



# The competitive status of the South African Wheat Industry June 2013

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- Wheat is currently the second most important field crop in South Africa.
- Wheat flour (used for bread baking) is regarded as the second most important food source and is at the forefront in the fight against food insecurity in South Africa.
- The importance of the SAWI however does not only lay in its ability to provide food, but also in the indirect contribution towards job creation, skills development, poverty alleviation, etc.

This exemplifies the importance of a viable, efficient and sustainable wheat production sector in South Africa.

# Background

- Prior to 1997:
  - The South African Agricultural sector (including wheat) was characterized by a single channel marketing system.
  - The SAWI was controlled by a centralized board i.e. The Wheat Board.
  - In this system The Wheat Board controlled prices, controlled imports and exports and wheat buyers (millers) were obliged to take up locally produced wheat.
  - The purpose of this system was to protect local supply by manipulating exports and imports.
- In 1997, the Wheat Board was decommissioned and as a result:
  - The international markets played an increasingly important role.
  - The SA wheat producers had to compete internationally.
  - There were more opportunities but also more risks due to fluctuating supply and demand affecting prices.

# Problem statement

- The decommissioning led to an increase in the efficiency of the entire wheat value chain. The major effects included:
  - Wheat buyers decreased from 137 mills in 1997 to 65 mills in 2011.
  - This coupled with the fact that most millers integrated vertically into the supply chain created a large degree of concentration amongst buyers in South Africa.
  - Currently there are four major wheat buyers in South Africa and is responsible for 87% of wheat purchases giving them unprecedented market power with regards to determining prices, wheat quality and innovation.
  - South African wheat production declined significantly since 1997,
  - Imports increased significantly since 1997 to sustain the local growing demand.
- This raised the question: Did the increase in concentration in the local market influence the competitiveness of the industry? To what extent? Which part of the industry did it affect most?

# Problem statement

- To reach the main objective of the study i.e. the competitive state of the SAWI, the ability of the industry to compete on an international scale must be determined.
- According to Porter (1998) two questions must be answered to determine the competitive status of any industry:

## 1. How is competitiveness defined?

The competitiveness of the SAWI can be defined as the ability of the industry to generate wealth and employment while remaining exposed to international competition.

## 2. How is competitiveness measured?

Several measures and indicators have been developed to measure competitiveness. Although it is not without its challenges, the use of trade data simultaneously take into account demand and supply factors and considers marketing and transport costs.

# Methodology

- The Relative Trade Advantage (RTA) method takes both exports and imports into consideration and is considered to be a more comprehensive and superior measure of competitiveness compared to methods considering only exports or imports.
- The RTA however only measures the state of competitiveness and does not identify factors responsible for this status.
- The RTA is calculated as the difference between relative export advantage (RXA) and relative import advantage (RMA) and is formulated as follows:

$$RTA_{iv} = RXA_{iv} - RMA_{iv}$$

Where for (n+v) countries and (m+i) products),

$$RXA_{iv} = [X_{iv}/X_{in}]/[X_{mv}/X_{mn}]$$

$$RMA_{iv} = [M_{iv}/M_{in}]/[M_{mv}/M_{mn}]$$

- It must be noted that the RTA is a relative measure and there must therefore be a comparison between industries or sections within an industry.

# Application

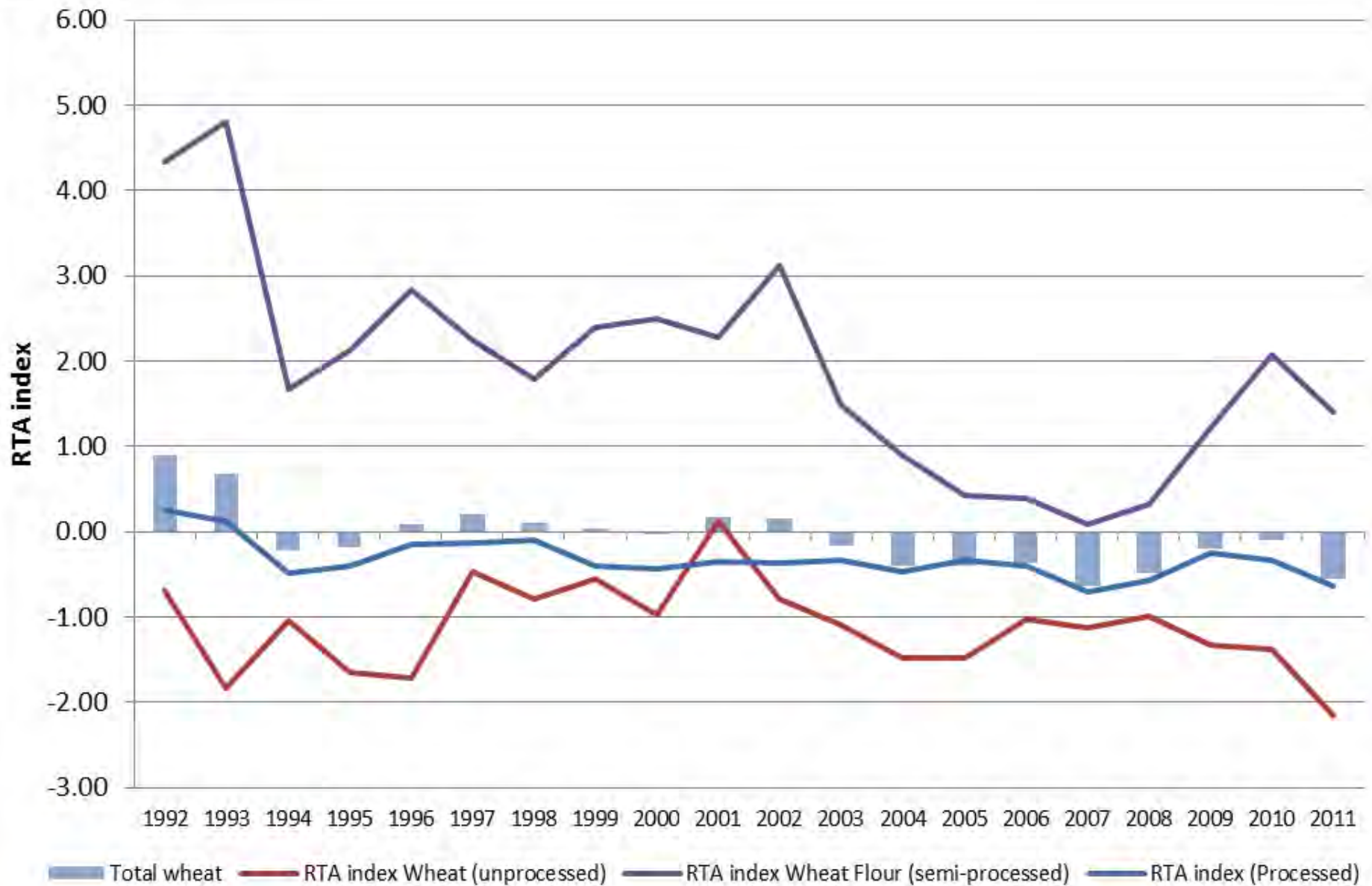
- Therefore, the supply chain of the SAWI will be divided into three sections namely: unprocessed, semi-processed and processed.
- To determine the competitive status of the SAWI, it is necessary to determine how successful each of these sections of the supply chain traded its products relative to other sections.
- The competitive status of the unprocessed, semi-processed and processed elements will then be determined.
- In order to accomplish this, the competitive status must be determined for wheat (unprocessed), wheat flour (semi-processed), pasta, bread and pastry, biscuits and brans and residues (processed) each representing a section of the wheat industry.



# Results

Year	RTA index Wheat (unprocessed)	RTA index Wheat Flour (semi- processed)	RTA index Pasta (processed)	RTA index bread and pastry (processed)	RTA index biscuits (processed)	RTA index brans and residues (processed)	Total wheat
1992	-0.68	4.34	-0.05	0.19	0.65	NA	0.89
1993	-1.83	4.81	-0.27	0.14	0.51	NA	0.67
1994	-1.03	1.67	-0.57	0.11	0.36	-1.85	-0.22
1995	-1.64	2.12	-0.40	0.12	0.27	-1.61	-0.19
1996	-1.71	2.84	-0.40	0.06	0.28	-0.51	0.09
1997	-0.48	2.25	-0.30	0.14	0.40	-0.78	0.21
1998	-0.79	1.80	-0.28	0.21	0.40	-0.73	0.10
1999	-0.55	2.40	-0.35	0.02	0.09	-1.35	0.04
2000	-0.97	2.49	-0.38	-0.07	0.00	-1.25	-0.03
2001	0.12	2.28	-0.43	-0.10	-0.11	-0.74	0.17
2002	-0.79	3.13	-0.32	0.07	0.25	-1.44	0.15
2003	-1.09	1.48	-0.39	-0.03	-0.04	-0.88	-0.16
2004	-1.48	0.89	-0.40	-0.10	-0.18	-1.18	-0.41
2005	-1.49	0.42	-0.43	-0.15	-0.12	-0.61	-0.40
2006	-1.03	0.40	-0.43	-0.20	-0.12	-0.86	-0.37
2007	-1.12	0.09	-0.56	-0.20	-0.14	-1.92	-0.64
2008	-0.99	0.32	-0.45	-0.10	-0.02	-1.69	-0.49
2009	-1.33	1.21	-0.35	0.05	0.35	-1.07	-0.19
2010	-1.38	2.08	-0.44	-0.04	0.14	-0.98	-0.10
2011	-2.16	1.41	-0.56	-0.10	0.03	-1.92	-0.55

# Results



# Conclusion

- It is clear from the results that the unprocessed wheat i.e. primary wheat production is the least competitive section of the wheat industry and have declined significantly since 2001 (lag effect of the decommissioning in 1997).
- It is clear from the results that the increase in market concentration coincides with a decrease in the competitiveness of local wheat producers.
- However, the decline in competitiveness could be due to several factors.
- It may be that farmer's inability to adapt to a free market system
- It still however raises some concerning questions with regard to the institutional environment within which these producers operate.
- It is thus of critical importance to determine the exact causes affecting the declining competitive status of the whole wheat industry in South Africa and to what extent each element contributes to this fundamental problem. Further analyses are therefore required to determine to underlying cause of this problem.



# Thank you

It all starts here