


REPORT NO. 538

**REVIEW OF THE DOLLAR-BASED DOMESTIC
REFERENCE PRICE AND VARIABLE TARIFF
FORMULA FOR WHEAT**

The International Trade Administration Commission (ITAC) of South Africa herewith presents **Report No. 538: Review of the Dollar-based domestic reference price and variable tariff formula for wheat.**



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PRETORIA

05 / 12 / 2016

REPUBLIC OF SOUTH AFRICA
INTERNATIONAL TRADE ADMINISTRATION COMMISSION OF
SOUTH AFRICA

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AND VARIABLE TARIFF FORMULA FOR WHEAT**

Synopsis

The Minister of Economic Development directed the International Trade Administration Commission of South Africa (ITAC) in terms of Section 16(1)(d)(i) of the International Trade Administration Act, to evaluate and investigate a review of the Dollar-based reference price (DBRP) and variable tariff formula for wheat.

The directive entails the review of the DBRP and variable tariff formula for wheat, as set out below:

"The directive was made in view of the fact that wheat, maize and sugar are basic necessities used by South Africans, and that the country is still in the grip of a drought coupled with large exchange rate fluctuations over the last couple of months. I direct ITAC to urgently review the current formulae, in particular taking into account the impact on the price of bread, maize and sugar."

During its deliberations and in arriving at its recommendation, the Commission considered the information at its disposal, including comments, with due regard to food security in its full context.

The aim of the current variable tariff formula is to set a fair level of protection that would encourage farmers to plant wheat, which is able to compete against low priced imported wheat, without having undue adverse price raising effect downstream. Wheat forms part of the food security basket, however, economically it is not the most profitable crop, which necessitates stimulation of production. Additionally, bread is a staple food for the low income sector, which requires a pricing system that does not render it unaffordable.

The domestic production of wheat declined by 25 per cent from 2005/06 to 2014/15 with an average of 1 857 000 tons per annum. The total demand for wheat in South Africa, increased by 17 per cent from 2 940 000 tons in 2005/06 to 3 443 000 tons in 2014/15 with an average of 3 254 000 tons per annum.

South Africa has experienced the worst drought in 2015 since the early 1980s. Wheat production has been on a decline in South Africa for decades, reaching 50% of the domestic demand in 2014/2015. This decline has been exacerbated by the drought, reaching a shortage of 60% in 2015/2016. There has therefore been an increased necessity to import under these circumstances.

South African wheat production is projected to significantly recover from the drought conditions in the 2016/2017 production season, due to favourable climatic conditions. This is expected to diminish the dependence on imports. Together with the positive outlook on wheat production, maintaining the variable tariff formula with some changes in the variables will continue to encourage farmers to increase wheat production.

Total imports increased, on average, by 28 per cent from the 2012/13 to 2014/15 marketing season, whilst, the average price per unit of imported wheat has declined by approximately 3 per cent over the same period. Between 2013/14 and 2014/15, the average price per unit of imported wheat declined by approximately 7 per cent, which could be attributed to a significant decline in the price of imported wheat from Russia by approximately 11 per cent over the same period. Russia, which accounts for approximately 40 per cent of total imports for wheat into the SACU region, recorded an average increase of approximately 245 per cent in wheat exported to SACU from the 2012/13 to 2014/15 marketing season.

An analysis of the price cost structure for wheat farmers was taken into account to ensure that the level of protection in the form of DBRP is in line with the farmer's production costs. It was found that the production costs are not the same for all regions and that yield levels play a significant role in determining the profitability of wheat farmers. Overall, it is also important to note that although the projected profit levels are higher particularly for the irrigated regions (Northern Cape), this region is not the main wheat producing area in South Africa. Projections indicate that the Swartland area, which is the main wheat producing region in South Africa, experiences profitability levels that are considerably less than the profits experienced in the Northern Cape region. While the Free State region is not considered to be the largest wheat producing region, it appears to be the most vulnerable region when compared to the Swartland and Northern Cape, and this could influence wheat farmers in the Free State to move into alternative, more profitable crops. Approximately 52 per cent of wheat is produced in the Western Cape (i.e. Swartland), 16 per cent in the Northern Cape and 14 per cent in the Free State. Other regions produce a combined total of approximately 18 per cent.

The average production cost plus marketing costs of the three wheat producing regions is fairly comparable with the proposed reference price of US\$279.03/ton.

Simulations were conducted, to look into the possibility of switching to the Rand-based reference price and it was found that a Rand-based reference system would not have yielded a duty and would unlikely yield a duty or perhaps at only low rates due to the trajectory of the Rand. This would place farmers at a disadvantage against the background of inflationary pressures that dilute the supposed benefits of the lower Rand. The Rand/Dollar exchange rate catapults current prices to levels higher than the reference price. The reference price would have to be updated constantly to the most recent year based on almost yearly applications by the industry and this would be untenable.

A move to a simple *ad valorem* duty was considered and it was found that the tariff would lose the countercyclical feature currently provided by the current DBRP that triggers a duty when world prices are low and triggers lower or no duties when world prices are high. The variable tariff formula is therefore better suited to the

circumstances surrounding the production and trade of wheat as opposed to the normal ad valorem duties. Rapid response is required due to the frequency of the sharp peaks and troughs evident in the price cycles of wheat. Wheat farmers do not have much bargaining power as they are price takers in the value chain.

Subsequent to stakeholder engagement, it emerged that introducing a new variable of the Real Effective Exchange Rate Index would address the negative impact of exchange rate fluctuations. This new variable must be factored into the variable tariff formula to ensure that producers are protected against real cost pressures and foreign currency denominated intermediate input costs such as fertiliser and machinery parts and not benefit unduly from exchange rate fluctuations, by adjusting the duty with the Rand's Real Effective Exchange Rate Index as published by the South African Reserve Bank. The Real Effective Exchange Rate Index that will be factored in will support farmers proportionally against a depreciating or an appreciating currency by adjusting the nominal Rand exchange rate for price differentials between South Africa and its most important trading partners. This would ensure that windfall profits or unnecessary additional protection to producers due to exchange rate fluctuations do not accrue to producers at the expense of food affordability.

Tariff protection must be complimented by addressing competitiveness constraints in wheat production. A long term drive towards improved productivity remains critical. According to information at ITAC's disposal, the wheat industry has put a number of initiatives in place to achieve higher levels of productivity, including a review of breeding and grading regulations and international technical agreements with research institutes, although competition from countries with a more favourable natural resource structure remains a challenge. In many of these countries, such as in Europe, some form of support will always be provided to producers, implying that South Africa is unlikely to compete with no tariff support in place.

It was found that since South Africa is a net importer of wheat, which is already trading at import parity levels, its contribution to food inflation has been modest compared to commodities such as maize that moved from a position of export parity to import parity in the recent past. Therefore, wheat prices as a driver of food inflation have been modest.

The Commission determined that there is no simple and straightforward correlation between changes in the customs duty on wheat and downstream bread and cereal prices. This was further supported by BFAP in its findings that in the short term, adjustments in the price of bread as result of a change in the price of wheat are slow. Retail prices of bread are mostly influenced by other key input costs such as labour, electricity as well as distribution costs. Furthermore the wheat value chain is relatively long and sophisticated, resulting in a cost share of wheat in the final retail price of bread of around 20 per cent.

In view of the above, the Commission decided that the domestic Dollar-based reference price for wheat be reduced from US\$294/ton to US\$279/ton based on the 5-year average USA Hard Red Wheat No.2 settlement price of wheat of US\$295/ton, plus an adjustment for the distortion factor evident in the international wheat market of US\$22/ton, less the average ocean transport cost of wheat to a South African port of US\$38/ton.

The initial duty on wheat will be calculated as the difference between US\$279/ton and the price of wheat on 9 August 2016, which amounted to US\$189.67/ton at an exchange rate of R13.43 to the US\$ adjusted for price differentials between South Africa and its most important trading partners using the published Real Effective Rand Exchange Rate Index as follows:

REFERENCE PRICE	
RSA domestic reference price	US\$279/ton
Minus: USA Hard Red Wheat No.2 settlement price of wheat on 09 August 2016	US\$189.67/ton
Dollar duty on wheat	US\$89.36/ton
Rand duty on wheat before adjustment	R1 199.76/ton
Adjusted with the Real Effective Exchange Rate Index	$R1\ 199.76 \times 0.79 = R947.21/ton$
Rand duty on wheat	94.72c/kg (equivalent to 37% <i>ad valorem</i>)
Rand duty on wheat flour	142.18c/kg (equivalent to 37% <i>ad valorem</i>)

Adjustments to the level of protection will be based on quantum movements in the world reference price as follows:

The difference between the 3-week moving average of the US No. 2 HRW (ord) Gulf settlement price (world reference price) and the domestic Dollar-based reference price for wheat is calculated on a weekly basis. If the 3-week moving average of the US No. 2 HRW (ord) Gulf settlement price shows a variance of more than US\$10/ton from the previous trigger level for 3 consecutive weeks, an adjustment to the tariff is triggered and a new duty calculated. The resulting Dollar specific duty is converted to Rand according to the Rand/Dollar exchange rate prevailing on the day that the adjustment is triggered and subsequently adjusted with the latest available real effective exchange rate index as published by the South African Reserve Bank.

The levels of duty should not exceed the bound rates of 72 per cent *ad valorem* for wheat and 99 per cent *ad valorem* for wheat flour.

The Dollar-based reference price should be reviewed on a three year basis. This would ensure that the DBRP is adapted to recent developments in the domestic and global markets.

1. BACKGROUND

1.1. Directive to review the Dollar-based domestic reference price and variable tariff formula for wheat

The Minister of Economic Development directed the International Trade Administration Commission of South Africa (ITAC) in terms of Section 16(1)(d)(i) of the International Trade Administration Act, to evaluate and investigate a review of the DBRP and variable tariff formula for wheat.

The directive entails the review of the DBRP and variable tariff formula for wheat, as set out below:

"The directive was made in view of the fact that wheat, maize and sugar are basic necessities used by South Africans, and that the country is still in the grip of a drought coupled with large exchange rate fluctuations over the last couple of months. I direct ITAC to urgently review the current formulae, in particular taking into account the impact on the price of bread, maize and sugar."

The review was published in Government Gazette on 22 July 2016 for a period of 4 weeks to solicit comments from interested parties.

1.2. The existing tariff dispensation for wheat

The current tariff dispensation for wheat, termed the variable tariff formula, was introduced in 1999 based on the recommendation of the then Board on Tariffs and Trade (BTT). The domestic DBRP of wheat was set at a level of US\$157/ton equal to the average long-term international price for wheat (using the then latest 10 year average US No. 2 Hard Red Winter (ord) Gulf wheat prices).

Adjustments to the level of protection are based on movements in the world wheat price and were made as follows:

- The difference between the 3-week moving average of the US No. 2 HRW (ord) Gulf settlement price (world reference price) and the domestic DBRP for wheat is calculated on a weekly basis. If the 3-week moving average of the US No. 2 HRW (ord) Gulf settlement price shows a variance of more than US\$10/ton from the previous trigger level for 3 consecutive weeks, an adjustment to the tariff is triggered and a new duty calculated. The resulting Dollar-specific duty is converted to Rand according to the Rand/Dollar exchange rate prevailing on the day that the adjustment is triggered.
- Using the wheat price data at the time, this particular dispensation was deemed to better suit the circumstances surrounding the production and trade of wheat than the normal *ad valorem* import duties that are in place for most other products.

- The BTT also recommended that the tariff protection on wheaten flour be in the form of a specific duty at a level of 150 per cent of the rate applicable to wheat and that this tariff be adjusted when the tariff on wheat is adjusted. The BTT was of the opinion that the milling industry was exposed to disruptive competition from subsidized products to the same extent as the primary industry and therefore recommended that the protection on wheat flour be linked directly to that applied to wheat. The conversion factor of 150 per cent was based on the world average for conversion of wheat to wheaten flour of 1:1.5 i.e. wheat flour is 1.5 times more expensive than wheat. In *ad valorem* terms, the duty on wheat flour is approximately the same as that for wheat.

Since the introduction of the variable tariff formula for wheat by the BTT in 1999, ITAC has maintained the use of the variable tariff formula until 2005, where in its Report No. 112, ITAC recommended the use of an *ad valorem* tariff.

Subsequent to approaches received from the National Chamber of Milling, Grain SA and the dti, ITAC initiated a review of the *ad valorem* tariff dispensation for wheat. In December 2008, ITAC recommended to the Minister of Trade and Industry to revert back to the variable tariff formula and initial reference price of US\$157/ton as this particular dispensation was deemed to better suit the circumstances surrounding the production and trade of wheat.

The Commission, in a subsequent review of the domestic Dollar-based reference price for wheat, recommended in its Report No. 333 of 2010, an increase in the domestic Dollar-based reference price from US\$157/ton to US\$215/ton.

The last time (2013) ITAC conducted an investigation pertaining to the wheat tariff, the Commission recommended an increase in the Dollar-based reference price to US\$294/ton as set out in ITAC's Report No. 427 of 2013. This price support mechanism as per ITAC's Report No. 427 was based on the rationale that the duty would place South African farmers and their foreign counterparts on an equal competitive footing, whilst simultaneously being sensitive to food affordability.

The existing tariff position for wheat and wheat flour reads as follows:

Table 1: Current tariff position for wheat and wheat flour

Tariff Heading	Tariff Sub-heading	Description	Statistical Unit	Rate of Duty			
				General	EU	EFTA	SADC
10.01		Wheat and Meslin					
	1001.9	Other:					
	1001.91	Seed	Kg	159.14c/kg	159.14c/kg	159.14c/kg	Free
	1001.99	Other	Kg	159.14c/kg	159.14c/kg	159.14c/kg	Free
11.01		Wheat or Meslin Flour					
	1101.00.10	Brown wheaten meal produced by the milling of whole grains	Kg	238.71c/kg	238.71c/kg	238.71c/kg	Free
	1101.00.90	Other	Kg	238.71c/kg	238.71c/kg	238.71c/kg	Free

Source: SARS

The level of duty, since the implementation of the last increase in the DBRP, remained zero for more than a year but subsequently triggered seven times, as shown below:

Table 2: Variable tariff formula triggers since 25 April 2013

Date of trigger	Three week moving average world price at the time of trigger	Upward or downward trigger	Ad valorem equivalent
09/09/2014	US\$279.69	Upward Free – 15.70c/kg	5%
03/02/2015	US\$264.00	Upward 15.70c/kg – 46.10c/kg	16%
25/05/2015	US\$227.67	Upward 46.10c/kg – 80.01c/kg	29%
14/07/2015	US\$253.00	Downward 80.01c/kg – 51.06c/kg	16%
04/08/2015	US\$222.00	Upward 51.06c/kg – 91.12c/kg	32%
01/12/2015	US\$209.00	Upward 91.12c/kg – 122.43c/kg	41%
24/05/2016	US\$193.33	Upward 122.43c/kg – 159.14c/kg	52%

(Source: ITAC)

At the core of the changes in the level of tariff support were movements in the world price of wheat. As can be seen in the table above, the declining world price necessitated an increase in the tariff to ensure that local wheat prices do not fall below the set domestic reference price.

The bound rate for wheat and wheat flour is 72 per cent *ad valorem* and 99 per cent *ad valorem*, respectively.

A provision for rebate of the full duty in terms of Schedule No. 4 to the Customs and Excise Act, 1964, exists with respect to wheat imported by the BLNS countries. The rebate provision under item 460.02/1001.90/01.06 in the South African tariff reads as follows:

"Wheat (excluding durum wheat), in such quantities and at such times as the Director-General: Agriculture may allow by a specific permit: provided that such permit shall be issued under such conditions as may be agreed upon by the Governments of the Republic, Botswana, Lesotho, Swaziland and Namibia: Provided further that wheat and wheaten flour obtained from such wheat cleared in terms of this rebate item, shall not be removed to the area of Botswana, Lesotho, Swaziland or Namibia."

The continuation of the wheat rebate is imperative to ensure the long-term survival of the BLNS milling industry and also to allow consumers in these respective countries access to competitively priced wheaten products, due to the fact that most of these countries either do not produce wheat or produce it in insufficient quantities to satisfy domestic demand. It should be noted that South Africa does not issue permits in terms of this provision. However, the BLNS countries may issue rebate permits to the level of the quantities agreed to for each by the SACU members, with the condition that such wheat, wheat flour and all downstream products manufactured from this rebated wheat shall not be removed to the area of the four other members. Therefore, the rebated wheat and any derivatives thereof is intended for consumption in the country which imported the wheat and shall not be sold in any of the other SACU countries.

According to the WTO's Minimum Market Access (MMA) requirements, South Africa is currently obliged to allow for the importation of 108 279 tons of wheat at full duty less 14.4 per cent *ad valorem*.

Table 3 below provides the information on the input tariff lines applicable and each input contribution to the product under review.

Table 3: Tariff lines of Inputs

Description	Tariff Heading	Sub-heading	Statistical Unit	Rates of Duty			
				General	EU	EFTA	SADC
Wheat and meslin seed	10.01						
		1001.9	Kg	free	free	free	free
Fertiliser	Chapt.31	-	Kg	free	free	free	free
Chemicals	Chapt.28	-		free	free	free	free
Fuel	Chapt.7			free	free	free	free
Machinery and Implement reparations	84.32 84.33			free	free	free	free
Other				free	free	free	free

Source: Jacobson's Harmonised Customs and Excise Tariff Book and Grain SA

As can be seen from Table 3 above, all the inputs used by members of Grain SA in the production of wheat, are duty free, which assists in managing the cost of production.

2. INDUSTRY AND MARKET

2.1. International wheat market

According to the United States Department of Agriculture (USDA)¹, global wheat production in 2016/17 is projected at 727 million metric tons (MMT), down 7.1 MMT and slightly below the 2015/16 record levels. Production levels among the major exporting countries, being Argentina, Australia, Canada, EU, Kazakhstan, Russia, Ukraine and the United States, declined by 2.4 MMT. Projected production gains in Argentina, Australia, Canada, and Russia's wheat production are not sufficient to offset declines in production levels in the EU, Kazakhstan, Ukraine and the United States. In the EU, the wheat area harvested is projected to increase; however, yields are expected to decline.

The study projects that farmers in Argentina will produce more wheat due to the elimination of previously introduced export policy restrictions. Production in Canada is expected to increase marginally as increased winter wheat offsets reduced spring wheat area. Russia's wheat crop for 2016/17 is expected to be the second largest on record. Production levels of wheat in the Ukraine are expected to decline from the 2015/16 period, but recent favourable weather conditions have boosted crop potential. The production levels of wheat in the U.S. are projected to be lower than the 2015/16 period, owing to a significant reduction in the area planted despite the offsets of above-average yields.

Ethiopia and South Africa's production levels are projected to significantly recover from last year's drought affected crop. China's wheat production level is estimated to remain unchanged from 2015/16, adding to the country's already excess supplies. Morocco, on the other hand, is suffering from a drought and its crop levels are projected to be at a 9-year low. Global consumption increased by 0.5 per cent as food, seed and industrial use increased by 1.1 per cent, which is sufficient to offset the decline of 2.3 per cent in feed use. Factors i.e. population, urbanization and income growth, particularly in Sub-Saharan Africa and Southeast Asia, are driving the growth in food consumption. Wheat used as a component in animal feed rations is projected to decline slightly due to greater utilization of coarse grains, particularly in China, EU, and Thailand.

According to the OECD (2016)², prices of wheat declined to their lowest levels since 2009, with global stocks reaching their highest level since 2009. However, global wheat production is forecasted to be lower than 2015/16's record levels, but continues to outpace consumption for the fourth consecutive year. The EU, Morocco, Turkey and Ukraine had sizeable reductions in their production levels of wheat, but these are partly offset by larger crops in Argentina and Russia. Global consumption is projected to increase fractionally as it is projected that there would be a steady growth in the use of wheat in food, which would offset lower demand for wheat in animal feed. Global trade in wheat declined slightly from the 2015/16 record levels. It is forecasted that

¹ Available online at <http://www.fas.usda.gov/data/grain-world-markets-and-trade>

² OECD/FAO (2016), *OECD-FAO Agricultural Outlook 2016-2025*, OECD Publishing, Paris.

the EU would be the world's largest exporter for the fourth consecutive year. Global stocks are projected to be at an all-time high, driven primarily by wheat stocks in China.

The 2016/17 global closing stocks are projected to reach a new record of 257 million tons, which constitutes an increase of 14.4 million tons from the 2015/16 period. China's burgeoning stocks now account for 46 per cent of global stocks and are expected to increase by 21.7 million tons from the 2015/16 period. Projected world closing stocks, excluding China, are projected to decline year-on-year.

2.2. SACU wheat market

The domestic supply and demand for wheat in South Africa is as shown in Table 4 below:

Table 4: Domestic supply and demand for wheat in South Africa

Marketing Year	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Area planted (x1 000 ha)	805	765	832	748	643	558	605	511	506	477
Yield (ton/ha)	2.37	2.75	3.01	0.45	3.05	2.66	3.32	3.68	3.7	3.67
CEC crop estimate ('000ton)	1905	2105	1905	334	1958	1430	2005	1870	1870	1760
Available for commercial deliveries	1 856	2 086	1 853	281	1 929	1 404	1 987	1 835	1 835	1 715
	('000-ton)									
Commercial supply										
Opening stocks (1 October)	574	582	376	509	694	579	478	651	489	489
Commercial production	1893	2045	1876	2130	1910	1389	1973	1837	1817	1701
Surplus (Adjustment of the reconciliation)										15
Imports	1955	777	1396	1192	1285	1649	1724	1393	1668	1832
Total commercial supply	3 522	3 404	3 648	3 831	3 889	3 617	4 175	3 881	3 975	4 037
Commercial demand										
Commercial consumption										
Food	2 781	2 818	2 844	2 849	2 991	2 994	3 086	3 008	3 122	3 109
Feed	12	2	1	8	26	1	136	32	54	4
Total	2 793	2 820	2 845	2 857	3 017	2 995	3 202	3 040	3 176	3 113
Withdrawn by producers	10	7	12	12	14	6	4	4	3	1
Released to consumers	4	4	2	6	3	6	7	7	3	3
Seed for planting purposes	26	17	22	26	17	13	18	16	18	23
SAGIS (Nota B)	-4	-31	35	6	19	-80	-1	21	17	11
Total	36	-3	71	49	53	-36	28	48	42	38
Total RSA consumption	2 829	2 817	2 916	2 906	3 070	2 960	3 230	3 088	3 218	3 151
Exports										
Products	18	12	9	21	35	24	26	28	13	17
Whole wheat	93	199	214	210	205	155	269	278	255	276
Total	111	211	223	231	240	179	294	304	288	292
Total demand	2 940	3 028	3 139	3 137	3 310	3 139	3 524	3 392	3 486	3 443
Carry-out (30 September)	682	378	509	894	879	478	851	489	489	594
Pipeline requirements	610	618	623	624	856	656	672	659	684	681
Surplus above pipeline	-26	-242	-114	70	-77	-178	-21	-170	-196	-87
% Imported of RSA consumption	37.30%	27.80%	47.90%	41.00%	41.90%	55.70%	53.40%	45.10%	51.90%	58.10%
Carry-out as a % of RSA consumption	20.80%	19.30%	17.50%	23.90%	18.90%	16.10%	20.20%	15.80%	16.20%	18.90%
Carry-out as a % of total commercial demand	19.90%	12.40%	16.20%	22.10%	17.50%	15.20%	18.50%	14.40%	14.00%	17.30%

Source: SAGIS

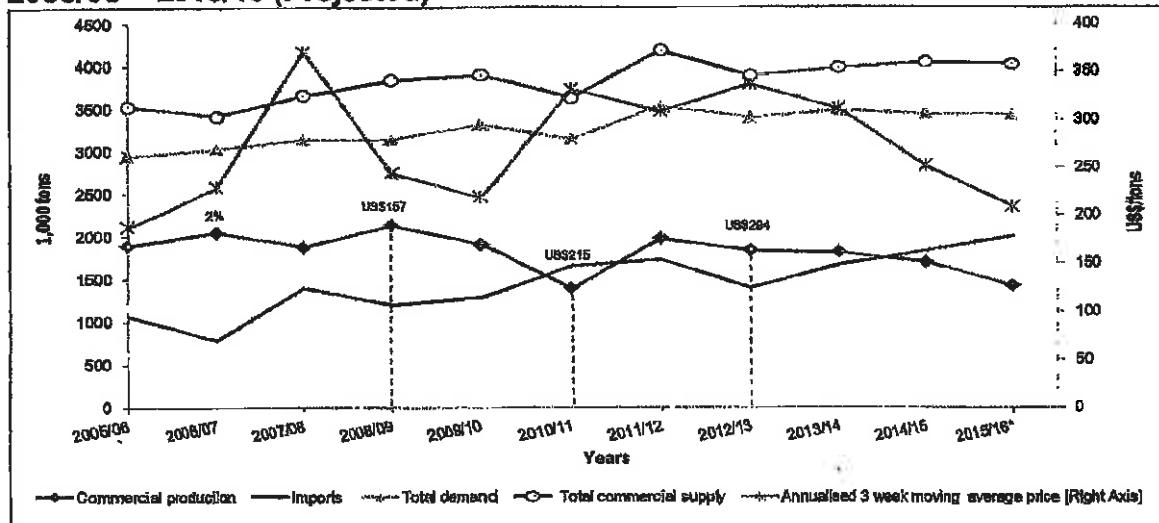
With regard to the demand for wheat in South Africa, it can be seen from Table 4 above, that the total demand increased by 17 per cent from 2005/06 to 2014/15. Total demand for wheat averaged at 3 254 000 tons between 2005/06 and 2014/15.

With regard to domestic supply of wheat to the South African market, it can be seen from Table 4 above that the total supply declined by 25 per cent from 2005/06 to 2014/15. Total domestic supply for wheat averaged at 1 857 000 tons between 2005/06 and 2014/15.

The aim of the current variable tariff formula is to set a fair level of protection that would encourage farmers to plant wheat, which is able to compete against low priced imported wheat, without having undue adverse price raising effect downstream. Wheat forms part of the food security basket, however, economically it is not the most profitable crop, which necessitates stimulation of production. Additionally, bread is a staple food for the low income sector, which requires a pricing system that does not render it unaffordable.

The demand, domestic supply and imports of wheat for the period 2005/06 – 2014/15 are illustrated in Figure 1 below:

Figure 1: Demand, domestic supply and imports of wheat for the period 2005/06 – 2015/16 (Projected)



Source: Sagis and ITAC calculations

As shown in Figure 1 above, there is a lag period between international wheat prices and domestic production levels of wheat i.e. in 2011, international prices of wheat increased significantly; however, domestic production only responded to this increase in 2012, through higher levels of plantings. Similarly, when international wheat prices declined in 2012, the domestic producers responded by planting less wheat in the following year.

Since the early 2000s, SACU has not been self-sufficient in the production of wheat. However, SACU produced more wheat than what was imported for the period 2005 to late 2010. Due to the lag effect, SACU producers planted less wheat in 2011 as a response to low international prices in 2010. In 2011, international prices increased, to which SACU producers responded by increasing planting of wheat in 2012. Subsequently, during the 2013/14 period, there was a significant slump in international commodity prices.

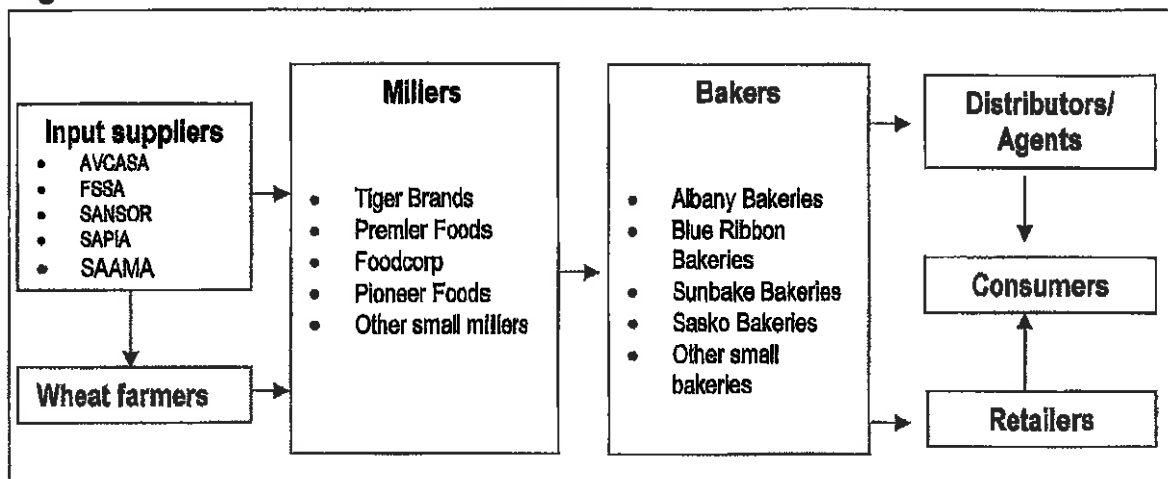
With regard to imports of wheat into the South African market, it can be seen from Table 4 and Figure 1 above that total imports increased by 90 per cent from 2005/06 to 2014/15. Total imports of wheat averaged at 1 397 000 tons between 2005/06 and 2014/15.

As shown in Figure 1 above, since the introduction of the increased DBRP of US\$215/t in 2011, domestic production increased significantly, to previous levels where domestic production exceeded the level of imports. Despite the sharp decline in world prices in 2013, through an increase in the level of the DBRP from US\$215/t to US\$294/t, domestic production remained relatively stable until late 2014 when SACU production levels declined and continued to decline in the 2015/16 season. According to Grain SA, a contributing factor to the decline in domestic wheat production in 2015 was as a result of policy uncertainty in terms of the DBRP formula. This uncertainty coupled with lower international prices, due to an oversupply situation, led to a decline in domestic production to levels where imports exceeded domestic production levels.

2.3. Downstream wheat Industry

Figure 2 below depicts the SA wheat to bread value chain:

Figure 2: The SA wheat to bread value chain:



As can be seen in Figure 2 above, the South African wheat milling industry is characterised by four big wheat millers, namely:

Pioneer Foods (Pty) Ltd	-	7 Sasko wheat mills
Tiger Food Brands Limited	-	4 Tiger wheat mills
Premier FMCG (Pty) Ltd	-	3 Premier wheat mills and
Foodcorp (Pty) Ltd	-	1 Ruto mill

There are also small wheat mills, which together with Tiger Brands and Premier FMCG (Pty) Ltd, are affiliated with the National Chamber of Milling. The wheat mills affiliated to the National Chamber of Milling produce, on average, 60 per cent of wheat flour milled in South Africa.

All four of the big wheat millers are vertically integrated into their respective bakeries that use the milled wheat flour to bake their own bread. Pioneer operates 16 Sasko bakeries, Tiger Brands operates 13 Albany bakeries, Premier Foods operates 11 Blue Ribbon bakeries and Foodcorp operates 8 Sunbake bakeries.

The four primary bakeries service between 50 – 60 per cent of the South African bread market. The bread produced is sold to:

- Formal retail outlets (e.g. Spar, Pick n Pay, Shoprite Checkers),
- Informal retailers (e.g. Spaza shops, cafes and small retailers), or
- Agents (also known as resellers/ independent distributors).

There are also various small in-house bakeries in retail outlets such as in Pick n Pay, Boxer Stores, Shoprite, Spar and Butterfields. Figures as published by the South African Chamber of Baking (SACB) indicate that, on average, since 1991, 2 778 000 000 loaves of bread are baked in South Africa per annum.

The following role-players are involved in marketing wheat and wheat products in the wheat value chain:

1. National Chamber Of Milling
2. Grain Silo Industry
3. The SA Cereals And Oilseeds Trade Association
4. South African Chamber Of Baking
5. South African Wheat Forum (LI Agricultural Services)

The following role-players are involved in supplying inputs to the wheat value chain:

1. AVCASA (Pesticide supplier companies)
2. SAAMA (Agricultural machinery supplier companies)
3. SANSOR (Seed supplier companies)
4. SAPIA (Fuel supplier companies)
5. FSSA (Fertilizer supplier companies)

According to the SADC, Food, Agriculture and Natural Resources (FANR), South Africa is an important supplier of wheat to Botswana, Lesotho, Namibia and Swaziland. The total production of wheat in Botswana, Namibia, Lesotho and Swaziland is negligible in comparison with South African production.

3. COMPETITIVE POSITION

South Africa produces high quality wheat as per the milling industry's requirements. It was found that there is a trade-off between good quality wheat and achieving higher yields of lower quality cultivars, which increases profitability levels of farmers. It was submitted that the millers import lower quality wheat, which is mixed with higher quality wheat obtained domestically. The major cost drivers for producing wheat are fertilizers, herbicides and pesticides. Fertilizers, which constitute the largest portion of wheat production

cost, are imported in Dollar, and as such, the cost is mainly affected by exchange rate fluctuations, among other factors.

It was found that the production costs are not the same for all wheat producing regions and that yield levels play a significant role in determining the profitability of wheat farmers. Overall, it is also important to note that although the projected profit levels are higher particularly for the irrigated regions (Northern Cape), this region is not the main wheat producing area in South Africa. Projections indicate that the Swartland area, which is the main wheat producing region in South Africa, experiences profitability levels that are considerably less than the profits experienced in the Northern Cape region. While the Free State region is not considered to be the largest wheat producing region, it appears to be the most vulnerable region when compared to the Swartland and Northern Cape, and this could influence wheat farmers in the Free State to move into alternative, more profitable crops. According to information at the Commission's disposal, approximately 52 per cent of wheat is produced in the Western Cape region (i.e. the Swartland), 16 per cent in the Northern Cape and 14 per cent in the Free State region. Other regions produce a combined total of approximately 18 per cent.

It was also found that average yields achieved in dry land production areas over the past decade have improved consistently at a rate comparable to global trends. A long term drive towards improved productivity remains critical. According to information at ITAC's disposal, the industry has put a number of initiatives in place to achieve higher levels of productivity, including a review of breeding and grading regulations and international technical agreements with research institutes, although competition from countries with a more favourable natural resource structure remains a challenge. In many of these countries, such as in Europe, some form of support will always be provided to producers, implying that South Africa is unlikely to compete with no tariff support in place.

In terms of total imports of wheat into the SACU region, Russia accounts for approximately 40 per cent. Russian exports of wheat into SACU, recorded an average increase of approximately 245 per cent from the 2012/13 to 2014/15 marketing season. With regard to imports from other countries, there has been a significant increase in imported wheat from Germany, Canada and Argentina, although the latter's percentage share of imported wheat for the period 2012/13 – 2014/15 has been below the 5 per cent level and its unit price of imported wheat is slightly higher than that of imports originating from Russia.

Imports of wheat for the 2014/15 marketing period (from October 2014 – July 2015) amounted to 1.2 million tons. Imports for the 2015/16 marketing period (from October 2015 – July 2016) amounted to over 1.6 million tons of wheat, which means that imports increased by 33 per cent. According to information submitted by Grain SA, imports of wheat from 1 October 2015 to the first week of September 2016 were already at 1.8 million tons, which is at the same level as the previous season's total imports ending September 2016. Grain SA submitted that given the current import rate of almost 40 000 tons per week, it

is expected that the market season will end at 2 million tons, which is a historical high.

4. ESSENTIAL ISSUES PERTAINING TO THE REVIEW

The essential issues according to the policy directive include: the effects of drought; food inflation (bread prices); exchange rate fluctuations; and the relationship between the cost of production and the level of protection.

4.1. The effects of drought

South Africa has experienced the worst drought in 2015 since the early 1980s. Wheat production has been on a decline in South Africa for decades, reaching 50% of the domestic demand in 2014/2015. This decline has been exacerbated by the drought, reaching a shortage of 60% in 2015/2016. There has therefore been an increased necessity to import under these circumstances.

The National Chamber of Milling (NCM) submitted that the drought conditions are expected to have a huge impact on wheat production with resultant significant shortages. Imports are expected to reach at least 60% (2 million tons) of the country's wheat demand. RSA has been a net importer of wheat for decades. In the mid-1970s, it produced nearly 20% more wheat than what the local market required. Domestic consumption has since doubled, while production has halved from its peak in the late eighties.

The NCM submitted that the wheat import tariff is envisioned to support the domestic farmers against imports of subsidized wheat and that it is important to highlight that this is not aimed at increasing the domestic wheat prices, but rather to ensure that local wheat prices do not fall to levels that make competitive production impossible in a distorted world trade environment. The NCM stated that the wheat import duty has increased by over 900% in less than two years from R157/ton introduced on the 7th October 2014 to the triggered R1 591.40/ton on 24th May 2016 and contrary to the ever-increasing protection level, the wheat area planted has been in a consistent average decline for 25 years. It said that this has not only defeated the purpose for protection but has remained a huge import cost burden in the processing sector as well as in the consumer's basic food basket. At the current duty of R1 591.40/ton, the expected imports will constitute an amount of just under R3.2 billion to be payable in direct import duties annually. The related price raising effect on domestic wheat production is of a similar amount (R2.3 billion), bringing the overall impact to approximately R5.5 billion annually. This, according to the NCM, certainly would have inflationary impact on downstream basic food products.

Grain SA submitted the current drought had a negative effect on wheat production resulting in a need to import approximately 2 million tons of wheat during the 2015/16 marketing period. Currently South Africa does not produce sufficient wheat to satisfy demand, therefore necessitating imports of wheat. Since South Africa is a net importer of wheat, wheat prices trade closer to

import parity price levels, meaning that local prices are dependent on international prices. Grain SA therefore submitted that the wheat market is not really affected by the local drought since the market is normally in a net import status. It was further submitted that in order to revive the industry, it is important to create a reference price level that would assist the industry to be less dependent on international markets until the industry can be self-sufficient. Grain SA has entered into consultations to introduce various supply side measures including: wheat breeding varieties and technical cooperation agreements with wheat producing countries aimed at improving the development of wheat cultivars that are drought resistant, which in turn would increase the competitiveness of the domestic industry.

The Commission in its analysis of the effects of the drought is of the view that the drought had a negative impact on wheat production necessitating an increase in wheat imports to satisfy domestic demand. Although the customs duty on wheat is intended to encourage wheat farmers to produce wheat, it should not unduly raise the cost of importation especially at a time when wheat imports are deemed necessary.

South African wheat production is projected to significantly recover from the drought conditions in the 2016/2017 production season, due to favourable climatic conditions. This is expected to diminish the dependence on imports. Together with the positive outlook on wheat production, maintaining the variable tariff formula with some changes in the variables will continue to encourage farmers to increase wheat production.

4.2. Food Prices

Bread and other downstream wheat products are important staple food items. Higher bread prices affect lower income households more severely, as bread and cereals account for approximately 10 – 13% of total household expenditure for the bottom three income levels according to the latest Income and Expenditure Survey. There is a concern that a duty on wheat has a significant impact on the price of bread and other wheat-based products and therefore can adversely affect food affordability especially for poor households.

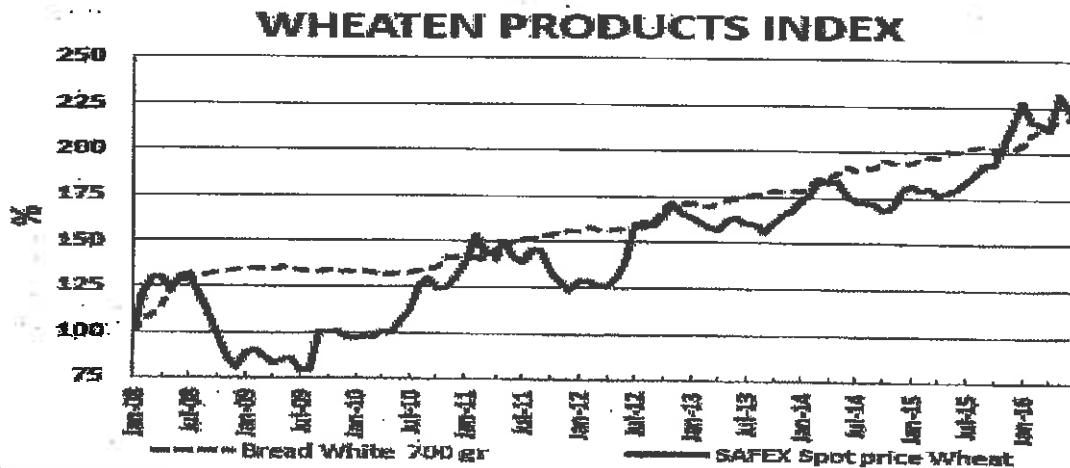
The NCM submitted that over the last 3 years the wheat price has increased by 38% and bread prices by 24%. If the wheat price less the duty is calculated, wheat prices would have increased by only 10%. It is also very evident that the bread price increases are still lagging raw material price increases for the last 6 months. The tariff of R1224.31/ton constitutes almost 25% of the overall wheat price. The tariff directly impacts on the local price of wheat as it is import parity driven being a net-import commodity. The direct impact on the bread price at the current tariff of R1224.31/ton is approximately 77 cents per loaf of bread. The wheat variable system triggered a further increase from R1 224.31/ton to R1 591.40. The NCM further stated that there is already an administrative process through ITAC to implement the incremental tariff adjustment. As a result, an additional import cost of R3.2 billion will be payable if the increase is implemented. This will further exacerbate the situation by

escalating an already high import cost burden on a staple food commodity with subsequent influence on basic food inflation – bread. The direct impact on the bread price at the tariff of R1 591.40/ton is approximately 99.5 cents per loaf of bread.

The NCM noted that there has been a concerted strategy in certain quarters of the value chain and the research community to downplay the wheat content cost of commercially baked bread, in an effort to create the perception that a high wheat tariff can readily be tolerated because it does not constitute a meaningful cost element of bread. It is a fatally spurious notion to be beguiled into an analysis of the bread market based on the analogy of a single loaf of bread. Volume effects are enormous in the bread market and ignoring the multiplier effects of these volumes leads to meaningless conclusions.

Grain SA submitted that it is clear from Figure 3 below that commodity prices are highly volatile and subject to factors such as supply and demand. However, the product prices were more stable in an upward trend and did not necessarily follow downward trends when commodity prices decreased. This is especially the case with wheat/bread prices. The reason for this is that wheat only contributes 20% to the overall bread prices.

Figure 3: Price index for wheat and bread:

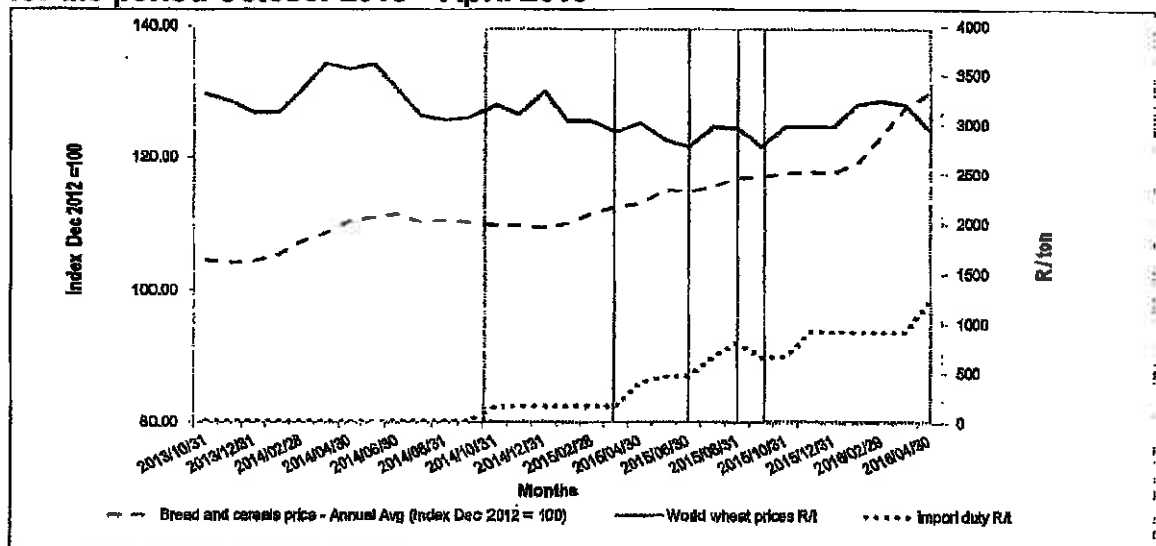


(Source: Grain SA)

The Commission in its analysis of the price trends of wheat over the past 3 years and the impact on food inflation found that wheat prices have been volatile over the recent past but its impact on food inflation has been much more complex than what it was made to be in public discourse. Since South Africa is a net importer of wheat, domestically produced wheat has to compete with imported wheat at international prices. The local wheat prices are therefore determined by import parity prices rather than export parity prices such as the case with maize. This means that since the market is already trading at import parity prices, the local supply and demand factors do not have the same price impact as in maize, which is normally traded at export parity prices.

The impact of customs duties on the price of bread and cereals for the period October 2013 to April 2016 is illustrated in the Figure 4 below:

Figure 4: Bread and cereal prices, world wheat price and import duty for wheat, for the period October 2013 – April 2016



Source: Sagis, Stats SA and ITAC calculation

From 25 April 2013, when the DBRP was increased to US\$294/t, until 10 October 2014, the customs duty remained at zero. However, bread and cereal prices continued to increase by approximately 10 per cent during this period. On 10 October 2014, the formula triggered an increase in the duty from free of duty to a 5 per cent *ad valorem* equivalent. The 5 per cent level of duty remained in place from 10 October 2014 until 03 March 2015. However, the price of bread and cereal continued to increase over this period by approximately 2 per cent.

Figure 4 above also indicates that even when a duty reduction was implemented on 21 August 2015 and remained effective until 25 September 2015, the price of bread and cereal continued to increase over this period by approximately 0.2 per cent. Similarly, where the level of duty remained the same at 32 per cent *ad valorem* equivalent from 25 September 2015 - 11 April 2016, the price of bread and cereal continued to increase further over this period by approximately 11 per cent.

As shown in Figure 4 above, there is no simple and straightforward correlation between movements in the international price of wheat, and the domestic price of bread and cereals at the retail level. The relationship between the level of duty and the price of bread and cereal as depicted in Figure 4 is also complicated by factors at play in the whole value chain. However, there is an inverse correlation between the movements in the world price of wheat and the wheat duty imposed, which is one of the intended purposes of the variable tariff formula to, *inter alia*, address the price-volatility in international commodity markets.

The Bureau for Food and Agricultural Policy (BFAP) was requested to conduct an impact analysis in terms of the price effect of the current Dollar-based

reference price and variable tariff formula on wheat production and the bread price. BFAP found that:

- Evaluation of historic price transmission from wheat to bread prices suggests that the effect of a shift in the wheat tariff on bread prices is modest.
- With current milling technologies employed in South Africa, one ton of wheat will yield 810 kg of brown bread flour. In the baking process, roughly 420g of flour is used to bake a 700g loaf of bread. Given this information, one ton of wheat can yield 1928 loaves of brown bread. Thus taking the analysis one step further, these extraction rates and conversion ratios can be used to calculate an average monthly wheat cost equivalent for brown bread, based on wheat prices reported by the South African Futures Exchange (SAFEX), which is then used to estimate long-run transmission elasticity.
- Around this long term co-integration however, estimated short run relationships are weak and the adjustment towards the long run equilibrium is slow. The slow rate of adjustment in retail prices can be ascribed to a number of factors, including the length and complexity of the value chain. A number of cost drivers throughout the value chain influence the final price of bread, including wages, energy, packaging and transportation. The fact that such cost drivers typically increase over time may be a factor influencing the even slower rate of adjustment from a downward shock in wheat prices relative to an upward shock.

In terms of the effect of the current wheat tariff on consumer food prices it was submitted that:

- While support to domestic producers is justified, the impact of a tariff in excess of R1200/ton on food prices must also be considered, particularly in the present scenario when food prices have reached an all-time high.
- As a simplified illustration of the extent of short term price relationships, it was shown that the cost equivalent of wheat in a brown bread has moved largely sideways over the 25 odd months under consideration. By contrast, average monthly brown bread prices appear to have trended upwards. At producer and retail levels, price formation is fundamentally different; South African wheat prices are determined in a global milieu in which South Africa is a very small player. As a result, domestic supply and demand factors have little effect on global prices.
- Retail prices, in turn, are determined in the context of a wider fast moving consumer good environment where other key input costs such as labour, electricity and distribution cost have a definite effect. These factors can be considered as fundamental factors driving the increasing margin between wheat cost equivalents of bread and final retail prices of bread.
- Ultimately the sustainability of wheat production in South Africa cannot depend merely on tariff protection. Therefore, it is encouraging that

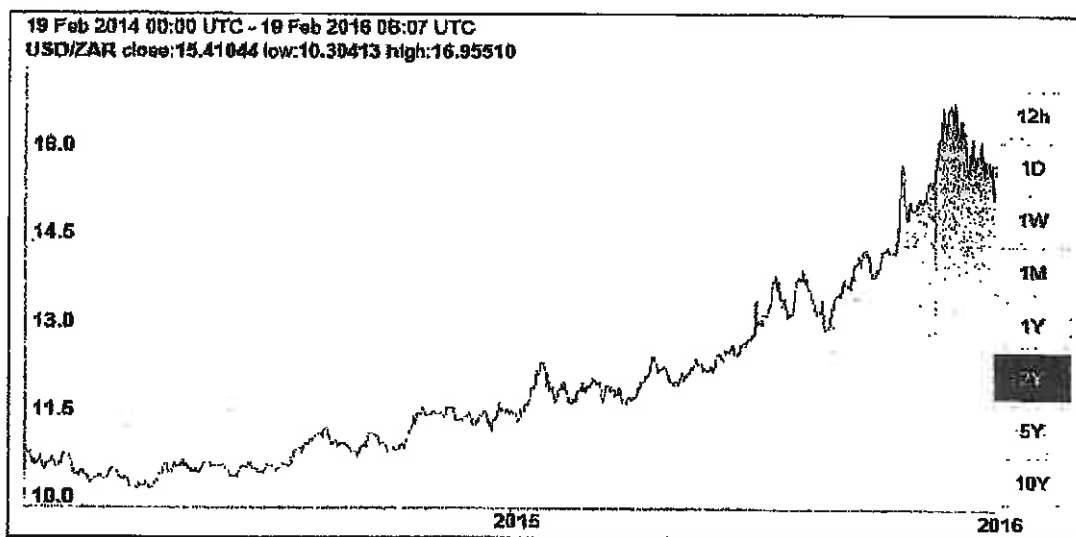
average yields achieved in dry land production over the past decade have improved consistently at a rate comparable to global trends. Going forward, a long term drive towards improved productivity remains critical. The industry has put a number of initiatives in place to achieve this, including a review of breeding and grading regulations and international technical agreements with research institutes, yet competition from countries with a more favourable natural resource structure remains stiff. In many of these countries, such as in Europe, some form of support will always be provided to producers, implying that South Africa is unlikely to compete with no tariff support in place.

In view of the above, the Commission found that since South Africa is a net importer of wheat, which is already trading at import parity levels, its contribution to food inflation has been modest compared to commodities such as maize that moved from a position of export parity to import parity in the recent past. Therefore, wheat prices as a driver of food inflation have been modest.

The Commission determined that there is no simple and straightforward correlation between changes in the customs duty on wheat and downstream bread and cereal prices. This was further supported by BFAP in its findings that in the short term, adjustments in the price of bread as result of a change in the price of wheat are slow. Retail prices of bread are mostly influenced by other key input costs such as labour, electricity as well as distribution costs. Furthermore the wheat value chain is relatively long and sophisticated, resulting in a cost share of wheat in the final retail price of bread of around 20 per cent.

4.3. Exchange rate fluctuations

In determining customs duties for wheat using the existing variable tariff formula, the difference between the current moving average international wheat price and the DBRP (both denominated in US Dollars), results in a Dollar specific duty which is converted to Rand according to the Rand/Dollar exchange rate prevailing on the day that the adjustment is triggered. Therefore changes in exchange rates play a crucial role in the quantum of the duty. Over the past two years the R/\$ exchange rate showed a weakening of 60% to the US\$, as shown in the graph below:



As a result of the weakening Rand/Dollar exchange rate and the impact this had on the calculation of the applied wheat duty, concerns were raised that the current variable tariff formula does not take into account extreme exchange rate variations, which may result in unnecessary additional protection to producers due to these fluctuations.

The NCM submitted that the original architects of the reference price model did not envisage a situation of aggressive declines in the value of the currency, nor did they foresee the substantial unintended additional protection levels that the model now provides because of runaway currency devaluations. It was submitted that the impact of the exchange rate is massive in the current variable tariff formula calculation because the US\$ amount is multiplied by the prevailing R/US\$ rate. It has continued to provide additional unnecessary protection due to devaluation of the Rand and should be eliminated going forward.

The NCM further stated that the Dollar-based reference price has continued to provide additional unnecessary protection due to aggressive devaluation of the Rand:

In 2013, USD294 = R2 028.60 (rate of R6.9 /1USD)

In 2016, USD294 = R4 615.80 (rate of R15.7/1USD),

and fixing the Rand/Dollar rate would also be counter-productive because it would either lead to a bias relative to the fixed rate - in favour of the producer (weak Rand) or, less likely, consumers (strong Rand).

The NCM submitted in order to deal with the problem of sharp depreciation of the Rand, that an *ad valorem* duty of 6.09% should be applicable up to a maximum fob ceiling price of US\$260/ton. The proposed 6.09% is equivalent to the calculated distortion factor based on Producer Support Estimates (PSE's) as published by the Organisation for Economic Co-operation and Development (OECD). The ceiling price of US\$260/ton is based on a long

term average price (10 years: 2006 - 2015) of US No. 2 Hard Red Winter Wheat. It was further submitted that should a decision be made to maintain the current formula structure, then it should be Rand-based and not Dollar-based.

Some of the other interested parties argued for a move to a Rand-based reference price citing amongst others that the existing DBRP is denominated in Dollar terms therefore the depreciation of the Rand and the decline in international wheat prices have caused the differential between the Rand price of international wheat and the DBRP respectively to diverge over recent months. In effect, it is argued that producers are receiving greater protection when global prices are low and the Rand depreciates.

Grain SA submitted that South Africa is operating in the global market where not only market prices (such as wheat) are subject to fluctuations in the exchange rate but also most of its production inputs. Within the wheat industries, more than 80% of the production input needs are imported. If the exchange rate were delinked from the tariff calculation, input prices would increase significantly due to the depreciation of the Rand, but wheat would be unaffected if international prices are constant. This would put the already high price/ cost squeeze on farmers under pressure.

The Commission considered the fact that when there is a sharp decline in the value of the Rand this may result in over protection. The Commission however also noted that, since April 2014 – April 2016, the international prices of major input costs such as crude oil and fertilizer decreased on average, by approximately 58% and 34%, respectively. However, the weakening in the R/\$ exchange rate negated any advantages that the local wheat producers would have had in potential lower input costs as far as fuel and fertilizers are concerned.

Based on simulations conducted on the possibility of switching to a Rand-based reference price, it was found that a Rand-based reference system would not have yielded a duty and would unlikely yield a duty or only at low levels due to the trajectory of the Rand. This would place farmers at a disadvantage against the background of inflationary pressures that dilute the supposed benefits of the lower Rand. This would expose domestic farmers to low priced and subsidized imports. The Rand/Dollar exchange rate catapults current prices to levels higher than the reference price. The reference price would have to be updated constantly to the most recent year based on almost yearly applications by the industry and this would be untenable.

The Commission therefore concluded that a new variable should be introduced into the tariff formula in the form of the Real Effective Exchange Rate (REER) Index published monthly by the South African Reserve Bank. This index takes into account price differentials between South Africa and its 20 most important trading partners. Adjusting the triggered duty by the REER, would ensure that producers are protected against real cost pressures and do not benefit unduly from exchange rate fluctuations. This adjustment should bring stability to the system during periods of exchange rate fluctuations or sustained depreciation or appreciation.

4.4. Relationship between the cost of production at farm level and the tariff regime

The variable tariff formula is intended to sustain and encourage the domestic production of wheat. Therefore, in establishing the level of the Dollar-based reference price (DBRP), production costs are taken into account in order to ensure that the DBRP is comparable to the domestic producer's production costs, which will enable the viability of domestic wheat production. There is a concern that the variable tariff formula does not take into account movements in farmers' production costs.

During consultations, both the NCM and Grain SA agreed in principle that the cost of production should be taken into consideration when determining the appropriate level of the DBRP. However, the level of protection should encourage domestic wheat production and on the other hand should not protect inefficiencies in production.

In analysing the relationship between domestic farmers' cost of production and the proposed DBRP, Grain SA was requested to submit the production cost of wheat farmers in the main wheat growing regions in South Africa, namely; the Swartland, Eastern Free State and Northern Cape, for the 2016/17 production years.

Based on the estimated production figures provided, it was found that the production costs are not the same for all regions and that yield levels play a significant role in determining the profitability of wheat farmers. Overall, it is also important to note that although the projected profit levels are higher for the irrigated regions (Northern Cape), this region is not the main wheat producing area in South Africa. Projections indicate that profitability levels in the Swartland, which is the main wheat producing area in South Africa, are far less than the profits expected in the Northern Cape region. While the Free State region is not considered to be the biggest wheat producing region, it appears to be the most vulnerable region when compared to the Swartland and Northern Cape, and this could influence wheat farmers in the Free State to move into alternative, more profitable crops. Approximately 52 per cent of wheat is produced in the Western Cape region, 16 per cent in the Northern Cape and 14 per cent in the Free State region. Other regions produce a combined total of approximately 18 per cent.

Due to the fact that SACU is a net importer of wheat, wheat is traded at import parity price levels. In addition, wheat is traded on a futures market, where the SAFEX price includes the applicable customs duty. The SAFEX price informs farm gate prices. However, the SAFEX prices will not prevail at farm gate level due to a number of compulsory deductions, i.e. transport differentials, possible grade/quality deductions and other related supply chain expenditures. According to BFAP, these compulsory deductions can exceed R750/ton for wheat.

South Africa is a higher cost producer than most wheat producing regions in the Northern Hemisphere due to the latter's conducive climatic conditions.

The variable tariff and the periodic adjustments to the reference price have been critical in supporting competitiveness levels where domestic producers can compete with imported wheat. Maintaining an appropriate level the DBRP would assist farmers to attain breakeven prices for wheat.

The DBRP should be set at a level that encourages domestic producers to plant wheat in order to be in a position to compete with imported wheat at prices which are approximately equal to the reference price, even in the absence of an actual duty.

The Commission took into account the domestic cost of wheat production in determining a level of protection, which is appropriate and supportive of the development of the whole SACU wheat value chain.

5. THE REVISED DBRP AND VARIABLE TARIFF FORMULA

The current tariff dispensation for wheat, referred to as the variable tariff formula, was introduced in 1999, with the aim to set a fair level of protection that would encourage farmers to plant wheat, which is able to compete against low priced imported wheat, without having undue adverse price raising effect downstream. The formula sets a floor-price referred to as the Dollar-based reference price (DBRP), which represents the minimum price at which the local producers are able to produce wheat. When the price of imported wheat is lower than the DBRP (i.e. due to depressed international prices), for a specified time, then an import duty is levied based on the difference between the DBRP and the low import price. It is countercyclical in that it affords protection when international world prices are low and no duty is levied when international prices are above the DBRP.

Initially, the NCM submitted that the formula for wheat is no longer relevant considering the following:

- The existing variable tariff dispensation for wheat, wheaten flour and downstream products thereof was introduced nearly two decades ago in 1999 by the BTT (Board of Tariffs and Trade). Its review is long overdue as a result of changes in local and global market dynamics.
- The intention to introduce a reference price model was to protect the primary sector against unfair and disruptive competition. The primary purpose was to address the world market distortions caused by price support subsidies applied by some major wheat producing countries.
- More than 70% of the RSA wheat imports in the past 5 years originated from countries that do not have domestic support or subsidies. The current high level of protection far out-weighs a justifiable level of price support subsidy on the remaining wheat imports.
- There are relevant remedy instruments to address unfair trade practices. In this instance, a countervailing duty or the established level thereof would be more relevant to address the subsidy distortions.

- The main purpose of the tariff is to encourage domestic production. RSA has remained a significant net importer of wheat for decades despite high level of protection the primary industry enjoyed. On the contrary, there has been a consistent decline in the plantings of wheat with annual record lows while the ever-increasing high tariffs continued to put input costs of food manufactures in the grain milling and bakery products sub-sectors under enormous pressure. This continued to impact basic food prices.
- The formula triggered high tariff levels due to decline in international prices not necessarily influenced by subsidies. The raw materials are cheaper in the rest of the world.
- The formula is administratively tedious and creates uncertainties in the market.
- Dollar-Based reference price continued to provide additional unnecessary protection due to devaluation of the Rand.
- The Rand devaluated by more than 40% against the Dollar since beginning of 2015.

Grain SA submitted that the wheat industry needs a “floor price” in order to support the industry against highly subsidised imports. This will ensure competitiveness within the local industry. This also creates an environment, which facilitates investor confidence in terms of production and growth. If the “floor price” is not in place wheat producers will shift their agricultural production to enterprises such as livestock or other alternatives.

It was further submitted that the current tariff model supports sustainable local production and is a crucial pillar of support in reviving the wheat industry. A long term drive towards improved productivity remains critical and Grain SA has put a number of initiatives in place to achieve higher levels of productivity, including a review of breeding and grading regulations and international technical agreements with research institutes, although competition from countries with a more favourable natural resource structure remains a challenge. In many of these countries, such as in Europe, some form of support will always be provided to producers, implying that South Africa is unlikely to compete with no tariff support in place.

On further consultation through engagements with producers and downstream users of wheat, with a view to explore ways of finding common ground, both the NCM and Grain SA understood in principle that a move to a simple *ad valorem* would result in the tariff structure losing the countercyclical feature currently provided by the current DBRP, which triggers a duty only when world prices are low and triggers lower or no duties when world prices are high.

The Commission considered that in terms of the current tariff regime, the DBRP is at US\$294/ton. This domestic reference price is determined typically by the most recent five-year average of the world benchmark wheat price (New Orleans, Dollar priced). Subsidies that foreign producers enjoy (weighted average) are added and transport costs from a foreign country to a South African port (natural protection) are deducted. This price support mechanism

was based on the rationale that the duty would place South African farmers and their foreign counterparts on an equal competitive footing, whilst simultaneously being sensitive to food affordability.

Although originally, most of the key downstream manufacturers were not in support of the current formula there emerged a common understanding, subsequent to consultations with NCM and Grain SA, that the aim of the current variable tariff formula is to set a fair level of protection that would ensure that the profitability and interests of primary producers are taken into account, but also those of value added producers and the possible inflationary effects for the consumers of food in particular the poor. Wheat forms part of the food security basket, however, economically it is not the most attractive crop in terms of profitability, which necessitates stimulation of production. Similarly, bread is a staple food for the low income sector, which requires a pricing system that does not render it unaffordable.

The Commission found that the variable tariff formula for wheat is the appropriate system that would address issues of global distortions and volatility in international markets, stimulate production and create stability in the trading environment. This formula sets a fair level of protection that would encourage farmers to plant wheat and enable them to compete against low priced imported wheat, without having an undue price raising effect for downstream users and consumers.

In determining the revised DBRP, the current US\$294/ton domestic reference price needs to be amended by taking into consideration, the average HRW No. 2 price over the past 5-year period. The distortion caused by subsidies that foreign producers enjoy (weighted average) must be added and the average transport costs from foreign countries to a South African port (natural protection) must be deducted in order to determine an appropriate level for the domestic reference price.

The wheat produced in South Africa compares with Hard Red Winter (HRW) No. 2 wheat. Prices for HRW No. 2 wheat are derived from the Kansas City Board of Trade and reliable quotes at a free on board value (USA Gulf) are readily available. Therefore, the FOB-value for HRW No. 2 wheat (USA Gulf) is used as the world wheat price in the variable tariff formula.

A 5-year period is deemed appropriate as it recognizes the significant change in the world price of wheat in the more recent past.

However, to address the negative impact of exchange rate fluctuations, a new variable must be factored into the tariff formula, to ensure that producers are protected against real cost pressures and foreign currency denominated intermediate input costs such as fertiliser and machinery parts and not benefit unduly from exchange rate fluctuations, by adjusting the duty with the Rand's Real Effective Exchange Rate Index as published by the South African Reserve Bank.

In other words, the Real Effective Exchange Rate Index that will be factored in will support farmers proportionally against a depreciating or an appreciating currency by adjusting the nominal Rand exchange rate for price differentials between South Africa and its most important trading partners. This would ensure that windfall profits or unnecessary additional protection to producers due to exchange rate fluctuations do not accrue to producers of an important staple food. This variable will introduce stability to the support mechanism.

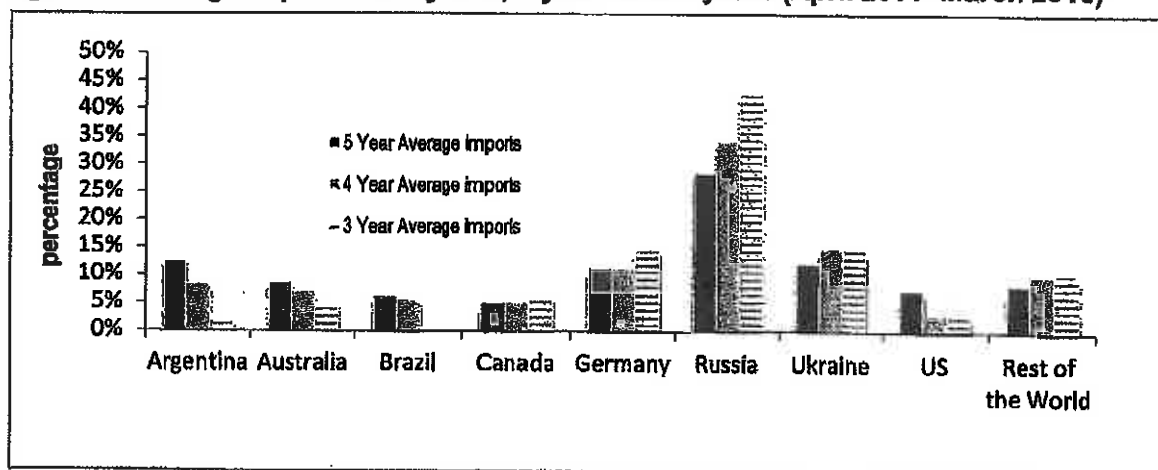
Table 5 and Figure 5 below provide a summary of the average imports in the SACU, for the specified periods that correspond with the local wheat farmer's production season:

Table 5: Average imports for 5 years, 4 years and 3 years (April 2011- March 2016)

Country of Origin	5 Year period		4 Year period		3 Year period	
	Average Imports p/a (Kg)	% share	Average Imports p/a (Kg)	% share	Average Imports p/a (Kg)	% share
Argentina	17 931 999	12.5%	12 189 395	8.5%	3 251 875	2.2%
Australia	12 433 530	8.7%	10 219 736	7.1%	7 366 138	5.0%
Brazil	8 920 467	6.2%	7 954 366	5.5%	996 048	0.7%
Canada	7 215 009	5.0%	7 385 007	5.1%	9 047 886	6.2%
Germany	16 314 842	11.4%	15 942 928	11.1%	21 257 209	14.5%
Russia	40 811 247	28.4%	49 255 754	34.3%	63 533 955	43.2%
Ukraine	17 279 226	12.0%	21 599 032	15.0%	21 607 352	14.7%
United States	10 698 468	7.4%	4 375 328	3.0%	4 570 868	3.1%
Rest of the World	12 072 989	8.4%	14 663 242	10.2%	15 447 736	10.5%
Total Average	143 677 777	100.0%	143 584 786	100.0%	147 079 267	100.0%

Source: SARS and ITAC calculations

Figure 5: Average imports for 5 years, 4 years and 3 years (April 2011- March 2016)



Source: SARS and ITAC calculations

As shown in Table 5 and Figure 5 above, based on a wheat production period spanning April 2011 to March 2016, the majority of wheat imports originated from Russia. On average, for the five, four and three year average periods, imports from Russia accounted for approximately 28.4 per cent, 34.3 per cent and 43.2 per cent, respectively. It is important to note that there has been a shift in the origin of imported wheat, which previously used to be dominated by the USA, Argentina and Germany. Recent import trends show that the origin of wheat imports has shifted towards the Black Sea region (i.e. Russia and

Ukraine) in recent years as a result of the comparative advantage for producing wheat that is prevalent in this region. The analysis of the origin of imports is important in this regard, as it has a major impact in the determination of the country-weighted distortion factor.

Table 6 below details the calculation of sea freight costs (transport costs) as submitted by Grain SA over the period 2011/12 to 2015/16:

Table 6: Average ocean freight costs for the 5 year period

Period	Transport Cost - Apr - Mar US\$/ton
2010/11	45.25
2011/12	40.08
2012/13	42.33
2013/14	35.58
2014/15	31.08
5 year Average	38.87

Source: Grain SA, IGC and ITAC calculations

As shown in Table 6 above, based on production year averages, transport cost over the five year period is calculated at US\$38.87/ton.

Table 7 below shows the weighted distortion factor based on the percentage share of imports originating from various countries as provided in Table 5 above.

Table 7: Average weighted Producer Subsidy Estimates for Agriculture for five years (2011/12 – 2015/16)

Country of Origin	5 Year period		
	% share of average imports	Country PSE %	Country weighted PSE %
Argentina	12.50%	0.00	0.00
Australia	8.70%	1.99	0.17
Brazil	6.20%	3.67	0.23
Canada	5.00%	11.63	0.58
Germany	11.40%	18.93	2.16
Russia	28.40%	14.66	4.16
Ukraine	12.00%	-3.87	-0.46
United States	7.40%	8.56	0.83
Rest of the World	8.40%	-	-
Total Average	100.0%		7.47

SARS, OECD and ITAC calculations

As shown in Table 7 above, in order to determine the level of distortion with respect to wheat imports, a weighted average of the volumes of wheat from countries from which South Africa imports was calculated and used together with the relevant country Producer Subsidy Estimates (PSE) to calculate the country-weighted PSE.

Export prices for wheat are to a large extent influenced by the domestic support of governments to producers in wheat exporting countries. The PSE, calculated by the OECD, shows the support given by the respective governments to producers as a percentage of gross farm receipts (by a given commodity such as wheat). In other words, for a given commodity, this measure includes only those policies that are directly linked to that individual commodity relative to gross farm receipts from producing that particular commodity.

Table 8 below presents the Dollar based reference price (US\$/ton) calculated for 5 years:

Table 8: Determination of the domestic Dollar based reference price level

April - March	Annual HRW#2 FOB price US\$/ton	Country Weighted Distortion factor (PSE %)	Average transport Cost US\$/ton	Average FOB Price + Country Weighted Distortion Factor (PSE %) (A+Bb)	Calculated Reference Price US\$/ton
	(A)	(Bb)	(C)		((A+(A*1.0Bb)-C)
5 year Average	295.80	7.47	38.87	317.90	279.03

Source: Grain SA, OECD, IGC and ITAC calculations

Table 8 above presents the domestic reference price calculation based on the country weighted distortion factors based on Producer Subsidy Estimates data from the OECD.

Since the current tariff dispensation also covers a downstream product in the form of wheaten flour, the conversion factor of 150 per cent is taken into account when calculating the duty for wheaten flour. This assumption is based on the world average for conversion of wheat to wheaten flour of 1:1.5 (i.e. wheat flour is 1.5 times more expensive than wheat).

Calculation of the revised DBRP and variable tariff formula for wheat is detailed below:

$$\text{DBRP} = 5 \text{ year USA HRW \#2 FOB price} + \text{Distortion Factor} - \text{Transport cost}$$

As shown in Table 8 above, the 5 year average FOB price (US\$/ton) is calculated at US\$295.80/ton. If a distortion factor of 7.47 per cent is added, the domestic Dollar-based reference price increases to US\$317.90/ton. However, to create a fair trading environment, transport costs of US\$38.87/ton needs to be deducted from the US\$317.90/ton, resulting in a domestic Dollar-based reference price equal to US\$279.03/ton.

Using the data from SAGIS, the 3-week moving average price on 09 August 2016 of US\$189.67/ton and the corresponding exchange rate of R13.4261, using the 5 year average reference price of US\$279.03/ton, the applicable duty on wheat and wheat flour is calculated as follows:

WHEAT:

$$\begin{aligned} & \text{Reference price} - 3 \text{ week moving average US No. 2 HRW FOB (ord)} \\ & = \text{US\$279.03} - \text{US\$189.67} \\ & = \text{US\$89.36} \times 13.4261 \text{ (exchange rate on 09/08/2016)} \\ & = \text{R1 199.76/t} \\ & = \text{R1 199.76/t} \times 0.79 \text{ (adjusted by the real effective exchange rate i.e.79/100} \\ & \quad \text{for July 2016 as published on the SARB website using} \\ & \quad \text{its published base year, which is currently 2010)} \\ & = \text{R 947.21} \\ & = (\text{R 947.21/ 1000kg}) \times 100 \\ & = 94.72\text{c/kg} \end{aligned}$$

WHEAT FLOUR:

$$\begin{aligned} & \text{Duty on wheat} \times 150\% \\ & = 94.72\text{c/kg} \times 1.5 \\ & = 142.18\text{c/kg} \end{aligned}$$

Based on the 5 year average, the rate of duty on wheat would be reduced from the current 159.14c/kg to 94.72c/kg (40 per cent decline). Taking into account the revised reference price, the level of protection would effectively be reduced from the current US\$294/ton to US\$279.03/ton. This implies that, if prices should fall below US\$279.03/ton a duty will be triggered to offset the decline in international wheat prices. Calculating the 1.5 multiplier effect or 150 per cent, in terms of the current formula, the duty on wheaten flour will be reduced from the current 238.71c/kg to 142.18c/kg. The *ad valorem* equivalent of the applicable duty on both wheat and wheaten flour would be reduced from the current *ad valorem* equivalent of 52.1 per cent to 37 per cent.

6. COMMENTS

Comments were received from Grain South Africa (Grain SA), the South African Chamber of Baking (SACB), the National Chamber of Milling (NCM), Premier FMCG, Woolworths, Paramount Mills, Godrich Flour Mills (Pty) Ltd, NWK, Bunge South Africa (Pty) Ltd, Snackworks a division of National Brands, the Animal Feed Manufacturers Association (AFMA), South African Cereals and Oilseeds Trade Association (SACOTA), and the South African Breweries (Pty) Ltd (SAB).

7. FINDINGS

The aim of the current variable tariff formula is to set a fair level of protection that would encourage farmers to plant wheat, which is able to compete against low priced imported wheat, without having undue adverse price raising effect downstream. Wheat forms part of the food security basket, however, economically it is not the most profitable crop, which necessitates stimulation of production. Additionally, bread is a staple food for the low income sector, which requires a pricing system that does not render it unaffordable.

The domestic production of wheat declined by 25 per cent from 2005/06 to 2014/15 with an average of 1 857 000 tons per annum. The total demand for wheat in South Africa, increased by 17 per cent from 2 940. 000 tons in 2005/06 to 3 443 000 tons in 2014/15 with an average of 3 254 000 tons per annum.

South Africa has experienced the worst drought in 2015 since the early 1980s. Wheat production has been on a decline in South Africa for decades, reaching 50% of the domestic demand in 2014/2015. This decline has been exacerbated by the drought, reaching a shortage of 60% in 2015/2016. There has therefore been an increased necessity to import under these circumstances.

South African wheat production is projected to significantly recover from the drought conditions in the 2016/2017 production season, due to favourable climatic conditions. This is expected to diminish the dependence on imports. Together with the positive outlook on wheat production, maintaining the variable tariff formula with some changes in the variables will continue to encourage farmers to increase wheat production.

Total imports increased, on average, by 28 per cent from the 2012/13 to 2014/15 marketing season, whilst, the average price per unit of imported wheat has declined by approximately 3 per cent over the same period. Between 2013/14 and 2014/15, the average price per unit of imported wheat declined by approximately 7 per cent, which could be attributed to a significant decline in the price of imported wheat from Russia by approximately 11 per cent over the same period. Russia, which accounts for approximately 40 per cent of total imports for wheat into the SACU region, recorded an average increase of approximately 245 per cent in wheat exported to SACU from the 2012/13 to 2014/15 marketing season.

An analysis of the price cost structure for wheat farmers was taken into account to ensure that the level of protection in the form of DBRP is in line with the farmer's production costs. It was found that the production costs are not the same for all regions and that yield levels play a significant role in determining the profitability of wheat farmers. Overall, it is also important to note that although the projected profit levels are higher particularly for the irrigated regions (Northern Cape), this region is not the main wheat producing area in South Africa. Projections indicate that the Swartland area, which is the main wheat producing region in South Africa, experiences profitability levels that are considerably less than the profits experienced in the Northern Cape region. While the Free State region is not considered to be the largest wheat producing region, it appears to be the most vulnerable region when compared to the Swartland and Northern Cape, and this could influence wheat farmers in the Free State to move into alternative, more profitable crops. Approximately 52 per cent of wheat is produced in the Western Cape (i.e. Swartland), 16 per cent in the Northern Cape and 14 per cent in the Free State. Other regions produce a combined total of approximately 18 per cent.

The average production cost plus marketing costs of the three wheat producing regions is fairly comparable with the proposed reference price of US\$279.03/ton.

Simulations were conducted, to look into the possibility of switching to the Rand-based reference price and it was found that a Rand-based reference system would not have yielded a duty and would unlikely yield a duty or perhaps at only low rates due to the trajectory of the Rand. This would place farmers at a disadvantage against the background of inflationary pressures that dilute the supposed benefits of the lower Rand. The Rand/Dollar exchange rate catapults current prices to levels higher than the reference price. The reference price would have to be updated constantly to the most recent year based on almost yearly applications by the industry and this would be untenable.

A move to a simple *ad valorem* duty was considered and it was found that the tariff would lose the countercyclical feature currently provided by the current DBRP that triggers a duty when world prices are low and triggers lower or no duties when world prices are high. The variable tariff formula is therefore better suited to the circumstances surrounding the production and trade of wheat as opposed to the normal *ad valorem* duties. Rapid response is required due to the frequency of the sharp peaks and troughs evident in the

price cycles of wheat. Wheat farmers do not have much bargaining power as they are price takers in the value chain.

Subsequent to stakeholder engagement, it emerged that introducing a new variable of the Real Effective Exchange Rate Index would address the negative impact of exchange rate fluctuations. This new variable must be factored into the variable tariff formula to ensure that producers are protected against real cost pressures and foreign currency denominated intermediate input costs such as fertiliser and machinery parts and not benefit unduly from exchange rate fluctuations, by adjusting the duty with the Rand's Real Effective Exchange Rate Index as published by the South African Reserve Bank. The Real Effective Exchange Rate Index that will be factored in will support farmers proportionally against a depreciating or an appreciating currency by adjusting the nominal Rand exchange rate for price differentials between South Africa and its most important trading partners. This would ensure that windfall profits or unnecessary additional protection to producers due to exchange rate fluctuations do not accrue to producers at the expense of food affordability.

Tariff protection must be complimented by addressing competitiveness constraints in wheat production. A long term drive towards improved productivity remains critical. According to information at ITAC's disposal, the wheat industry has put a number of initiatives in place to achieve higher levels of productivity, including a review of breeding and grading regulations and international technical agreements with research institutes, although competition from countries with a more favourable natural resource structure remains a challenge. In many of these countries, such as in Europe, some form of support will always be provided to producers, implying that South Africa is unlikely to compete with no tariff support in place.

It was found that since South Africa is a net importer of wheat, which is already trading at import parity levels, its contribution to food inflation has been modest compared to commodities such as maize that moved from a position of export parity to import parity in the recent past. Therefore, wheat prices as a driver of food inflation have been modest.

The Commission determined that there is no simple and straightforward correlation between changes in the customs duty on wheat and downstream bread and cereal prices. This was further supported by BFAP in its findings that in the short term, adjustments in the price of bread as result of a change in the price of wheat are slow. Retail prices of bread are mostly influenced by other key input costs such as labour, electricity as well as distribution costs. Furthermore the wheat value chain is relatively long and sophisticated, resulting in a cost share of wheat in the final retail price of bread of around 20 per cent.

8. RECOMMENDATION

In view of the above, the Commission decided that the domestic Dollar-based reference price for wheat be reduced from US\$294/ton to US\$279/ton based on the 5-year average USA Hard Red Wheat No.2 settlement price of wheat of US\$295/ton, plus an adjustment for the distortion factor evident in the international wheat market of US\$22/ton, less the average ocean transport cost of wheat to a South African port of US\$38/ton.

The initial duty on wheat will be calculated as the difference between US\$279/ton and the price of wheat on 9 August 2016, which amounted to US\$189.67/ton at an exchange rate of R13.43 to the US\$ adjusted for price differentials between South Africa and its most important trading partners using the published Real Effective Rand Exchange Rate Index as follows:

REFERENCE PRICE	
RSA domestic reference price	US\$279/ton
Minus: USA Hard Red Wheat No.2 settlement price of wheat on 09 August 2016	US\$189.67/ton
Dollar duty on wheat	US\$89.36/ton
Rand duty on wheat before adjustment	R1 199.76/ton
Adjusted with the Real Effective Exchange Rate Index	$R1\ 199.76 \times 0.79 = R947.21/ton$
Rand duty on wheat	94.72c/kg (equivalent to 37% <i>ad valorem</i>)
Rand duty on wheat flour	142.18c/kg (equivalent to 37% <i>ad valorem</i>)

Adjustments to the level of protection will be based on quantum movements in the world reference price as follows:

The difference between the 3-week moving average of the US No. 2 HRW (ord) Gulf settlement price (world reference price) and the domestic Dollar-based reference price for wheat is calculated on a weekly basis. If the 3-week moving average of the US No. 2 HRW (ord) Gulf settlement price shows a variance of more than US\$10/ton from the previous trigger level for 3 consecutive weeks, an adjustment to the tariff is triggered and a new duty calculated. The resulting Dollar specific duty is converted to Rand according to the Rand/Dollar exchange rate prevailing on the day that the adjustment is triggered and subsequently adjusted with the latest available real effective exchange rate index as published by the South African Reserve Bank.

The levels of duty should not exceed the bound rates of 72 per cent *ad valorem* for wheat and 99 per cent *ad valorem* for wheat flour.

The Dollar-based reference price should be reviewed periodically after every three years. This would ensure that the DBRP is adapted to recent developments in the domestic and global markets.

[05/2016]