Section	Description	Weight	Average		2004²			
			2003	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr
	Overall Index	10,000	100.0	100.6	97.1	101.4	100.9	100.8
Section 0	Food and live animals	1,621	100.0	99.4	95.6	102.8	102.2	100.2
Section 2	Crude materials, inedible, except fuels	221	100.0	91.6	92.8	101.7	113.8	107.8
Section 3	Mineral fuels, lubricants and related materials	1,789	100.0	113.0	90.7	99.9	96.4	106.5
Section 4	Animal and vegetable oils, fats and waxes	113	100.0	104.7	95.1	106.4	93.8	102.3
Section 5	Chemical materials & related products, n.e.s	467	100.0	97.7	99.2	101.7	101.4	98.2
Section 6	Manufactured goods classified chiefly by material	3,776	100.0	97.9	99.4	101.3	101.3	100.4
Section 7	Machinery and transport equipment	1,134	100.0	97.6	100.6	102.0	99.9	96.3
Section 8	Miscellaneous manufactured articles	879	100.0	96.4	98.7	100.2	104.7	96.8

 $<sup>^{\</sup>rm 1}$  The standard International Trade Classification Revision 3 (SITC Rev. 3)  $^{\rm 2}$  Provisional

Table 2: Quarterly Import Price Index by SITC¹ section & division, 2003 - 2004

Section/	Description	Weight	Average 2003		2004 <sup>2</sup>			
Division	Description			1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr
	Overall Index	10,000	100.0	100.6	97.1	101.4	100.9	100.8
Section 0	Food and live animals	1,621	100.0	99.4	95.6	102.8	102.2	100.2
Div 01	Meat and meat preparations	101	100.0	92.4	97.5	101.1	109.1	110.4
Div 02	Dairy products and birds' eggs	266	100.0	92.9	97.8	104.2	105.1	98.4
Div 03	Fish, crustaceans, etc, and preparations thereof	388	100.0	106.5	85.2	107.4	100.9	102.1
Div 04	Cereals and cereal preparations of which:	472	100.0	101.5	99.5	99.9	99.1	93.8
	Wheat (including spelt) & meslin, unmilled	196	100.0	108.5	100.3	96.1	95.1	86.4
Div 05	Vegetables and fruit	227	100.0	96.9	98.3	100.4	104.4	108.0
Div 09	Miscellaneous edible products and preparations	167	100.0	94.9	100.7	102.4	102.0	100.2
Section 2	Crude materials, inedible, except fuels	221	100.0	91.6	92.8	101.7	113.8	107.8
Div 24	Cork and wood	102	100.0	95.1	97.7	100.5	106.7	105.8
Div 26	Textile fibres and their wastes (not manufactured into yarn or fabric)	119	100.0	88.6	88.6	102.8	120.1	109.5
Section 3	Mineral fuels, lubricants and related materials	1,789	100.0	113.0	90.7	99.9	96.4	106.5
Div 32	Coal, coke and briquettes	94	100.0	91.2	93.0	98.6	117.2	118.8
Div 33	Petroleum, petroleum products and related materials	1,554	100.0	114.9	89.1	100.2	95.7	107.4
Div 34	Gas, natural and manufactured	141	100.0	106.8	106.2	96.8	90.2	88.3
Section 4	Animal and vegetable oils, fats and waxes	113	100.0	104.7	95.1	106.4	93.8	102.3
Div 42	Fixed vegetable fats and oils, crude, refined or fractionated	113	100.0	104.7	95.1	106.4	93.8	102.3

<sup>&</sup>lt;sup>1</sup> The standard International Trade Classification Revision 3 (SITC Rev. 3)

<sup>&</sup>lt;sup>2</sup> Provisional

Table 2 (cont'd): Quarterly Import Price Index by SITC¹ section & division, 2003 - 2004

Section/	Description	Weight	Average		2004²			
Division		vveigni	2003	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr
Section 5	Chemical materials & related products, n.e.s	467	100.0	97.7	99.2	101.7	101.4	98.2
Div 54	Medical and pharmaceutical products	252	100.0	99.7	97.8	102.0	100.5	97.5
Div 55	Essential oils and resinoids & perfume materials; toilet, etc.	103	100.0	94.8	101.3	101.0	102.9	101.3
Div 59	Chemical materials & products, n.e.s	112	100.0	95.8	100.4	101.7	102.1	96.9
Section 6	Manufactured goods classified chiefly by material	3,776	100.0	97.9	99.4	101.3	101.3	100.4
Div 64	Paper, paperboard and articles of paper pulp of which:	305	100.0	97.7	99.3	102.4	100.6	97.3
D: 05	Paper and paperboard	226	100.0	99.8	100.6	101.4	98.1	94.6
Div 65	Textile yarn, fabrics, made-up articles, n.e.s of which: Textile yarn	2,590 1,141	100.0	98.2 97.4	99.2 96.3	100.8 100.9	101.8 105.4	99.4 105.0
	Cotton fabrics, woven (not including narrow or special fabrics)	755	100.0	100.0	100.3	100.9	98.8	93.2
	Fabrics, woven, of man-made textile materials	235	100.0	97.2	106.3	97.5	99.0	96.1
	Knitted/crocheted fabric including tubular knit, fabrics, n.e.s	217	100.0	98.5	100.5	103.9	97.1	99.8
Div 66	Non-metallic mineral manufactures, n.e.s. of which:	652	100.0	98.4	100.0	102.5	99.1	105.9
	Lime, cement & fab. const. materials (except glass & clay mats.)	236	100.0	98.8	98.8	102.3	100.1	116.0
	Pearls, precious and semi-precious stones, unworked or worked	292	100.0	98.5	100.5	103.7	97.3	99.7
Div 67	Iron and steel	76	100.0	94.2	100.2	103.2	102.3	96.9
Div 69	Manufactures of metals, n.e.s.	153	100.0	92.2	100.3	102.7	104.8	104.6

<sup>&</sup>lt;sup>1</sup> The standard International Trade Classification Revision 3 (SITC Rev. 3)

<sup>&</sup>lt;sup>2</sup> Provisional

Table 2 (cont'd): Quarterly Import Price Index by SITC¹ section & division, 2003 - 2004

Section/	Description		Average 2003		2004²			
Division		Weight		1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr
Section 7	Machinery and transport equipment	1,134	100.0	97.6	100.6	102.0	99.9	96.3
Div 74	General industrial machinery & equipment, n.e.s.	157	100.0	98.0	98.8	104.5	98.7	95.5
Div 75	Office machines and automatic data processing machines	194	100.0	97.1	105.5	104.2	93.1	86.3
Div 76	Telecommunications and sound recording and reproducing apparatus	216	100.0	98.5	99.1	101.0	101.4	92.8
Div 78	Road vehicles (including air-cushion vehicles)	567	100.0	97.2	99.9	100.9	102.0	101.2
	of which:  Motor cars & other motor vehicles for the transport of persons	378	100.0	97.7	100.1	101.5	100.7	102.1
Section 8	Miscellaneous manufactured articles	879	100.0	96.4	98.7	100.2	104.7	96.8
Div 87	Professional, scientific and controlling inst. and app.	179	100.0	85.7	103.4	99.2	111.6	90.9
Div 89	Miscellaneous manufactured articles, n.e.s.	700	100.0	99.1	97.5	100.5	102.9	98.3
	of which: Articles, n.e.s. of plastics	195	100.0	95.3	96.9	102.0	105.8	100.7
	Jewellery, goldsmiths' & silversmiths' wares of prec/semi-prec.n.e.s.	233	100.0	99.9	98.0	101.2	100.9	96.1

<sup>&</sup>lt;sup>1</sup> The standard International Trade Classification Revision 3 (SITC Rev. 3)

<sup>&</sup>lt;sup>2</sup> Provisional

Table 3: Percentage change by SITC¹ section & division, 1<sup>st</sup> quarter 2003 - 1<sup>st</sup> quarter 2004²

		Weight	Percentage change from						
Section/ Division	Description		1 <sup>st</sup> Qr 03 to 2 <sup>nd</sup> Qr 03	to	to	to 1 <sup>st</sup>	1 <sup>st</sup> Qr 03 to 1 <sup>st</sup> Qr 04		
	Overall Index	10,000	-3.5	4.4	-0.5	-0.1	0.2		
Section 0	Food and live animals	1,621	-3.8	7.5	-0.6	-1.9	0.8		
Section 2	Crude materials, inedible, except fuels	221	1.3	9.5	11.9	-5.3	17.6		
Section 3	Mineral fuels, lubricants and related materials	1,789	-19.7	10.1	-3.5	10.4	-5.8		
Section 4	Animal and vegetable oils, fats and waxes	113	-9.1	11.8	-11.8	9.0	-2.3		
Section 5	Chemical materials & related products, n.e.s	467	1.6	2.5	-0.3	-3.2	0.5		
Section 6	Manufactured goods classified chiefly by material	3,776	1.5	1.9	0.0	-0.9	2.6		
Section 7	Machinery and transport equipment	1,134	3.1	1.4	-2.1	-3.6	-1.4		
Section 8	Miscellaneous manufactured articles	879	2.4	1.5	4.5	-7.5	0.5		

<sup>&</sup>lt;sup>1</sup> The standard International Trade Classification Revision 3 (SITC Rev. 3)

<sup>&</sup>lt;sup>2</sup> Provisional

Table 4: Percentage change by SITC¹ section & division, 1<sup>st</sup> quarter 2003 - 1<sup>st</sup> quarter 2004²

	Description		Percentage change from						
Section/ Division		Weight	1 <sup>st</sup> Qr 03 to 2 <sup>nd</sup> Qr 03	to	to	to	1 <sup>st</sup> Qr 03 to 1 <sup>st</sup> Qr 04		
	Overall Index	10,000	-3.5	4.4	-0.5	-0.1	0.2		
Section 0	Food and live animals	1,621	-3.8	7.5	-0.6	-1.9	0.8		
Div 01	Meat and meat preparations	101	5.6	3.7	7.9	1.2	19.6		
Div 02	Dairy products and birds' eggs	266	5.2	6.5	0.9	-6.4	5.9		
Div 03	Fish, crustaceans, etc, and preparations thereof	388	-20.0	26.0	-6.0	1.2	-4.1		
Div 04	Cereals and cereal preparations of which:	472	-2.0	0.5	-0.8	-5.4	-7.6		
	Wheat (including spelt) & meslin, unmilled	196	-7.5	-4.3	-1.0	-9.2	-20.4		
Div 05	Vegetables and fruit	227	1.4	2.2	3.9	3.5	11.5		
Div 09	Miscellaneous edible products and preparations	167	6.2	1.7	-0.5	-1.7	5.6		
Section 2	Crude materials, inedible, except fuels	221	1.3	9.5	11.9	-5.3	17.6		
Div 24	Cork and wood	102	2.7	2.9	6.3	-0.9	11.2		
Div 26	Textile fibres and their wastes (not manufactured into yarn or fabric)	119	0.0	16.1	16.8	-8.9	23.6		
Section 3	Mineral fuels, lubricants and related materials	1,789	-19.7	10.1	-3.5	10.4	-5.8		
Div 32	Coal, coke and briquettes	94	1.9	6.1	18.9	1.3	30.3		
Div 33	Petroleum, petroleum products and related materials	1,554	-22.4	12.4	-4.5	12.2	-6.5		
Div 34	Gas, natural and manufactured	141	-0.5	-8.9	-6.8	-2.1	-17.3		
Section 4	Animal and vegetable oils, fats and waxes	113	-9.1	11.8	-11.8	9.0	-2.3		
Div 42	Fixed vegetable fats and oils, crude, refined or fractionated	113	-9.1	11.8	-11.8	9.0	-2.3		

<sup>&</sup>lt;sup>1</sup> The standard International Trade Classification Revision 3 (SITC Rev. 3)

<sup>&</sup>lt;sup>2</sup> Provisional

# Table 4(cont'd): Percentage change by SITC¹ section & main group, 1<sup>st</sup> quarter 2003 - 1<sup>st</sup> quarter 2004²

Reference 2003=100

	Description		Percentage change from						
Section/ Group		Weight	1 <sup>st</sup> Qr 03 to 2 <sup>nd</sup> Qr 03	2 <sup>nd</sup> Qr 03 to 3 <sup>rd</sup> Qr 03	to	4 <sup>th</sup> Qr 03 to 1 <sup>st</sup> Qr 04	1 <sup>st</sup> Qr 03 to 1 <sup>st</sup> Qr 04		
Section 5	Chemical materials & related products, n.e.s	467	1.6	2.5	-0.3	-3.2	0.5		
Div 54	Medical and pharmaceutical products	252	-1.9	4.3	-1.5	-3.0	-2.2		
Div 55	Essential oils and resinoids & perfume materials; toilet, etc,	103	6.9	-0.3	1.8	-1.5	6.9		
Div 59	Chemical materials & products, n.e.s	112	4.9	1.2	0.4	-5.1	1.2		
Section 6	Manufactured goods classified chiefly by material	3,776	1.5	1.9	0.0	-0.9	2.6		
Div 64	Paper, paperboard and articles of paper pulp  of which:  Paper and paperboard	305 226	1.7 0.8	3.1 <i>0.8</i>	-1.7 -3.3	-3.4 -3.6	-0.4 -5.2		
Div 65	Textile yarn, fabrics, made-up articles nes of which:	2,590	1.0	1.6	1.0	-2.4	1.1		
	Textile yarn	1,141	-1.1	4.7	4.5	-0.4	7.8		
	Cotton fabrics, woven (not including narrow or special fabrics)	755	0.3	0.6	-2.1	-5.6	-6.8		
	Fabrics, woven, of man-made textile materials	235	9.4	-8.3	1.6	-2.9	-1.1		
Div 66	Knitted/crocheted fabric including tubular knit, fabrics nes  Non-metallic mineral manufactures, n.e.s.  of which:	217 652	2.1 1.6	3.3 2.5	-6.6 -3.3	2.8 6.9	1.3 7.6		
	Lime, cement & fab. const. materials (except glass & clay mats.)	236	0.0	3.6	-2.1	15.8	17.4		
	Pearls, precious and semi-precious stones, unworked or worked	292	2.0	3.3	-6.2	2.5	1.2		
Div 67	Iron and steel	76	6.4	3.0	-0.8	-5.3	2.8		
Div 69	Manufactures of metals, n.e.s.	153	8.8	2.4	2.0	-0.2	13.5		

<sup>&</sup>lt;sup>1</sup> The standard International Trade Classification Revision 3 (SITC Rev 3)

<sup>&</sup>lt;sup>2</sup> Provisional

Table 4(cont'd): Percentage changes by SITC¹ section & main group, 1st quarter 2003 - 1st quarter 2004²

	Description	Weight	Percentage change from						
Section/ Division			1 <sup>st</sup> Qr 03 to 2 <sup>nd</sup> Qr 03	2 <sup>nd</sup> Qr 03 to 3 <sup>rd</sup> Qr 03	3 <sup>rd</sup> Qr 03 to 4 <sup>th</sup> Qr 03	to	1 <sup>st</sup> Qr 03 to 1 <sup>st</sup> Qr 04		
Section 7	Machinery and transport equipment	1,134	3.1	1.4	-2.1	-3.6	-1.4		
Div 74	General industrial machinery & equipment, n.e.s.	157	0.8	5.8	-5.5	-3.3	-2.6		
Div 75	Office machines and automatic data processing machines	194	8.6	-1.2	-10.7	-7.4	-11.2		
Div 76	Telecommunications and sound recording and reproducing apparatus	216	0.5	1.9	0.4	-8.5	-5.8		
Div 78	Road vehicles (including air-cushion vehicles)	567	2.7	1.0	1.1	-0.7	4.1		
	of which:  Motor cars & other motor vehicles for the transport of persons	378	2.4	1.4	-0.8	1.3	4.5		
Section 8	Miscellaneous manufactured articles	879	2.4	1.5	4.5	-7.5	0.5		
Div 87	Professional, scientific and controlling inst. and app.	179	20.7	-4.1	12.6	-18.6	6.1		
Div 89	Miscellaneous manufactured articles, n.e.s.	700	-1.6	3.1	2.4	-4.5	-0.8		
	of which: Articles, n.e.s. of plastics	195	1.7	5.3	3.6	-4.8	5.7		
	Jewellery, goldsmiths' & silversmiths' wares of precious/semi-precious, n.e.s.	233	-1.9	3.4	-0.3	-4.8	-3.8		

<sup>&</sup>lt;sup>1</sup> The standard International Trade Classification Revision 3 (SITC Rev. 3)

<sup>&</sup>lt;sup>2</sup> Provisional

## **Technical Note**

# **Import Price Index (IPI)**

# Methodology for the construction of the EPI

## 1. Definition

The Import Price Index (IPI) provides an overall measure of pure price changes (in Mauritian Rupees) of goods imported into the country.

Unlike Unit Value Import Index which is affected by product mix and country of imports, the IPI is based on actual price measurements of a fixed basket of imported goods. It requires elaborate specifications of products and takes into account all the main price determining factors such as country of origin and quality.

# 2. Scope and Classification

The commodities are classified according to the United Nations Standard International Trade Classification (SITC Rev 3). Under this nomenclature, commodities are classified under 3,118 basic headings arranged into 261 groups. These groups are, in turn, assembled into 67 divisions designed to summarise the groups according to their broader characteristics. The divisions are finally consolidated into 10 sections.

Sub-indices are produced for each SITC section and for more detailed groups where possible.

The Import Price Index covers eight out of the 10 SITC sections, namely "Food and live animals", "Crude materials, inedible, except fuels", "Mineral fuels, lubricants and related materials", "Animal and vegetable oils, fats and waxes", "Chemical materials and related products, n.e.s", "Manufactured goods classified chiefly by materials", "Machinery and transport equipment" and "Miscellaneous manufactured articles".

The two SITC sections not covered are "Beverages and tobacco" and "Commodities and transactions not classified elsewhere". Goods in these sections represent a low one per cent of all imports in 2002. They are not included because of the heterogeneity of the products and the inherent difficulties in pricing the items to a constant quality.

Thus, the index, either directly or indirectly, covers about 99% of the value of merchandise imported during 2002. Items directly represented constitute 61% of the total value of imports, and for those items which are not directly represented, their prices are considered to move similarly to those represented directly.

# 3. Weighting scheme

The weights were derived from total imports in 2002. Weights assigned to each section and group are based on their import values in that year. Each product or group of products selected for pricing purposes represents all products that fall within that weight group.

#### 4. Reference Period

The base price for the calculation of the indices refers to calendar year 2003 to be in line with the reference period used for the Export Price Index. The firms have supplied prices of selected commodities for each quarter in 2003. The yearly average price of each product has been used as base price for that product.

#### 5. Selection of items and firms

The commodities forming the basket were selected according to the following criteria:

- (i) As far as possible, an item is included if it is imported regularly and frequently
- (ii) The items selected had to be, to a large extent, representative of the bulk of the trader's import
- (iii) There must be a sustained demand of the commodity variety
- (iv) Items had to be specific and detailed enough for pricing.

Similarly, an importer for a particular product is selected provided that he imports that product on a regular basis.

At the end of the selection process, 171 importers and 142 commodities were selected for subsequent price collection.

#### 6. Price collection

There are two common practices for the collection of prices of items falling in the basket. Prices for the specified goods are collected each month from importers and average quarterly prices are then derived for compiling the index, or, in case where most imports occur at intervals longer than a month, prices are collected only once every quarter and refer to the last consignment. A preliminary survey of the importers has shown that, in the case of Mauritius, the second practice is more suitable.

Prices are reported on a cost, insurance and freight (c.i.f) basis and are expressed in Mauritian Rupees. Exchange rates from the Customs and Excise Department are used in case prices are reported in foreign currencies.

Though the frequency of imports has been taken into consideration in selecting items and importers, it may happen that some items in the basket have not been imported during a certain period. In such cases, the prices are estimated using the variations in the exchange rate of the currency of imports. The underlying assumption is that the only factor affecting the price is the value of the Mauritian Rupee relative to the transaction currency.

# 7. Uses of the Import Price Index

The Import Price Index is an important economic indicator which is used, inter alia, to:

- measure changes in prices of imports
- analyse the effect of import price changes on the various sectors of the economy
- calculate changes in the volume of imports
- calculate the terms of trade (that is the ratio of export prices to import prices)
- analyse the effect of exchange rates on import prices.

### 8. Calculation of the IPI

The compilation of the Import Price Index involves first the derivation of weighted averages through the four levels of the SITC, namely item, group, division and section as follows:

#### (a) Commodity item level

The price relative of each item forms the most basic level for the compilation of higher aggregate indices:

Price index at commodity level: 
$$I_{it} = \frac{\sum P_{it}}{\sum P_{io}} \times 100$$

where  $I_{it}$  is the price relative of the i  $^{th}$  commodity in period t relative to the base period

- $\sum P_{it}$  is the sum of the prices of all commodity varieties imported in period t
- $\sum P_{io} \quad \text{is the sum of the prices of all commodity varieties imported in the base period}$

# (b) Group level

The group index is derived as a weighted average of the commodity indices:

Price index at group level: 
$$I_{G(j)} = \frac{\sum W_i I_{it}}{\sum W_i}$$

where 
$$I_{G(j)}$$
 is the index for group j  $W_i$  is the weight of commodity i

# (c) Division level

Similarly a weighted average of the group indices yields the index at division level:

Price Index at division level: 
$$I_{D(k)} = \frac{\sum W_{j}I_{G(j)}}{W_{j}}$$

$$\begin{array}{ccc} \text{where} & & I_{D(k)} & \text{is the index for division } k \\ & & W_j \text{ is the weight of group } j \end{array}$$

# (d) Section level

The index at the division level is then derived as a weighted average of the indices of the divisions falling within that section.

$$Price \ index \ at \ section \ level: \ \ I_{s(l)} = \frac{\sum W_k I_{D(k)}}{\sum W_k}$$

 $\begin{array}{ccc} \text{where} & & I_{s(l)} \text{ is the index for section } k \\ & & W_k \text{ is the weight of group } k \end{array}$ 

# (e) Overall index

Finally, the overall Import Price Index is computed as a weighted average of the indices of the sections.

$$Overall\ Import\ Price\ index: \quad I_{o(m)} = \frac{\sum W_m I_{s(l)}}{\sum W_m}$$

where 
$$I_{o(m)}$$
 is the overall Price Index  $W_m$  is the weight of section m