



QUARTERLY REVIEW OF THE PERFORMANCE OF THE DAIRY INDUSTRY¹

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Fourth Quarter 2023

¹ A publication of Milk SA authored by Bertus van Heerden, Chief Economist MPO

Synopsis of the performance of the dairy industry: Q4 2023.

Food prices are worldwide significantly lower than the all-time high in March 2022. Despite the reduced prices, the FAO Food Price Index is still 24% higher than the average index level over the five years from January 2016 to December 2020. This goes a long way to explain the unabated high cost of living in many parts of the world. The FAO Dairy price index followed the same downward trend until September 2023, whereafter the index increased moderately by 6.9%.

In unison with the reduced FAO dairy price index, the FOB USD prices for SMP, FMP, and Cheddar decreased from December 2022 to December 2023, with butter being the odd one out. Despite the ZAR depreciating by 10% over the same period both SMP and Cheddar FOB prices decreased by 8.8% and 9.6% respectively. The Global Dairy Trade Price Index mimicked the same downward trend with some recovery from August 2023 to December 2023, with December reflecting more stable and long-term price levels. Future prices on New Zealand's Exchange indicate increasing trends for milk powders, with anhydrous milk fat moving sideways while butter reflects a decreasing trend (February to October 2024).

Although the above lower price levels are encouraging, the high levels of uncertainty and continuous increase in geopolitical tension remain short-term risks that can manifest overnight and cause havoc in markets.

Growth of unprocessed milk production in the major dairy exporting countries is better than in 2022 but still relatively flat.

The weighted average of producer prices of unprocessed milk in the EU27 increased from 35€/100kg in January 2021 to 58.25€/100kg in December 2022. This represents an increase of 66% over 24 months. In January 2023 the 24 months of increased prices started to reverse and decrease to 44.29€/100kg in October 2023. This equates to a decrease of 23.9% over 10 months. From July 2023 the average EU price started to move sideways. The October 2023 price is 21.8% lower than the same month in 2022, 16% higher compared to the same month in 2021, and 26.5% higher compared to the same month in 2020.

The South African trade results for the first nine months of 2023 indicate that on a mass basis dairy imports decreased by 5.6% while dairy exports increased by 5.9%.

South African Sales quantities of the main dairy products decreased for the first nine months of 2023 compared to the same period in 2022 while on a year-on-year basis for September 2023, all dairy product prices covered in the NielsenIQ report increased with more than the Headline inflation rate.

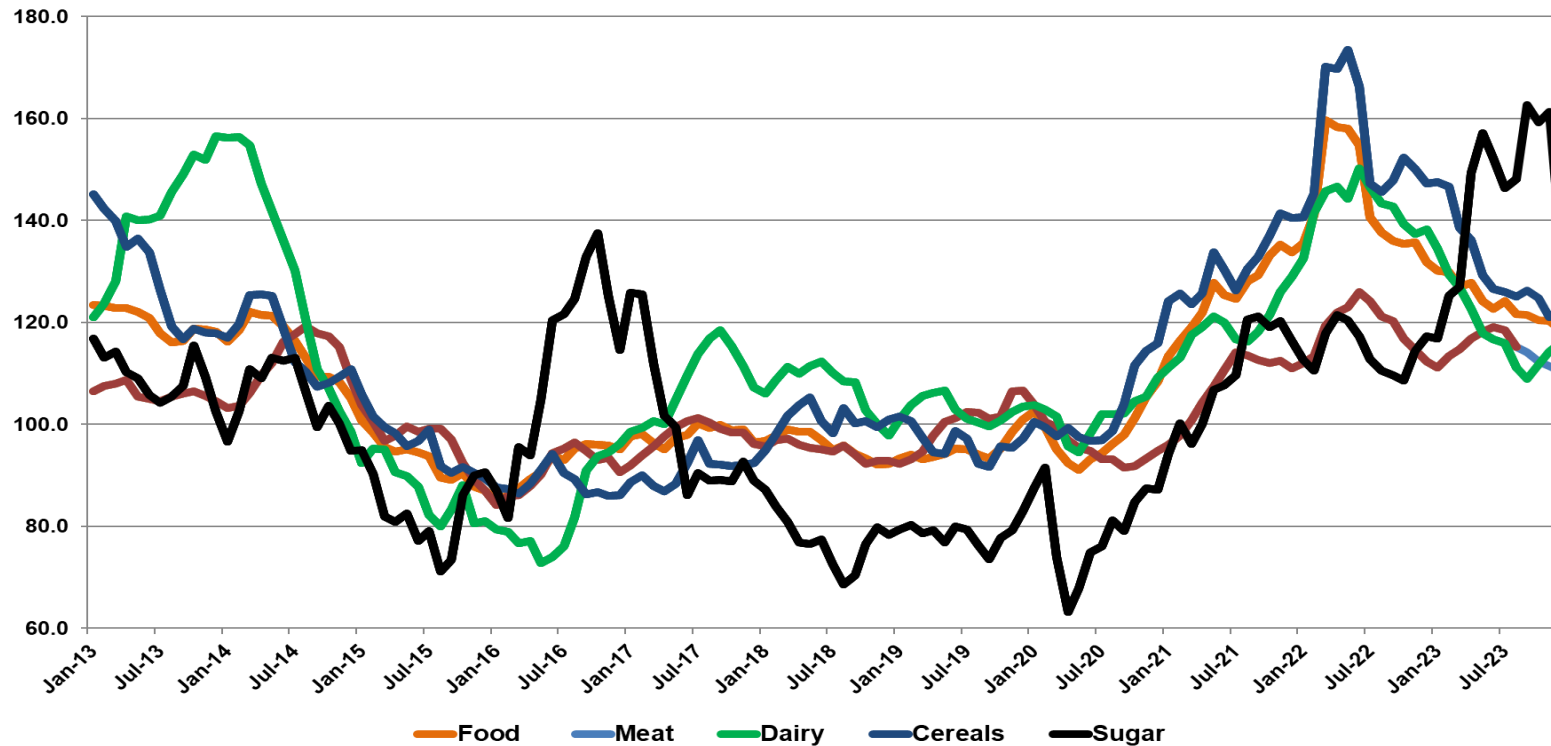
The South African PPI for unprocessed milk in November 2023 continued to increase by double digits while the PPIs for dairy products, other manufactured food products, and agriculture increased with single digits. The CPI for milk, cheese, and eggs increased by 13.9% in November and for food by 9.0%.

The cumulative unprocessed milk purchases for the first eleven months of 2023 were 0.76% less than the same period in 2022. Daily average unprocessed milk purchases in 2023 are generally lower compared to 2022 but started to move to the same levels from August onward.

1. INTERNATIONAL MARKET

FIGURE 1A: FOOD AND AGRICULTURAL ORGANISATION (FAO) FOOD PRICE INDICES, JANUARY 2013 – DECEMBER 2023

Index (2014 - 2016 = 100)



Source: FAO Food Price Index, January 2024

The FAO Food Price Index* (FFPI) reached an all-time high in March 2022, of 160 index points. Since then, the index reversed the upward trend and reduced to 118.5 index points in December 2023, representing a drop of 25.8%. From January 2016 to December 2020 the FFPI mostly moved sideways with the average index level at 95.8 points (a low of 84.9 points and a high of 108.5 points over the five-year

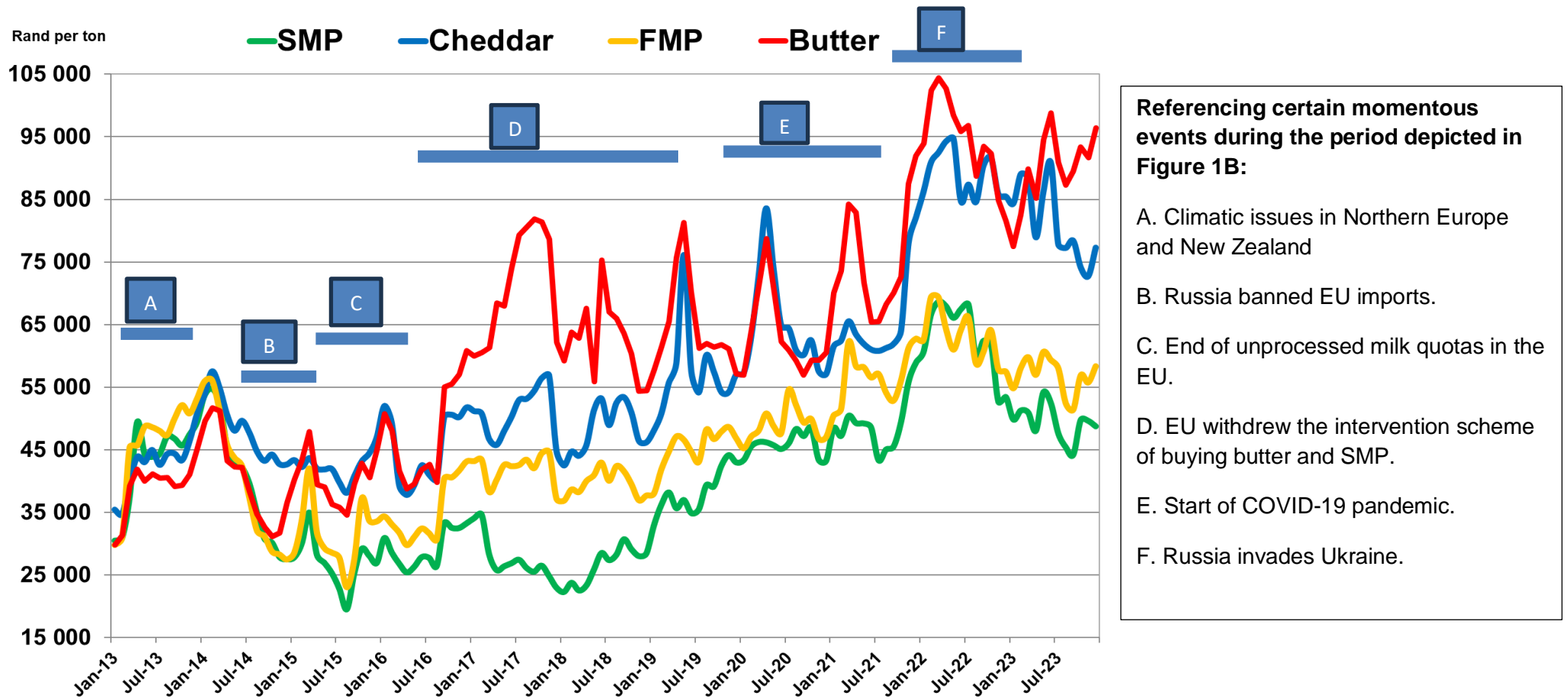
period). Comparing the average level over this five-year period to the index level in December 2023, the FFPI is still 23.6% higher. This goes a long way to explain the unabated high cost of living in many parts of the world.

The prices of cereal and dairy were the most important contributors to the all-time high of the FFPI.

The FAO Dairy Price Index reached an all-time high in July 2022, of 147.3 index points. Since then, the index reversed the upward trend and reduced to 108.6 index points in September 2023, representing a drop of 26.3%. Since September 2023 the index registered moderate increases, standing on 116.1 index points for December 2023, up 6.9%.

The FAO Cereal Price Index reached an all-time high in May 2022, of 173.5 index points. Since then, the index reversed the upward trend and reduced to 122.8 index points in December 2023, representing a drop of 29.2%.

FIGURE 1B: INTERNATIONAL DAIRY PRODUCTS PRICES: FREE-ON-BOARD (FOB): JANUARY 2013 – DECEMBER 2023



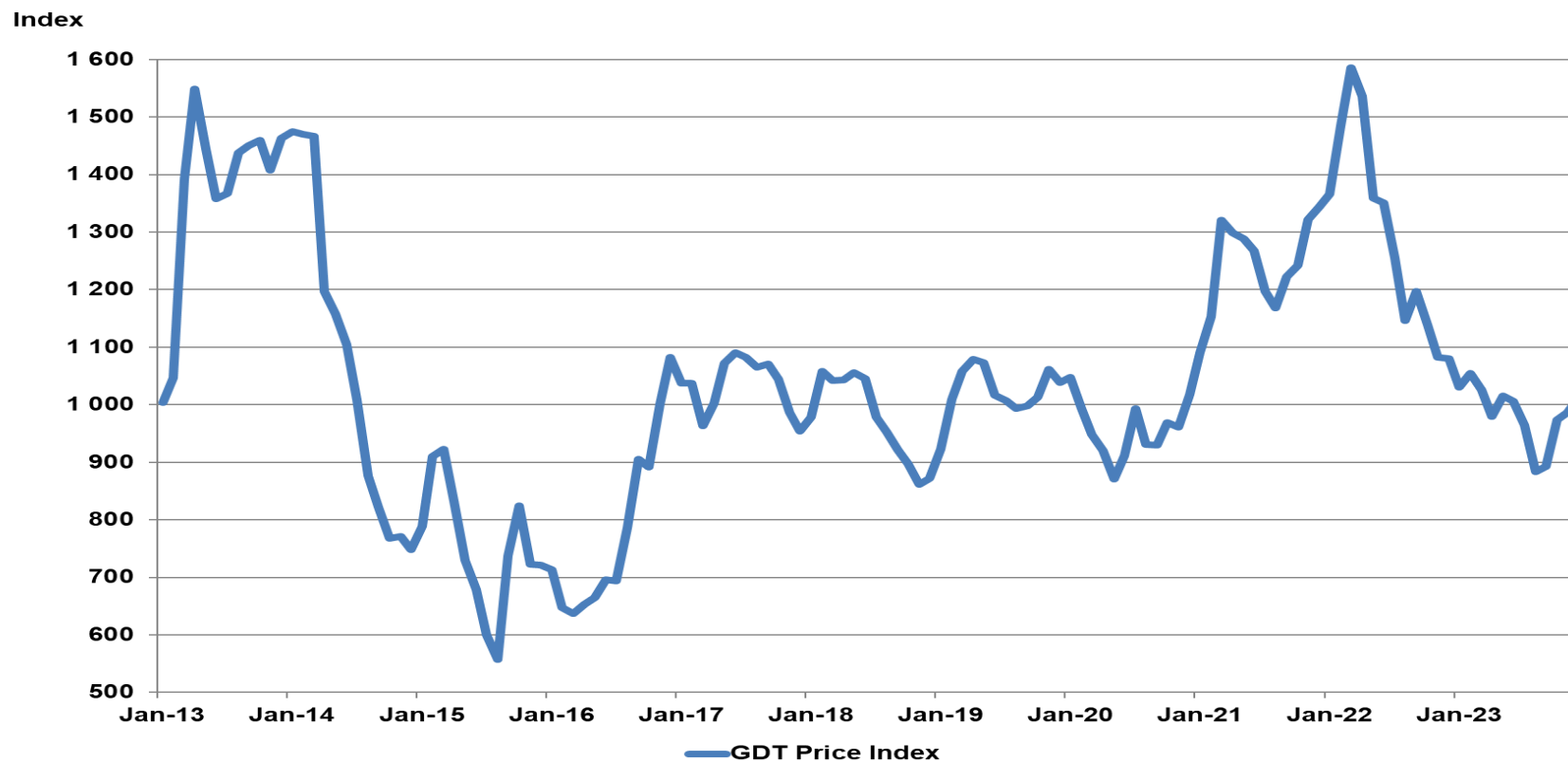
Source: USDA, SARB

The December 2023 USD price for all the international dairy products is lower than for the same month of 2022, except for butter, which increased by 9.5%. SMP, Cheddar, and FMP respectively are down by 15.5%, 16.2%, and 6.0%.

The December 2023 ZAR price for all the international dairy products is lower than for the same month of 2022, except for butter up 18.2% and FMP marginally higher. SMP and Cheddar respectively down by 8.8% and 9.6%.

The ZAR weakened by 10% from December 2022 to December 2023.

FIGURE 2A: GLOBAL DAIRY TRADE-WEIGHTED PRICE INDEX. JANUARY 2013 – DECEMBER 2023



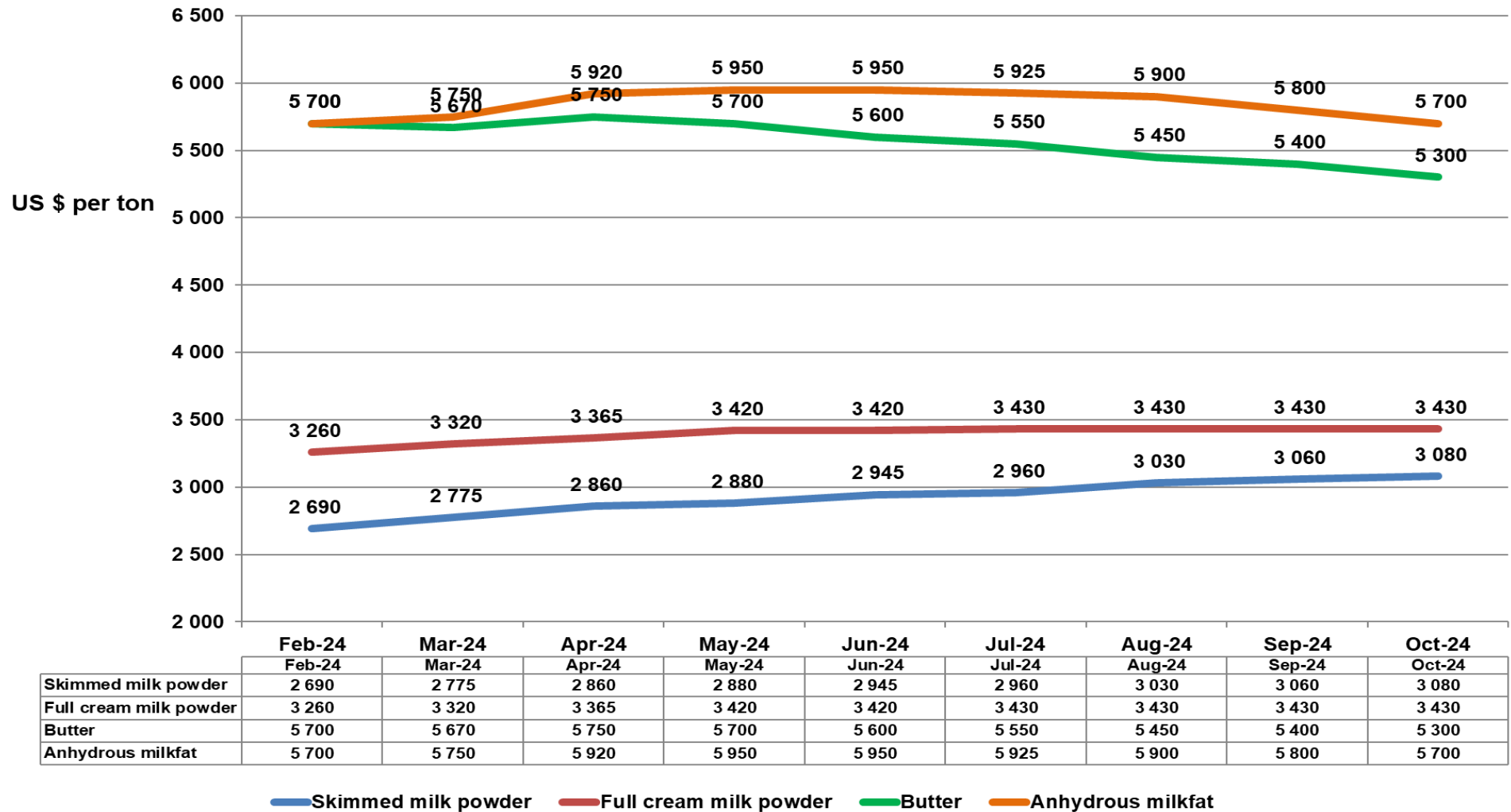
Source: Global Dairy

The Global Dairy Trade platform is an online auction through which large volumes of dairy products can be sold or bought. There are two trading events per month where people across the globe can enter bids and/or offers.

Figure 2A shows the movement of the Global Dairy Trade (GDT) price index inclusive of December 2023. The GDT price index reached its lowest index level in August 2023 (884 points) ending a downward trend of 17 months and has since recovered to 1013 points in December 2023 (14.5%). The 1000 index point level can be regarded as a midpoint level that developed over the period January 2017 to January 2021.

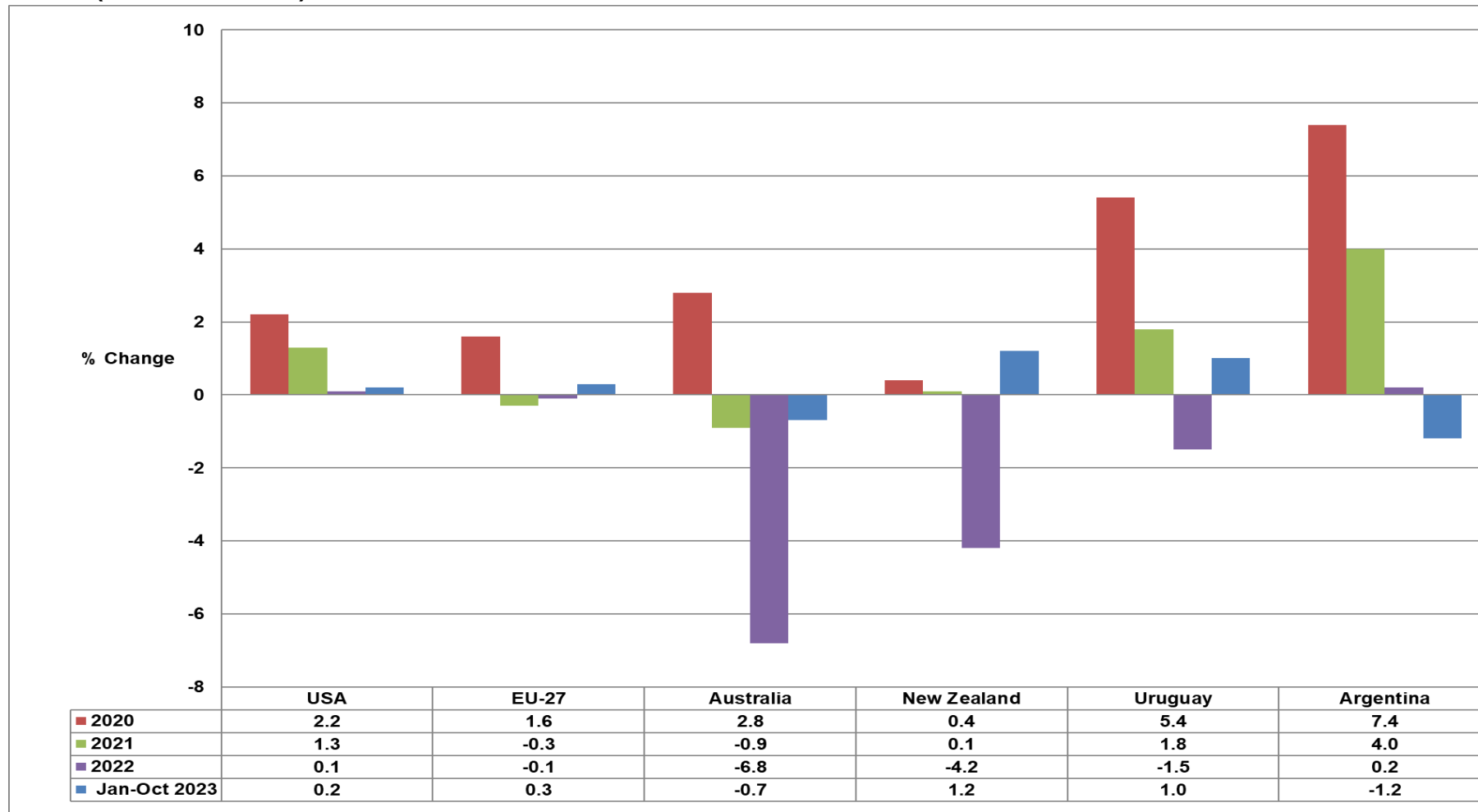
Figure 2B consists of the future prices on the New Zealand Future Exchange for butter, anhydrous milkfat, SMP and FMP. The prices of SMP and FMP have a steady upward trend. Both butter and anhydrous fat start the February future price at 5 700\$ per ton. Anhydrous fat then increased to 5 950\$ in May 2024 future but ended the period in the graph at the same level it started with. Butter increased to 5 750\$ in the April future but then entered a downward trend period to end the period in the graph at 5 300\$ per ton.

**FIGURE 2B: FUTURE PRICES FOR DAIRY PRODUCTS ACHIEVED ON THE NEW ZEALAND FUTURES EXCHANGE (NZX):
FEBRUARY 2024 – OCTOBER 2024**



Source: NZX Futures, January 2024

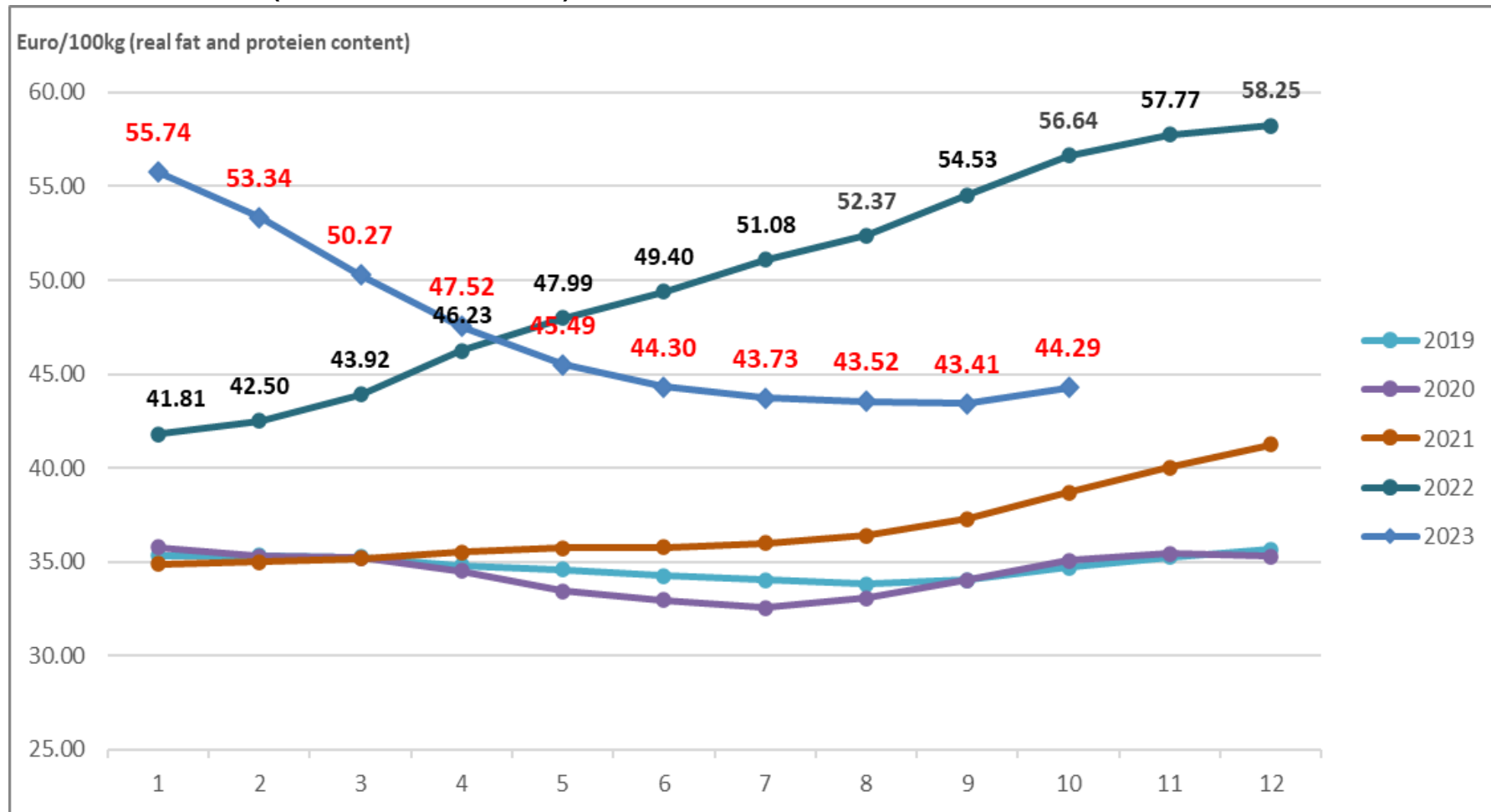
FIGURE 3: YEAR-ON-YEAR CHANGE IN UNPROCESSED MILK PRODUCTION IN MAJOR DAIRY EXPORTING COUNTRIES, 2020 – 2023 (First 10 months)



Source: CLAL, January 2024

Unprocessed milk production in the countries monitored in Figure 3, are all showing improved levels of unprocessed milk production except for Argentina. The most meaningful stimulation of unprocessed milk production occurred in New Zealand and Australia.

FIGURE 4: WEIGHTED AVERAGE PRODUCER PRICE OF UNPROCESSED MILK IN THE EU27 (excluding the UK). JANUARY 2019 – OCTOBER 2023 (Last month's estimate)

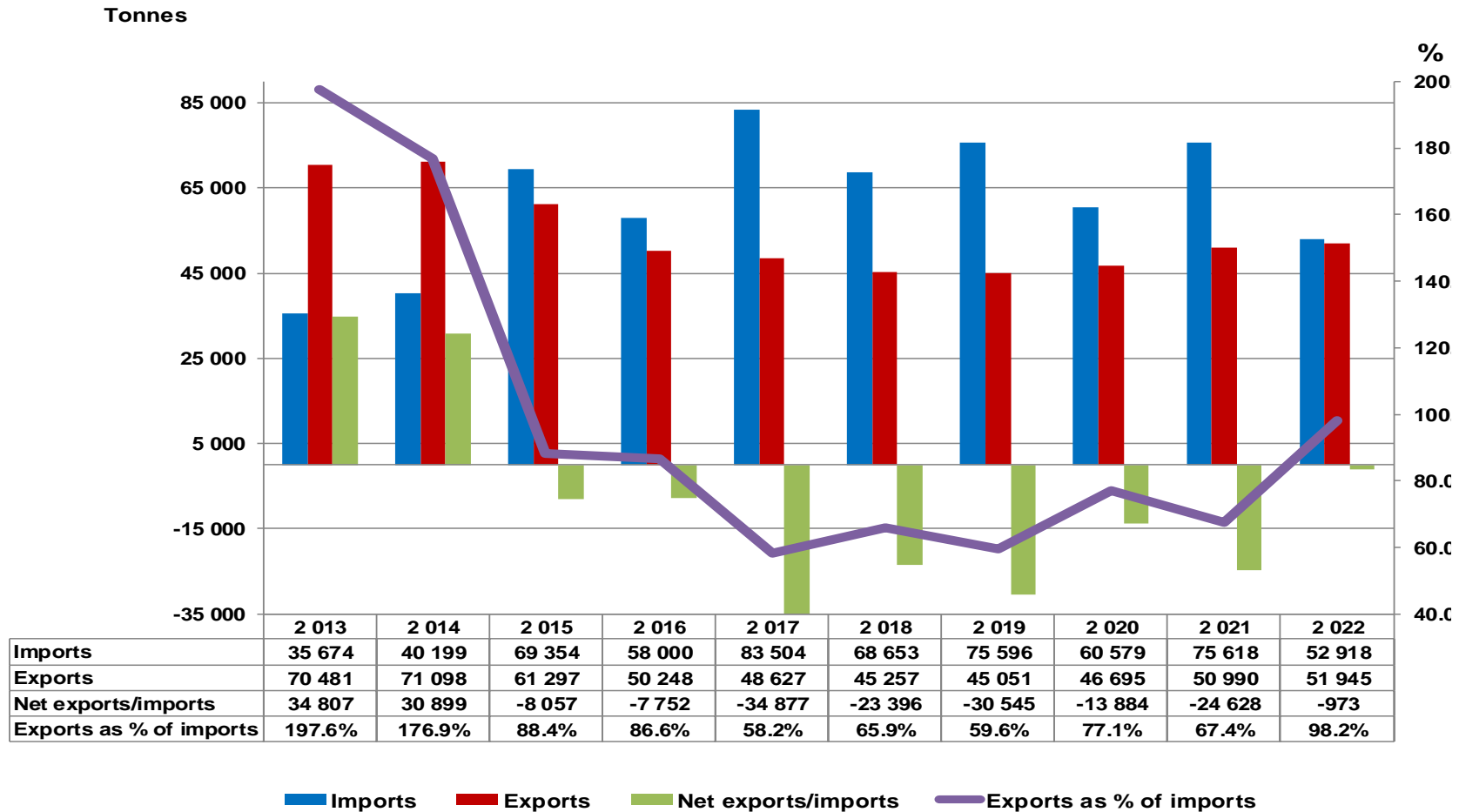


Source: European Commission, January 2024

The constantly rising trend in Figure 4 that was in play for the whole of 2021 and 2022 ended abruptly at the beginning of 2023. The average EU price in October 2023 is down by 21.8% compared to the October 2022 price level. The steep drop started to level out in June 2023 with October 2023 registering a marginal increase of 2% over September 2023, ending a nine-month downward trend.

2. SOUTH AFRICAN DAIRY MARKET

FIGURE 5: TOTAL SOUTH AFRICAN IMPORTS AND EXPORTS OF DAIRY PRODUCTS, 2013 – 2022



Source: SARS as supplied by SAMPRO

The information regarding imports and exports by South Africa of dairy products in 2022, showed that:

- The mass of imports in 2022, was 30.0 percent lower than in 2021, and 12.6 percent lower than in 2020. The mass of imports of buttermilk powder (04.03) and whey and whey powder (04.04) was higher in 2022, compared to 2021, while the mass of the other four products was lower.
- The mass of exports in 2022, was 1.9 percent higher than in 2021 and 11.3 percent higher than in 2020. This increase is due to the increases in exports of four of the six categories of dairy products.
- The mass of imports and exports in 2022, showed that South Africa was a net importer of concentrated milk (04.02), whey (04.04), butter (04.05), and cheese (04.06) and a net exporter of milk and cream (04.01), buttermilk and yogurt (04.03). The same net importer and net exporter status per product were applicable in 2021.
- The mass of the total sales of dairy products by South Africa to the other members of the Southern African Customs Union (Botswana, Eswatini, Lesotho and Namibia, the BeLN countries) in 2022, exceeds the mass of exports. (Exports are sales to destinations outside SACU); and the mass of the sales by South Africa to members of SACU, of all the dairy product categories in 2022, exceeds the mass of exports by South Africa. See Table1.

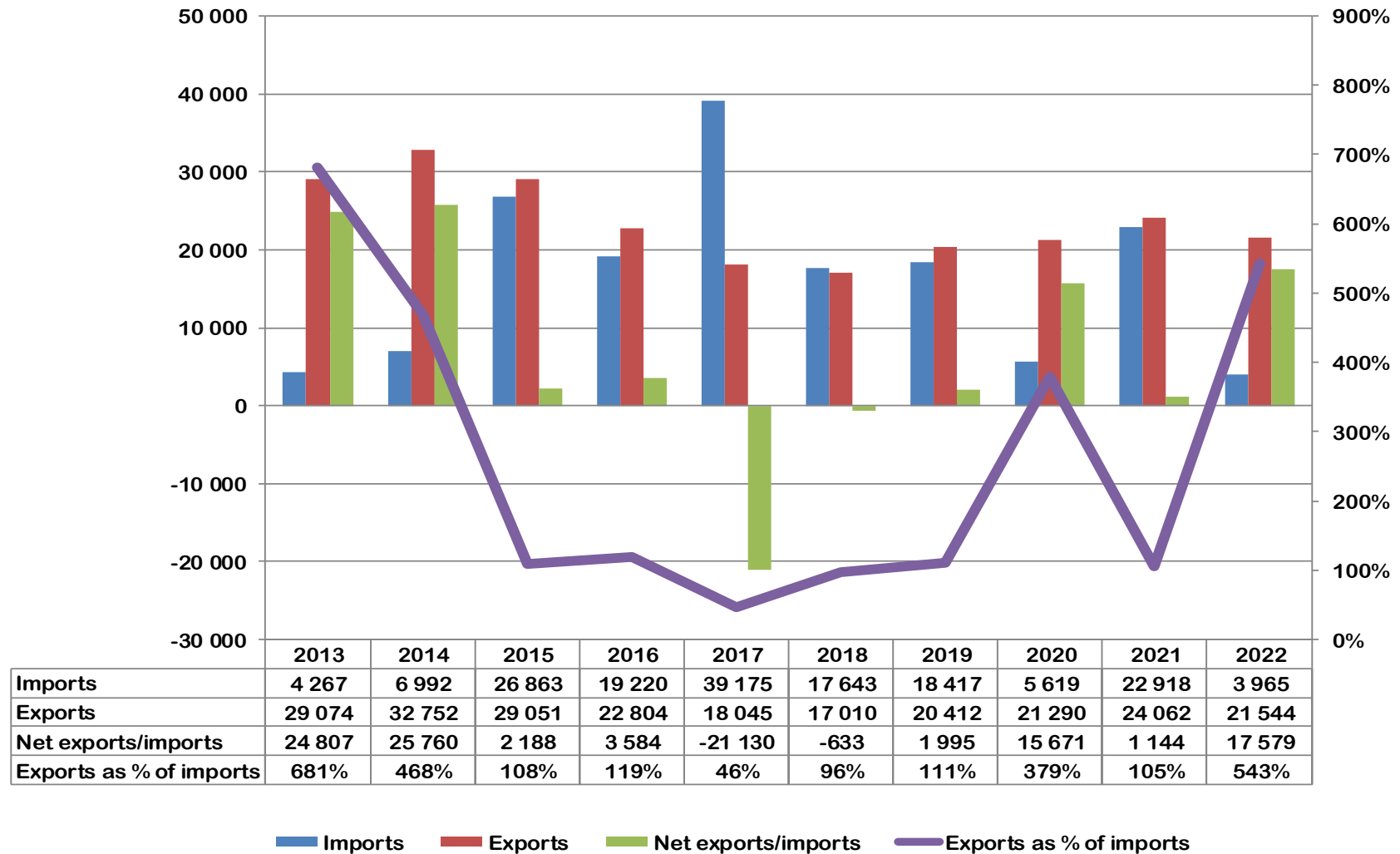
TABLE 1: MASS OF SALES TO THE BeLN COUNTRIES COMPARED TO EXPORTS OUTSIDE OF SACU IN THE PERIOD JANUARY 2022 TO DECEMBER 2022

Heading	Description	(A) Sales To BeLN	(B) Exports to Countries Outside SACU	(A+B) = (C) Sales to BeLN plus exports outside SACU	A as % of C
		Kilogram			
04.01	Milk and cream, unsweetened	66 615 847	21 544 230	88 160 078	75.6
04.02	Milk, concentrated	36 556 368	10 422 221	46 978 588	77.8
04.03	Buttermilk powder, yogurt	23 431 721	10 472 455	33 904 175	69.1
04.04	Whey, whey powder, etc	3 067 708	1 930 683	4 998 391	61.4
04.05	Butter, butter spreads and butter oil	1 828 965	1 225 720	3 054 685	59.9
04.06	Cheese and curd	6 657 546	6 349 359	13 006 905	51.2
Total		138 158 155	51 944 668	190 120 823	72.7

Source: SARS as supplied by SAMPRO

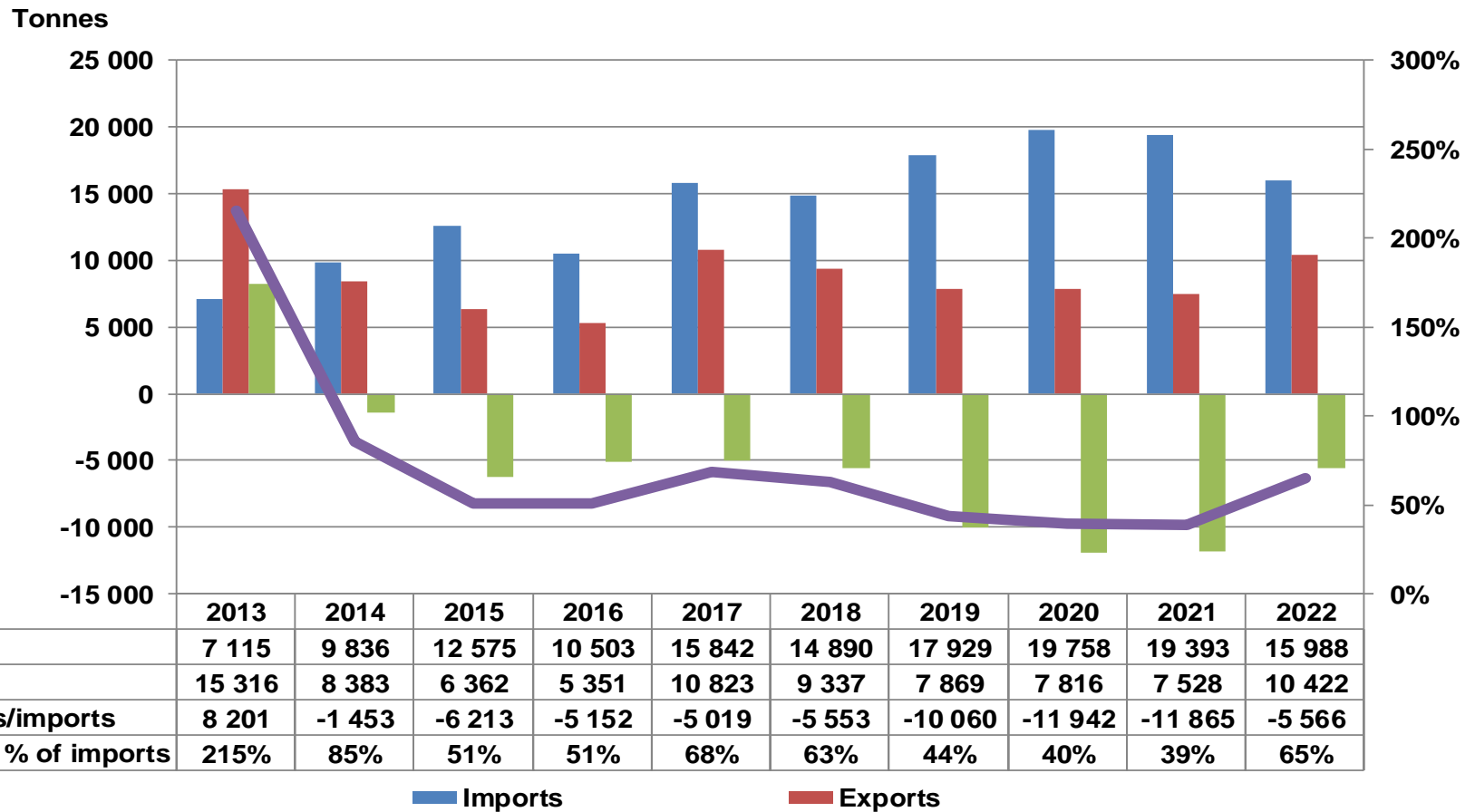
FIGURE 6: SOUTH AFRICAN IMPORTS AND EXPORTS OF MILK AND CREAM (04.01), 2013 – 2022

Tonnes



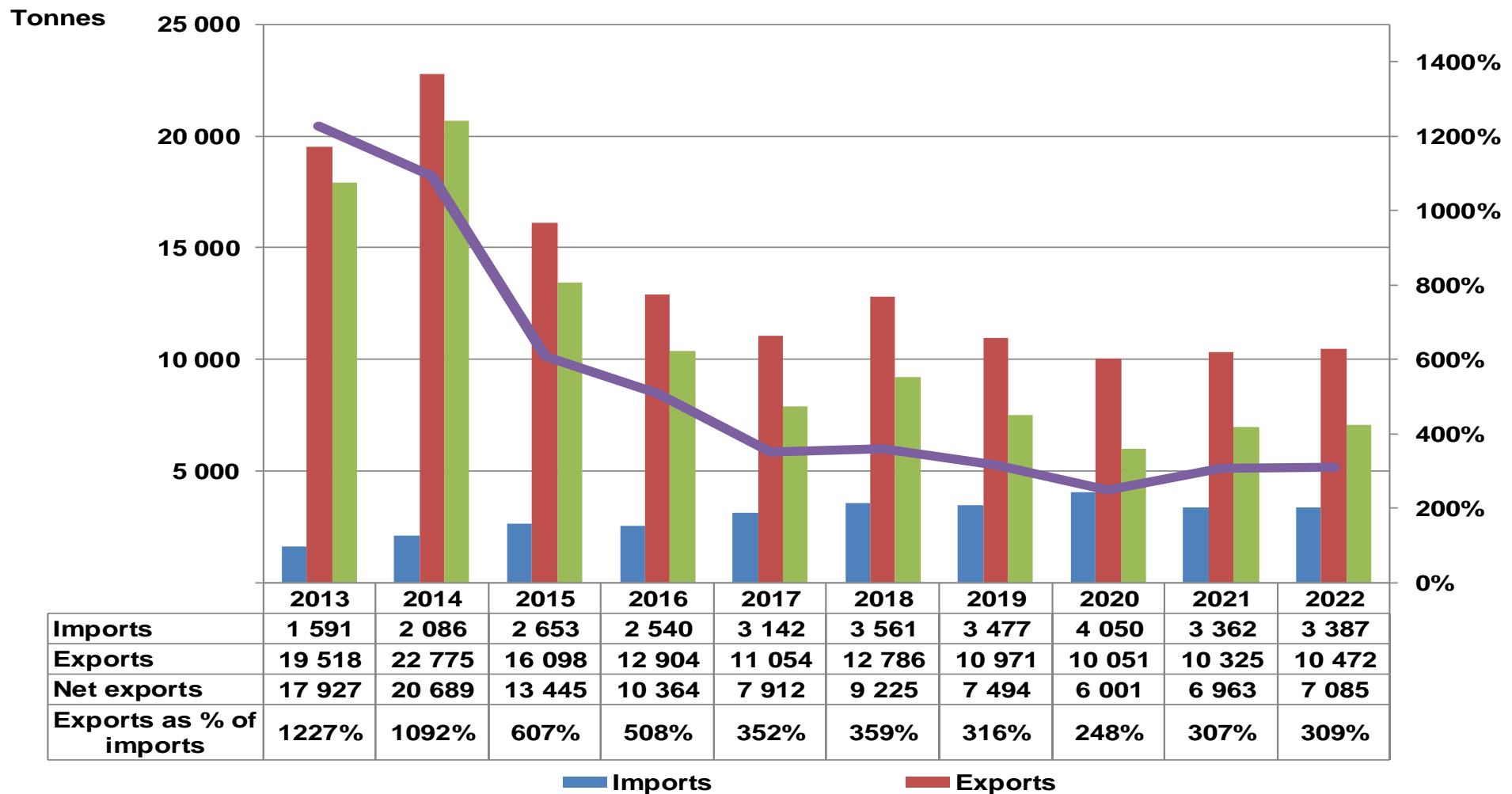
Source: SARS as supplied by SAMPRO

FIGURE 7: SOUTH AFRICAN IMPORTS AND EXPORTS OF CONCENTRATED MILK, (04.02), 2013 – 2022



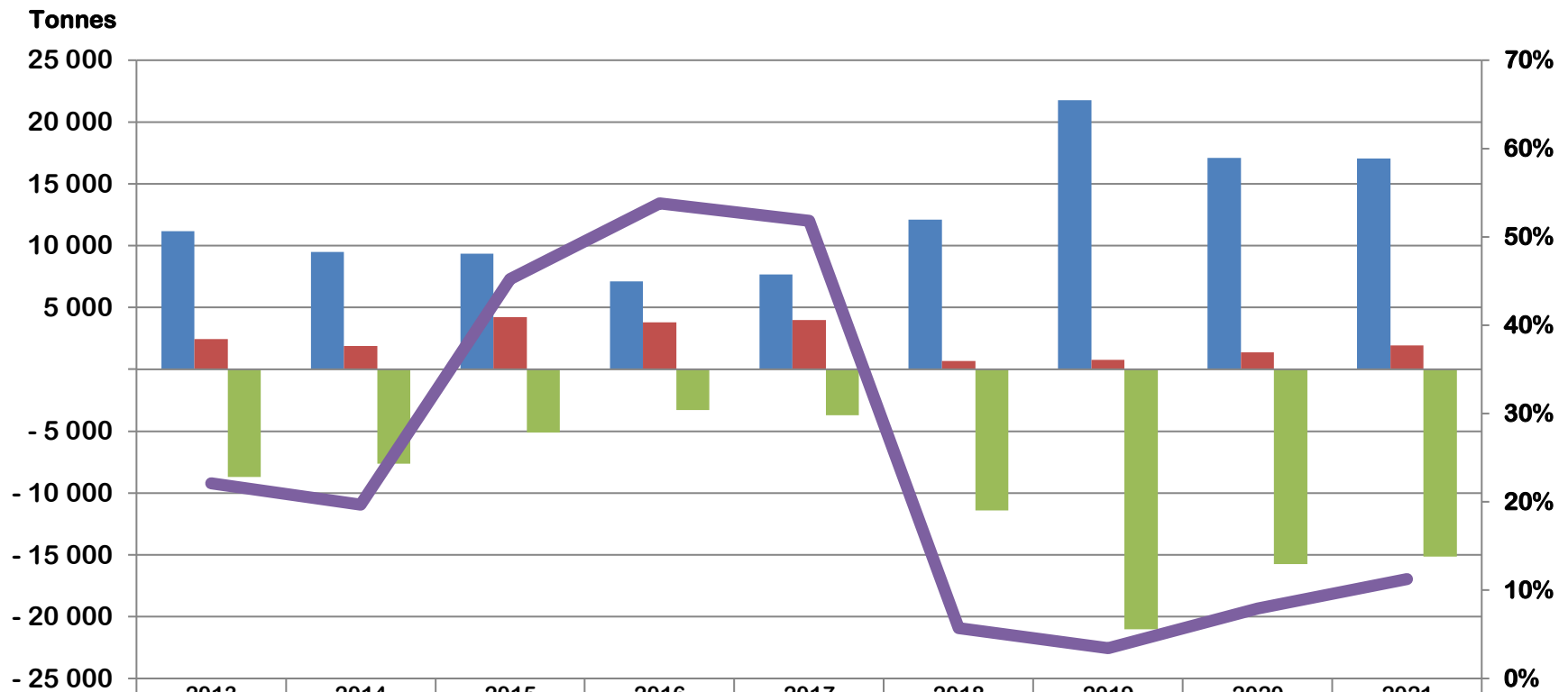
Source: SARS as supplied by SAMPRO

FIGURE 8: SOUTH AFRICAN IMPORTS AND EXPORTS OF BUTTERMILK AND YOGHURT, (04.03), 2013 – 2022



Source: SARS as supplied by SAMPRO

FIGURE 9: SOUTH AFRICAN IMPORTS AND EXPORTS OF WHEY AND WHEY POWDER, (04.04), 2013 – 2022

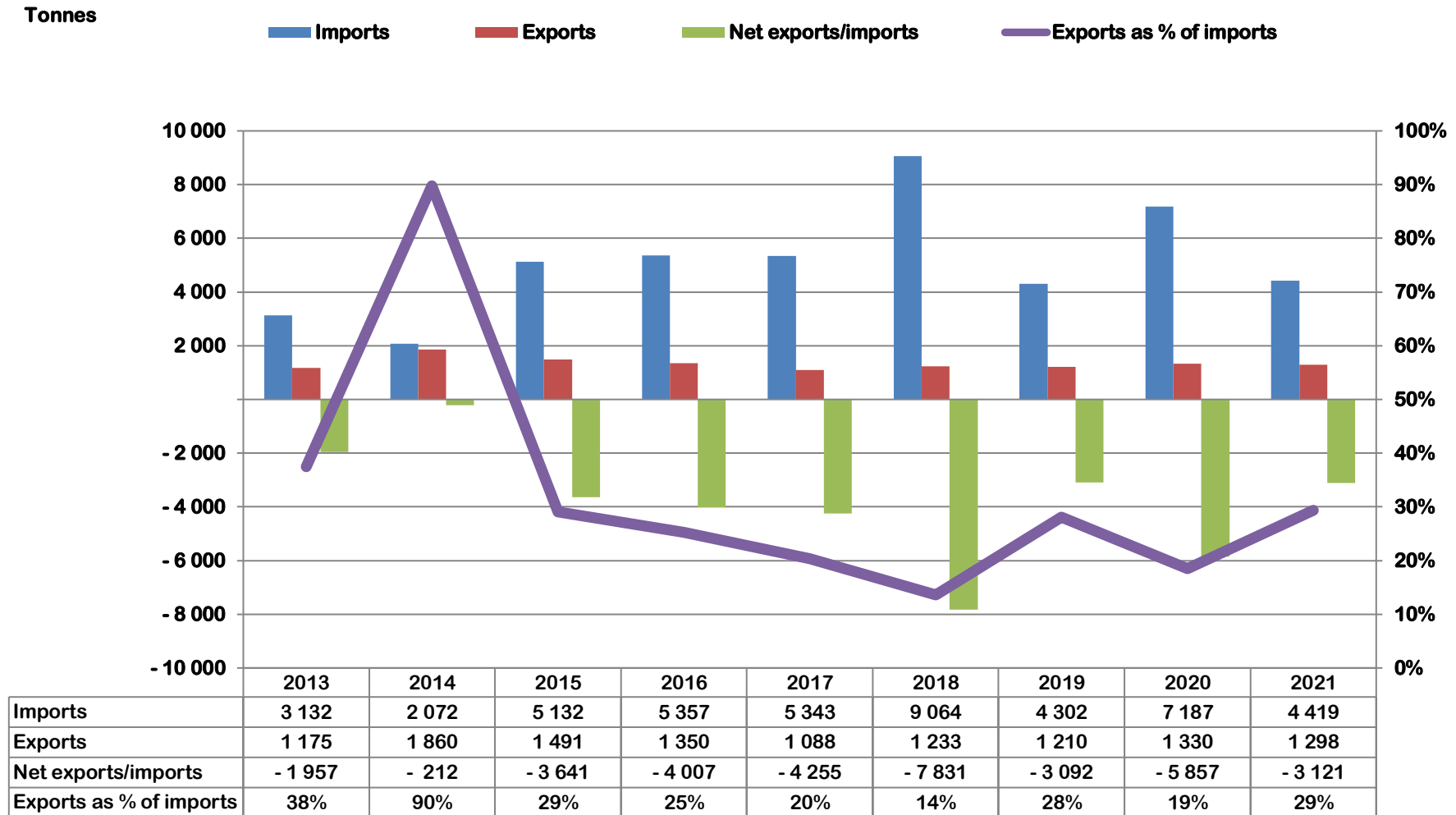


	2013	2014	2015	2016	2017	2018	2019	2020	2021
Imports	11 165	9 480	9 365	7 096	7 674	12 084	21 755	17 094	17 055
Exports	2 466	1 868	4 232	3 817	3 978	692	746	1 359	1 920
Net exports/imports	- 8 699	- 7 612	- 5 133	- 3 279	- 3 696	- 11 392	- 21 009	- 15 735	- 15 135
Exports as % of imports	22%	20%	45%	54%	52%	6%	3%	8%	11%

■ Imports
 ■ Exports
 ■ Net exports/imports
 — Exports as % of imports

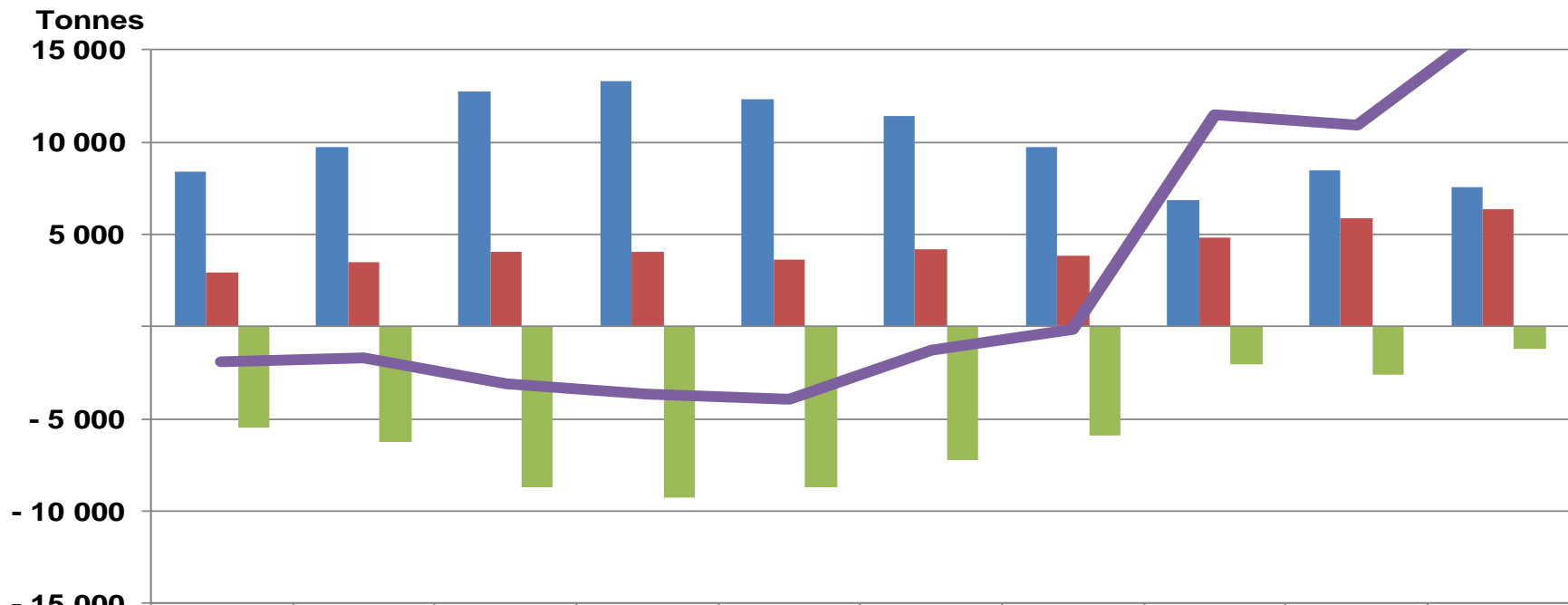
Source: As supplied by SAMPRO

FIGURE 10: SOUTH AFRICAN IMPORTS AND EXPORTS OF BUTTER AND MILKFATS, (04.05) 2013 – 2022



Source: As supplied by SAMPRO

FIGURE 11: SOUTH AFRICAN IMPORTS AND EXPORTS OF CHEESE AND CURD, (04.06), 2013 – 2022



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Imports	8 403	9 732	12 766	13 285	12 328	11 447	9 713	6 871	8 471	7 540
Exports	2 932	3 461	4 062	4 022	3 640	4 200	3 844	4 850	5 857	6 349
Net exports/imports	- 5 471	- 6 271	- 8 704	- 9 263	- 8 688	- 7 247	- 5 869	- 2 021	- 2 614	- 1 191
Exports as % of imports	35%	36%	32%	30%	30%	37%	40%	71%	69%	84%

■ Imports

■ Exports

Source: SARS as supplied by SAMPRO

TABLE 2: AVERAGE SOUTH AFRICAN IMPORT AND EXPORT FOB PRICES FOR DAIRY PRODUCTS, 2018– 2022

Tariff heading	Description	Import price (R/kg)					Export price (R/kg)				
		2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
04.01	Milk & cream	8.00	8.95	10.32	9.04	13.78	11.20	11.30	12.23	13.14	15.49
04.02	Concentrated milk	30.84	36.49	46.22	46.68	63.22	36.56	36.97	46.98	49.56	63.53
04.03	Buttermilk & yoghurt	23.51	32.27	40.32	40.13	60.42	18.45	21.02	20.28	24.25	22.54
04.04	Whey	29.33	25.77	39.68	33.53	36.14	18.71	18.03	19.50	21.71	38.93
04.05	Butter	72.84	70.17	69.25	67.01	87.18	67.27	56.89	73.57	69.04	79.38
04.06	Cheese	62.92	69.85	79.19	70.06	88.67	53.15	56.25	58.17	62.69	70.75

Source: SARS as supplied to SAMPRO

The average free-on-board (F.O.B) export prices in 2022, for five of the six different categories of dairy products, were higher than in 2021, while for import F.O.B prices of all the categories were higher in 2022 compared to 2021.

In Table 3, the mass of imports from January to September 2023, is compared to the mass of imports from January to September 2022. The mass of imports of three of the six products was higher during the above comparative periods. Milk and cream (04.01) imports increased the most with 145% while butter, butter spreads and butter oil decreased the most with 71%. The mass of total imports decreased by 5.6%.

TABLE 3: IMPORTS IN JANUARY TO SEPTEMBER 2023 COMPARED TO JANUARY 2022 TO SEPTEMBER 2022

Heading	Description	A 2023 Kg	B 2022 Kg	A as % of B
04.01	Milk and cream, unsweetened	5 693 695	2 324 061	245.0
04.02	Milk, concentrated	14 436 017	11 161 554	129.3
04.03	Buttermilk powder, yogurt	2 818 479	2 401 281	117.4
04.04	Whey, whey powder, etc	9 099 226	15 644 211	58.2
04.05	Butter, butter spreads and butter oil	1 019 515	3 483 562	29.3
04.06	Cheese and curd	5 511 674	5 853 152	94.2
Total		38 578 605	40 867 821	94.4

Source: SARS as supplied to SAMPRO

In Table 4, the mass of exports from January to September 2023, is compared to the mass of exports from January to September 2022. On the export front, the mass of exports of four of the six categories of dairy products was higher in the above comparative periods. Cheese and curd (04.06) exports increased the most with 32% while whey, whey powder. etc (04.04) decreased the most with 15.6%. The mass of total exports increased by 5.9%.

TABLE 4: EXPORTS IN JANUARY TO SEPTEMBER 2023 COMPARED TO JANUARY 2022 TO SEPTEMBER 2022

Heading	Description	A 2023 Kg	B 2022 Kg	A as % of B
04.01	Milk and cream, unsweetened	16 338 888	15 889 729	102.8
04.02	Milk, concentrated	7 865 617	7 718 601	101.9
04.03	Buttermilk powder, yoghurt	8 104 151	7 478 138	108.4
04.04	Whey, whey powder. etc	1 291 958	1 545 803	83.6
04.05	Butter, butter spreads and butter oil	805 156	920 503	87.5
04.06	Cheese and curd	5 742 766	4 350 566	132.0
Total		40 148 537	37 903 341	105.9

Source: SARS as supplied to SAMPRO

TABLE 5: CHANGES IN THE RETAIL SALES QUANTITIES FROM THE YEAR OCTOBER 2021 TO SEPTEMBER 2022, TO THE YEAR OCTOBER 2022 TO SEPTEMBER 2023 AND CHANGES IN THE RETAIL PRICES FROM SEPTEMBER 2022 TO SEPTEMBER 2023 OF SPECIFIC DAIRY PRODUCTS

PRODUCT	CHANGE IN RETAIL SALES QUANTITY	CHANGE IN RETAIL PRICES
	PERCENT	PERCENT
FRESH MILK	-5.8	12.8
LONG LIFE MILK (UHT MILK)	-4.2	14.9
FLAVOURED MILK	-10.7	9.4
YOGHURT	-7.6	9.6
MAAS	-5.9	16.8
PRE-PACKAGED CHEESE	-1.1	13.2
CREAM CHEESE	5.6	8.6
BUTTER	-5.8	12.3
CREAM	-3.1	8.6

Source: Nielsen figures supplied by SAMPRO

In Table 5 the average retail prices of all nine products were higher in September 2023, than in September 2022; and all the prices increased with more than the Headline inflation rate of 5.4%. All the products also increased with more than the food inflation rate of 8.0%. The magnitude of the differential between Headline inflation and the dairy product price increases does not bode well for dairy demand. For the period October 2021 to September 2022 compared to October 2022 to September 2023, only cream cheese sales quantity improved while the rest saw sales quantity declining.

The percentage changes in the average retail prices indicated in Table 5, do not mean that the prices changed continuously at the same rate, during the period concerned. This situation is illustrated in Table 6.

TABLE 6: CHANGES IN THE QUANTITIES OF RETAIL SALES OF SPECIFIC DAIRY PRODUCTS

PRODUCT	Sales in the month of September 2023 versus the sales in the month of September 2022	Sales in the 3 months from July to September 2023 versus the sales in the 3 months from July to September 2022	Sales in the 6 months from April 2023 to September 2023 versus the sales in the 6 months from April 2022 to September 2022	Sales in the 9 months from January 2023 to September 2023 versus the sales in the 9 months from January 2022 to September 2022	Sales in the 12 months from October 2022 to September 2023 versus the sales in the 12 months from October 2021 to September 2022
	percent	percent	percent	percent	percent
Fresh Milk	-6.5	-6.4	-6.2	-6.1	-5.8
UHT milk	-2.8	-0.13	-2.6	-4.9	-4.2
Flavoured milk	-8.8	-10.9	-11.5	-11.5	-10.7
Yoghurt	-1.8	-7.1	-8.5	-8.5	-7.6
Maas	-2.4	-6.6	-7.9	-7.2	-5.9
Pre-packaged cheese	-3.4	-1.5	-1.0	-1.6	-1.1
Cream cheese	19.0	15.9	11.3	8.4	5.6
Butter	-15.4	-3.5	-4.0	-6.6	-5.8
Cream	2.1	-1.3	-2.3	-2.7	-3.1

Source: Nielsen as supplied by SAMPRO

In Table 6, the retail sales quantities of all the dairy products in all the different time periods decreased with the exception of cream cheese and cream.

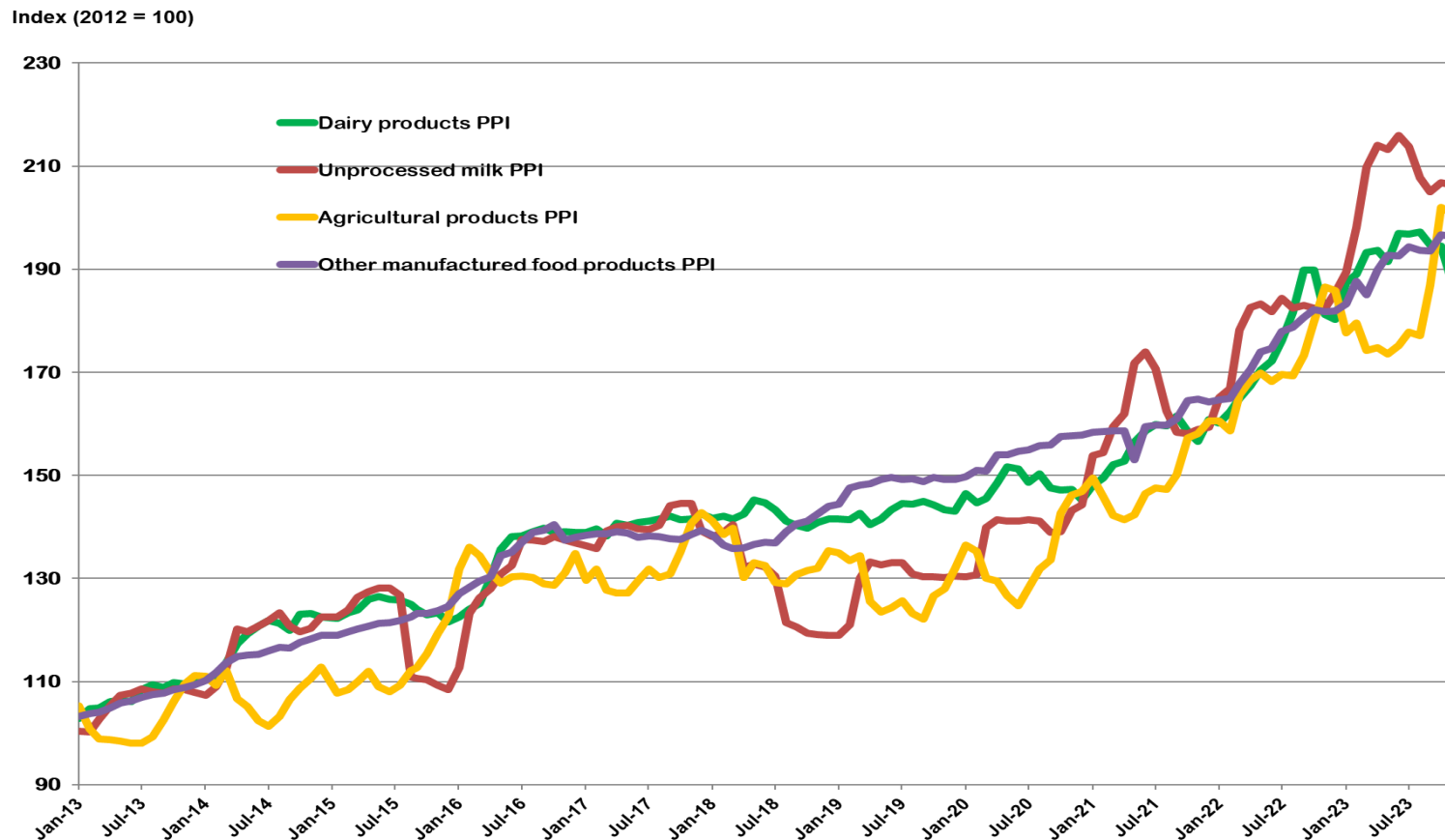
TABLE 7: THE AVERAGE RETAIL PRICES OF SPECIFIC DAIRY PRODUCTS IN SEPTEMBER 2023, COMPARED TO THE AVERAGE RETAIL PRICES OF THE PRODUCTS CONCERNED IN SPECIFIC PREVIOUS MONTHS OF 2022 AND 2021

PRODUCT	September 2023 versus August 2023	September 2023 versus June 2023	September 2023 versus March 2023	September 2023 versus December 2022	September 2023 versus September 2022	September 2023 versus March 2022	September 2023 versus September 2021
	(1 month ago)	(3 months ago)	(6 months ago)	(9 months ago)	(12 months ago)	(18 months ago)	(24 months ago)
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
FRESH MILK	-0.1	-1.0	0.5	10.2	12.8	18.1	19.0
UHT MILK	0.3	-0.4	5.2	11.0	14.9	27.0	23.9
FLAVOURED MILK	1.5	1.4	2.2	10.5	9.4	23.8	22.4
YOGHURT	-2.9	-0.03	1.8	8.4	9.6	18.0	19.3
MAAS	-0.3	0.5	2.2	12.1	16.8	26.6	28.4
PRE-PACKAGED CHEESE	-0.07	2.9	5.0	7.4	13.2	21.1	18.9
CREAM CHEESE	0.6	-0.2	4.0	5.4	8.6	15.6	17.4
BUTTER	1.9	0.5	6.7	2.7	12.3	22.4	18.2
CREAM	-0.8	-0.9	1.9	6.2	8.6	15.5	18.5

Source: Nielsen as supplied by SAMPRO

In Table 7, there are some signs that retail price increases in the most recent periods as per the above table, are calming down.

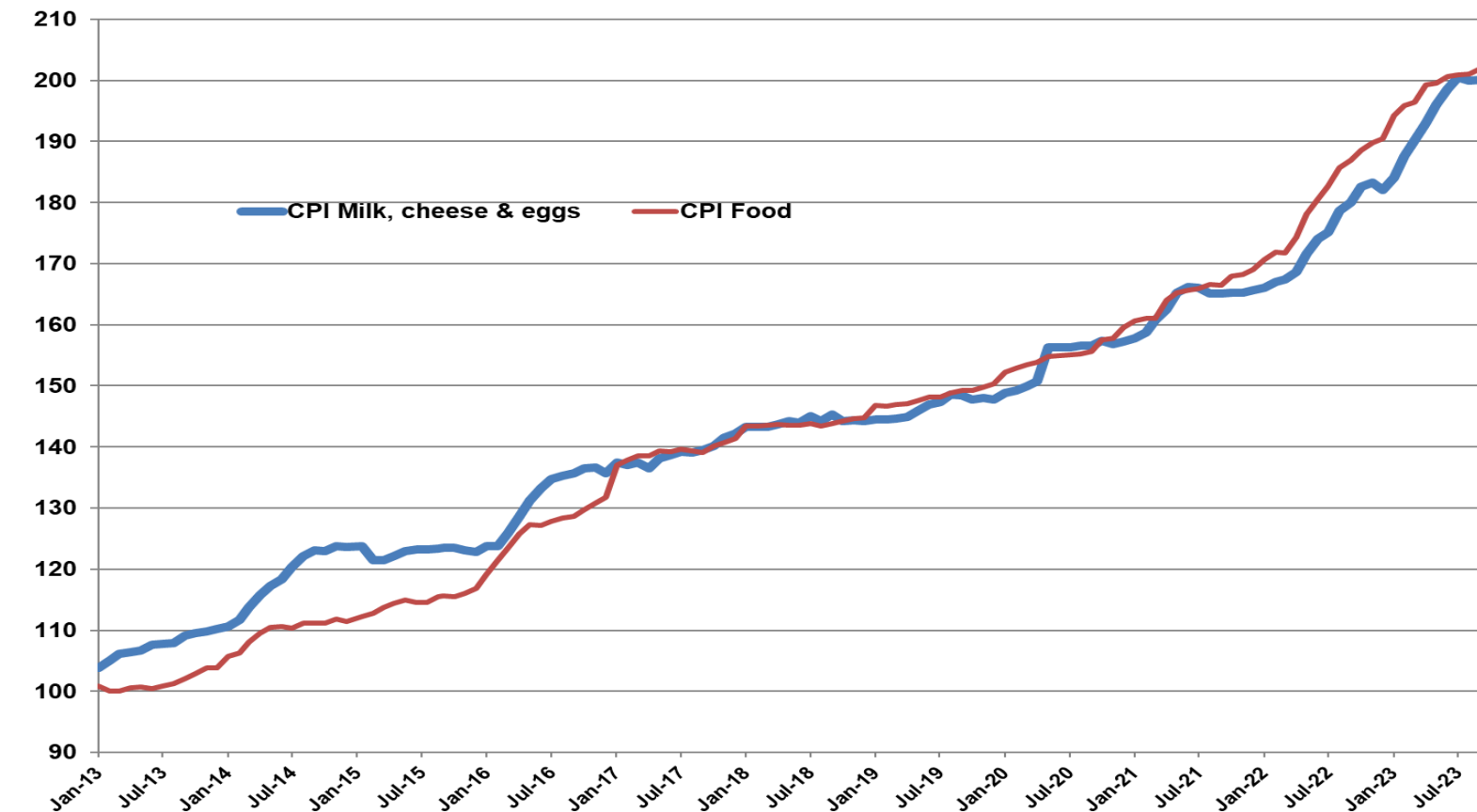
FIGURE 12: PRODUCER PRICE INDICES OF SOUTH AFRICAN AGRICULTURAL AND FOOD PRODUCTS, JANUARY 2013 – NOVEMBER 2023



Source: Stats SA

The PPI for unprocessed milk increased by 13.1% in November 2023 year on year, down from the 2023 high of 18.8% (June). The PPI for dairy products increased by 3.7% in November 2023 year on year, down from the 2023 high of 17.1% (March). The PPI for other manufactured food products increased by 8.0% in November 2023 year on year, down from the 2023 high of 13.7% (February). The overall PPI for agriculture increased by 7.1% in November 2023 year on year, down from the 2023 high of 13.2% (February). All the indices measured in Figure 12 improved in unison with softer raw material prices and reduced inflation worldwide.

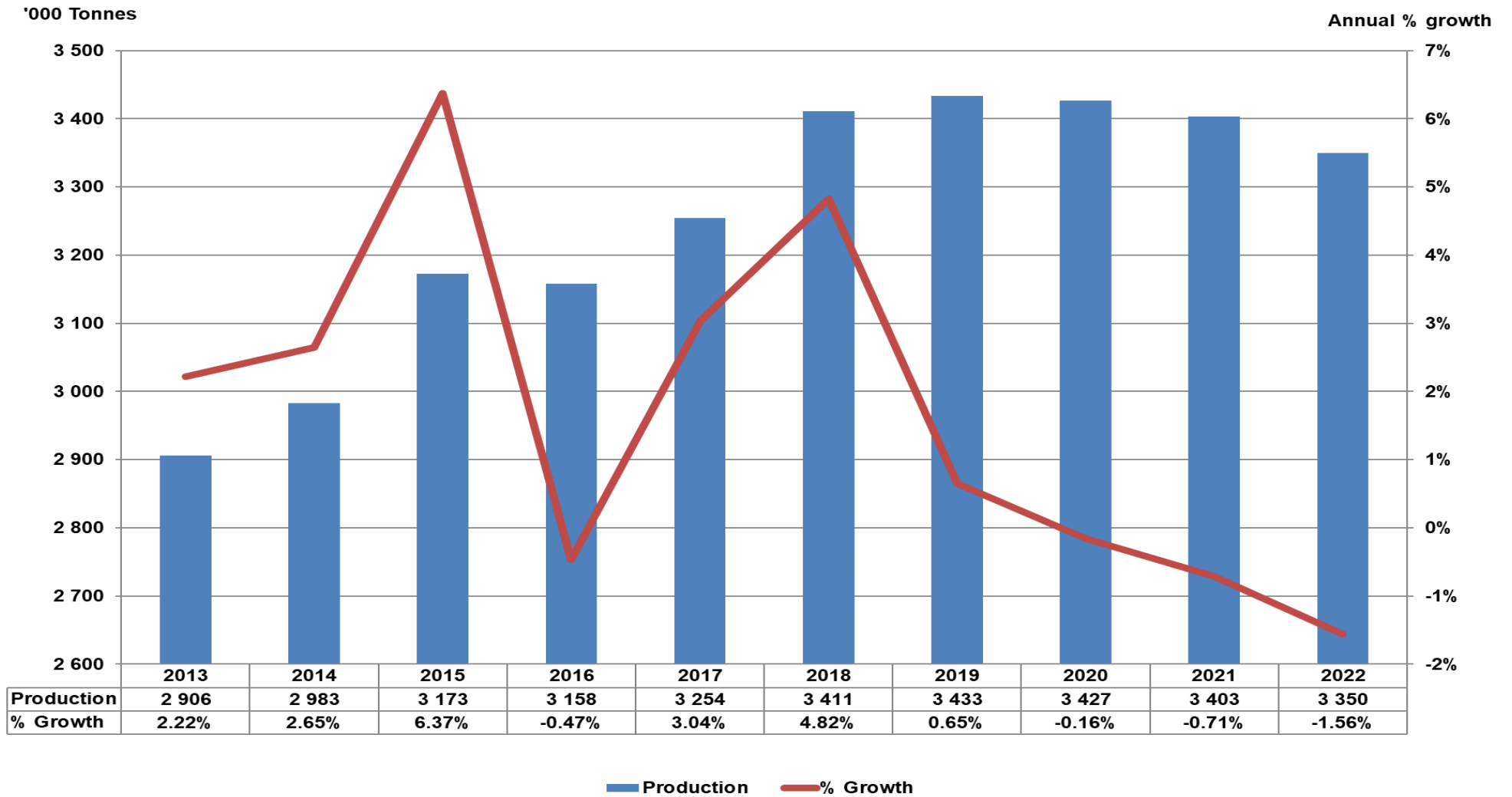
FIGURE 13: CONSUMER PRICE INDICES OF SOUTH AFRICAN FOOD AND DAIRY PRODUCTS, JANUARY 2013 – NOVEMBER 2023



Source: Stats SA

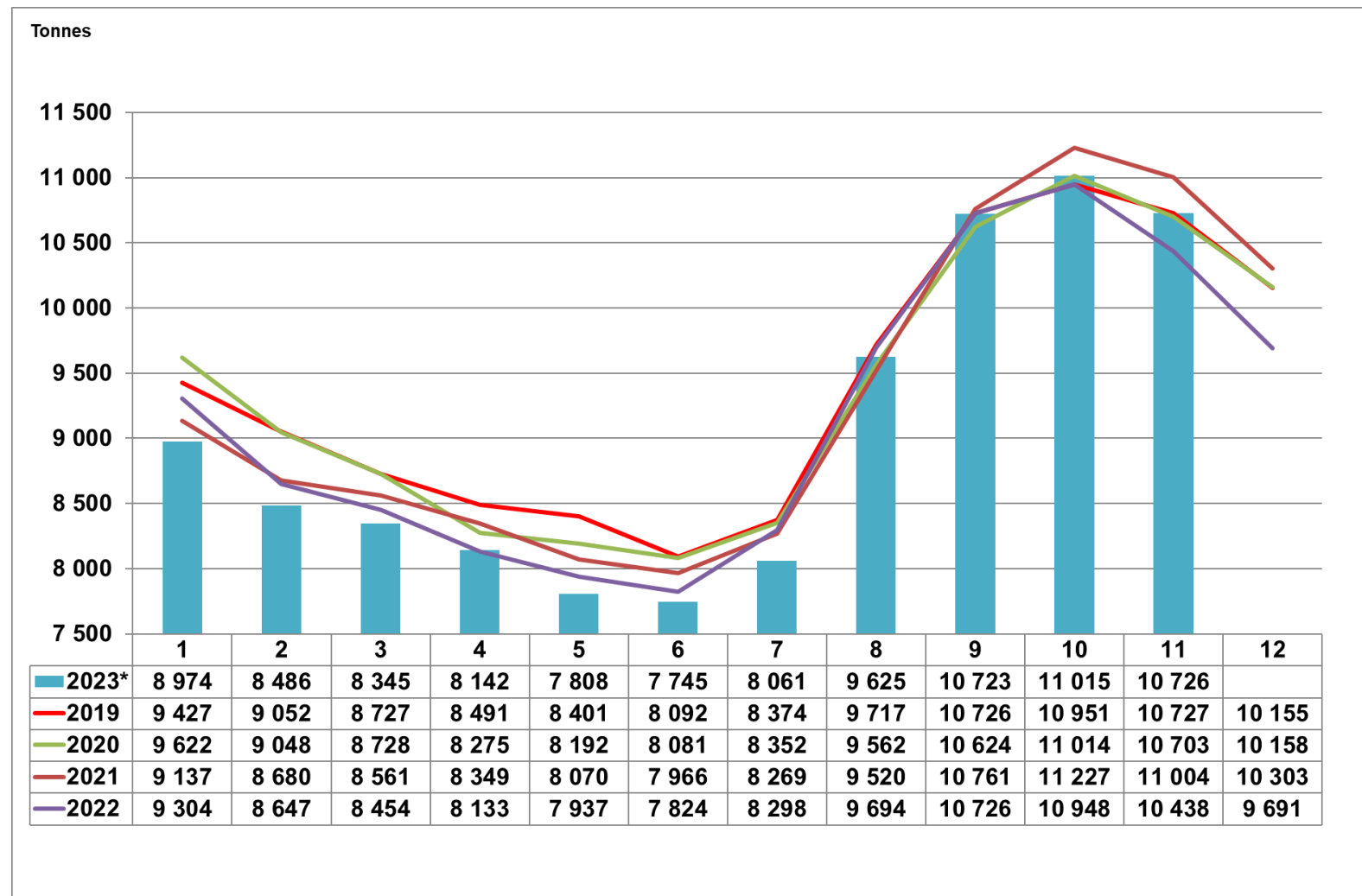
In January 2022 the change to a steeper upward slope for the two indices is visible. Up until that time the pressure build-up in producer price indices was absorbed/partly absorbed by role players in the different value chains to protect the affordability of food and sales volume. The pressure build-up lasted too long and was aggravated by erratic electricity supply, dilapidated infrastructure, poor service delivery, and the cost of energy in general with the consequential effect that price transfer spilled into consumer prices. The CPI for milk, cheese, and eggs increased by 13.9% in November 2023 year on year, down from the 2023 high of 14.5% (April). The CPI for food increased by 9.0% in November 2023 year on year, down from the 2023 high of 14.4% (March).

FIGURE 14: ANNUAL SOUTH AFRICAN UNPROCESSED MILK PURCHASES, 2013 – 2022



Source: Milk SA

FIGURE 15: SOUTH AFRICAN UNPROCESSED MILK PURCHASES DAILY AVERAGE PER MONTH, JANUARY 2019 – NOVEMBER 2023



Source: Milk SA. The last two months are preliminary.

Daily average unprocessed milk purchases in 2023 are generally lower compared to 2022 but started to move to the same levels from August onward.

TABLE 8: CUMULATIVE UNPROCESSED MILK PURCHASES (Tonnes), 2019 – 2023

Month	2019	2020	2021	2022	2023
January	292 222	298 287	283 260	288 433	278 186
February	545 682	560 678	526 286	530 550	515 784
March	816 208	831 233	791 682	792 617	774 464
April	1 070 927	1 079 473	1 042 152	1 036 592	1 018 736
May	1 331 360	1 333 417	1 292 311	1 282 647	1 260 780
June	1 574 114	1 575 855	1 531 293	1 517 370	1 493 124
July	1 833 695	1 834 773	1 787 625	1 774 605	1 743 008
August	2 134 907	2 131 205	2 082 757	2 075 131	2 041 376
September	2 456 699	2 449 933	2 405 584	2 396 918	2 363 077
October	2 796 179	2 791 371	2 753 615	2 736 299	2 700 160
November	3 117 985	3 112 446	3 083 722	3 049 429	3 019 613
December	3 432 802	3 427 335	3 403 100	3 349 861	3 328 378

Source: Milk SA. The last two months are preliminary.

During 2022, 3 349 861 tonnes of unprocessed milk were purchased, which is 1.56% less than in 2021. The cumulative unprocessed milk purchases for 2023 were 0.64% less than the same period in 2022.

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