



Dairy market trends

October 2019

Dairy Market Trends October 2019

Executive summary

Cost price squeeze blow for the primary dairy industry.

The low producer price for unprocessed milk together with the price increases of yellow maize and soya beans in October reduced the milk : feed price ratio to 1,15:1. The September 2019 derived feed price compared to September 2018 is 23% higher. At the milk : feed price ratio level the majority of dairy farmers will not break even and will have to fund their operations from equity or borrowings, if available. The double dip in the above ratio that farmers experienced in the first 10 months of 2019 will have a prolonged effect on supply in the coming months and in the next season.

Supply side

Unprocessed milk production for October 2019 is estimated at 332-million litres, 1.7% more than in October 2018. The comparative growth percentage for October 2018 was 3.7% and 3.5% for October 2017. Cumulative unprocessed milk production for 2019, inclusive of October is 2 705 million litres registering a growth of only 0.53%. Compared over the same period in 2018 the growth was 5.8%.

The primary industry is clearly haemorrhaging due to the cost price squeeze which is exacerbated by the unfavourable climatic and economic conditions. It seems that the overhang of dairy stocks that was created by the strong unprocessed milk production growth of 4,8% in 2018 adequately buffered the current low growth in production to still meet demand.

If the level of producer prices is a function of the demand from the secondary industry, it seems that supply and stock levels are adequate since some processors appear to stand aloof of the extent of the cost price squeeze in the primary industry. The MPO is still receiving information from farmers whose milk buyers are reducing producer prices or simply replacing current suppliers with unprocessed milk suppliers from other regions.

Dairy farmers need to plan to grow unprocessed milk production with less than 2% per year in order to achieve a progressive producer price scenario. The magnitude of the decrease in producer prices when slightly higher growth is registered is simply too devastating.

Dairy imports for the first nine months of 2019 is down compared to 2018. It is evident when compared to 2015, 2017 and 2018 that dairy imports are at a much lower level. The September 2019 cumulative import figure is 11% less than the September 2018 cumulative figure and 29% less than the September 2017 cumulative figure.

Demand side

The September year on year sales volumes and price changes are indicating that demand is more subdued than a year ago. Sales volumes are clearly under pressure with six of the nine products registering a negative growth, one product a small increase in volumes sold with the remaining two (yoghurt and maas) doing well. However, yoghurt and maas are not big volume players. Four product prices increased with less than inflation, two marginally more than inflation while three experienced more aggressive increases.

UHT milk that has been growing market share aggressively over the past three years with low price increases seems to be losing steam. Volumes sold in September 2019 is 9.3% lower than in September 2018. This will have a direct negative impact on the demand for unprocessed milk. Consumer spending has been under pressure for some time and will remain, under pressure which will influence dairy demand negatively.

The UHT price increase over the 24 month period from September 2017 to September 2019 was 9.6% and over the 18 month period from March 2018 to September 2019 was 9.5%. The low price increases enabled UHT sales volumes to grow substantially but the low price increases set the stage for the product price to catch-up at some stage which appears to be happening now.

International dairy product prices

In October SMP prices strengthened with a further 8% in Dollar terms, full cream milk powder with 2%, butter stayed the same while cheddar prices decreased with 6%. In Rand terms, price behaviour in October 2019 was similar due to the R/\$ exchange rate being stable between September and October.

Trends in the production of unprocessed milk in the major dairy exporting countries.

Changes (%) in cumulative unprocessed milk production in the major dairy exporting countries and South Africa 2015 – 2019 (2019 only first 9 months). SA first 10 months, last two preliminary.

	2015	2016	2017	2018	2019
USA	1.2	1.6	1.7	1.1	0.2
EU	2.1	0.2	2.1	1.4	0.4
AUS	2.2	-6.9	0	0.9	-8.2
NZ	-1.4	-2.0	1.7	1.3	-0.5
URU	-2.0	-10.4	7.6	5.7	-6.0
ARG	1.5	-14.4	-1.6	6.4	-3.2
ZA	6.4	-0.5	3.0	5.0	0.5

Milk production at farm level is down for all the major exporting countries. This provides illumination on the strong increases in international dairy product prices all round for the first 10 months of 2019 and the current nervousness on the Global Dairy Trade Index.

Frequently milk producers and other role players ask about the meaning and implications of specific market trends on the total dairy market balance and how it will change future markets. While the Milk Producers’ Organisation cannot and will not try to predict the future in any detail, the possible general impact of specific changes will be discussed in this document. This information should not be regarded as financial advice.

While this report is compiled from sources that are deemed to be reliable, MPO cannot take responsibility for any decisions based on the information in this report.

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1. Milk supply, demand and prices

1.1 Milk production

Unprocessed milk production for October 2019 is estimated at 332-million litres, 1.7% more than in October 2018. The comparative growth percentage for October 2018 was 3.7% and 3.5% for October 2017. Cumulative unprocessed milk production for 2019 inclusive of October is 2 705 million litres registering a growth of 0.53% and if compared over the same period in 2018 the growth was 5.8%.

The primary industry is clearly haemorrhaging due to the cost price squeeze which is exacerbated by the unfavourable climatic and economic conditions. It seems that the overhang of dairy stocks that was created by the strong unprocessed milk production growth of 4,8% in 2018 adequately buffered the current low growth in production to still meet demand.

If the level of producer prices is a function of the demand from the secondary industry, it seems that supply and stock levels are adequate since some processors appear to stand aloof of the extent of the cost price squeeze in the primary industry. The MPO is still receiving information from farmers whose milk buyers are reducing producer prices or simply replacing current suppliers with unprocessed milk suppliers from other regions.

Monthly milk production is reflected in Figure 1 below.

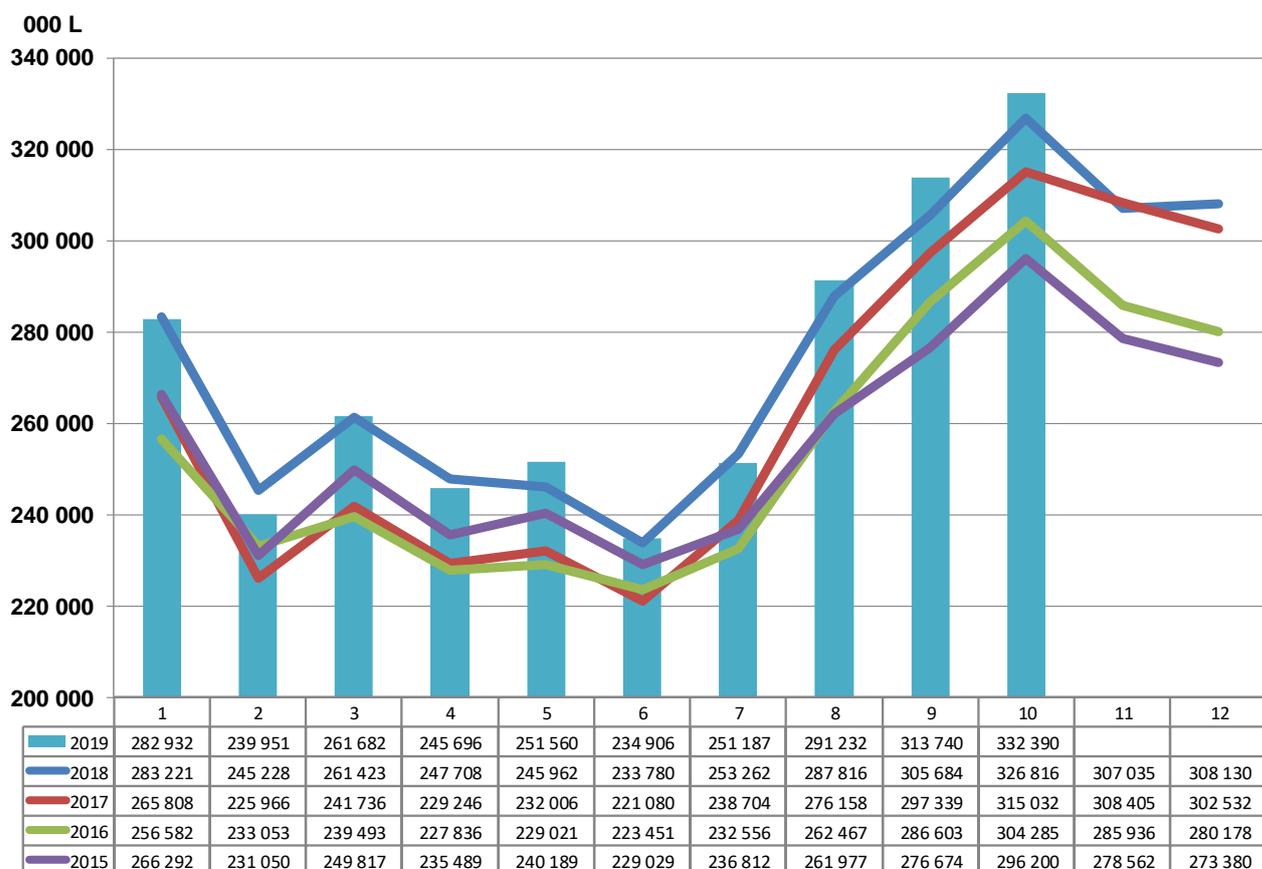


Figure 1 Monthly milk production ('000 L.).

Source: Milk SA, September and October preliminary

1.2 Dairy imports

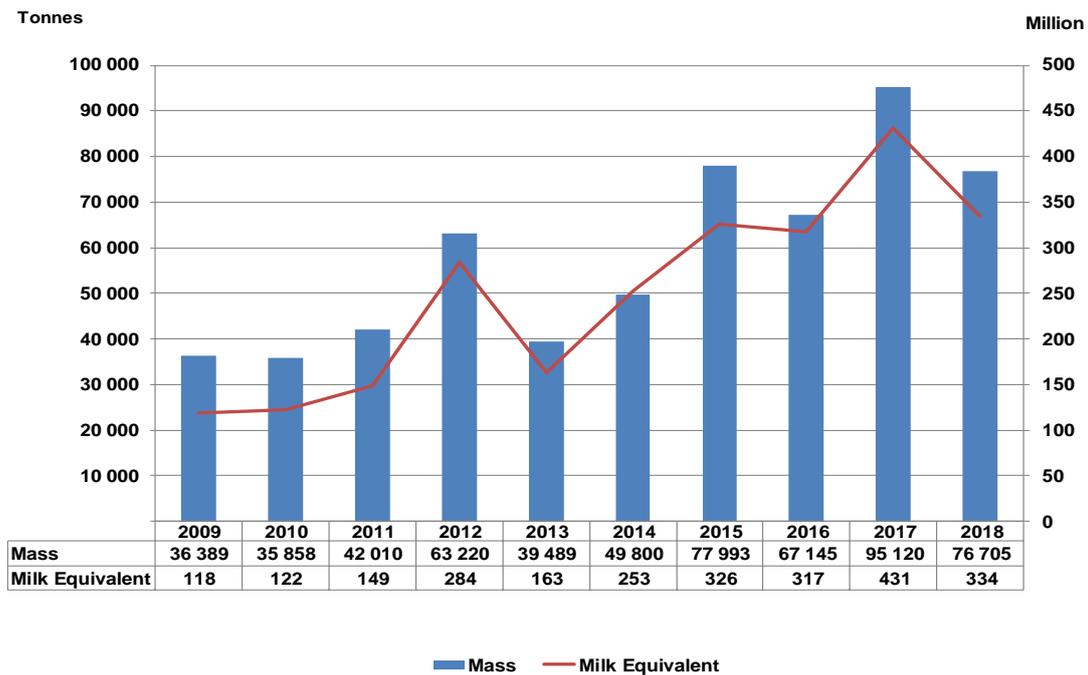


Figure 2 Annual imports, mass and milk equivalent basis, 2009-2018

Source: Agrilnspec

Figure 2 illustrates the fluctuation in dairy imports on a mass and milk equivalent basis over the past 10 years. Imports for 2018 are at the same level as in 2015, registering a 19% drop in imports when compared to 2017. This is mainly due to reduced imports of UHT milk as a result of high levels of milk production in SA and the accelerated depreciation in the value of the rand in the second and third quarter of 2018.

Figure 3 illustrates cumulative dairy imports. It is evident when compared to 2015, 2017 and 2018 dairy imports are at a much lower level. The September 2019 cumulative import figure is 11% less than the September 2018 cumulative figure and 29% less than the September 2017 cumulative figure.

Million litres milk equivalent

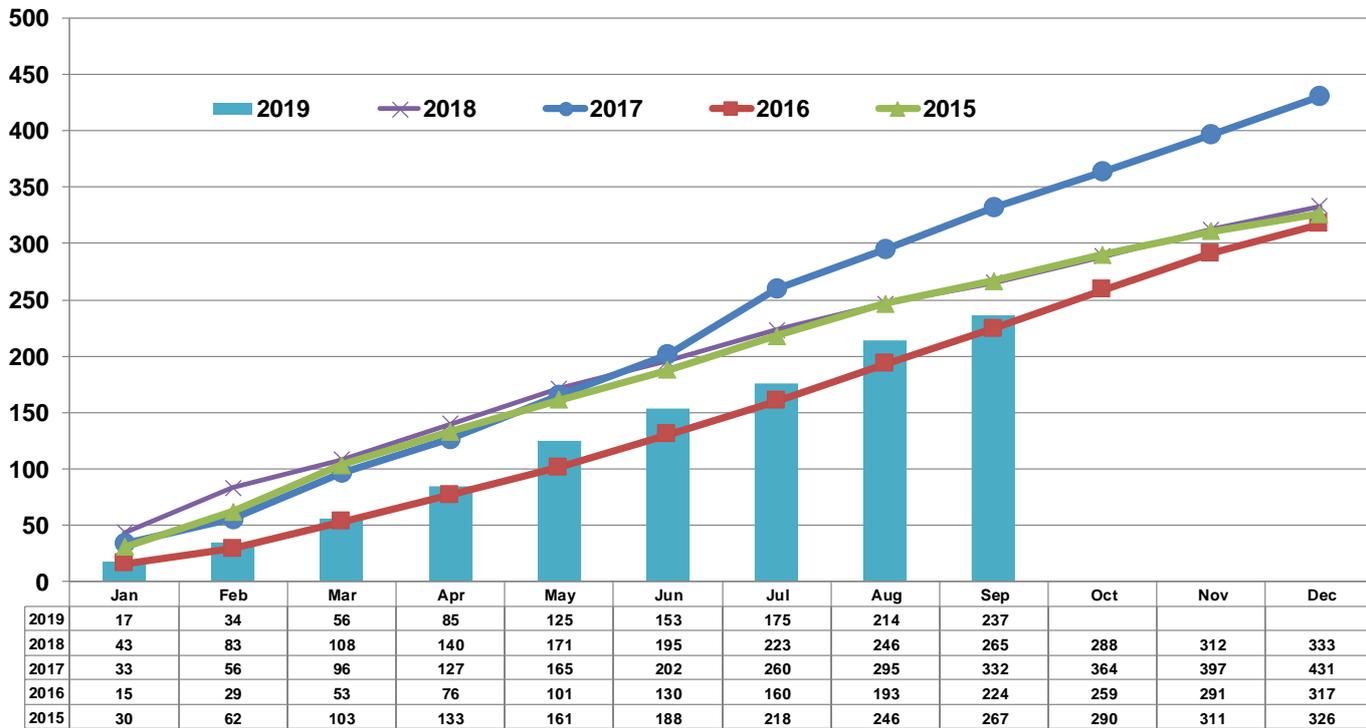


Figure 3 Monthly cumulative imports, (Mil. L.) milk equivalent basis

Source: Agrilnspec

1.3 Dairy exports and sales to BLNS countries

Monthly cumulative exports on a milk equivalent basis are reflected in Figure 4 below. Cumulative dairy exports inclusive of September 2019 remain at the same levels as the previous four years. This is an indication that export markets are well looked after by the SA exporters and that the markets are satisfied with the product range and quality.

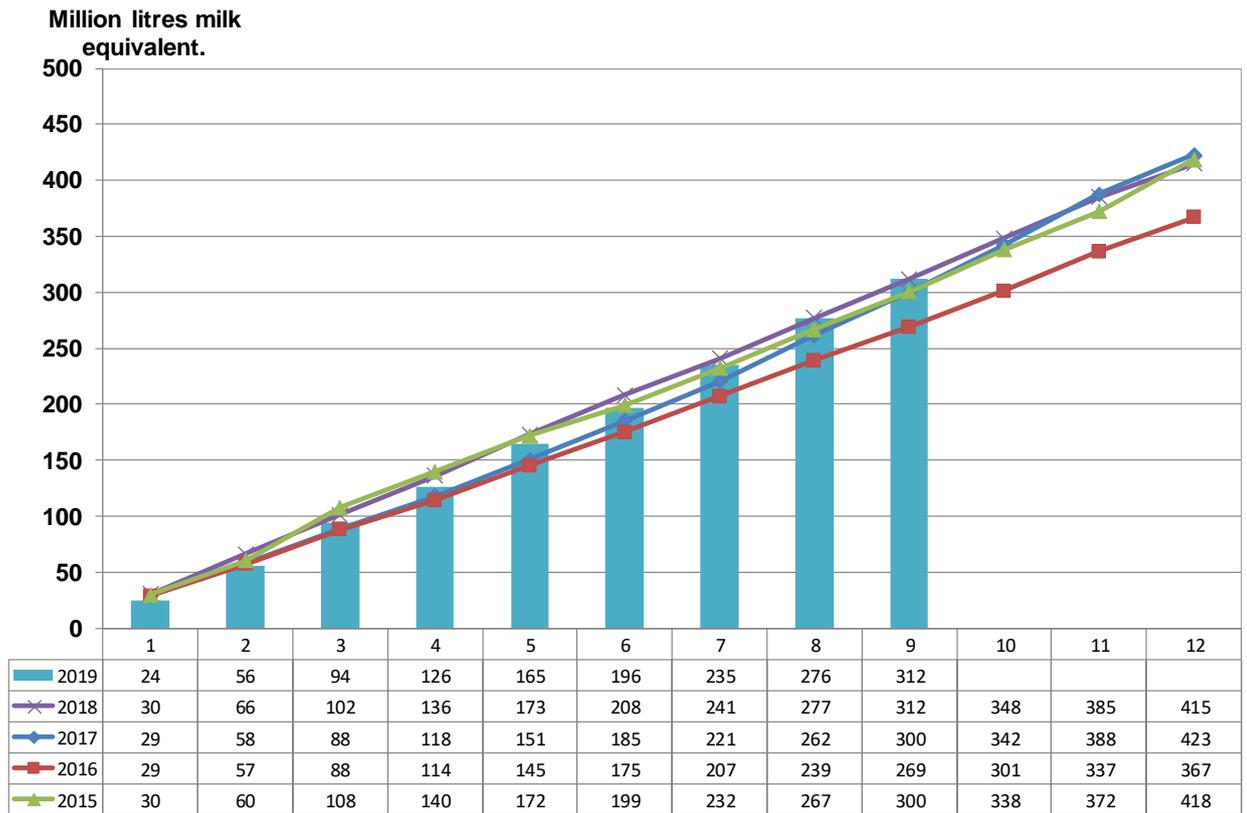


Figure 4 Monthly cumulative dairy exports (Mil. L.), milk equivalent basis

Source: Agrilnspec

1.4 Net exports

For the period ending 30 September 2019, the SA dairy industry continued to be a net exporter of dairy products (exporting 75 million litres milk equivalent). This is due to reduced imports while exports were maintained at the same levels as previous years. The SA dairy industry regained its status as a net exporter of dairy products in 2018. Exports in 2018 exceeded imports with 82 million litres. Net exports in 2018 were higher than in 2017 and 2016 and only slightly below the level of 2015. Cumulative net exports (total exports plus sales to BLNS countries less total imports) on a milk equivalent basis are shown in Figure 5 below.

Mil. L. ME

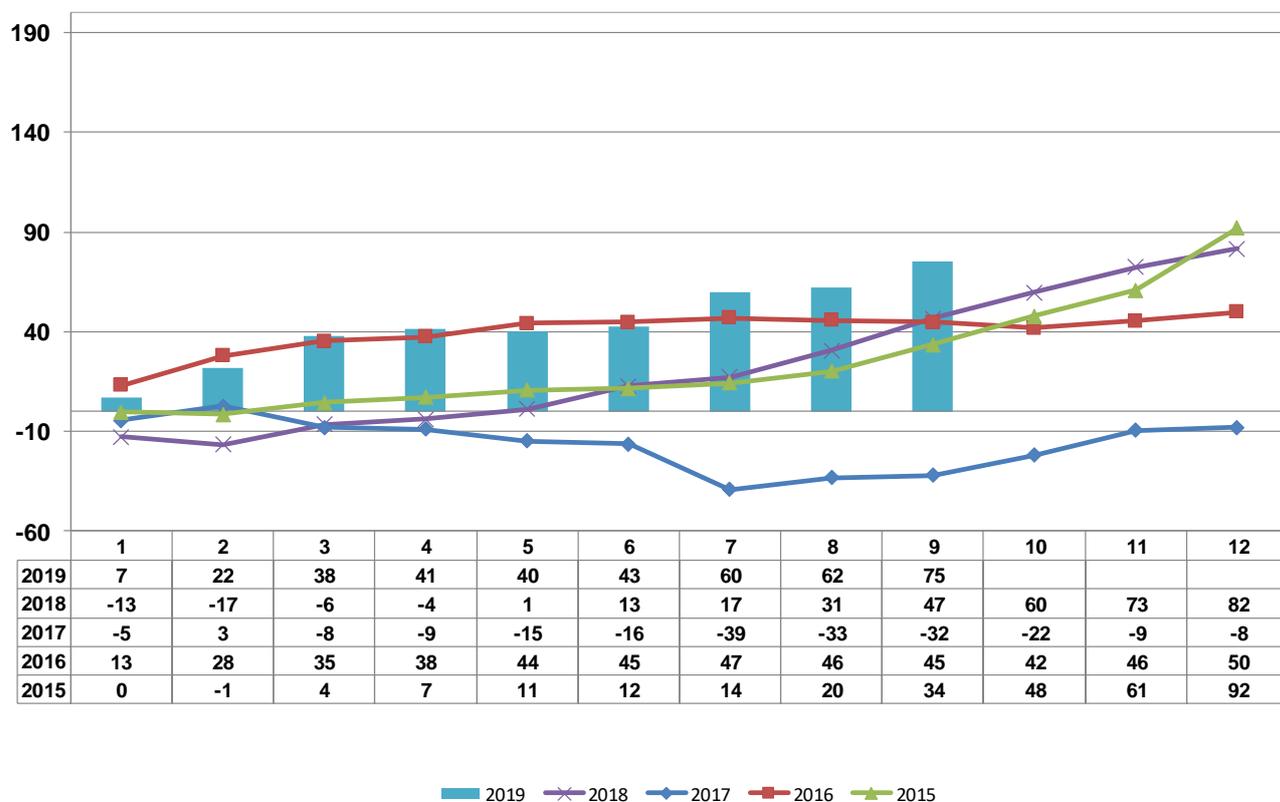


Figure 5 Cumulative net exports, milk equivalent basis (Mil. L.)

Source: Agrilnspec

1.5 Total milk supply

The total cumulative monthly supply of milk, consisting of locally produced milk less net exports (total exports inclusive of sales to BLNS countries less total imports) is reflected in Figure 6. The total cumulative supply of milk in September 2019 if compared over the same period in 2018 is 0.8% lower.

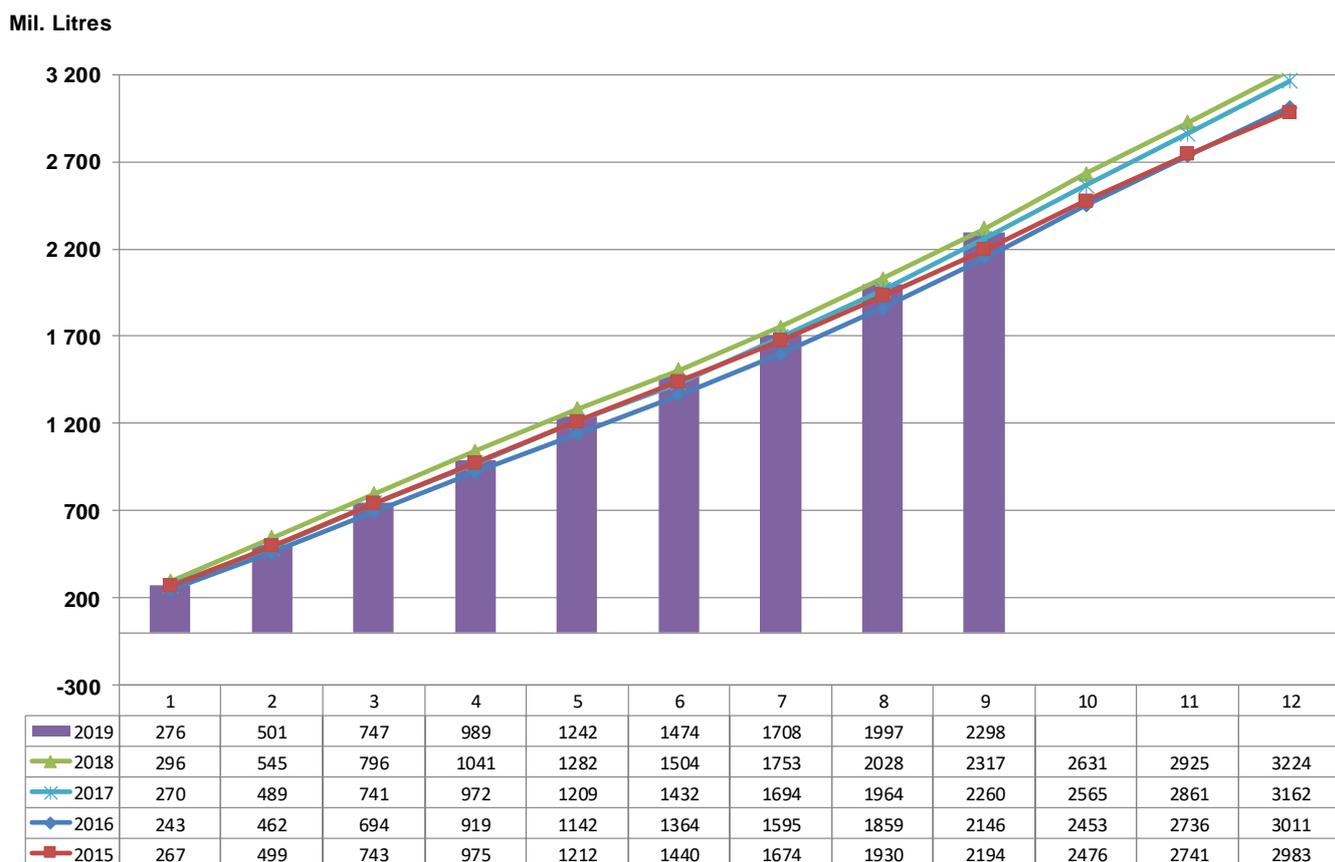


Figure 6 Total Cumulative monthly milk supply

Source: MPO calculation

1.6 Milk demand

Table 1 contains information with regard to the change in retail demand for different dairy products for the 12 month period from October 2017 to September 2018 compared to the 12 month period from October 2018 to September 2019 and the change in retail prices from September 2018 to September 2019. Only three of the nine products experienced a negative growth in sales volumes while four of the nine product prices increased with less than inflation. Four of the nine products experienced modest growth while yoghurt and maas had strong growth on the back of very low price increases.

Table 2 compares year on year September sales volumes and price changes. Sales volumes are clearly under pressure with six of the nine products registering a negative growth, one product a small increase in volumes sold and the remaining two doing well. Yoghurt and maas however are not big volume players. Four product prices increased by less than inflation, two with marginally more than inflation while three with more aggressive percentages.

UHT milk that has been growing market share aggressively for the past three years with low price increases but seem to be losing steam as reflected in table 2. This will have a direct negative impact on the demand for unprocessed milk. Consumer spending has been under

pressure for some time and will remain under pressure which will influence dairy demand negatively.

The UHT price increase over the 24 month period from September 2017 to September 2019 was 9.6% and over the 18 month period from March 2018 to September 2019 was 9.5%. The low price increases set the table for the product price to catch-up at some stage which appears to be happening now.

Dairy demand illustrated in table 1 is still positive despite the struggling SA economy and disposable income of consumers being under pressure, but the growth is subdued. An industry that can produce these levels of sales growth amid timid consumer financials needs to be looked after. The capacity in the value chain needs to be nurtured especially at farmer level given the multiplier effect up and down the value chain. If the industry can guard this capacity it will improve even more when proper economic growth is achieved in future.

TABLE 1: PERCENTAGE CHANGE IN RETAIL SALES QUANTITIES FOR MAJOR DAIRY PRODUCTS FOR THE 12 MONTH PERIOD FROM October 2017 TO September 2018 COMPARED TO THE 12 MONTH PERIOD FROM October 2018 TO September 2019 AND THE CHANGE IN RETAIL PRICES FROM September 2018 TO September 2019

Product	Change in quantity sold %	Change in retail prices %
Fresh milk	-3.2	5.4
Long-life milk (UHT)	4.2	13.8
Flavoured milk	4.0	9.0
Yoghurt	9.3	2.2
Maas	22.3	1.9
Pre-packaged cheese	4.6	5.7
Cream cheese	-0.3	3.0
Butter	5.3	-1.2
Cream	-2.8	8.8

Source: Nielsen figures supplied by SAMPRO

TABLE 2: PERCENTAGE CHANGE IN RETAIL SALES QUANTITIES FOR MAJOR DAIRY PRODUCTS in the month of September 2019 versus the month of September 2018 AND THE CHANGE IN RETAIL PRICES FROM September 2019 TO September 2018

Product	Change in quantity sold %	Change in retail prices %
Fresh milk	-0.4	5.4
Long-life milk (UHT)	-9.3	13.8
Flavoured milk	-6.2	9.0
Yoghurt	8.7	2.2
Maas	12.4	1.9
Pre-packaged cheese	-2.7	5.7
Cream cheese	0.9	3.0
Butter	-6.3	-1.2
Cream	-8.0	8.8

Source: Nielsen figures supplied by SAMPRO

1.7 Producer prices

Producer prices are indicated in Figure 7. Milk buyers started to announce price decreases in June 2019 some taking effect in July others only in August/September. The average producer price for October is R4.30 and is at the same level as the average producer price in 2014.

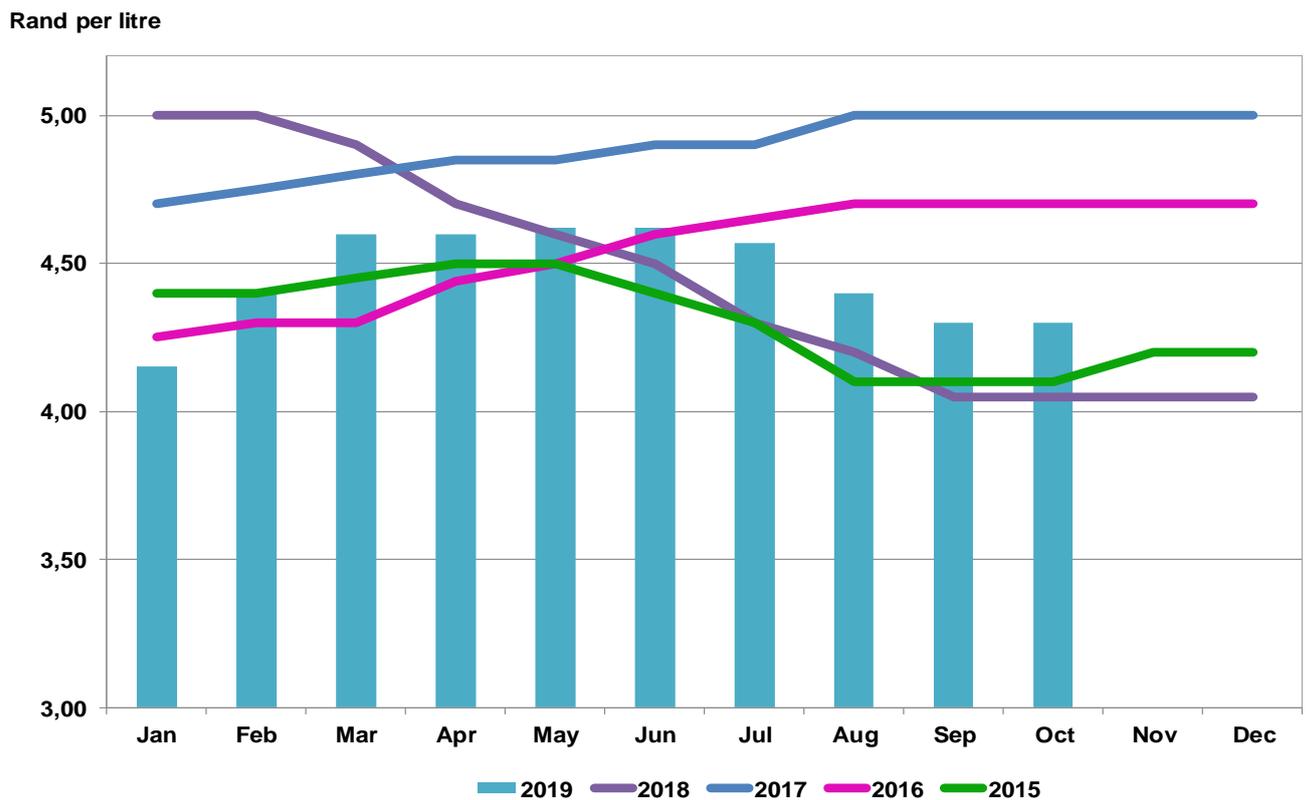


Figure 7 Monthly milk producer prices, 2015-2019

Source: MPO calculations

1.8 Retail prices

Retail prices of fresh milk in different packaging are supplied by the South African National Consumer Union (SANCU). The retail prices of fresh milk per litre for milk packaged in 2-litre plastic containers are compared to producer prices in Figure 8. The graph indicates that the spread was most favourable for retailers in July 2016 due to a strong uptick in retail prices while producer prices were kept level. The spread bottomed out towards the end of 2017 and increased since then, up to and including, January 2019. The following three months presented a decline in the spread with May through September 2019 increasing.

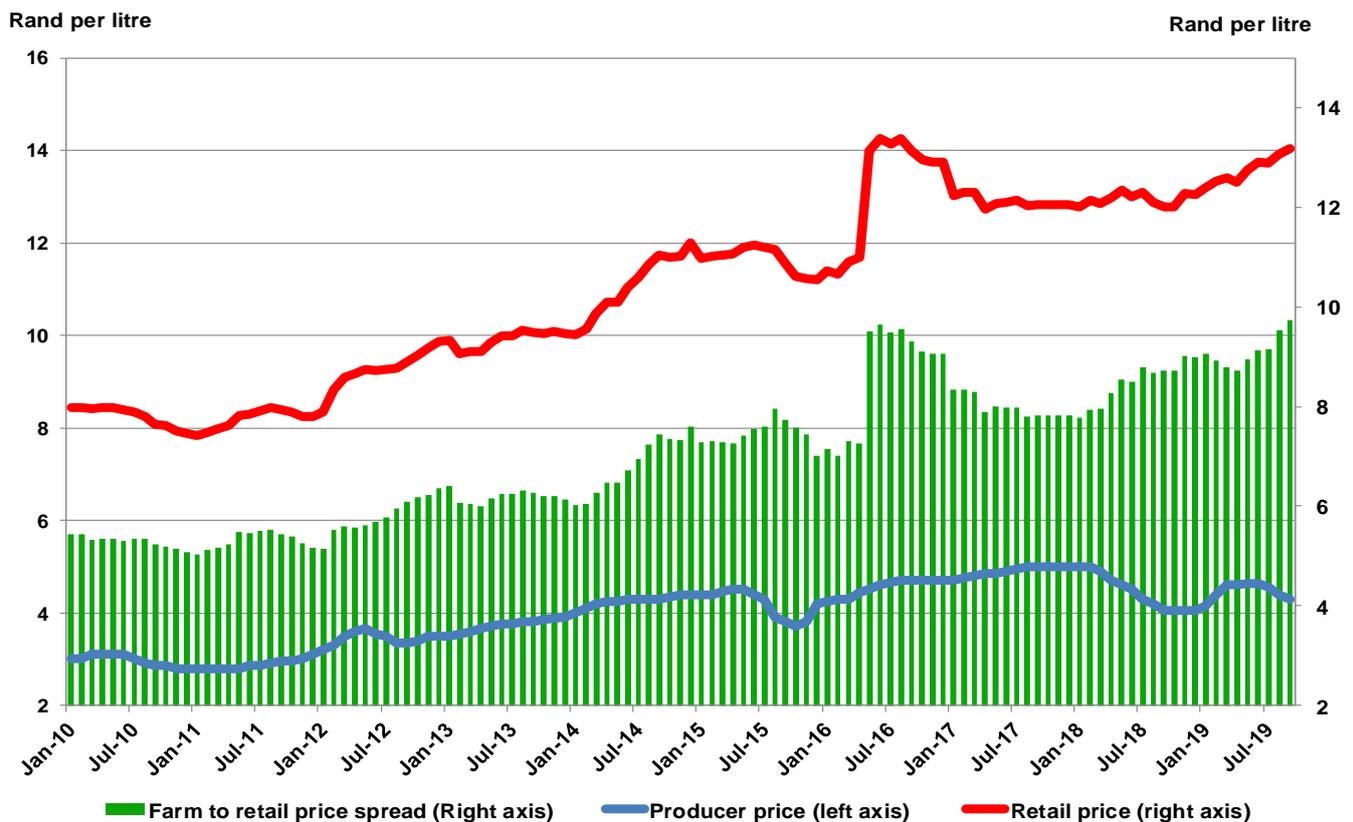


Figure 8 Monthly producer and retail prices, 2010- 2019

Source: MPO, SANCU

1.9 Feed prices

Feed cost is the most important cost item for milk producers. Internationally the price of maize and soybeans are used as a proxy for feed prices. A derived feed price is thus defined as the weighted price per kilogram of maize and soybeans (70% maize, 30% soybeans). Feed prices, based on Safex nearest month prices, are reflected in Figure 9. Farmers’ production decisions are not based on absolute prices, but on relative prices. If producer milk prices decrease in relation to feed prices, farmers will tend to produce less, and if prices increase relative to feed prices, production will increase. Unfavourable milk: feed price ratios will result in slower production growth or lower production over time. The December 2018 milk: feed price ratio of 1:2 reflects lower producer price versus increased feed cost. At a milk: feed price ratio of 1:2 many dairy farmers are below breakeven level and that will consequently reduce production and may lead to dairy farmers exiting the industry.

The upward trend in feed cost is clearly visible since July 2018 while December prices registered a spike as a result of late and inadequate rain in many summer crop producing areas. The September 2019 derived feed price compared to September 2018 is 23% higher.

The milk: feed price ratio is illustrated in figure 10. The ratio decreased on the back of higher grain prices in June and July. At a ratio of 1,15:1 production will be slowing down. The higher

feed cost registered in October decreased the milk: feed price ratio further to below 1:2 and will negatively impact on unprocessed milk production. The effect will be limited in the short term but more severe in the medium term.

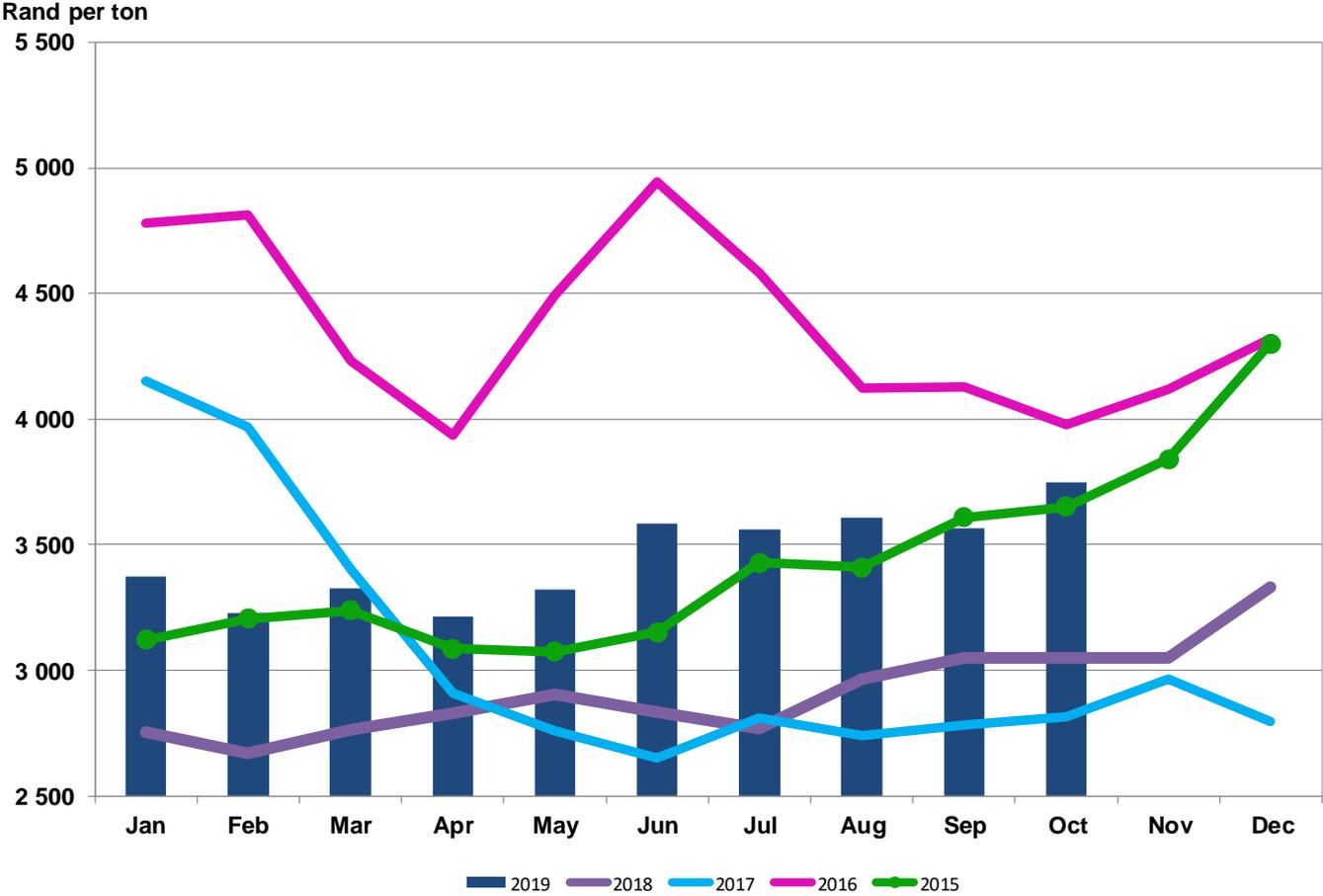


Figure 9 Calculated dairy feed prices, 2015-2019

Source: Safex nearest month data

Milk : feed price ratio

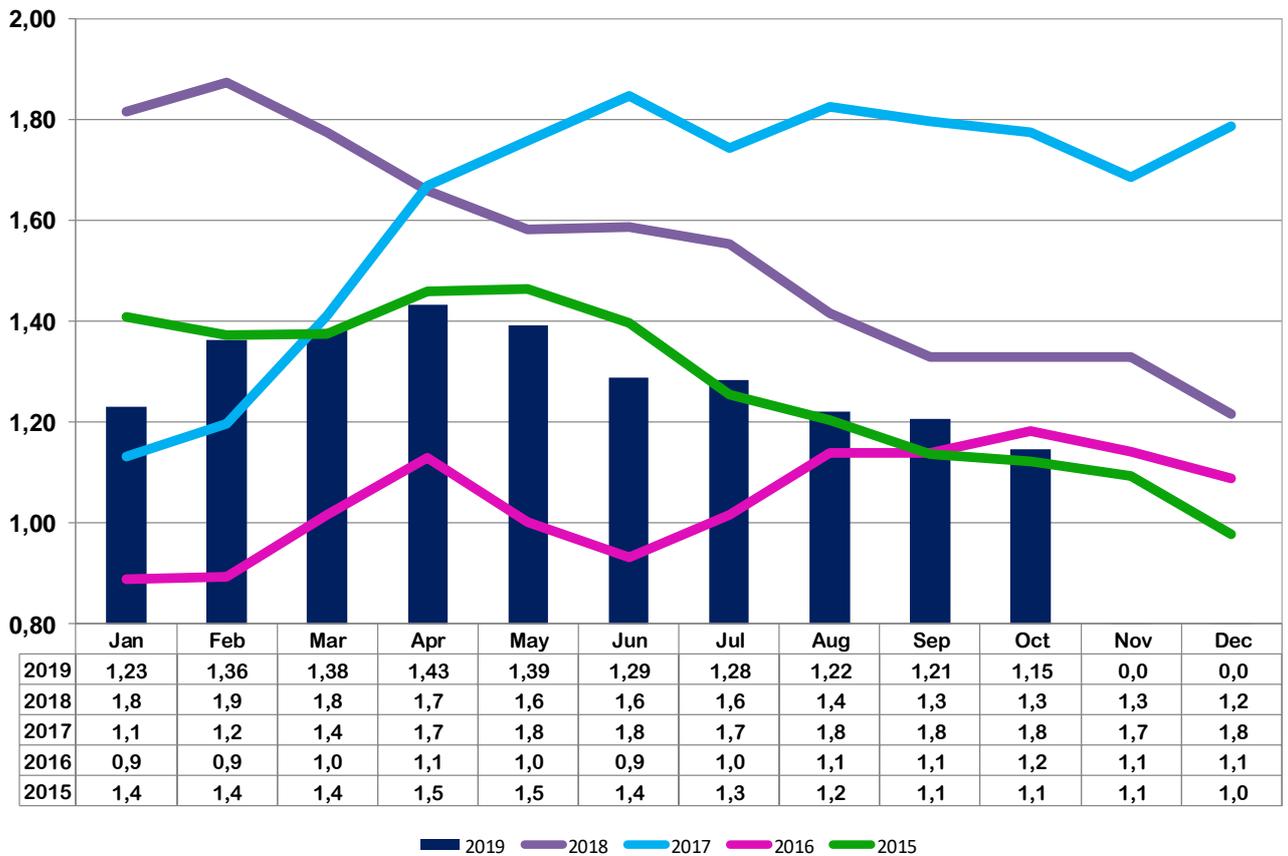


Figure 10 Milk: feed price ratio, 2015-2019

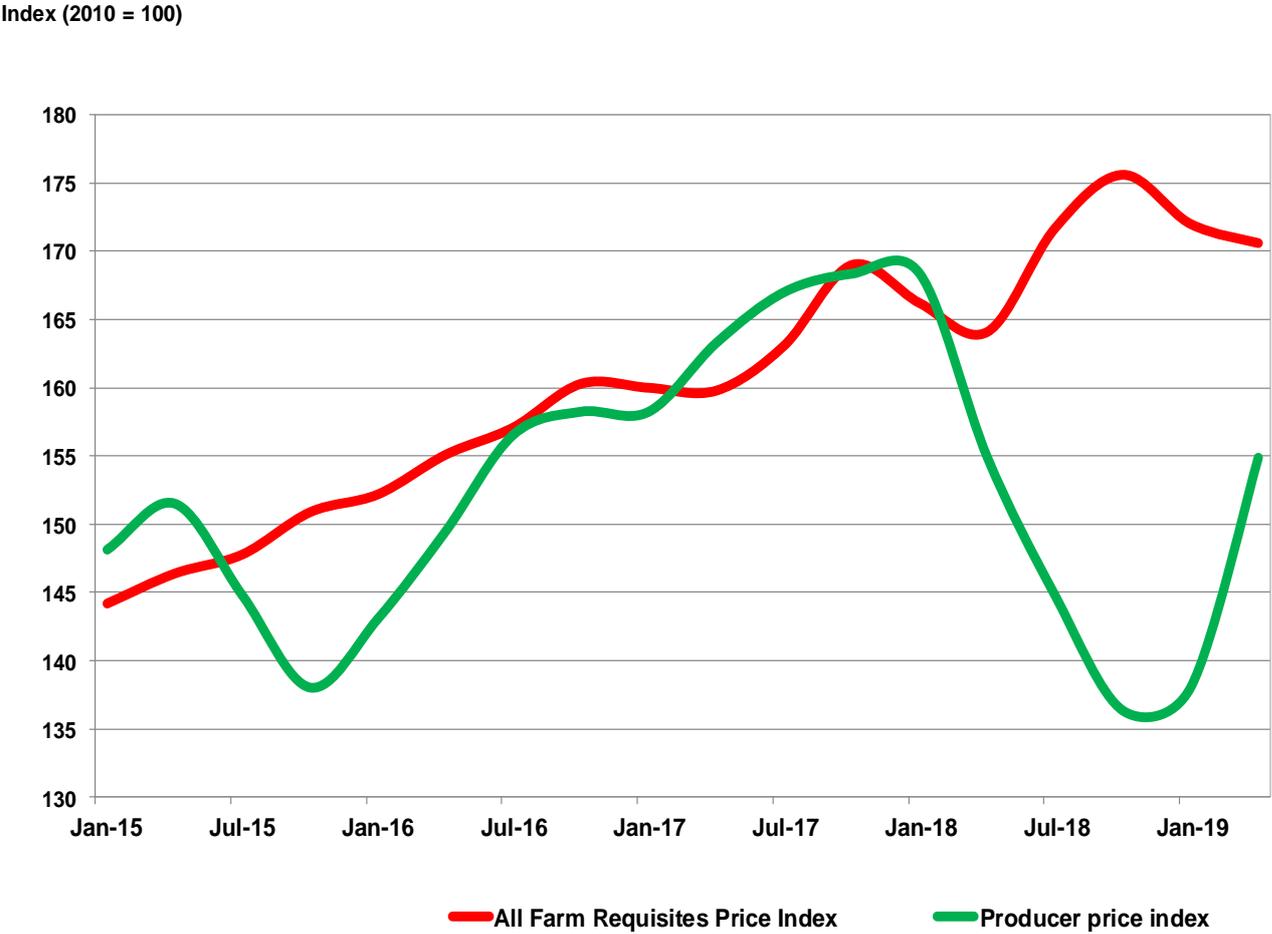
Source: MPO calculations

1.10 Input prices

The Department of Agriculture, Forestry and Fisheries publishes price indexes for farm requisites on a quarterly basis. As with all indexes, this index simplifies a very complex data-set to a level that does not correspond to individual farm data-sets. However, the trend in this index gives an indication of the direction of input price changes. The farm requisite index and producer price index are shown in Figure 11. The developments early in 2019 indicate that the cost price squeeze has reduced slightly, however still at a severe level. Cost management will be crucial over the coming months and optimising energy utilisation will play a big role in containing costs.

The slope of the downward trend in producer prices during 2018 is more severe than the slope of the trend that occurred in July 2015 which resulted in financial difficulty for many farmers. The downward trend depicted in the All Farm Requisite Price Index from the beginning of 2018 was reversed in the second quarter of 2018 on the back of the continued weak rand resulting in, amongst other, higher fuel and fertiliser prices. In the first quarter of 2019, the trend changed

and continued down in the second quarter. The producer price index reflects the price increases at the beginning of 2019.



Source: DAFF, MPO calculation

Figure 11 Quarterly Farm Requisites Price Index and Producer Price Index

1.11 International prices

According to the food price index of the Food and Agricultural Organisation of the United Nations (FAO) the combined food price index, the sugar index, and cereal index are edging upward in October 2019, while the dairy index is moving sideways albeit at a higher level. The meat index has been increasing since January 2019.

For the first five months of 2019, international dairy product prices were on an upward trend due to strong export demand while export availability from Oceania and other exporting countries was low and being reinforced by the seasonal decline in production in Oceania. Milk production in Europe and the USA stagnated in terms of growth compounding short supply. Adverse climate conditions are centre to slower supply.

International dairy product prices started to pull back in June and July as illustrated in figure 12. The downward momentum reduced in July and in August and in September and in October prices moved sideways.

Index (2002 - 2004 = 100)

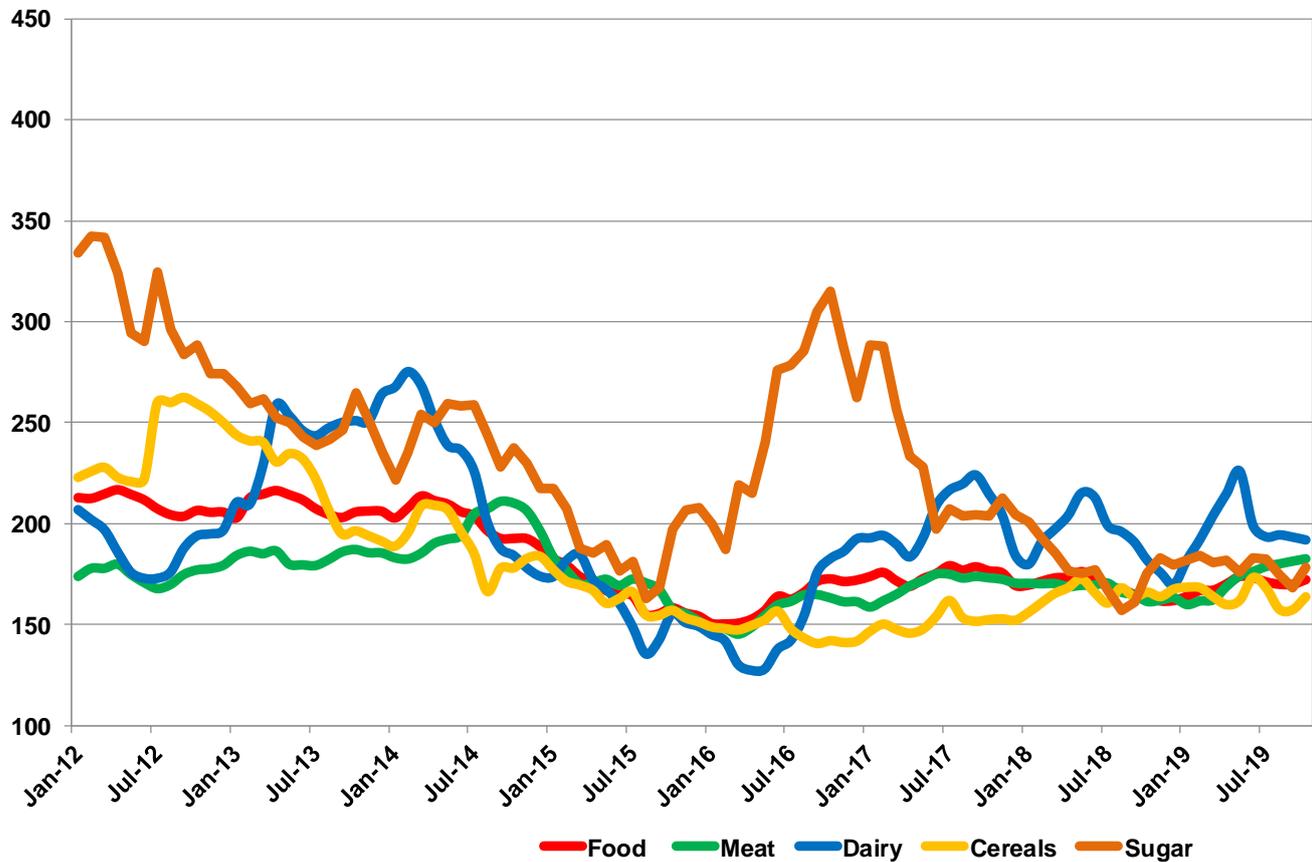


Figure 12 Monthly FAO food price indexes

Source: FAO food price index

Figure 13 shows the movement of the Global Dairy Trade (GDT) price index inclusive of October 2019. The downward momentum in July did slow down with August showing signs of further reduced downward momentum. As expected, the September and October trend changed with the index increasing slightly in both months. This is a confirmation of uncertainty regarding export availability and reflects some nervousness in the market.

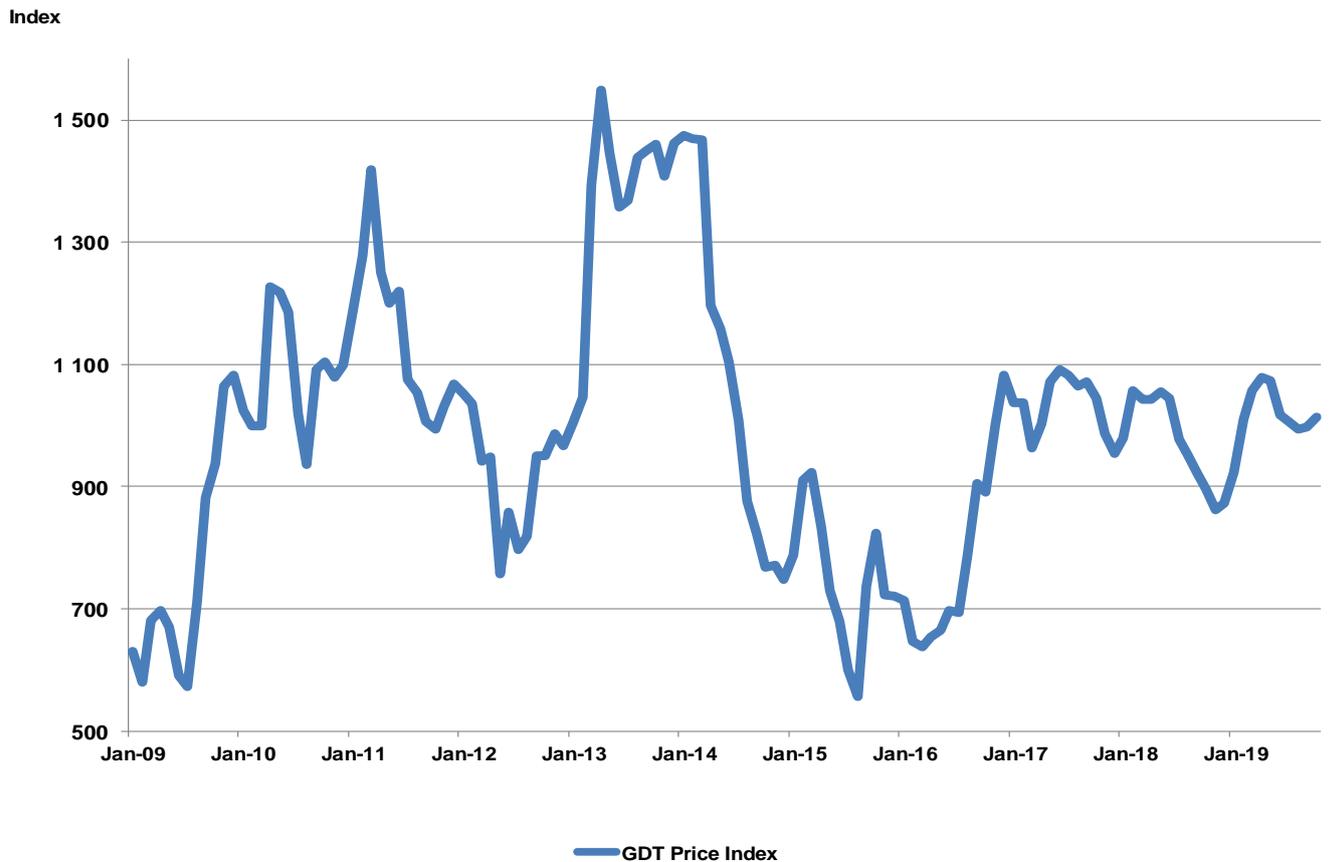


Figure 13 Global dairy trade-weighted price index

Source: Global dairy trade

Figure 14 shows international prices for milk powders, butter and cheddar cheese as reported by USDA in Rand/ton inclusive of October 2019. The upward trend for dairy product prices since the beginning of 2019 was led by cheese with butter providing further momentum. This trend reversed in June and July with all product prices reducing but maintaining levels higher than in July 2018 with the exception of butter which is lower. In August 2019 prices for all dairy products increased in both US Dollar and Rand terms. Growth in unprocessed milk production in the major dairy exporting countries is poor and is creating uncertainty in the world market regarding export availability.

In September 2019, both butter and SMP prices strengthened in Dollar terms while the prices for full cream milk powder and cheddar softened. In October SMP prices strengthened with a further 8% in Dollar terms, full cream milk powder with 2%, butter stayed the same while cheddar prices decreased with 6%. In Rand terms, price behaviour in October 2019 was similar due to the R/\$ exchange rate being stable between September and October.

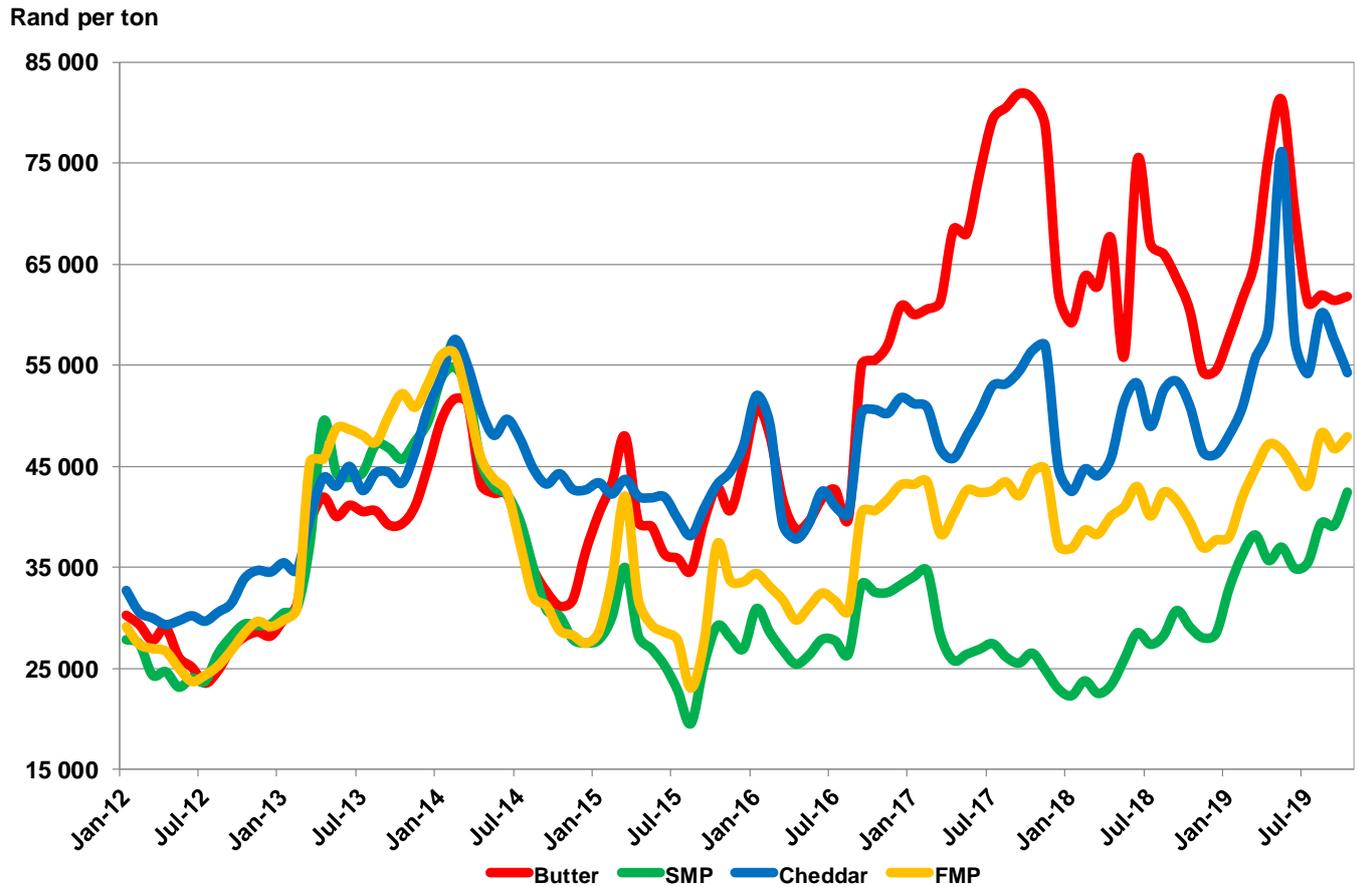


Figure 14 International dairy product prices (Rand/ton)

Source: USDA, SA Reserve Bank

1.12 Import parity and producer prices

The MPO's benchmark import parity is based on the published USDA prices, SA Rand/\$ exchange rates, standard import tariffs and import and production cost as supplied by industry sources. The calculation methodology is standardised and while import parity may differ for a specific importer, based on a specific import mix and individual cost structure, the trend indicated by the import parity index is applicable to all importers

Import parity and producer prices are reflected in Figure 15.

The current difference in import parity and SA producer prices reduced from the extreme level registered in May 2019 with the current differential increasing in October.

Rand per litre

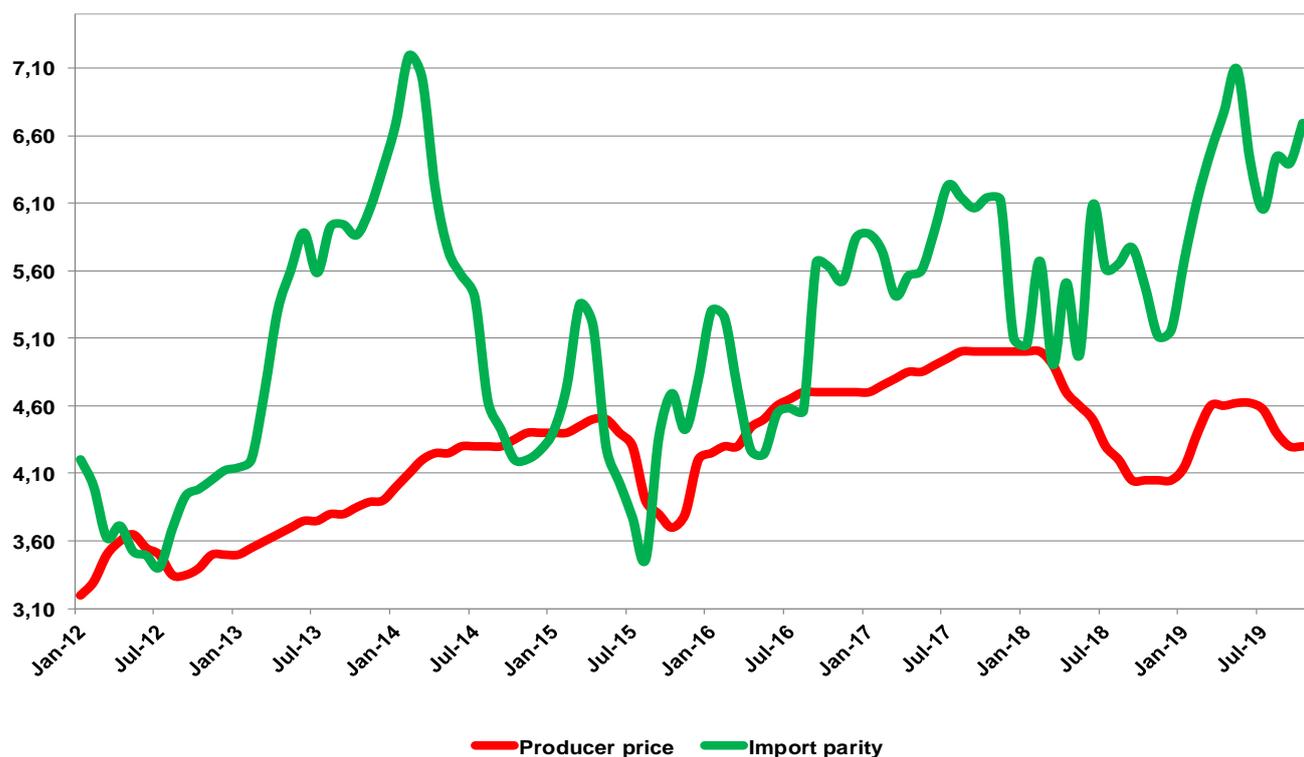


Figure 15 Monthly producer and import parity prices

Source: MPO calculations

Import parity and producer prices

Import parity at or below average producer prices implies that processors can import dairy products at current international prices at a lower price per litre than they have to pay local producers. An importing processor will still have to service the fixed cost on infrastructure and an importing retailer has to pay for packaging and manage returns.

2. Changes in cumulative unprocessed milk production in the major dairy exporting countries

Changes (%) in cumulative unprocessed milk production in the major dairy exporting countries and South Africa 2015 – 2019 (2019 only first 9 months). SA first 10 months, last two preliminary.

	2015	2016	2017	2018	2019
USA	1.2	1.6	1.7	1.1	0.2
EU	2.1	0.2	2.1	1.4	0.4
AUS	2.2	-6.9	0	0.9	-8.2
NZ	-1.4	-2.0	1.7	1.3	-0.5
URU	-2.0	-10.4	7.6	5.7	-6.0
ARG	1.5	-14.4	-1.6	6.4	-3.2
ZA	6.4	-0.5	3.0	5.0	0.5

Milk production at farm level is down for all the major exporting countries. This provides illumination on the strong increases in international dairy product prices all round for the first 10 months of 2019 and the current nervousness on the Global Dairy Trade Index.

3. Economic overview

3.1 International economic outlook

In the October 2019 publication, the IMF again adjusted growth predictions slightly downward. The influencing factors are a softer momentum in demand in 2019 in countries like Germany (automobile industry slowing), Turkey due to tighter macro-economic policy, stricter credit policies in China and the uncertain world trade environment. International economic growth and estimated growth are shown in Figure 16. SA is not participating adequately in the current expansion of the world economy or in the growth levels achieved in the emerging economies. Although the projected growth for SA in 2019 and 2020 is higher than 2018 it is uncertain. Government remains unclear on policy with continued utterances of policy directions that failed in other countries and internal conflict regarding government’s role in the economy.

Recent announcements regarding poor governance at the Durban harbour, the dysfunctionality of the harbour and certain SA Airways aeroplanes being grounded owing to technical safety issues indicate that the extent of inefficiency and corruption at government and state owned entities is significant.

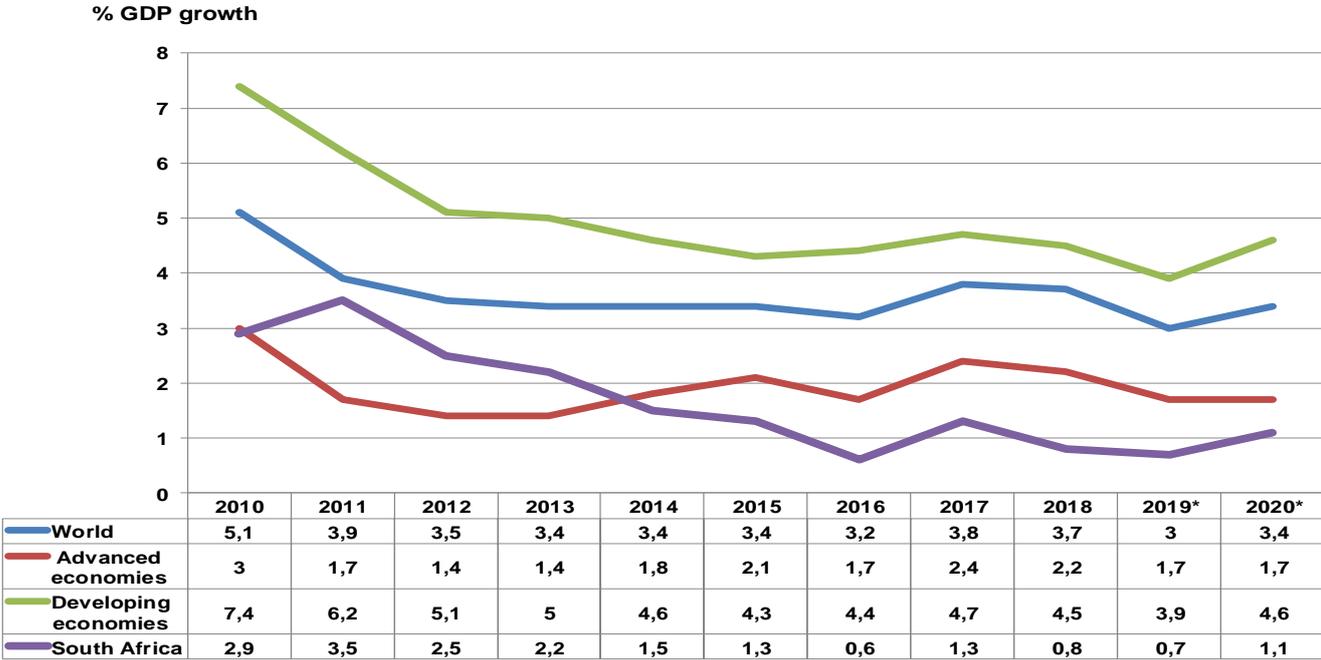


Figure 16 International economic growth and estimated growth

* Projection

Source: IMF WEO Oct 2019

3.2 South African economy

3.2.1 Economic activity and growth

Indicators of economic activity are provided by the SA Reserve Bank in the form of a co-incident, leading and lagging indicator. The monthly movement of the leading and co-incident indicator of economic activity is reflected in Figure 17. The leading indicator signals future economic activity while the co-incident indicator reflects what is happening now in the economy.

Figure 18 shows the quarterly growth rate of the SA gross domestic product. The SA economy contracted with 3.2% in the first quarter of 2019 while a second quarter growth rate of 3.1% was registered. The second quarter growth is coming off a very low base and it seems that the SA economic growth will fall far short of 1% for the year. The continued struggle between the factions in the ANC regarding the role of government in the economy leaves investors out in the cold.

Indicators of economic activity
The coincident indicator of economic activity show whether the economy is in an upwards or downwards phase of the business cycle. The current slow downwards trend indicates a slowdown in economic activity. The leading indicator shows possible changes in economic activity in future. The decreasing trend points towards still lower economic growth in future.

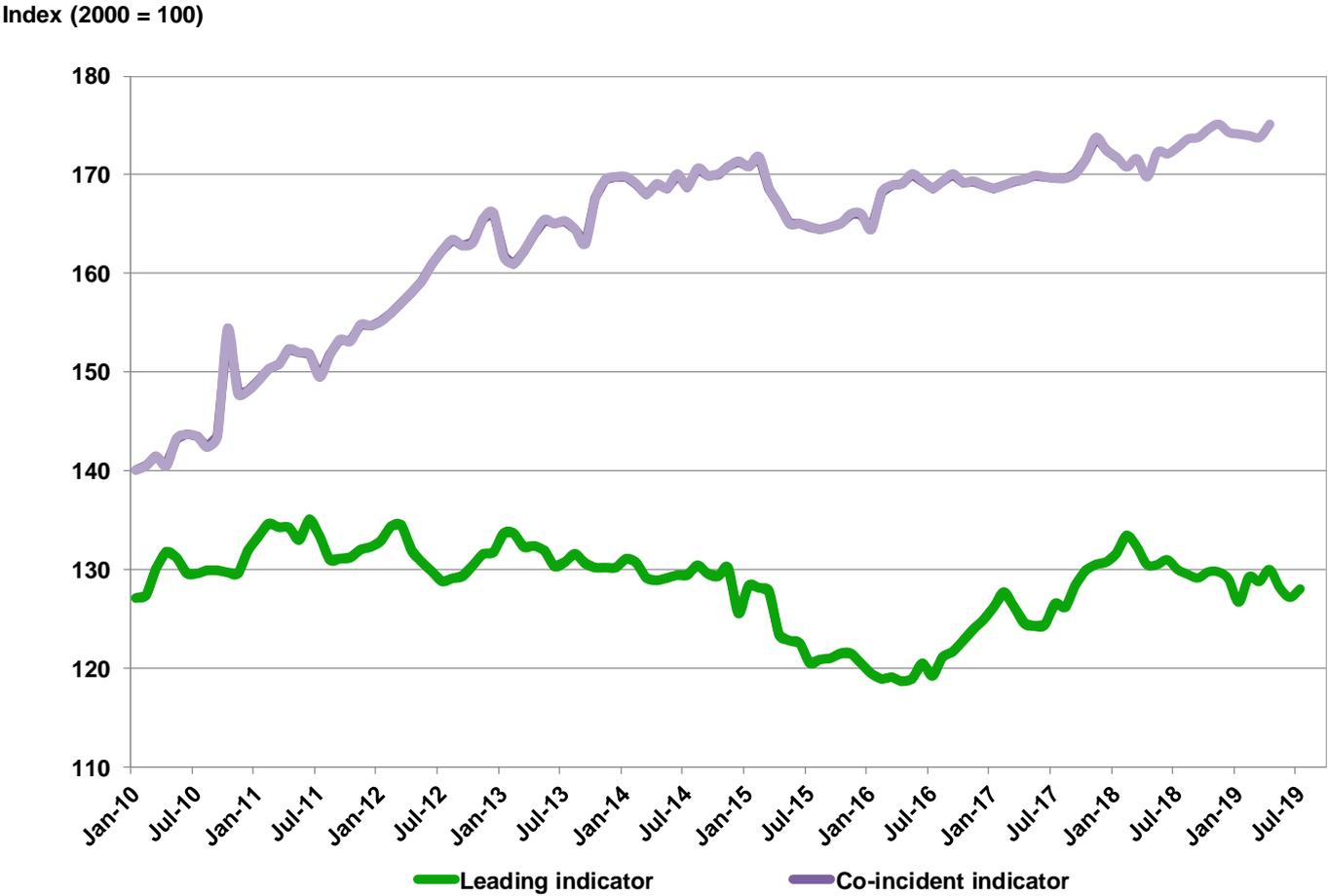


Figure 17 Leading and co-incident indicator of economic activity

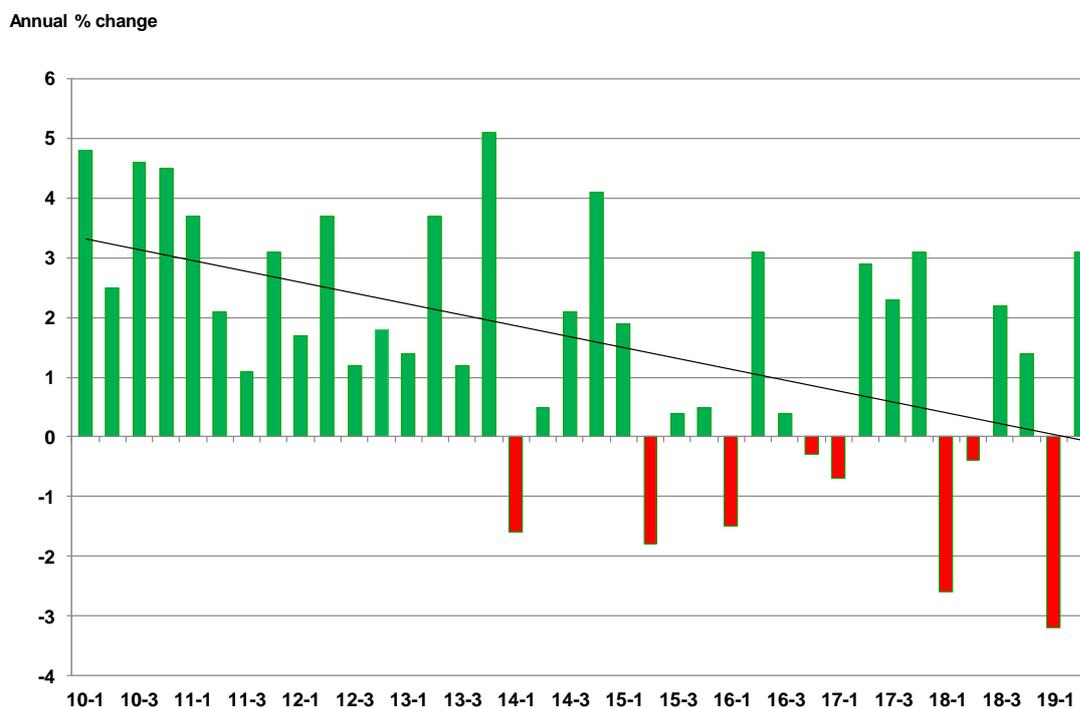


Figure 18 Quarterly change in real gross domestic product

Source: Stats SA

3.2.2 Household debt and income

Household debt at current prices as a percentage of household income has been on a steady decline since the first quarter of 2008. Household debt decreased from 87.8 to 71.3 in the third quarter of 2018.

3.2.3 Inflation

The consumer price index and monthly inflation rate are reflected in Figure 19. A record low inflation rate in March 2018 enabled the Reserve bank to decrease the repo rate in March 2018. There was a slight upward trend in the inflation rate from March 2018 to July 2018, but the trend was reversed in August 2018 going down from 5.1% to 4.9%, September staying on 4.9%, rising to 5.1% in October and staying on 5.1% in November and a strong move down to 4.5% in December. The slowdown in the inflation rate for December is mainly due to the reduced price of fuel in December and the decrease in the price for food and non-alcoholic beverages flowing through to January 2019 with a further reduction in the inflation rate down to 4%.

The inflation rate increased slightly February 2019 through May 2019 to 4.5% and stayed level for June. The rate came down one tic in July to 4.0% but increased in August to 4.3% and decreased in October to 4.1%. Inflation is under control with the SARB doing a sterling job.

Consumer price index (CPI) and inflation

The CPI is the value of a basket of goods and services on retail price level. The change in the value of this basket compared to the same period a year ago is called the rate of inflation. The Reserve Bank tries to keep the rate of inflation between 3% and 6%.

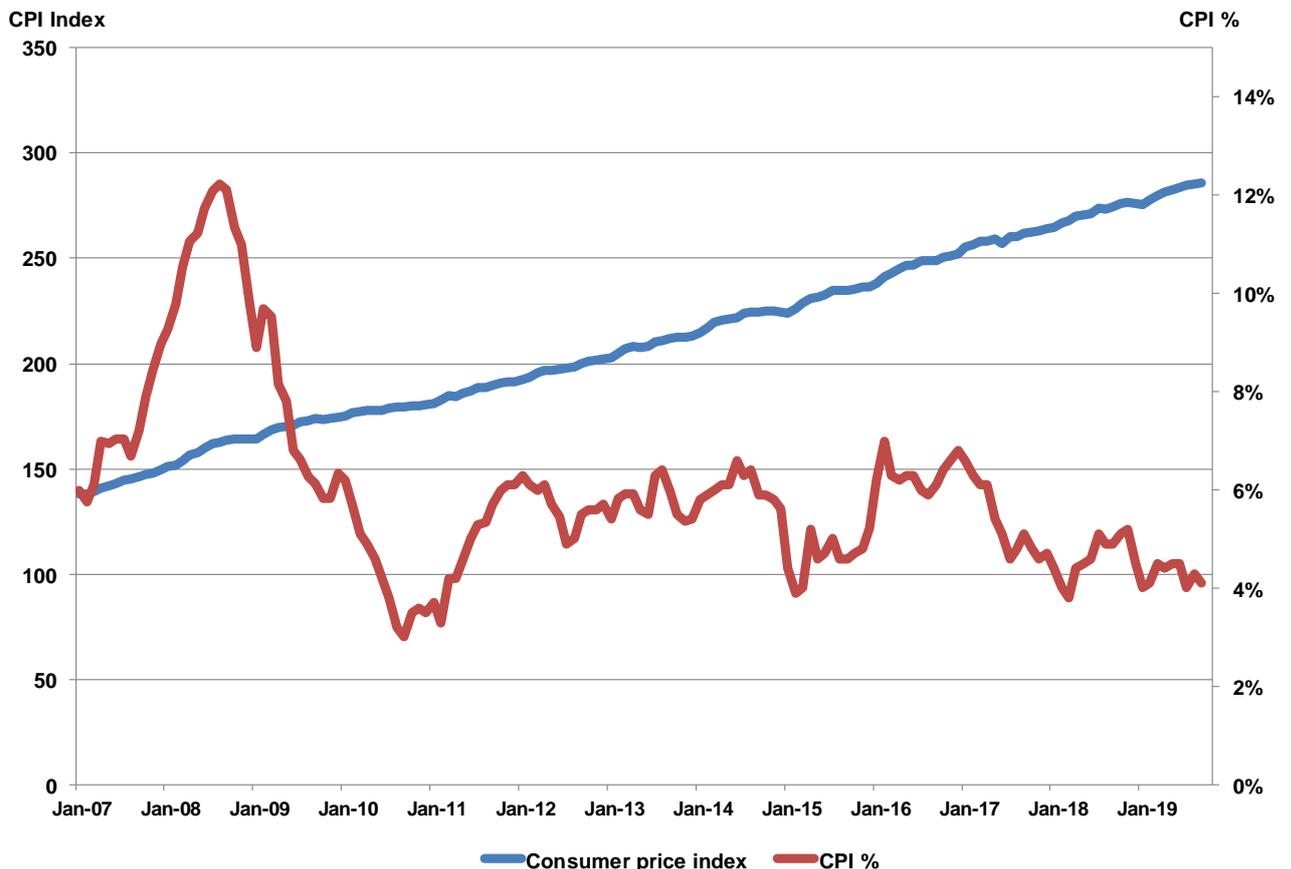


Figure 19 Consumer price index and consumer price inflation, 2007-2019

Source: Stats SA

4. Ruling factors

- Unprocessed milk likely to become one of the most volatile agricultural commodities in future (Outcome at the 2019 International Farm Comparative Network (IFCN) conference).
- This is because of:
 - the strong influence that small changes in the quantities available internationally have on world market prices;
 - the length of time before there are increases in milk production as a result of price changes; and
 - delayed reaction of demand to changing dairy commodity prices. The key challenges to making a reliable forecast of world market prices for milk are the nature of

consumer reaction to rising milk prices and the response of dairy farmers with regard to supply, especially in low-cost dairy regions. The last part of this sentence is very applicable in SA.

- World producer price of unprocessed milk is poised to enter a lower price band.
- 50% of milk is sold as liquid products – retailers claim it a low margin product line limiting upward mobility in unprocessed milk producer prices.
- Production will increasingly be a function of comparative advantage. Geographical niches will exist especially near semi-urban areas and smaller cities as will certain product niches and milk types.
- Land values and competing enterprise dynamics will be at play especially as the optimization of the production factors are more exact and dairy farming squeezed on capital yields
- Farmers have been and are still being squeezed on optimisation while the same is not as amplified outside the farm gate. The model will have to be reviewed.

Although UHT imports expressed as a percentage of production is negligible, it changes the mood in the market and negotiation tactics between retailers, processors and farmers. The balance of power from the milk farmer's perspective seems to tilt even more towards the processors and other role players further down the value chain once UHT imports start to arrive. This will continue to frustrate farmers.