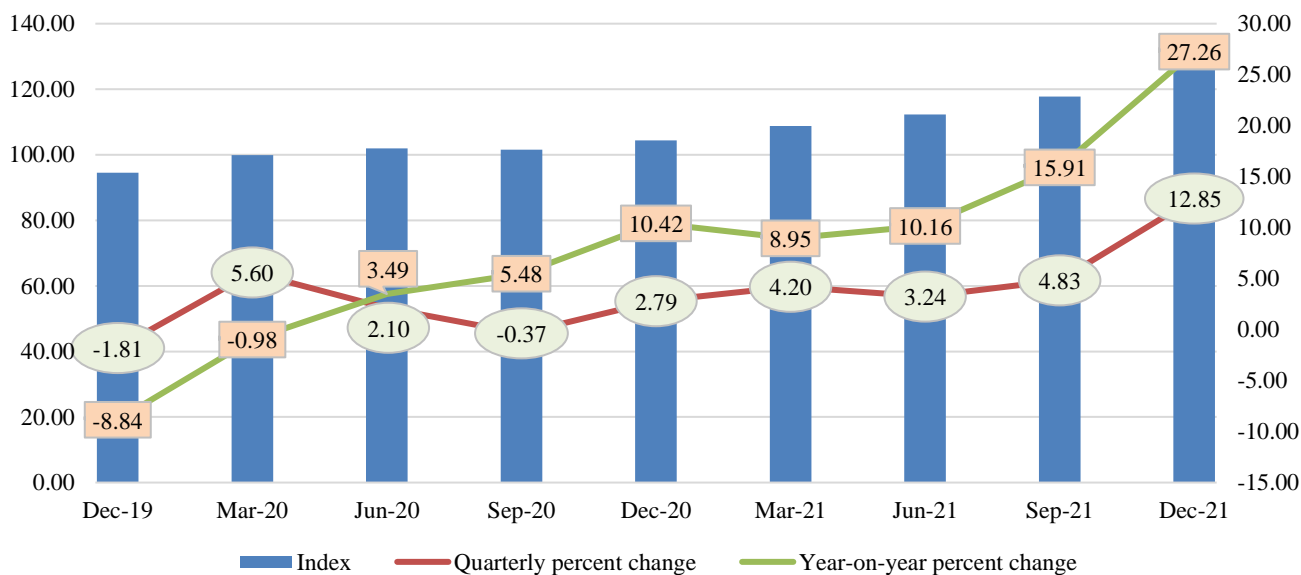




**Export and Import Price Index – Q3 (Jul-Sep) and Q4 (Oct-Dec), 2021**

Release date: 31<sup>st</sup> May, 2022

**Export Price Index**

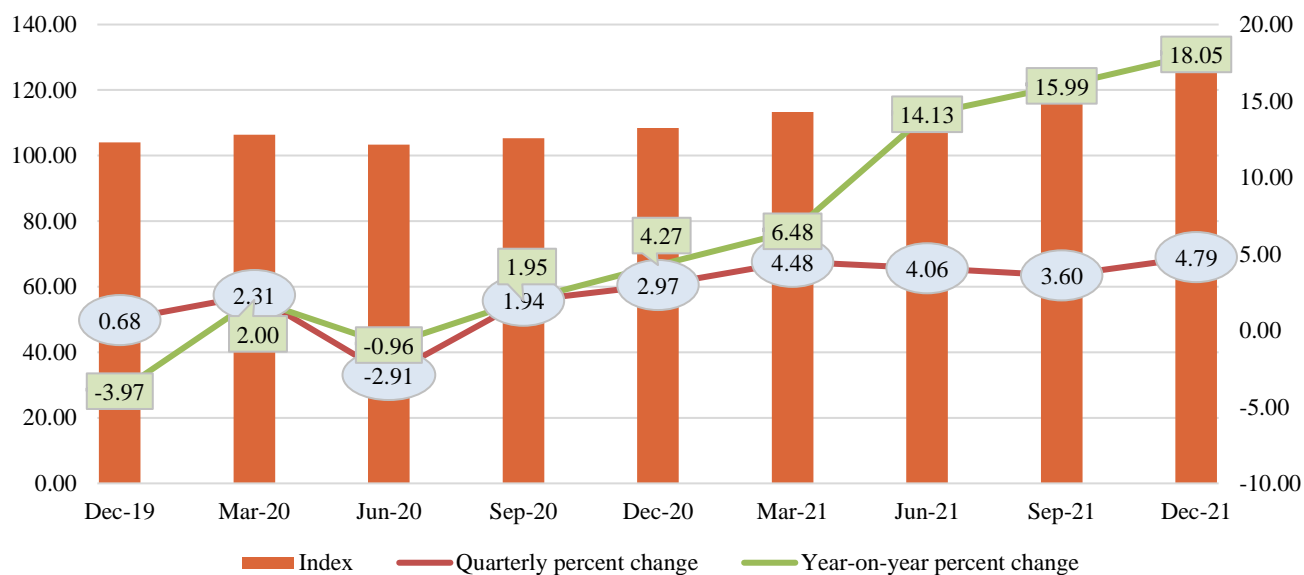


The export prices of goods increased by 15.91 percent and 27.26 percent in third and fourth quarter of 2021 respectively compared to the same quarter of previous year. Q4 recorded the highest increase so far since 2014 mainly contributed by the increase in prices of ferro-silicon by about 123 percent compared to last year. It contributed to around 90 percent of the total increase in both the quarters. Chemicals, plastics, textile and apparel group recorded the second highest increase with 29.54 percent and 41.96 percent in Q3 and Q4 respectively while both the quarters recorded drop in prices for food and beverages by 1.78 percent and 3.10 percent compared to the same quarters of previous year.

Quarter-on-quarter inflation rate was 4.83 percent in Q3 followed by a significant rise in Q4 at 12.85 percent, mainly due to increase in price of ferro-silicon in both quarters.

On average, the export price for 2021 went up by 15.72 percent with base metal and other manufactures group recording the highest increase with 58.76 percent. All other groups recorded price increase from 2020 except food and beverages which dropped by 2.09 percent.

## Import Price Index

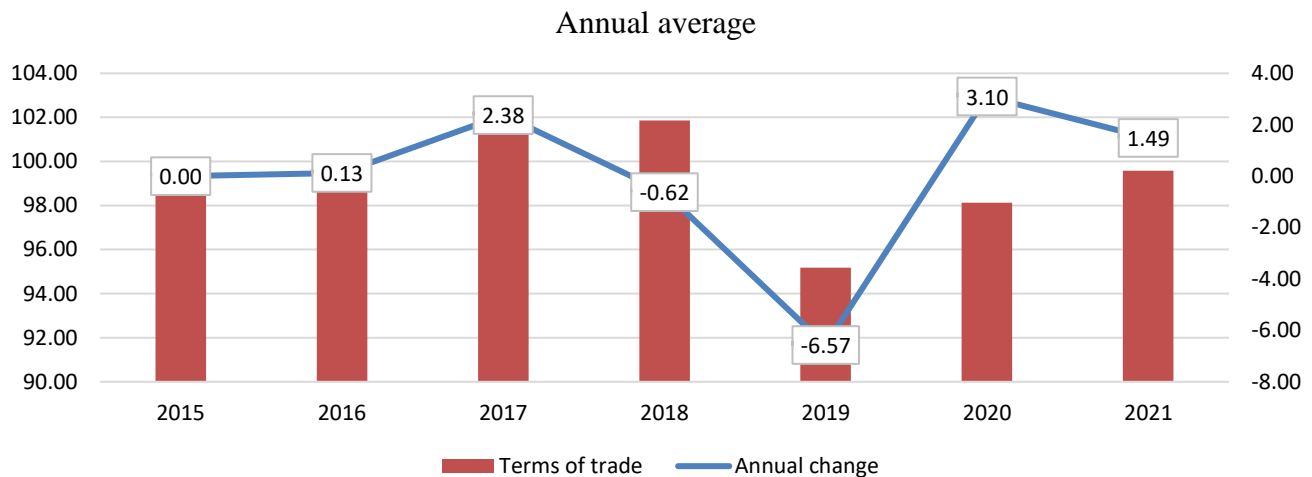
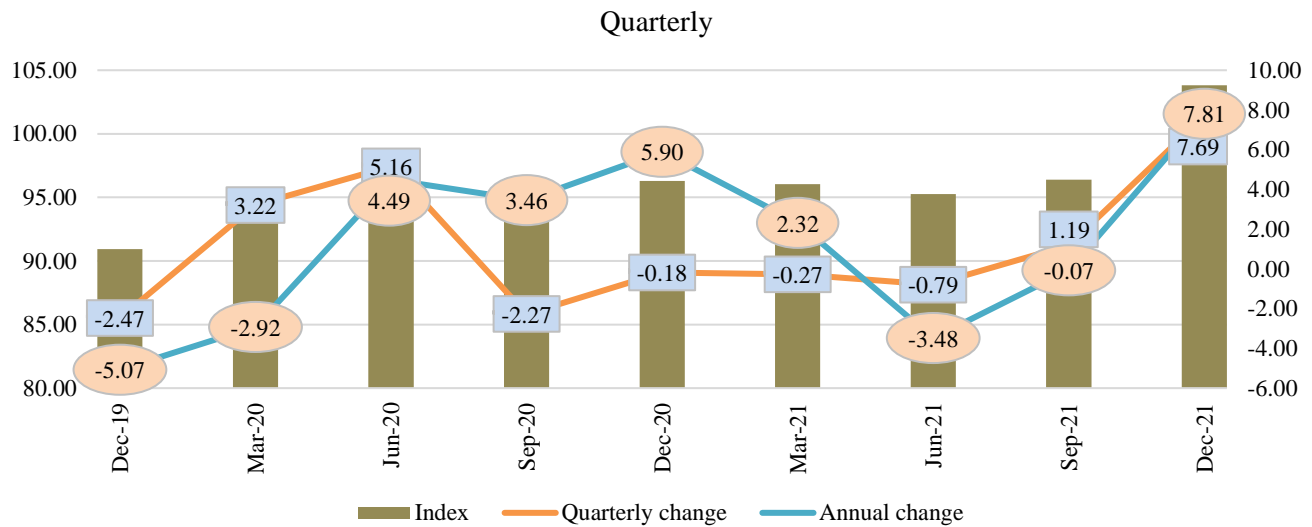


The year-on-year inflation rate for import goods continued to increase in third and fourth quarter by 15.99 percent and 18.05 percent respectively. Within imported goods, the highest increase was recorded in metals and metal articles with more than 40 percent increase in both Q3 and Q4. Mineral products, cement and electricity also recorded an increase of 26.32 percent and 35.25 percent in Q3 and Q4 respectively. Ferrous product was the main contributor for the increase in metal & metal articles while increase in fuel price led to the increase for mineral group.

The quarter-on-quarter (current quarter compared to previous quarter) import price went up by 3.60 percent in Q3 and 4.79 percent in Q4. Highest increase in Q3 was recorded in mineral products, cement and electricity group with 8.36 percent while food and beverages recorded the least increase with 0.60 percent. Prices of transport equipment dropped by 1.87 percent in Q3 but increased by 3.27 percent in Q4. Chemicals, plastics, textiles and apparel had the highest increase in Q4 with 13.59 percent followed by higher increase for most groups compared to Q3 except for food and beverages which fell by 0.28 percent.

2021 saw a record increase for import price index with an annual average increase of 14.03 percent from 2020 mainly driven by metal & metal articles with 24.64 percent, and mineral products, cement & electricity with 38.82 percent. Unlike the export, all groups within the import recorded an increase.

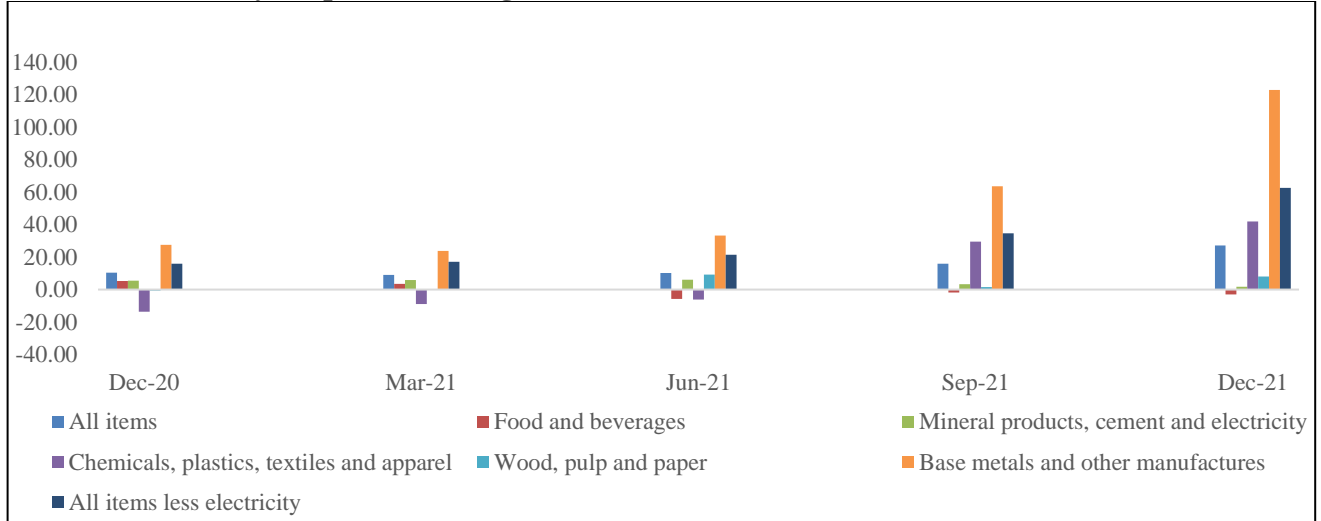
## Terms of Trade



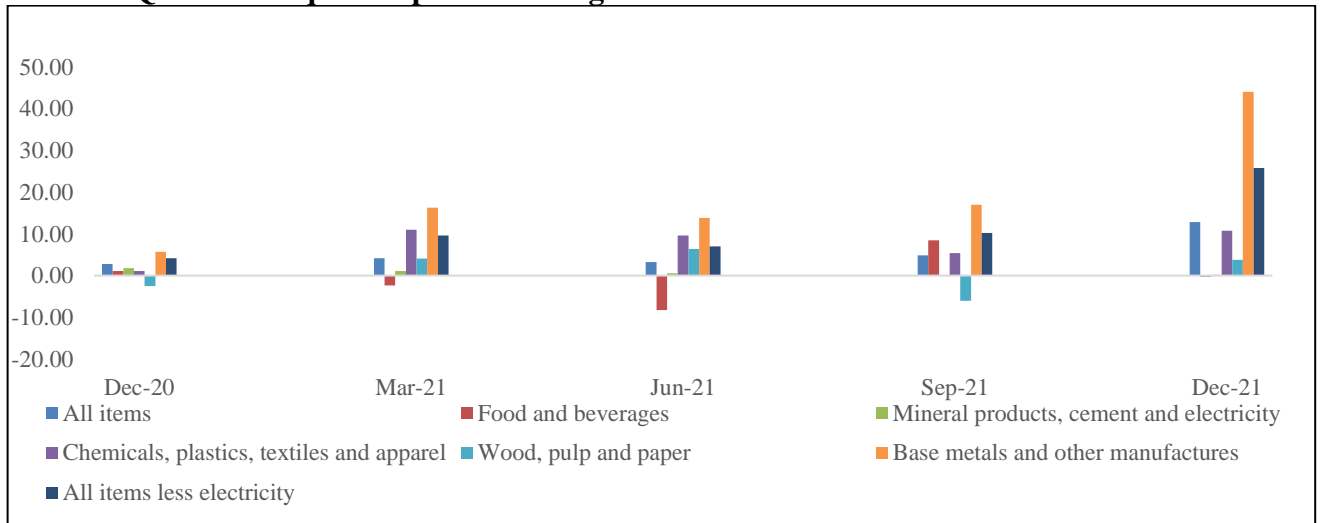
The terms of trade dropped by 0.07 percent in Q3 compared to same quarter of previous year, however, it improved by 1.19 percent compared to the previous quarter. Q4 recorded an improvement in terms of trade by 7.81 percent and 7.69 percent for annual and quarterly respectively. On average, terms of trade increased further by 1.49 percent in 2021 from 2020, although the rate has declined from 3.10 percent in 2020. Increase in terms of trade means more quantity of imports that can be funded by a fixed quantity of exports while decrease in terms of trade means smaller quantity of imports can be funded by a fixed quantity of exports.

## Export Price Index (Dec 2014 quarter = 100)

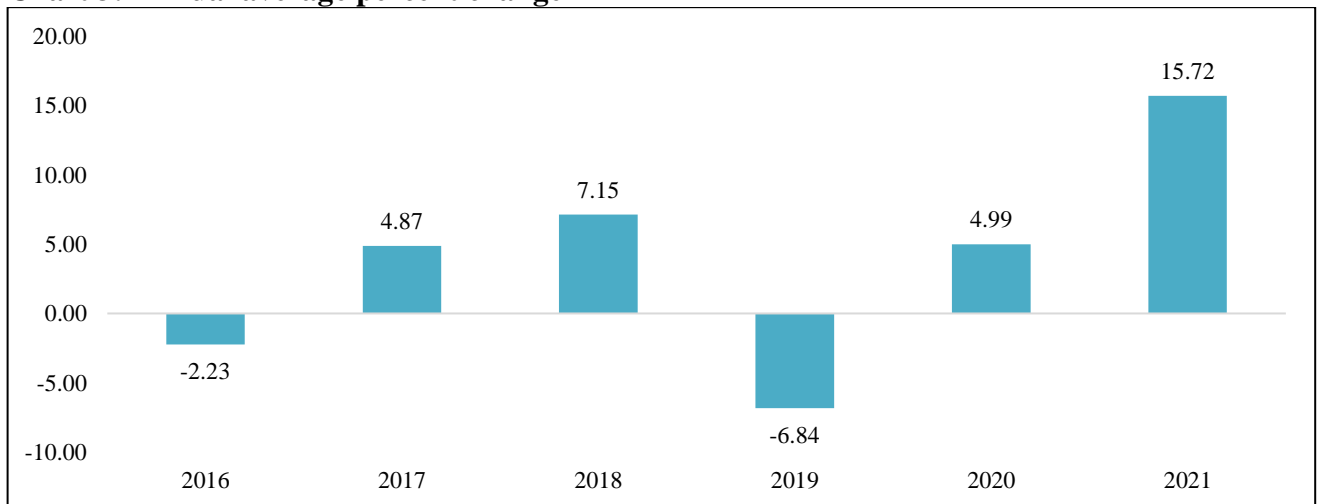
**Chart 1: Year-on-year percent change**



**Chart 2: Quarter-on-quarter percent change**

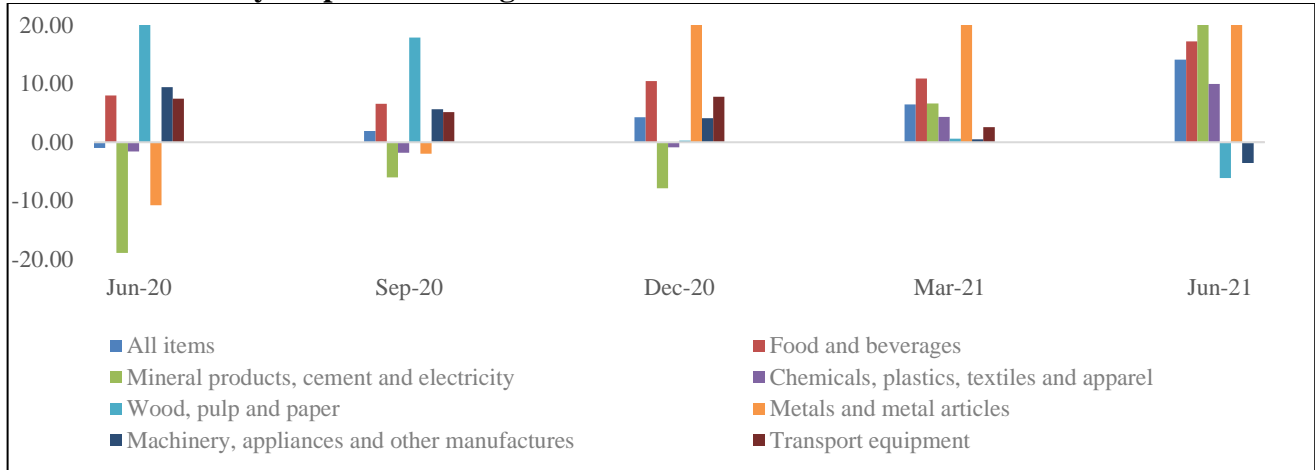


**Chart 3: Annual average percent change**

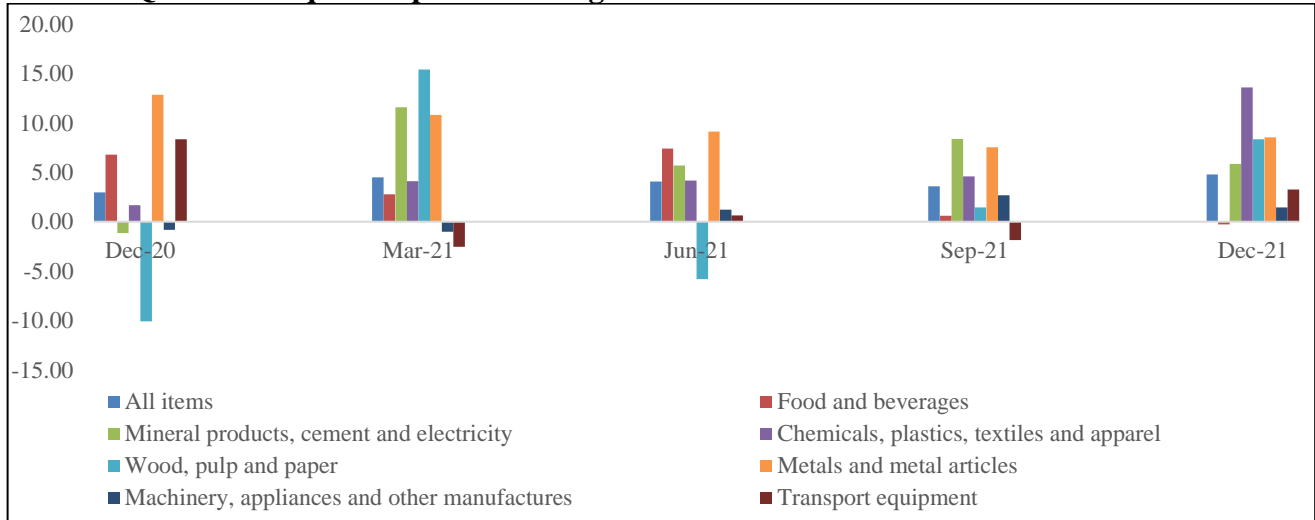


## Import Price Index (Dec 2014 quarter = 100)

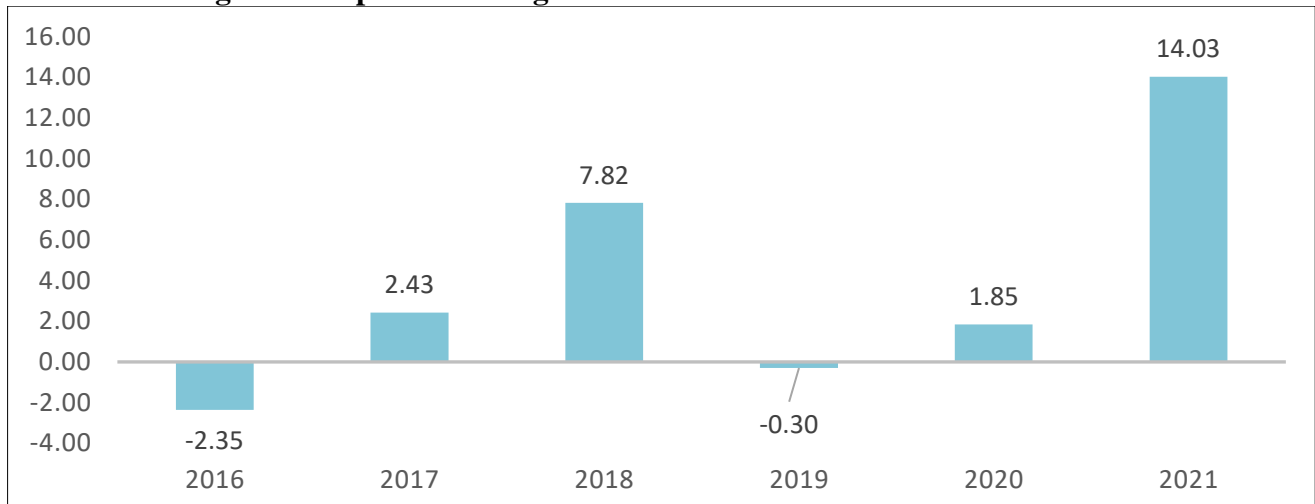
**Chart 4: Year-on-year percent change**



**Chart 5: Quarter-on-quarter percent change**



**Chart 6: Average annual percent change**



**Table 1: Export Price Index (Dec 2014 quarter = 100)**

Quarter	All items	Food and beverages	Mineral products, cement and electricity	Chemicals, plastics, textiles and apparel	Wood, pulp and paper	Base metals and other manufactures	All items less electricity
Dec-16	94.08	100.58	104.13	89.64	108.78	78.79	89.56
Mar-17	96.34	98.51	107.41	88.81	100.62	82.01	90.96
Jun-17	97.19	91.66	108.40	93.13	100.31	84.42	92.61
Sep-17	96.64	87.43	107.17	88.05	117.18	86.87	91.80
Dec-17	99.29	87.55	107.21	84.00	114.25	96.22	95.75
Mar-18	103.92	89.23	107.73	86.00	112.41	108.96	102.10
Jun-18	105.85	91.16	108.56	91.64	105.82	111.73	104.24
Sep-18	103.85	90.96	108.38	92.68	107.07	105.47	101.38
Dec-18	103.74	88.13	109.04	92.93	96.56	105.31	101.22
Mar-19	100.85	90.81	110.66	91.12	93.90	95.02	97.38
Jun-19	98.53	88.63	111.55	87.92	84.42	89.01	94.23
Sep-19	96.31	87.31	111.48	86.72	93.17	83.32	91.29
Dec-19	94.57	88.00	111.21	89.49	62.65	79.39	88.98
Mar-20	99.87	87.40	112.14	93.96	64.95	95.14	96.66
Jun-20	101.96	88.12	112.51	100.13	63.12	100.68	99.63
Sep-20	101.59	91.63	115.28	76.37	63.88	95.85	99.09
Dec-20	104.42	92.61	117.32	77.19	62.29	101.35	103.19
Mar-21	108.81	90.46	118.63	85.65	64.85	117.88	113.15
Jun-21	112.33	82.99	119.28	93.87	68.98	134.23	121.04
Sep-21	117.75	90.00	119.17	98.93	64.83	156.98	133.38
Dec-21	132.89	89.74	119.37	109.58	67.30	226.14	167.84

**Table 2: Year-on-year percent change**

Quarter	All items	Food and beverages	Mineral products, cement and electricity	Chemicals, plastics, textiles and apparel	Wood, pulp and paper	Base metals and other manufactures	All items less electricity
Dec-17	5.53	-12.96	2.95	-6.30	5.03	22.12	6.91
Mar-18	7.87	-9.42	0.30	-3.16	11.72	32.86	12.25
Jun-18	8.91	-0.55	0.15	-1.60	5.49	32.35	12.55
Sep-18	7.46	4.03	1.14	5.27	-8.63	21.41	10.44
Dec-18	4.49	0.67	1.71	10.63	-15.48	9.45	5.72
Mar-19	-2.95	1.78	2.72	5.95	-16.46	-12.79	-4.63
Jun-19	-6.92	-2.77	2.75	-4.07	-20.22	-20.34	-9.60
Sep-19	-7.26	-4.01	2.86	-6.43	-12.98	-21.00	-9.95
Dec-19	-8.84	-0.15	1.99	-3.70	-35.12	-24.61	-12.09
Mar-20	-0.98	-3.76	1.33	3.12	-30.83	0.13	-0.74
Jun-20	3.49	-0.58	0.86	13.89	-25.23	13.11	5.74
Sep-20	5.48	4.95	3.41	-11.94	-31.44	15.04	8.54
Dec-20	10.42	5.24	5.49	-13.75	-0.57	27.66	15.97
Mar-21	8.95	3.50	5.79	-8.85	-0.15	23.90	17.07
Jun-21	10.16	-5.82	6.02	-6.25	9.27	33.32	21.48
Sep-21	15.91	-1.78	3.38	29.54	1.49	63.78	34.61
Dec-21	27.26	-3.10	1.75	41.96	8.03	123.13	62.64

**Table 3: Quarter-on-quarter percent change**

Quarter	All items	Food and beverages	Mineral products, cement and electricity	Chemicals, plastics, textiles and apparel	Wood, pulp and paper	Base metals and other manufactures	All items less electricity
Mar-17	2.39	-2.06	3.15	-0.93	-7.50	4.10	1.56
Jun-17	0.88	-6.95	0.92	4.86	-0.31	2.94	1.82
Sep-17	-0.56	-4.62	-1.14	-5.46	16.82	2.89	-0.88
Dec-17	2.74	0.13	0.04	-4.60	-2.51	10.77	4.30
Mar-18	4.67	1.92	0.49	2.39	-1.61	13.25	6.64
Jun-18	1.85	2.17	0.77	6.56	-5.86	2.54	2.09
Sep-18	-1.89	-0.22	-0.16	1.14	1.19	-5.61	-2.74
Dec-18	-0.10	-3.11	0.61	0.26	-9.82	-0.15	-0.15
Mar-19	-2.79	3.04	1.48	-1.94	-2.76	-9.77	-3.80
Jun-19	-2.31	-2.40	0.80	-3.52	-10.09	-6.33	-3.23
Sep-19	-2.25	-1.49	-0.06	-1.36	10.36	-6.39	-3.11
Dec-19	-1.81	0.79	-0.24	3.19	-32.76	-4.72	-2.53
Mar-20	5.60	-0.68	0.83	5.00	3.67	19.84	8.63
Jun-20	2.10	0.82	0.33	6.56	-2.81	5.82	3.08
Sep-20	-0.37	3.99	2.46	-23.73	1.19	-4.79	-0.55
Dec-20	2.79	1.07	1.77	1.07	-2.48	5.73	4.14
Mar-21	4.20	-2.32	1.12	10.97	4.11	16.32	9.65
Jun-21	3.24	-8.26	0.55	9.59	6.36	13.86	6.97
Sep-21	4.83	8.45	-0.09	5.39	-6.01	16.95	10.20
Dec-21	12.85	-0.29	0.17	10.76	3.81	44.05	25.83

**Table 4: Average annual index (2015=100) and percent change**

Year	All items	Food and beverages	Mineral products, cement and electricity	Chemicals, plastics, textiles and apparel	Wood, pulp and paper	Base metals and other manufactures	All items less electricity
2015	100	100	100	100	100	100	100
2016	97.77	99.35	102.13	95.02	107.50	89.03	95.73
2017	102.53	86.68	107.93	90.90	104.29	102.49	99.66
2018	109.85	85.15	108.93	92.45	104.28	126.08	109.72
2019	102.33	84.00	111.76	91.19	81.60	100.37	99.92
2020	107.45	85.63	115.21	87.68	62.70	114.21	106.86
2021	124.34	83.84	119.59	97.83	65.48	181.33	141.96

**Percent change**

2016	-2.23	-0.65	2.13	-4.98	7.50	-10.97	-4.27
2017	4.87	-12.75	5.68	-4.33	-2.98	15.12	4.11
2018	7.15	-1.76	0.92	1.70	-0.01	23.02	10.09
2019	-6.85	-1.36	2.60	-1.36	-21.75	-20.40	-8.93
2020	4.99	1.94	3.09	-3.85	-23.15	13.80	6.95
2021	15.72	-2.09	3.80	11.57	4.42	58.76	32.85

**Table 5: Import Price Index (Dec 2014 quarter = 100)**

Quarter	All items	Food and beverages	Mineral products, cement and electricity	Chemicals, plastics, textiles and apparel	Wood, pulp and paper	Metals and metal articles	Machinery, appliances and other manufactures	Transport equipment
Dec-16	97.25	113.22	96.50	99.29	95.24	73.79	105.12	111.96
Mar-17	97.66	109.69	101.45	96.08	98.67	77.86	103.89	109.50
Jun-17	98.07	113.74	99.50	96.92	98.58	84.79	100.69	110.23
Sep-17	95.46	112.51	95.76	96.05	90.74	82.18	101.07	99.15
Dec-17	95.32	112.15	94.78	94.12	91.65	82.49	101.33	100.79
Mar-18	99.90	112.53	100.82	97.20	104.85	96.98	101.06	105.72
Jun-18	103.20	111.58	106.07	100.05	112.32	99.03	105.35	109.10
Sep-18	106.32	111.89	111.37	103.99	105.88	102.27	110.26	109.19
Dec-18	108.30	113.20	111.54	110.18	108.07	102.80	112.29	115.58
Mar-19	104.31	114.04	102.62	104.01	107.00	105.14	108.97	107.83
Jun-19	104.30	114.69	106.68	102.68	103.88	98.47	107.31	111.01
Sep-19	103.30	115.68	107.13	102.61	103.05	90.28	107.87	106.73
Dec-19	104.00	119.13	108.05	103.37	108.96	80.87	108.58	112.83
Mar-20	106.40	121.99	104.12	102.29	125.36	90.39	111.35	115.56
Jun-20	103.31	123.90	86.47	101.04	126.58	87.83	117.45	119.29
Sep-20	105.31	123.27	100.69	100.78	121.54	88.52	113.99	112.26
Dec-20	108.44	131.65	99.54	102.48	109.28	99.89	113.04	121.63
Mar-21	113.30	135.30	111.06	106.70	126.12	110.69	111.88	118.56
Jun-21	117.91	145.32	117.37	111.15	118.79	120.81	113.25	119.31
Sep-21	122.15	146.19	127.19	116.25	120.51	129.93	116.27	117.08
Dec-21	128.01	145.77	134.62	132.05	130.58	141.01	117.97	120.91

**Table 6: Year-on-year percent change**

Quarter	All items	Food and beverages	Mineral products, cement and electricity	Chemicals, plastics, textiles and apparel	Wood, pulp and paper	Metals and metal articles	Machinery, appliances and other manufactures	Transport equipment
Dec-17	-1.99	-0.95	-1.78	-5.21	-3.77	11.79	-3.61	-9.98
Mar-18	2.29	2.58	-0.62	1.16	6.26	24.56	-2.72	-3.45
Jun-18	5.24	-1.90	6.61	3.23	13.93	16.79	4.62	-1.03
Sep-18	11.38	-0.55	16.30	8.26	16.68	24.45	9.10	10.12
Dec-18	13.61	0.94	17.68	17.06	17.91	24.62	10.81	14.68
Mar-19	4.42	1.34	1.79	7.00	2.05	8.41	7.83	1.99
Jun-19	1.07	2.79	0.57	2.63	-7.52	-0.57	1.86	1.76
Sep-19	-2.85	3.38	-3.81	-1.32	-2.67	-11.73	-2.17	-2.25
Dec-19	-3.97	5.24	-3.13	-6.18	0.83	-21.33	-3.30	-2.38
Mar-20	2.00	6.98	1.45	-1.65	17.16	-14.03	2.18	7.16
Jun-20	-0.96	8.03	-18.94	-1.60	21.86	-10.80	9.45	7.46
Sep-20	1.95	6.56	-6.01	-1.79	17.94	-1.95	5.68	5.19
Dec-20	4.27	10.51	-7.88	-0.87	0.29	23.52	4.11	7.80
Mar-21	6.48	10.91	6.67	4.31	0.61	22.46	0.48	2.60
Jun-21	14.13	17.29	35.73	10.01	-6.16	37.54	-3.58	0.01
Sep-21	15.99	18.59	26.32	15.36	-0.85	46.78	2.00	4.29
Dec-21	18.05	10.73	35.25	28.86	19.50	41.16	4.36	-0.59



**Table 7: Quarter-on-quarter percent change**

Quarter	All items	Food and beverages	Mineral products, cement and electricity	Chemicals, plastics, textiles and apparel	Wood, pulp and paper	Metals and metal articles	Machinery, appliances and other manufactures	Transport equipment
Mar-17	0.42	-3.12	5.12	-3.23	3.60	5.51	-1.18	-2.20
Jun-17	0.41	3.69	-1.92	0.87	-0.09	8.91	-3.07	0.66
Sep-17	-2.66	-1.08	-3.75	-0.89	-7.95	-3.08	0.37	-10.05
Dec-17	-0.14	-0.33	-1.02	-2.01	1.00	0.38	0.26	1.65
Mar-18	4.80	0.34	6.37	3.27	14.40	17.56	-0.26	4.90
Jun-18	3.30	-0.84	5.21	2.93	7.13	2.11	4.24	3.19
Sep-18	3.02	0.28	5.00	3.94	-5.73	3.27	4.67	0.08
Dec-18	1.86	1.17	0.15	5.95	2.07	0.52	1.84	5.86
Mar-19	-3.68	0.74	-7.99	-5.60	-0.99	2.27	-2.95	-6.71
Jun-19	-0.01	0.57	3.96	-1.28	-2.92	-6.35	-1.53	2.95
Sep-19	-0.96	0.86	0.42	-0.06	-0.80	-8.32	0.52	-3.86
Dec-19	0.68	2.99	0.85	0.74	5.74	-10.42	0.66	5.72
Mar-20	2.31	2.40	-3.64	-1.05	15.05	11.77	2.55	2.42
Jun-20	-2.91	1.57	-16.95	-1.22	0.98	-2.83	5.48	3.23
Sep-20	1.94	-0.51	16.44	-0.26	-3.98	0.78	-2.94	-5.89
Dec-20	2.97	6.80	-1.15	1.69	-10.09	12.85	-0.83	8.34
Mar-21	4.48	2.77	11.58	4.12	15.41	10.81	-1.03	-2.52
Jun-21	4.06	7.40	5.68	4.17	-5.81	9.14	1.22	0.64
Sep-21	3.60	0.60	8.36	4.59	1.45	7.55	2.67	-1.87
Dec-21	4.79	-0.28	5.84	13.59	8.36	8.53	1.46	3.27

**Table 8: Average Annual index (2015=100) and percent change**

Year	All items	Food and beverages	Mineral products, cement and electricity	Chemicals, plastics, textiles and apparel	Wood, pulp and paper	Metals and metal articles	Machinery, appliances and other manufactures	Transport equipment
2015	100	100	100	100	100	100	100	100
2016	97.65	107.77	97.75	97.84	94.30	80.47	101.52	104.69
2017	100.02	110.18	105.17	97.37	93.87	94.78	98.36	98.70
2018	107.84	110.49	115.01	104.66	106.55	116.11	103.16	103.31
2019	107.52	114.04	113.79	104.92	104.67	107.16	104.63	103.42
2020	109.50	123.44	105.29	103.50	118.51	105.88	110.24	110.89
2021	124.87	140.83	131.23	119.30	122.62	146.98	111.45	112.09

Percent change								
2016	-2.35	7.77	-2.25	-2.16	-5.70	-19.53	1.52	4.69
2017	2.43	2.24	7.60	-0.48	-0.45	17.79	-3.11	-5.72
2018	7.82	0.28	9.36	7.48	13.51	22.51	4.87	4.67
2019	-0.30	3.21	-1.07	0.25	-1.77	-7.71	1.43	0.10
2020	1.85	8.25	-7.47	-1.36	13.23	-1.20	5.36	7.23
2021	14.03	14.08	24.64	15.26	3.47	38.82	1.10	1.08

**Table 9: Export weights (%)**

Section	2014	2015	2016	2017	2018	2019	2020
All items	100	100	100	100	100	100	100.00
Food and beverages	10.55	9.56	11.45	10.29	8.99	8.93	6.79
Mineral products, cement and electricity	46.19	50.39	53.45	51.33	47.84	62.44	70.64
Chemicals, plastics, textiles and apparel	7.45	9.49	7.64	7.03	4.65	2.98	1.53
Wood, pulp and paper	1.07	1.01	0.93	0.68	1.20	0.58	0.27
Base metals and other manufactures	34.75	29.56	26.53	30.66	37.33	25.07	20.77
All items less electricity	69.99	65.86	63.80	67.32	73.61	64.86	43.41

**Table 10: Import weights (%)**

Section	2014	2015	2016	2017	2018	2019	2020
All items	100	100	100	100	100	100	100
Food and beverages	17.44	15.04	15.84	16.41	15.12	16.90	19.51
Mineral products, cement and electricity	26.72	20.84	21.25	23.57	26.45	25.36	19.49
Chemicals, plastics, textiles and apparel	10.88	9.64	9.23	9.63	10.28	11.52	11.13
Wood, pulp and paper	4.41	3.90	3.11	3.80	4.88	4.67	4.66
Metals and metal articles	17.46	15.33	10.76	11.77	11.09	13.04	9.96
Machinery, appliances and other manufactures	19.51	22.11	28.95	26.91	22.67	19.34	21.56
Transport equipment	3.58	13.14	10.85	7.90	9.50	9.16	13.68

## Technical note

**Export and Import Price Index (XMPI)** is a measure of average price change over the period for goods and services that are exported and imported. The export and import price index for Bhutan includes only the goods and does not include the services component.

The data for compilation of export and import price index are sourced from the Trade Statistics published by the Department of Revenue and Customs (DRC), Ministry of Finance. Prices for both export and import are based on FOB (Free-on-Board) values. Data for electricity trade is sourced from the Druk Green Power Corporation.

US Import Price Index is used as proxy for import of machinery and equipment as the unit value based on trade statistics is not sufficiently reliable. The US import price index is adjusted for changes in exchange rate between the Ngultrum and the US dollar.

**Items selection** – Export and import baskets are updated annually using the annual trade statistics data. Selection of items for the basket are based on factors such as *FOB values; quarterly unit values; coefficient of variation (CV); and count of number of quarters that unit values are present during the latest nine quarters.*

There are 54 items in the Export basket (43 items exported to India and 11 items exported to countries other than India) and 123 items in the Import basket (109 items imported from India and 14 items imported from countries other than India). Overlapping items which are exported/imported to/from India and countries other than India are counted as separate item in the basket.

**Terms of Trade** - Terms of trade indexes measure the relative price of exports in terms of import prices. It is calculated as the ratio of export prices to import prices and expressed in terms of 100. The terms of trade track the purchasing power of exports. It measures the changing quantity of imports that can be funded by a fixed quantity of exports. An increase in the terms of trade means that a larger quantity of imports can be funded by a fixed quantity of exports, while a decrease in the terms of trade means that a smaller quantity of imports can be funded by a fixed quantity of exports.

**Frequency, timeline and revision** - XMPI will be published on quarterly basis with a time lag of one quarter after the reference quarter. DRC provides provisional data for the first three quarters of the year and the finalized data for the year when providing the fourth quarter data. Hence, the index for the past three quarters may get revised when the final annual data is received.

**Classification** - Goods are classified using the Bhutan Trade Classification which is based on the International Harmonized System Classification

**Weights** - represents the relative importance of specific item to the overall exports or imports and determines the impact each item will have on the overall price change. Weights are updated annually along with annual basket selection.

**Formula** - Arithmetic Young upper-level formula is used to calculate the XMPI