

South African Food Cost Review: 2010



National Agricultural
Marketing Council
Strategic positioning of South African Agriculture
in dynamic global markets



**agriculture,
forestry & fisheries**

Department:
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This publication attempts to provide more insight into the complex factors driving commodity and food prices.

This is the sixth publication of the South African Food Cost Review, emanating from the recommendations by the Food Pricing Monitoring Committee in 2003 to monitor food prices in South Africa on a regular basis.

The purpose of this publication is to reflect on food price trends during 2010.

Foreword



Governments around the globe have come to terms with the fact that stable and side-ways moving food prices is a luxury of the past and that high and volatile food prices are expected to persist into the future. The impact of high and volatile food price on poor consumers and its effect on food security ensures that this topic will remain on the agenda of governments for quite some time. South Africa's case is no different from the rest of the world.

The annual Food Cost Review forms part of an initiative by the NAMC to review and monitor food prices from farm level to retail level, including processing costs, and also to measure the farm-to-retail price spreads. The aim of the Food Cost Review is to inform policy makers and other stakeholders and to provide them with the opportunity to gain first hand qualitative and quantitative data on price trends in order to make informed decisions and implement appropriate actions. The value of information/knowledge during such difficult times can be best described by a quote of John Fitzgerald Kennedy: "In a time of turbulence and change, it is more true than ever that knowledge is power".

South African consumers were largely protected from high food prices in 2010 due to the strong exchange rate, which played an important role to buffer domestic consumers against the rise in international commodity and food prices. South Africa's ability to produce surpluses in the case of maize and to expand production in other products like meat and vegetables also contributed to lower food inflation.

Even though household food security remains a challenge in South Africa, the country has not experienced food riots as in many parts of the world in recent years or been forced to make emergency policy adjustments. This is testimony to the South African agricultural sector being able to feed its people and contributing to maintaining social stability. However various challenges remain to ensure that the sector grows and contributes to the equitable use of resources in addressing transformation, household food security and expanding our agro-processing sector.

These are not challenges that only a government can address, but requires that all stakeholders be part of the solution. It is my sincere hope that the opportunities that the current agricultural and food environment presents are realised by all stakeholders, and that we can move forward in a pro-active manner to ensure an equitable, profitable and sustainable agricultural and food sector for generations to come. I trust that the Food Cost Review plays an important part during this journey.

Special thanks go to the private and public sector stakeholders who are always willing and able to share their industry specific information with the NAMC to use in this publication and various other related studies.

A handwritten signature in black ink, appearing to read 'Ntombi Faith Msimang'. The signature is stylized and fluid.

Ms Ntombi Faith Msimang
Chairperson: NAMC

EXECUTIVE SUMMARY

SETTING THE SCENE

The good news is that the global economy rebounded in 2010 and, according to the International Monetary Fund (IMF), world output was up 4.8 %, mainly due to growth in emerging and developing economies. The recovery remained fragile, however, mainly due to high unemployment, low consumer confidence, reduced household incomes and high public debt in many of the developed economies.

Similarly, agricultural commodity and food markets globally have taken a roller coaster ride in recent years. Prices of most commodities, including oil, minerals and agricultural commodities, remained firm or strengthened in 2010. For example, in the crop sector, several factors contributed to prices strengthening significantly throughout 2010. These include, amongst others, adverse climate conditions that resulted in poor harvests in many parts of the world, export restrictions, developments in the bio-fuels industry and a worrying low stock-to-use ratio for many cereals.

The overall food price index of the Food and Agricultural Organization (FAO) of the United Nations (UN) increased by 33 % year-on-year, i.e. from January 2010 to January 2011, reaching its highest level since January 2008. Food prices started to rise significantly from June 2010. The most significant increase was seen in the price index of edible oils, which increased by 65 % from January 2010 to January 2011.

TRENDS IN AGRICULTURE, FORESTRY AND FISHERIES TRADE

In 2010, South Africa remained a net exporter of agriculture products, and hence the agricultural sector continued to be an important earner of foreign exchange. The value of agricultural exports amounted to R46.5 billion (i.e. a 2 % decline from 2009), while imports were valued at R35.7 billion in 2010 (i.e. a 3 % decline from 2009). Although the trade balance for unprocessed agricultural products remained positive, South Africa imported more processed agricultural products than it exported in 2010. The value of exports of fisheries and forestry products exceeded that of imports into South Africa in 2010.

TRENDS IN INPUT COSTS

Non-food component costs can make up a considerable proportion of the overall cost of producing food. At the farm level, the non-food input cost component contributes 90 % to the total cost of production. The farming requisite price index increased by 11.9 % from 2009 to 2010; the price of machinery and implements showed the biggest increase of 16.4 %; fertilizer prices decreased by 2.3 % but 2010 prices were still significantly higher than 2007 prices; animal feed prices increased by 16.2 % and fuel prices increased by 4.1 %. The terms of trade at primary agricultural level declined further in 2010.

It is estimated that non-food component costs at the manufacturing level can make up as much as 55 % of total costs. The producer price index (PPI) for selected materials used in the food manufacturing process shows the following trends between 2000 and 2010: plastic bottles increased by 151.3 %, tinplate increased by 102.2 %, kraft paper increased by 74.6 % and corrugated cardboard boxes increased by 60.8 %, gas and water increased by 148.8 %, electricity prices increased by 134.4 %, and petroleum and coal products increased by 126 %.

At the retail level, when considering two of South Africa's largest food retailers (Shoprite and Pick 'n Pay), the cost of actual food items sold accounts for approximately 85 % of total costs, with the remaining 15 % originating from labour, rental, and other non-food-related costs.

Non-food inputs that are used at almost all stages of the food value chain are inputs such as fuel, electricity, labour and water. All of these items fall within the category of administered and regulated prices, and showed the following price trends between 2009 and 2010:

- The regulated minimum wages for primary agriculture increased by 6.8 %.
- 0.05 % Sulphur diesel increased by 8.1 % in Gauteng and by 8 % at the coast.
- Electricity prices increased by 24 %. In 2009, the total cost of electricity for the primary agricultural and forestry sectors amounted to approximately R1.8 billion. If the planned electricity costs over the next three years are taken into account, the cost of electricity is estimated to increase to nearly R3 billion if electricity usage by the primary agricultural and forestry sector remains at more or less current levels.

A better understanding of the impact of regulated price increases can be illustrated by applying it to a specific industry, for example the animal feed and poultry industries.

- Animal feed industry: The percentage contribution of regulated fuel, labour and electricity to the total production cost of animal feed varied between 46.6 % in 2007 and 54.8 % in 2010. When considering the individual cost components over a period of ten years (2001 to 2010), it shows that the cost of labour increased by 68.3 %, the cost of electricity increased by 204.1 % and the cost of fuel for delivery increased by 34.2 %. Cost trends between 2009 and 2010 for the items depicted were as follows: labour increased by 6.8 %, electricity increased by 24.8 % and fuel for delivery increased by 12.2 %.
- Poultry industry: From 2008 to 2010, the cost of electricity increased by 55.3 %, the cost of water increased by 52 % and the cost of transport increased by 3.6 %. Cost trends between 2009 and 2010 were as follows: electricity increased by 33.9 %, water increased by 18.6 % and transport decreased by 2.4 %.

INFLATIONARY TRENDS FOR SELECTED FOOD ITEMS

The average headline Consumer Price Index (CPI) rate for 2010 was 4.29 %, i.e. 2.85 percentage points lower than the average headline CPI rate of 2009 (7.14 %). On average, price increases were 2.85 % lower in 2010 than in 2009. From 2008 to 2009 the average headline CPI rate decreased by 4.38 percentage points. This indicates that although prices increased from 2008 to 2009 to 2010, the rate of price increases was lower in 2010 than in 2009 and 2008.

Food and non-alcoholic beverages CPI averaged 111 index points in 2010, only one point higher than the 110 index points in 2009. The food and non-alcoholic beverages inflation contributed less to headline inflation in 2010 compared to its contribution in 2008 and 2009. A comparison of the CPI for food and non-alcoholic beverages in the different provinces in South Africa shows that the Eastern Cape, Limpopo and the Northern Cape experienced the highest food price increases during 2010.

A closer look at the price movements of the different food groups shows that sugar, sweets and desserts, fruit and other food products showed the largest price increases in 2010 compared to 2009, i.e. prices increased respectively by 5.79 %, 4.14 % and 3.72 %. The fish and milk, eggs and cheese price indices showed a 2.65 % and 2.01 % increase from 2009 to 2010. The vegetable price index showed that vegetable prices increased by 1.19 %. Meat showed a small increase of 0.53 % on average from 2009 to 2010. Oils and fats prices decreased by 5.32 % between 2009 and 2010. Bread and cereal products prices also decreased, by 1.62 %. The index for prices of processed and unprocessed food products indicates that prices decreased on average by 0.17 % from 2009 to 2010 for unprocessed products, while the average prices for processed food products increased by 1.95 %. A comparison between urban and rural food prices shows that, for a certain basket of goods, rural consumers paid R12.61 more than urban consumers in 2010.

TRENDS IN THE FARM VALUE AND THE FARM-TO-RETAIL PRICE SPREADS OF SELECTED COMMODITIES

The margin between farm gate prices and the price the consumer pays for selected food items is a topic that is frequently debated. In order to better understand the difference between farm gate and retail prices, farm values of selected products and the farm-to-retail price spreads (FTRPS) were calculated. The farm value is the value of the farm product's equivalent in the final food product purchased by consumers. The FTRPS is the difference between what the consumer pays for the retail food product and the value of the farm products used in that product. Price spreads measure the aggregate contributions of food manufacturing, distribution, wholesaling and retailing firms that transform farm commodities into final food products.

- Poultry: The real FTRPS of fresh whole chicken decreased by 4.20 % on average from 2009 to 2010. During the same period, the real farm value share of fresh whole chicken decreased by 0.55 % to 67 %.
- Beef: The real FTRPS of beef decreased by 3.33 % on average from 2009 to 2010, while the real farm value share of beef decreased by 0.92 %, on average, from 2009 to 2010. The real farm value share was at 44 % in December 2010.

- Lamb: On average, the real FTRPS for lamb chops in a lamb carcass decreased from 103.77 index points in 2009 to 95.84 index points in 2010 (i.e. 7.64 %). The real farm value share increased, on average, from 48 % in 2009 to 53 % in 2010.
- Pork: Between 2009 and 2010, the average real FTRPS decreased from 105.93 index points to 97.82 index points. The real farm value share, on average, decreased from 32.9 % to 32.71 %.
- Milk: The average real FTRPS decreased from R5.20 per litre to R4.99 per litre (i.e. a 4.11 % decrease) between 2009 and 2010. The average real farm value share in 2010 was 34.64 %, lower than the 35.37 % real farm value share in 2009.
- Maize: Between 2009 and 2010, the average real farm value share of super and special maize meal declined from 44.13% to 35.87 % (i.e. an 18.71 % decrease) and from 50.31 % to 40.61 % (a 19.27 % decrease), respectively. The real FTRPS for super maize meal increased from R2 116.74 per ton to R2 247 per ton (or 6.17 %), while the real FTRPS for special maize meal decreased from R1 453 per ton to R1 414 per ton (or 2.16 %).
- Wheat: The real farm value share for brown and white bread was at 13 % and 14 %, respectively, during the first half of 2010. From September 2010 onwards, the real farm value share for both brown and white bread increased and reached 17 % in December 2010. The average real FTRPS for brown bread decreased by 0.5 %, while the average real FTRPS for white bread increased by 1.8 %.
- Vegetables: From 2009 to 2010 the average real FTRPS and real farm value share for the different vegetables showed the following trends:
 - The real FTRPS of cabbage decreased by 2.76 %, while the real farm value share of cabbage decreased by 12.35 %.
 - The real FTRPS of onions decreased by 3.69 %, while the real farm value share of onions decreased by 13.56 %.
 - The real FTRPS of tomatoes increased by 1.02 %, while the real farm value share decreased by 2.9 %.
 - The real FTRPS of potatoes increased by 4.62 %, while the real farm value share of potatoes decreased by 21.66 %.
- Sugar: The cane price increased by 13.2 %, season-on-season. The nominal retail price of white sugar increased by 9.5 % on average between 2009 and 2010. The real retail price of white sugar increased by 5.03 % on average between 2009 and 2010.
- Oilseeds: The domestic sunflower price increased by 52.92 % from December 2009 (R3 294/ton) to December 2010 (R5 038/ton). The retail price of sunflower oil (750 ml) increased by 11.46 % from December 2009 (R12.84/750 ml) to December 2010 (R14.49/750 ml). The domestic price of soybeans increased by 6.2 % from December 2009 (R3 169/ton) to December 2010 (R3 366/ton).

SELECTED TOPICS

With each publication of the Food Cost Review, a number of selected topics are discussed. The topics generally fall within the ambit of a country being able to provide access to nutritious food in an affordable manner, but on a sustainable basis. In this publication, the role of social grants and policies/programmes to shield consumers against high food prices are discussed briefly. The purpose of these special topics is to create increased awareness and stimulate and promote further discussion/research regarding these topics.

- Social Grants in South Africa

The South African government uses social grant payments as a social assistance policy tool to maintain social well-being and address vulnerabilities such as health, poverty, life productive assets and to improve the welfare and the livelihoods of the population.

Currently, the number of social grant recipients is estimated at 14.6 million and recent years have seen a higher uptake of social grants, particularly the Child Support Grant (CSG). At the end of the 2009/10 fiscal period, more than R80 billion from the national budget was spent on social grants. These social grants are financed through government revenue of which the largest portion is raised through several forms of taxes. Personal Income Tax, Company Income Tax and Value Added Tax are the core of tax revenue, and account for around 80 % of taxes collected.

The number of individual taxpayers rose from 4.1 million in 2004/05 to 5.9 million in 2009/10. The growth in the number of individual taxpayers has showed a declining trend since 2004/05. The number of companies registered for income tax increased from 2004/05 to 2008/09 and then showed a significant drop in 2009/10. For the other registered tax entities, numbers remained more or less stable.

A question frequently raised is whether or not social grants are enough to meet the needs of individual households. Several authors argue that social grants do not address the impact of income inequalities and create no opportunities for the beneficiaries to participate in the economy. Others argue that social grants are not designed as livelihood interventions that take people out of the poverty trap.

The direct and indirect cost of disbursing social grants are significant. In rural communities, banks are largely absent. This challenge increases the cost of social grant administration and the cost of tightening security. Furthermore, the poor and inadequate road infrastructure in rural areas forces grant recipients to walk long distances to centres where social grants are paid as cash. This practice of collecting social grants as cash from far away places poses a risk to those who have weak health, as well as a high probability of being robbed.

It is estimated that an amount of approximately R1 billion is lost through corruption every year. The Department of Social Development (DSD) (2009) stated that, by September 2008, it had removed 333 233 illegal grant recipients from the system, amounting to over R1 billion.

- Policy Measures/Programmes to Shield Consumers Against High Food Prices

The current global food system has been greatly affected by various factors such as globalization, adverse climate conditions, civil strife, inequality and weak governance. These factors have increased the vulnerability of poor households, causing governments around the world to use several food aid related instruments to shield vulnerable people against severe hunger. Examples of these instruments include:

- Food Stamps

The Food Stamp Programme (FSP) is regarded as the largest and most comprehensive nutritional programme in the United States (US). Its purpose is to help low-income families and individuals to purchase a nutritionally adequate diet. The programme allows eligible recipients to purchase nutritious foods (and only food) by using an electronic debit card at authorised retail food stores which also gives it the advantage of reducing both fraud and stigma. The entire FSP is funded by the government and shows significant spin-off effects to the rest of the economy in terms of job creation and the primary production of food. Results show that each \$1 billion of food stamps generates \$340 million in farm production and 3 300 farm jobs. Each \$5 of food stamps spent generates almost \$10 in total economic activity.

- Food Reserves

Currently there is a renewed awareness regarding food reserves as an alternative tool for fighting poverty and hunger and improving food security. Food reserves as part of a food security strategy may provide several benefits, which include enhanced trade, stabilization of production, better strategies to cope with climate change, creation of bigger markets, and cheaper and more guaranteed sources of food, both in times of shortages and decline in world stocks. Further, food reserves can improve both access and distribution of food, reduce dependency on donor countries for food aid, reduce heavy dependence on imports, and reduce excessive price volatility for consumers and farmers.

Governments, however, need to take into account the financial implications in terms of cost involved in building up food reserves and actions with regard to export and price controls, distortions in domestic markets, cross-border import barriers, quality harmonization and phyto-sanitary standards for food commodities. In addition, although food reserves could be an important component of a food security strategy, they do not necessarily guarantee direct access to food for vulnerable households, since they may be designed to address national and regional food security concerns.

– Food Banks

A Food Bank (FB) is a centralized warehouse or clearing house registered as a non-profit organization for the purpose of collecting, storing and distributing food (donated/shared), free of charge, to front-line agencies which provide supplementary food and meals to the hungry. FBs intend to make food that would otherwise be dumped available to organizations which can put it to good use. These are essentially the numerous organizations in the community which provide food to the needy. Agencies include orphanages, crèches, old age homes, shelters, soup kitchens and HIV/AIDS clinics. However, it should be noted that FBs are there as a supplement, not as a long-term, direct feeding programme.

In South Africa, the Global Food Banking Network initiative resulted in four community food banks being established.

– School Nutrition System

A school nutrition programme is aimed at improving the nutritional status of students/learners and improving education (i.e. to increase enrolment, attendance, enhance cognitive development and improve academic performance).

South Africa currently has the National School Nutrition Programme (NSNP). In 2007/08, the NSNP provided nutritious meals daily to approximately 6 million learners, in 2008/09 to 6.2 million, and the number increased to 7.1 million learners in 2009/10. It was found that the NSNP improved the learning capacity of learners, resulted in better academic performance and a reduction of drop outs. The main challenges for the NSNP is improvement in cooking methods, storage facilities, record-keeping, variety of menus, eating utensils and minimizing of delays in the delivery of food, which should lead to better efficiency and contribution of the programme.

• Concluding Remarks

There is no doubt that these programmes can play an important role to lessen the impact of high and volatile food prices, but the impact will depend on the scope and nature of the programme. The long run sustainability of the different programmes is however a debatable issue. These include, for example, possible market distortions, unequal access to the programmes, the ability to fund these programmes, etc.

Social grants are an important programme being utilised by the South African government to address the plight of the poor and vulnerable. Although research has shown that these grants are assisting vulnerable and poor individuals/households to, amongst others, access food, there are increasing concerns about the long run sustainability of social grants as a tool to address poverty in South Africa; these concerns have been raised by several researchers and even government departments. These concerns emanate, amongst others, from the ability of grants to reduce income inequalities and whether or not it acts as an incentive to seek employment against the background of a significant

uptake of grants demanding increasing budget allocations annually. Further grounds for concern is that the revenue sources to fund social grants is also under increasing pressure due to, amongst others, high unemployment, job losses and slower growth in the tax base. Another important consideration is that the grant system stimulates consumption (access to food, which per se is a favourable outcome), but ideally an increase in the availability of food through increased production should also be stimulated (increased imports are not necessarily the answer in light of international food price movements). In the absence increased availability of food, demand forces will push prices higher at the expense of not only recipients of grants, but the population at large. The end result could be a vicious circle where the demand for grants increases followed by higher food prices and so forth up to a point where it is not sustainable even in the medium run.

In light of the aforementioned, it is imperative that other options to address the plight of the poor and vulnerable are explored in a timely manner. It is therefore no surprise that one of the main imperatives of government is to increase employment. This notwithstanding and given the high level of poverty and inequality in South Africa, will require that other interventions apart from social grants to address the challenge of household food security in South Africa be explored. Such programmes could, amongst others, include the introduction of a country wide food stamp system and work for food programmes, as well as a significant expansion in the food bank and school nutrition programmes. However, neglecting to also stimulate the expansion of primary agricultural production and increased local processing of food could seriously impede on the potential impact of such programmes.

It is clear that food prices are emerging as a key driver of overall consumer inflation in South Africa and may continue to become a major risk factor in the overall inflation outlook in the future. In addition, price volatility has emerged as a major concern internationally and domestically. The aforementioned requires timely public and private sector interventions. These interventions include, amongst others, the following and require further investigation to ensure holistic, coordinated and sustainable approaches:

- Comprehensive and sustainable social national and regional programmes;
- Sustainable increase in productivity and agricultural output;
- Significant investment, expansion and consolidation of agricultural and food processing research and development;
- A transparent agricultural and food information system that is value chain orientated;
- High level intergovernmental policy and operational coordination that is geared to addresses issues (e.g. infrastructure, trade, regulations & standards, education and training, etc.) that are constraining a conducive environment for the agricultural and food sector to grow.

Finally, as far as South Africa is concerned, the likelihood of the country being prioritized in the international discourse on food insecurity is relatively low, due to South Africa currently being a net exporter of agricultural commodities and also the country's high per capita income compared to other emerging economies (Koch, 2011). Yet, with expected production of maize for the 2011/12 season

around 10 million tons, which is approximately 20 % less than the 12 million tons in the previous season, combined with a weaker Rand, adverse climate conditions, soaring petrol and diesel prices as a result of the ongoing global economic woes and political turmoil in the Middle East, and a precarious national electricity supply, the challenges faced by policymakers, even in the short term, are not insignificant.

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ACRONYMS

AFMA	Animal Feed Manufacturer's Association
AMT	Agrimark Trends
BDI	Baltic Dry Index
CDG	Care Dependency Grant
CIF	Cost, Insurance and Freight
CIS	Commonwealth of Independent States
CIT	Company Income Tax
CPI	Consumer Price Index
CSG	Child Support Grant
DAFF	Department of Agriculture, Forestry and Fisheries
DAP	Di-Ammonium Phosphate
DBE	Department of Basic Education
DG	Disability Grant
DSD	Department of Social Development
FAO	Food and Agricultural Organization of the United Nations
FB	Food Bank
FBSA	Food Bank South Africa
FCG	Foster Child Grant
FOB	Free On Board
FFW	Food For Work
FRPI	Farming Requisite Price Index
FSP	Food Stamp Program
FSSA	Fertilizer Society of South Africa
FTRPS	Farm-to-Retail Price Spreads
GDP	Gross Domestic Product
GFN	Global Food Banking Network
GIA	Grant-In-Aid
GWh	Gigawatt Hour
IATP	Institute for Agriculture and Trade Policy
IEA	International Energy Association
IFA	International Fertilizer Industry Association
IMF	International Monetary Fund
MOP	Muriate of Potash
MPO	Milk Producers' Organization
NFD	National Freight Database
NGO	Non-government Organization
NSNP	National School Nutrition Programme

ODI	Overseas Development Institute
PAYE	Pay-As-You-Earn
PIT	Personal Income Tax
PPI	Producer Price Index
PSC	Public Service Commission
PSNP	Primary School Nutrition Programme
RV	Recoverable Value
SADC	Southern African Development Community
SAFEX	South African Futures Exchange
SAGIS	South African Grain Information Service
SAMPRO	South African Milk Processors Organization
SAPIA	South African Petroleum Industry Association
SARS	South African Revenue Services
SASA	South African Sugar Association
SASSA	South Africa Social Security Agency
SDL	Skills Development Levy
SFP	School Feeding Program
SOAP	State Old Age Pension
STWR	The Share of the World's Resources
UAE	United Arab Emirates
UIF	Unemployment Insurance Fund
UK	United Kingdom
UN	United Nations
US	United States
VAT	Value Added Tax
WFP	World Food Programme
WTO	World Trade Organization
WVG	War Veteran's Grant

1 SETTING THE SCENE

1.1 The Good and the Bad News

The good news was that the global economy rebounded in 2010 and according to the International Monetary Fund (IMF), world output is up 4.8 %, mainly due to growth in emerging and developing economies. The bad news is, however, the recovery remains fragile, mainly due to high unemployment, low consumer confidence, reduced household incomes and high public debt in many of the developed economies.

1.2 The Global Challenge of High Food Prices

Over the course of the last five decades, global agricultural production has steadily increased on an almost annual basis, yet millions of people, many of them farmers themselves, continue to face the challenge of household food insecurity (Sikarwar and Pandey, 2011). The way in which the world feeds itself has changed. This focus on food security through global supply chains, rather than domestic food sovereignty, reflects a marked departure from the approach taken by previous generations (Diaz-Bonilla and Ron, 2010). This liberalized market-driven system, while (theoretically) allowing countries to pursue comparative advantage and diversify their economies, has also increased exposure to the adverse effects of globalization and international trade, particularly with regard to price instability of agricultural commodities. The rhetoric of inadequate distribution and availability is often reiterated, yet changes at the household level have been inadequate (Diaz-Bonilla and Ron, 2010) to prevent food crises from becoming recurring phenomena, as demonstrated by current trends, with food prices having risen to record highs for the second time in three years (Kharas, 2011).

Prices of most commodities, including oil, minerals and agricultural commodities, remained firm or strengthened in 2010. According to the International Fertilizer Industry Association (IFA) (2010), a number of factors have contributed to an upward evolution of crop prices. The first is the heat wave that caused poor cereal harvests in the Commonwealth of Independent States (CIS), including extensive fire damage in Russia, as well as the hot and wet conditions in the Corn Belt of the United States (US). Second, the grain export restrictions in effect in Russia and Ukraine. Third, demand for ethanol, particularly in the US, remains high, putting pressure on grain markets. Fourth, the cereal stock-to-use ratio is declining to worrying levels, with a significant drop in maize and wheat inventories. The overall food price index of the Food and Agricultural Organization (FAO) of the United Nations increased by 33 % year-on-year, i.e. from January 2010 to January 2011, reaching its highest level since January 2008. Food prices started to rise significantly from June 2010. The most significant increase was seen in the price index of edible oils which increased by 65 % from January 2010 to January 2011. Cereal prices and meat prices also showed a significant increase of 44 % and 34 % respectively over the same period. Sugar prices and dairy prices showed the smallest increases of 12 % and 10 % respectively from January 2010 to January 2011.

There is also a greater realization that the food price challenge is significantly aggravated by price volatility, i.e. abrupt, erratic rise and fall, as opposed to high prices per se. In the words of Homi Kharas, senior fellow and deputy director of the US-based Bookings Institute: “It is the rapid and unpredictable changes in food prices that wreak havoc on markets, politics and social stability, rather than long-term structural trends in food prices that we can prepare for and adjust to”. Surging food prices tend to be the focus of mainstream media attention, as this issue poses a major concern for consumers and the public at large; however, sudden drops in price have an equally devastating effect on the production side, often leading to declines in inputs, which again result in price spikes due to limited supply. Thus, when attempting to address food insecurity as a result of prices, it must be kept in mind that volatility cuts both ways.

1.3 At the Home Front

As far as South Africa is concerned, the likelihood of the country being prioritized in the international discourse on food insecurity is relatively low. At present, the country is a net exporter of agricultural commodities and per capita income is high compared to other emerging economies (Koch, 2011). Yet, with expected production of maize for the 2011/12 season at 10 831 million tons, which is 20 % less than the 12 815 million tons in the previous season (FAO, 2011), combined with a weaker Rand, adverse climate conditions, soaring petrol and diesel prices as a result of the ongoing political turmoil in the Middle East, and a precarious national electricity supply, the challenges faced by policymakers, even in the short term, are not insignificant.

1.4 This Issue of the Food Cost Review

This issue of the Food Cost Review considers input, commodity and food price trends, globally and nationally, in 2010, but also briefly reflects on more long-run trends. Lastly, issues pertaining to policies/programmes to mitigate the impact of high food prices and/or lack of access to food are also considered.

2 TRENDS IN AGRICULTURAL, FORESTRY AND FISHERIES TRADE

2.1 Introduction

The question of why countries trade sounds a little obvious but it is a tricky one. In international economics on the basis of both the partial and general equilibrium it is concluded that countries are better off trading with each other than not trading at all. There is a vast amount of literature on this matter (starting with the mercantilists, to Adam Smith and David Ricardo and to the New Trade theory). At the centre of the reasoning behind trade are scarce resources and their distribution. Countries trade because scarce resources are distributed unevenly between different countries and thus some countries are better at producing some products than others. International trade helps to make the distribution of resources more even. Countries can specialize in producing that they are best at. It also helps countries to obtain products they otherwise might not have access too. In short, trade is beneficial to a country on two important grounds:

- It expands the range of available goods or services, and
- It allows for efficiency gains.

As such, it is critical to look at global trade and South Africa's trade in agricultural products, as it has direct links to developmental issues such as food security, job creation and foreign exchange earnings. Trade also impacts on international and local price trends.

2.2 World Agricultural Trade

South Africa's agricultural trade needs to be viewed in the context of world trade. Ideally, world imports and exports are supposed to equate, but do not, due to reporting mechanisms (CFI or FOB), exchange rate fluctuations and reporting time. It is, however, logical that imports are bigger than exports (see Figure 1). Looking at world trade data, the following can be seen:

- An increasing trend in both world imports and world exports was observed from 2001 until 2008 and dropped in 2009 and 2010. This can largely be attributed to the global economic recession. The world trade balance for all commodities has expanded from negative 1.6 trillion Rand in 2001 to 4.1 trillion Rand in 2010.
- In 2010 global agricultural exports accounted for 9 % to total world exports. Over the last 10 years global agricultural exports have been growing at an average rate of 9 % per annum to reach a total of 9.7 trillion Rand in 2010. The main agricultural exported commodities include wood, meat, beverages, fish and cereals products.

- In 2010 global agricultural imports accounted for roughly 9 % to total world imports. Over the last 10 years global agricultural imports have been increasing at an average rate of about 9 % per annum to reach a total value of 9.8 trillion Rand in 2010.

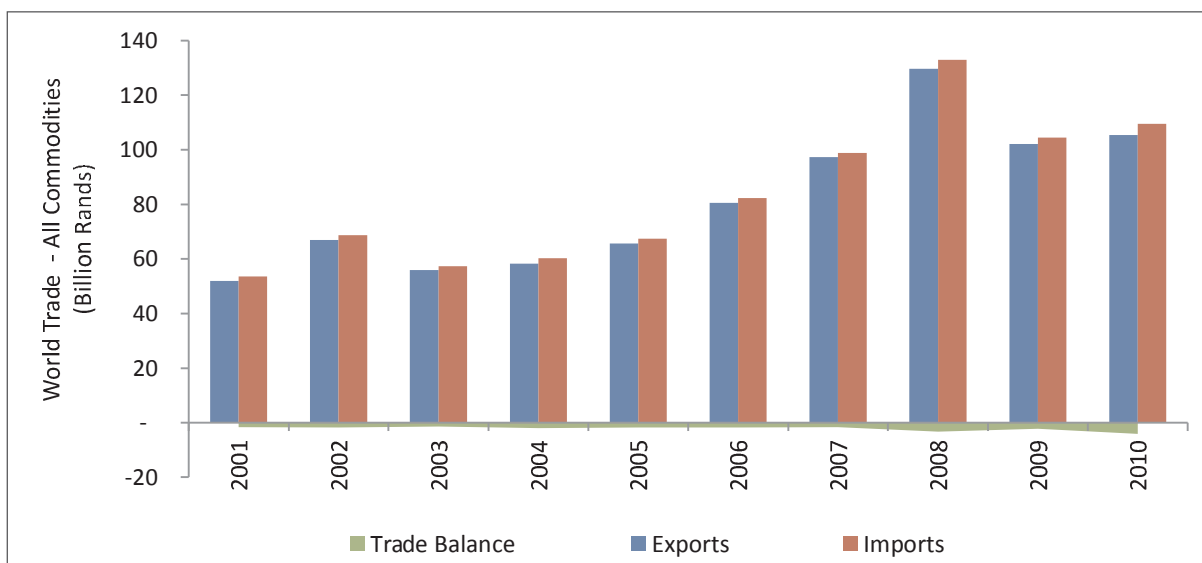


Figure 1: World trade for all commodities

Source: Global Trade Atlas, 2011

2.3 South Africa's Agricultural Trade

South Africa's trade in agricultural products over the period from 1996 to 2010 depicts a favourable situation of the country as a net exporter. It is only in 2007 that the positive trade balance was reduced tremendously (but remained positive), due to the fact that the growth in the value of imports was higher than the growth in the value of exports (see Figure 2).

- In 2010, South Africa remained a net exporter of agriculture products. The value of exports amounted to R46.5 billion (i.e. a 2 % decline from 2009), while imports were valued at R35.7 billion in 2010 (i.e. a 3 % decline from 2009).
- Over the past 15 years, the value of imports of agriculture products have been growing by an average rate of 13 % per annum, while the value of exports have grown, on average, by 12 % annually. Strong growth in agriculture imports can be attributed to significant increases in the value of processed agriculture imports, which have increased from R5 billion in 1996 to over R28.5 billion in 2010.

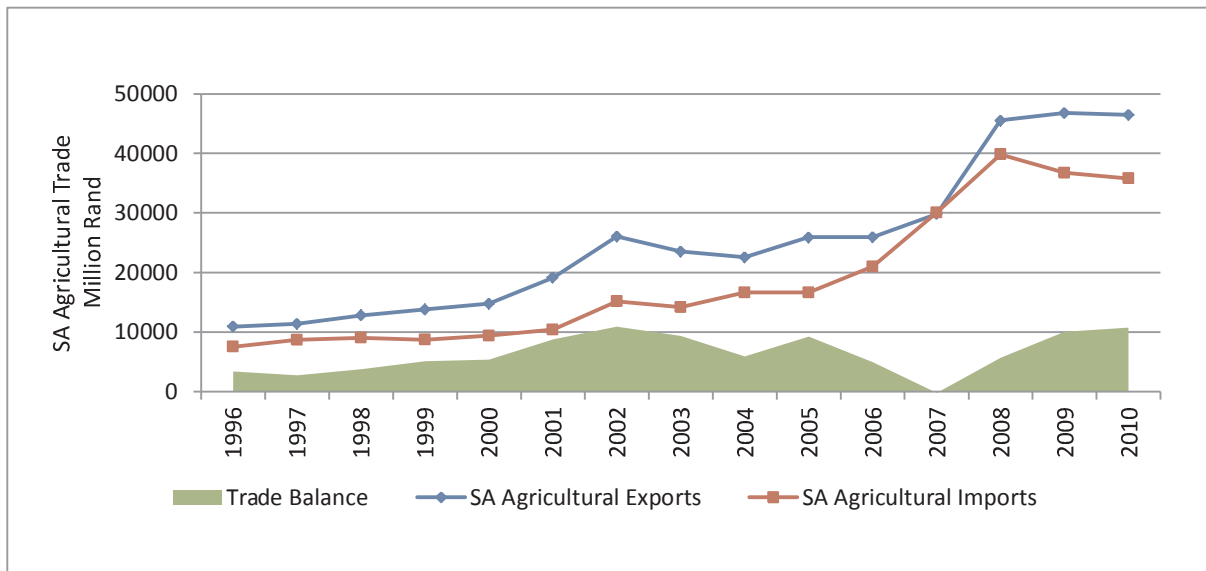


Figure 2: South Africa's agricultural trade

Source: World Trade Atlas, 2011

2.3.1 Trade in Unprocessed Agricultural Commodities

Figure 3 shows that the value of unprocessed agricultural exports consistently exceeded that of unprocessed agricultural imports from 1996 to 2010. Since the early 2000s, the trade balance of unprocessed agriculture products increased from R4.7 billion to over R15.3 billion in 2010, indicating a relatively strong capacity to produce and export unprocessed agricultural products. Over the last three years, imports of unprocessed agricultural products have been declining at an average rate of 10% per annum.

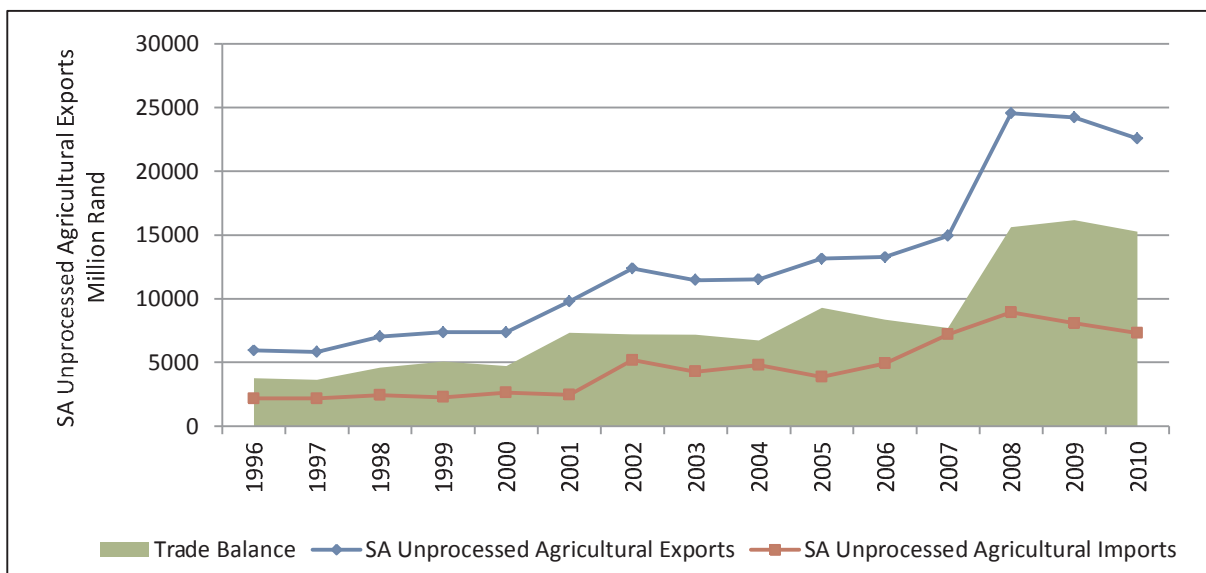


Figure 3: South Africa's unprocessed agricultural trade

Source: World Trade Atlas, 2011

Table 1 shows the leading destination markets for South Africa's unprocessed agricultural exports. The fruit sub-sector dominates the unprocessed agricultural export basket (e.g. oranges, table grapes and apples), followed by maize, wool and sugar. The top five leading destination markets for South Africa's exports included the Netherlands, the UK, Russia, Mozambique and the UAE, which collectively absorbed around 41 % of total unprocessed agricultural exports in 2010.

Table 1: South Africa's unprocessed agricultural exports

HS Code	Product Description	Export Value: Million Rand	Export Quantity: Ton	Growth in Value: 2007-2010	Top 5 Destinations of Exports (Share in SA exports)
Unprocessed Agriculture		2 683	4 697 262	52 %	Netherlands (17 %); UK (11 %); Russia (5 %); Mozambique (4 %); and UAE (4 %)
080510	Oranges	4 401	1 109 611	58 %	Netherlands (17 %); Russia (13 %); UAE (9 %); Saudi Arabia (8 %); and UK (6 %)
080610	Table Grapes	3 071	259 837	40 %	Netherlands (45 %); UK (19 %); Hong Kong (5 %); Russia (4 %); and UAE (3 %)
100590	Maize	1 929	1 217 617	1 636 %	South Korea (28 %); Kenya (18 %); Japan (9 %); Zimbabwe (8 %); and Indonesia (7 %)
080810	Apples	1 821	306 324	22 %	UK (30 %); Malaysia (12 %); Benin (7 %); Netherlands (5 %); and UAE (4 %)
510111	Wool	1 240	34 773	20 %	China (38 %); Czech Republic (28 %); India (18 %); Italy (8 %); and Hong Kong (5 %)
080820	Pears	1 178	186 353	40 %	Netherlands (29 %); UK (12 %); Russia (10 %); Germany (6 %); and UAE (5 %)
170199	Refined Sugar	929	215 569	71 %	Mozambique (33 %); Madagascar (11 %); Kenya (10 %); Uganda (9 %); and Tanzania (6 %)
170111	Raw Sugar	851	204 213	30 %	Japan (31 %); Zimbabwe (23 %); Mozambique (12 %); Angola (11 %); and Tanzania (6 %)
080550	Lemons	802	150 606	104 %	UAE (18 %); Netherlands (16 %); Russia (13 %); Saudi Arabia (12 %); and UK (11 %)
080540	Grapefruit	694	179 610	-2 %	Japan (28 %); Netherlands (27 %); Russia (12 %); UK (6 %); and Italy (4 %)

Source: World Trade Atlas, 2011

Table 2 shows the leading suppliers of unprocessed agricultural imports to South Africa as well as the largest category of imported products. The top 10 imported products accounted for 73 % of total unprocessed agricultural imports in 2010. Major suppliers of imports included Germany, Brazil, USA, China and India, collectively supplying about 51 % of total unprocessed agricultural imports to South Africa.

Table 2: South Africa's unprocessed agricultural imports

HS Code	Product Description	Imports Value: Million Rand	Imports Quantity: Ton	Growth in Value: 2007-2010	Top 5 Suppliers for SA Imports (Share in SA imports)
Unprocessed Agriculture		7 293	2 599 283	-2 %	Germany (13 %); Brazil (12 %); USA (11 %); China (8 %); and India (7 %)
100190	Wheat	2 003	1 259 498	10 %	Germany (44 %); USA (27 %); Canada (10 %); Brazil (7 %); and Australia (5 %)
240120	Tobacco (Stemmed)	1 045	24 102	116 %	Brazil (33 %); Zimbabwe (22 %); India (19 %); Germany (4 %); and Uganda (4 %)
071333	Beans	437	86 380	23 %	China (92 %); Ethiopia (5 %); Kyrgyzstan (1 %); Singapore (0.5 %), and USA (0.4 %)
520100	Cotton	372	29 556	-1 %	Zambia (59 %); Zimbabwe (4 %); Malawi (3 %); Mozambique (0.2 %); and India (0.1 %)
090111	Coffee	372	24 403	41 %	Vietnam (43 %); Indonesia (13 %); Brazil (9 %); Colombia (5 %); and Guatemala (4 %)
090240	Black Tea	326	26 767	92 %	Malawi (58 %); Tanzania (14 %); Zimbabwe (11 %); Sri Lanka (9 %); and Kenya (5 %)
170199	Refined Sugar	221	51 635	591 %	Brazil (90 %); UAE (4 %); Poland (0.9 %); and Netherlands (0.7 %)
170111	Raw Sugar	195	51 819	-13 %	Brazil (60 %); India (5 %); and USA (2 %)
120991	Vegetable Seeds	169	646	49 %	Netherlands (30 %); France (18 %); USA (15 %); New Zealand (6 %); and China (4 %)
240110	Tobacco (Not Stemmed)	145	5 332	133 %	India (38 %); Philippines (20 %); Zambia (10 %); Paraguay (9 %); and Turkey (6 %)

Source: World Trade Atlas, 2011

2.3.2 Trade in Processed Food Products

Figure 4 shows the value of processed agricultural imports and exports from 1996 to 2010. The value of processed agricultural exports increased from 2007 to 2010, to approximately R23.9 billion. Although exports have shown positive growth in the past four years, the value of processed agricultural imports remained higher than that of exports, resulting in a negative trade balance of R4.4 billion in 2010.

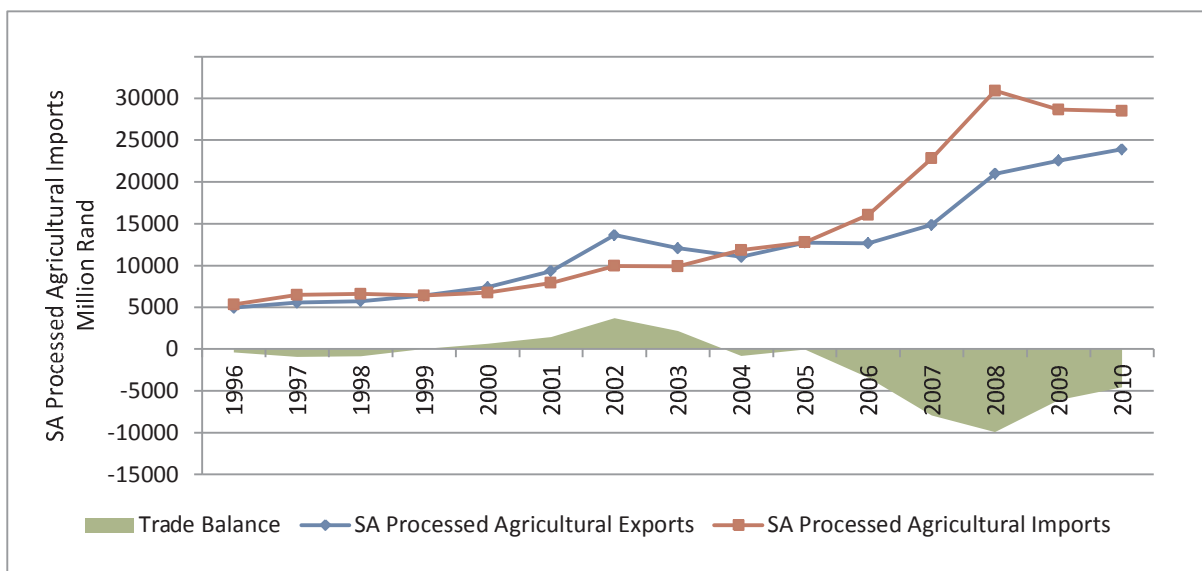


Figure 4: South Africa's processed agricultural trade

Source: World Trade Atlas, 2011

Table 3: South Africa's processed agricultural exports

HS Code	Product Description	Export Value: Million Rand	Export Quantity: Ton/ML	Growth in Value: 2007-2010	Top 5 Destinations of Exports (Share in SA exports)
Processed Agriculture		23 916		61 %	Zimbabwe (12 %); UK (8 %); Germany (6 %); Mozambique (6 %); and Netherlands (5 %)
220421 220710	Grape Wine	5 485	384	61 %	UK (25 %); Germany (11 %); Netherlands (10 %); Canada (7 %); and USA (7 %)
220710	Ethyl Alcohol	833	154	39 %	USA (16 %); Mozambique (14 %); UAE (9 %); Singapore (6 %); and Tanzania (6 %)
210690	Food Preparation	804	30 414	64 %	Nigeria (16 %); Zimbabwe (15 %); Zambia (10 %); Mozambique (8 %); and Tanzania (7 %)
240220	Cigarettes	731	11 582	49 %	Angola (17 %); Mali (15 %); Cameroon (14 %); Saudi Arabia (13 %); and Mozambique (10 %)
151219	Sunflower Seed	710	74 708	1 061 %	Zimbabwe (91 %); Mozambique (2 %); Malawi (2 %); USA (2 %); and Zambia (2 %)
240310	Smoking Tobacco	651	18 768	59 %	Yemen (52 %); Egypt (33 %); Jordan (4 %); UAE (2 %); and Mali (2 %)
080620	Dried Grapes	853	40 225	49 %	Canada (26 %); USA (11 %); Algeria (10 %); France (9 %); and Netherlands (8 %)
200870	Preserve Peach and Nectarines	560	62 345	39 %	Japan (14 %); Hong Kong (13 %); Russia (10 %); UK (9 %); and Germany (6 %)
230120	Flour Meal and Pellets	525	46 714	190 %	China (53 %); Japan (19 %); Turkey (13 %); Australia (5 %); and Tokelau (3 %)
080260	Macadamia Nuts	505	9 389	381 %	USA (36 %); Netherlands (20 %); Hong Kong (10 %); Japan (8 %); and Spain (7 %)

Source: World Trade Atlas, 2010

Table 3 shows the top ten processed agricultural export products as well as the leading destination markets for these exports. Between 2007 and 2010, processed agricultural exports showed a growth in value of 61 %; grape wine was the biggest contributor to this growth followed by ethyl alcohol,

prepared food products and sunflower seeds. The top ten products accounted for 48 % of total processed agricultural exports in 2010. The leading destination markets in 2010, were Zimbabwe, UK, Germany, Mozambique and Netherlands, collectively absorbing 37 % of South Africa's processed agricultural exports.

Table 4: South Africa's processed agricultural imports

HS Code	Product Description	Import Value: Million Rand	Import Quantity: Ton/ML	Growth in Value: 2007-2010	Top 5 Suppliers for SA Imports (Share in SA imports)
Processed Agriculture		28 468		25 %	Argentina (17 %); Thailand (11 %); UK (9 %); Malaysia (8 %); and Netherlands (5 %)
100630	Rice	2 983	721 415	46 %	Thailand (78 %); Pakistan (11 %); India (5 %); Vietnam (2 %); and China (2 %)
230400	Soybean Oil Cake	2 476	957 171	68 %	Argentina (99 %); and Zambia (1 %)
151190	Palm Oil	2 183	350 972	58 %	Malaysia (52 %); Indonesia (47 %); and Argentina (1 %)
220830	Whiskies	1 903	2.8	28 %	UK (81 %); Ireland (9 %); USA (7 %); and Canada (2 %)
150790	Soybean Oil	1 616	214 942	145 %	Germany (40 %); Argentina (22 %); Netherlands (22 %); Spain (9 %); and Brazil (5 %)
020712	Chicken Cuts	1 074	117 629	-12 %	Brazil (74 %); Canada (10 %); Argentina (7 %); UK (2 %); and USA (2 %)
210690	Food Preparations	945	18 346	-3 %	USA (22 %); Netherlands (11 %); Ireland (9 %); Germany (7 %); and Canada (6 %)
151211	Sunflower Seed	747	108 283	-5 %	Argentina (74 %); Russia (11 %); Ukraine (7 %); Netherlands (5 %); and Bolivia (3 %)
160413	Sardines	542	36 681	254 %	Thailand (81 %); China (12 %); and Indonesia (4 %)
150710	Soybean Oil Crude	397	58 021	-51 %	Argentina (49 %); Spain (22 %); Netherlands (15 %); Brazil (7 %); and Germany (6 %)

Source: World Trade Atlas, 2010

Table 4 shows the growth value of processed agricultural imports, the top ten imported products as well as the leading suppliers of these products into South Africa. Rice is the largest imported processed product, with the bulk of it originating from Thailand and Pakistan. The two countries supply around 89 % of the total of South Africa's imported rice. Other imported processed products include soybean oil cake, palm oil and whiskies. Overall, South Africa's processed agricultural imports showed a growth in value of 25 % between 2007 and 2010.

2.4 South Africa's Fisheries Trade

South Africa has enjoyed a positive trade balance in the fisheries sub-sector. Figure 5 shows the trends in the value of export and import of fisheries products between 2006 and 2010. A strong growth in exports was observed between 2006 and 2008, then dropped in 2009 as well as in 2010 to a value of R2.26 billion. The recent drop in fisheries exports can be attributed to the world economic depression. On the other hand, fisheries products imports have been growing faster than exports. This is evident as the trade balance shrunk from R1.2 billion in 2006 to R907 million in 2010, indicating that imports are growing faster than exports. In 2010, Sardines and Tuna, together with Cuttlefish and Squid, were the leading imported products and constituted 66.5 % of total value of imports of fisheries products. The concentration of Sardine (81 %) and Tuna (96 %) imports from Thailand should be noted. Imports of Sardine (2 179.7 %), Hake (2 368.2 %) and Mackerel (143.2 %) have experienced significant growth since 2006. The leading suppliers of South African fisheries products imports during 2010 were Thailand (52 %), China (12 %), New Zealand (6 %), Norway (4.5 %) and Spain (3 %).

Cuttlefish and Squid, Frozen Fish and Lobsters were the leading fisheries export products and constituted 44.3 % of exports. Exports of Frozen Fish (300.7 %), Lobster (3 685.2 %) and prepared Molluscs (332.7 %) experienced significant growth since 2006. Spain (25 %), Italy (16 %), Hong Kong (9 %), the US (7 %) and Portugal (5 %) were the leading export destinations for South African fisheries products during 2010. The value of South African exports to four of the five leading markets has declined over the past three years.

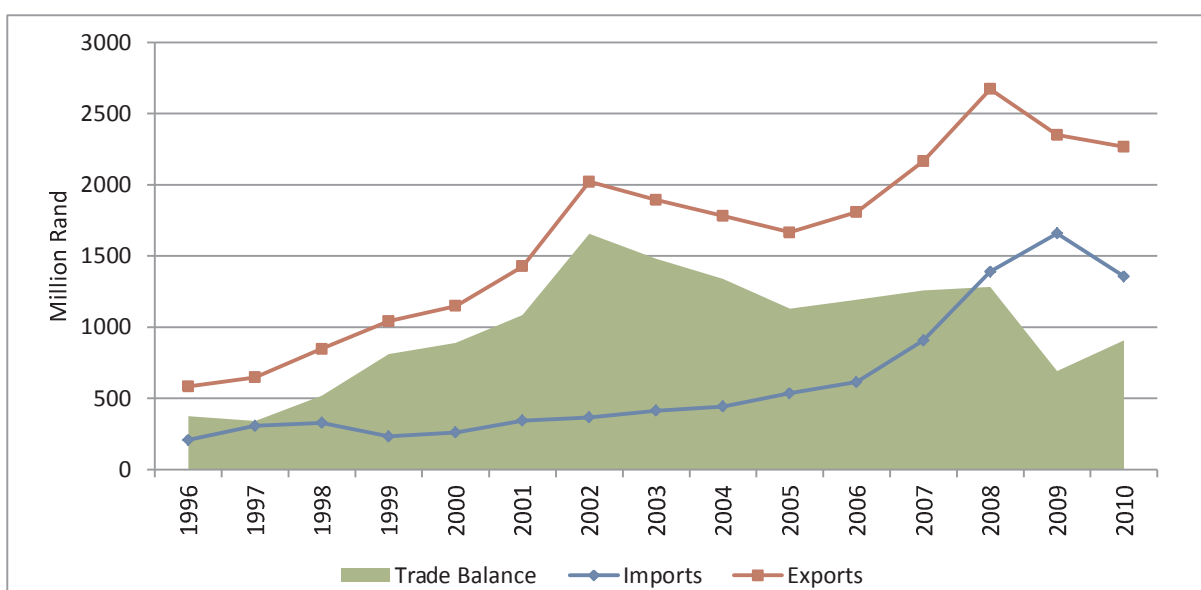


Figure 5: South Africa's fisheries trade

Source: Global Trade Atlas, 2011

2.5 South Africa's Forestry Trade

Figure 6 shows that South Africa has a positive forestry trade balance, i.e. the value of exports exceed the value of forestry imports in 2010. The positive trade balance decreased in 2007, but recovered in 2008. The following should be noted of the forestry sector:

- The total value of imports of forestry products during 2010 amounted to R9.67 billion and the quantity of imports has grown by 14.34 % since 2006.
- The UK (13.6 %), China (12.9 %), the US (12.5 %), Germany (7.9 %) and Sweden (5 %) were the leading sources of South African forestry products during 2010.
- Printed articles (books, brochures, etc.), sanitary paper and fine paper were the leading imported products and constituted 36.49 % of the value of imports.
- The total value of exports of forestry products during 2010 amounted to R 2.26 billion and the volume of exports grew by 52.6 % from 2006.
- Indonesia (20.6 %), China (7.7 %), Thailand (6.7 %), the UK (6.2 %) and Zimbabwe (5 %) were the leading export destinations for South African forestry products during 2010.
- Chemical wood pulp, kraft liner and printed articles were the leading export products and constituted 70.8 % of the value of exports.

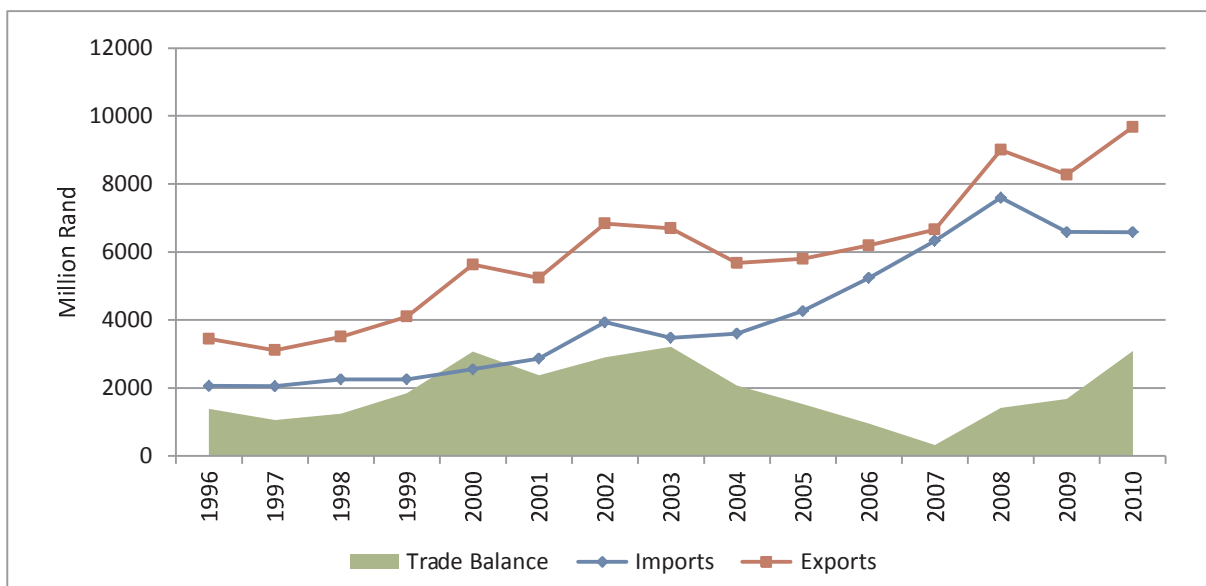


Figure 6: South African forestry trade

Source: Global Trade Atlas, 2011

2.6 Freight Rate Indices

One factor that is frequently overlooked in terms of the cost of trade is the international shipping rates. The cost of shipping goods between countries have increased tremendously during the commodity boom in 2007 and 2008, but declined significantly after 2008.

Figure 7 shows the Baltic Dry Index (BDI) and the HARPEX Shipping Index from May 2008 to December 2010. These indices represent international freight rates for dry bulk and container cargo respectively. The BDI is considered to be one of the purest leading indicators of economic activity internationally, since it measures the demand to move raw materials internationally. However, there is some criticism on only relying on the BDI as proxy for economic activity at the international level. This is due to the following reasons:

- The BDI measures freight rates and is therefore affected by the supply and demand of dry bulk ships.
- Several years of increasing freight rates, most notably between 2003 and 2008, attracted new supplies of shipping capacity to the global dry bulk shipping market.
- Due to the long production time to manufacture ships, new ships were added during and after the world economy contracted, since production was commenced in periods of increasing freight rates.
- This new shipping capacity has kept downward pressure on the BDI, even though the world economy continues to grow.

The annual average BDI for 2010 was 2757 index points, a 5.8 % increase from the annual average of 2606 index points in 2009, and much lower than the highs experienced in 2007 and 2008.

An alternative measure to the BDI is the HARPEX shipping index. The HARPEX shipping index measures weekly container shipping rate changes for eight classes of all-container ships, therefore providing insight into a much wider base of commercial goods than commodities alone. The annual average for the HARPEX shipping index for 2010 was 558 index points, a 73.4 % increase from the annual average of 322 index points in 2009.

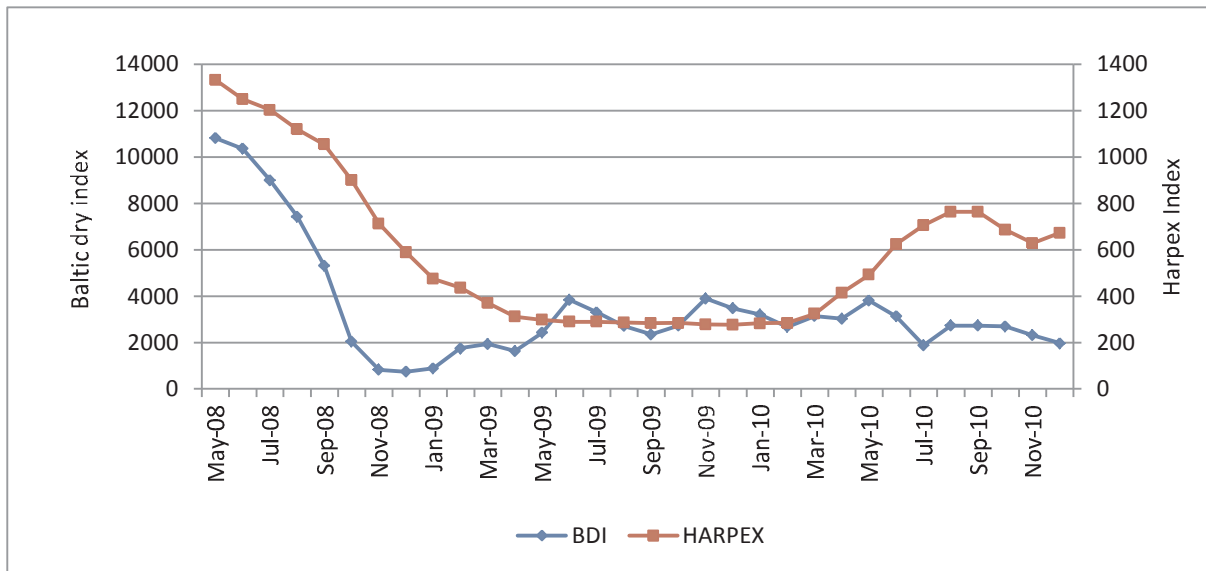


Figure 7: Trends in the Baltic Dry Index (BDI) and the HARPEX Shipping Index

Source: Harper Petersen and Co., 2011; SAGIS, 2011

3 TRENDS IN INPUT COSTS

3.1 Trends of Input Costs in the Food Value Chain

The role that input costs play in the overall price of food is important to consider. For example, at the manufacturing level, it is important to realize that non-food input costs can comprise as much as 55 % of the overall cost of manufacturing food. Consequently, packaging prices, distribution costs and utility pricing are critical when analyzing the pass-through of agricultural food inflation to that of retail food inflation. The rise in the oil price has led to a persistent increase in the price of diesel, with electricity tariffs remaining just above 20 % year-on-year. In the case of packaging, producer prices of cardboard and plastic products have reverted to inflationary mode after declining for much of 2009 – all significant additions to cost-push inflation within the food supply chain. Figure 8 illustrates how non-food costs contribute to the overall cost of food.

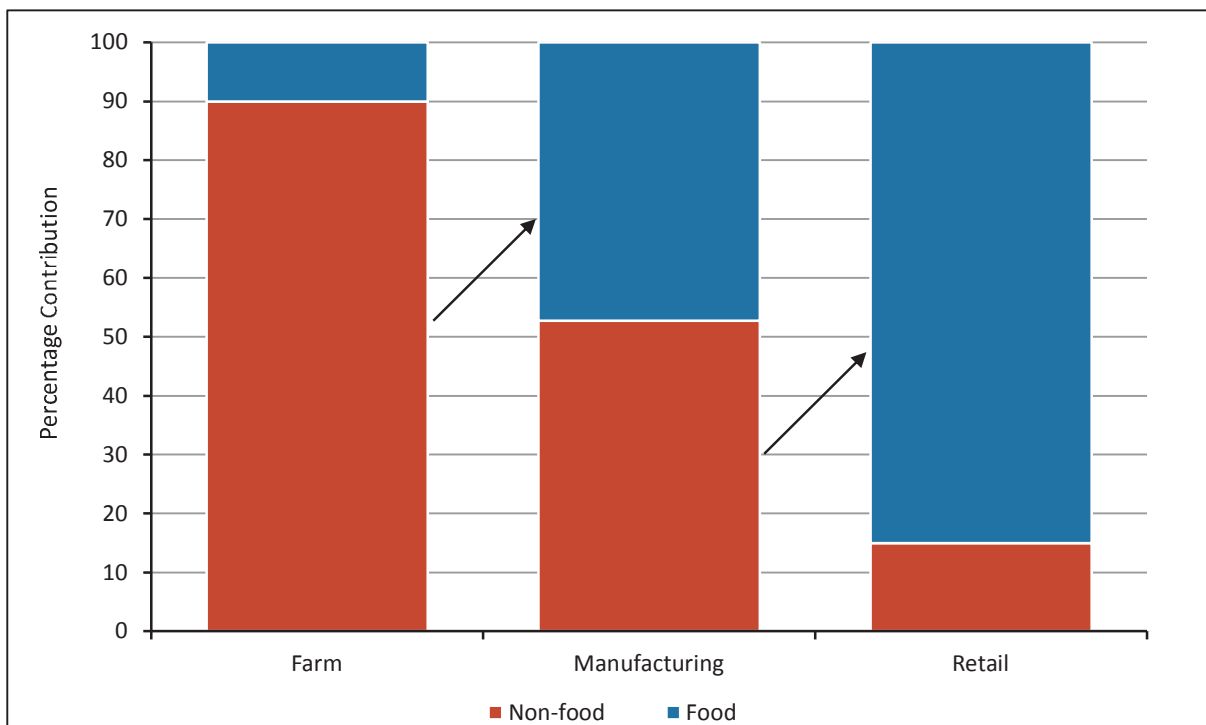


Figure 8: Non-food costs pass through the supply chain

Source: Absa Capital, 2011

According to Absa Capital (2011), when considering two of South Africa's largest food retailers, Shoprite and Pick 'n Pay, the cost of actual food items sold accounts for approximately 85 % of total costs, with the remaining 15 % originating in labour, rental, and other non-food-related costs. While it is important to recognize that much of the end price passed on to retailers by manufacturers already incorporates the non-food items at the farm and producer levels, non-food costs at the retail level also

appear to be on the rise. The Labour Research Service estimated median wage settlements of 9 % in the retail sector during 2010, with the price of utilities also rising into solid double-digit figures. Figure 9 shows a typical break down of the cost to sell food at the retail level.

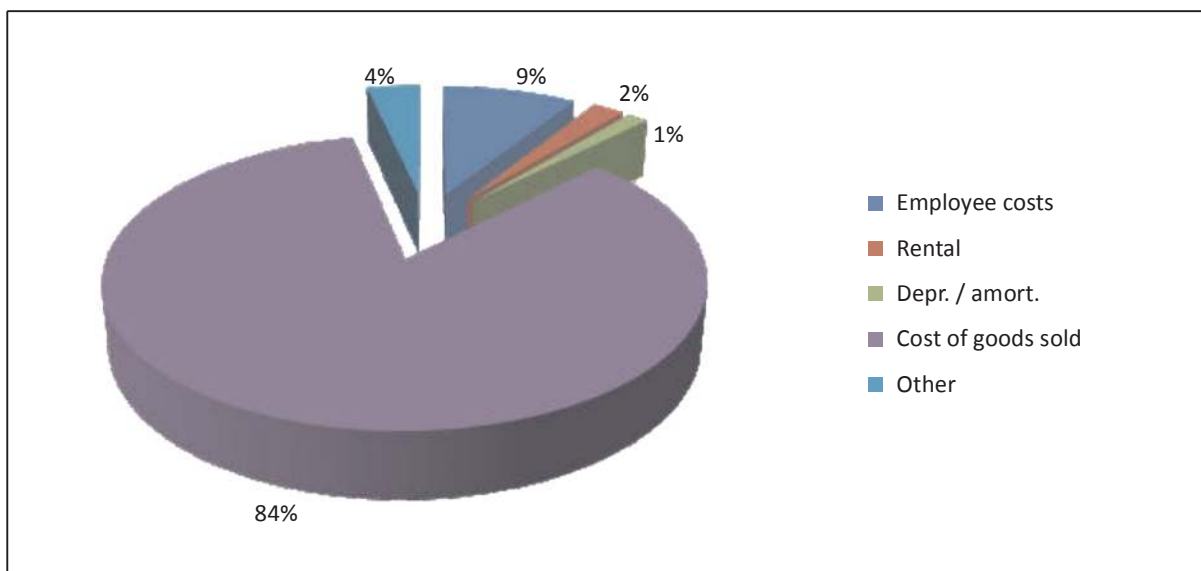


Figure 9: A typical break down of the cost to sell food at the retail level

Source: Shoprite and Pick 'n Pay Annual Results, 2009/10, Absa Capital, 2011

Within the ambit of the aforementioned this section reflects on cost trends for selected inputs in the food value chain.

3.2 Farming Requisite Price Index Trends

The farming requisite price index (FRPI) as calculated by the Department of Agriculture, Forestry and Fisheries (DAFF) measures the trends of prices farmers pay for farming inputs. This index includes prices of machinery and implements, material for fixed improvements and intermediate goods and services and is a weighted average index.

From Figure 10 it is evident that all the input categories' prices showed continuous increases throughout the depicted period. The total FRPI increased by 223.6 % from 1995 to 2010, with the prices of intermediate goods and services increasing the most, by 245.2 %, followed by prices of materials for fixed improvements and then machinery and implement prices by 132.6 % and 128.8 %, respectively. The FRPI increased by 11.9 % from 2009 to 2010, with the biggest increase of 16.4 % in the price of machinery and implements.

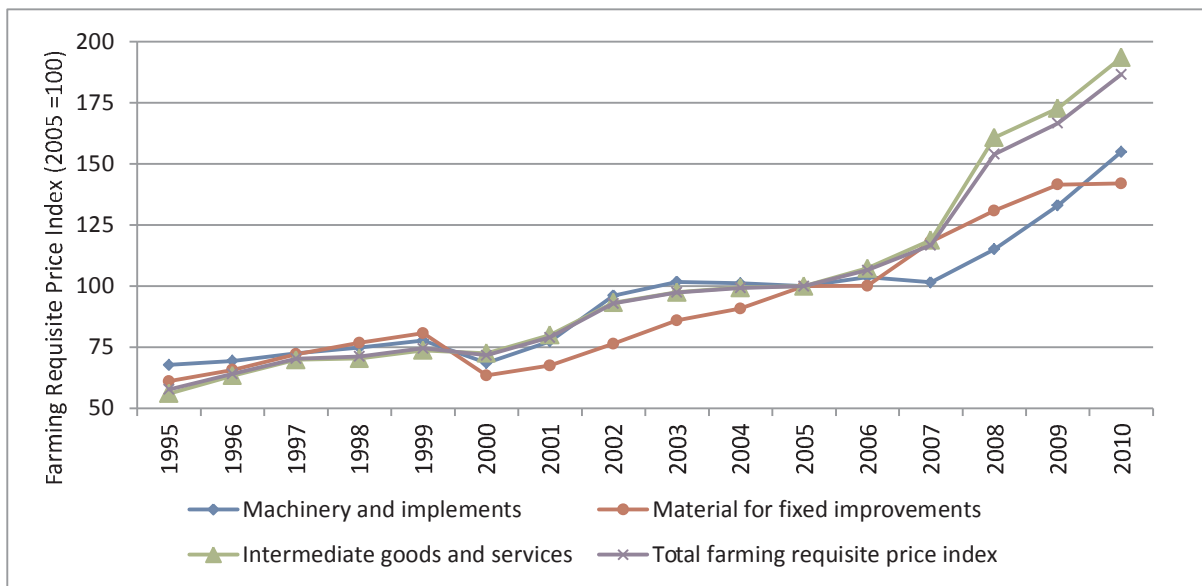


Figure 10: Farming requisite price index

Source: DAFF, 2011

When considering the price trends of intermediate goods and services, it is clear from Figure 11 that the prices of fertilizer and fuel are much more volatile than the others and peaked at higher levels during 2008. The prices of fertilizers did come down but not to levels before 2008. From 1995 to 2010 the price of fertilizers rose by 245.2 %, the price of fuel by 286.9 % and animal feed increased by 366.9 %. Price trends from 2009 to 2010 of these inputs were as follows, a decrease of 2.3 % in the price of fertilizers, an increase of 4.1 % in the price of fuel and an increase of 16.2 % in the price of animal feed.

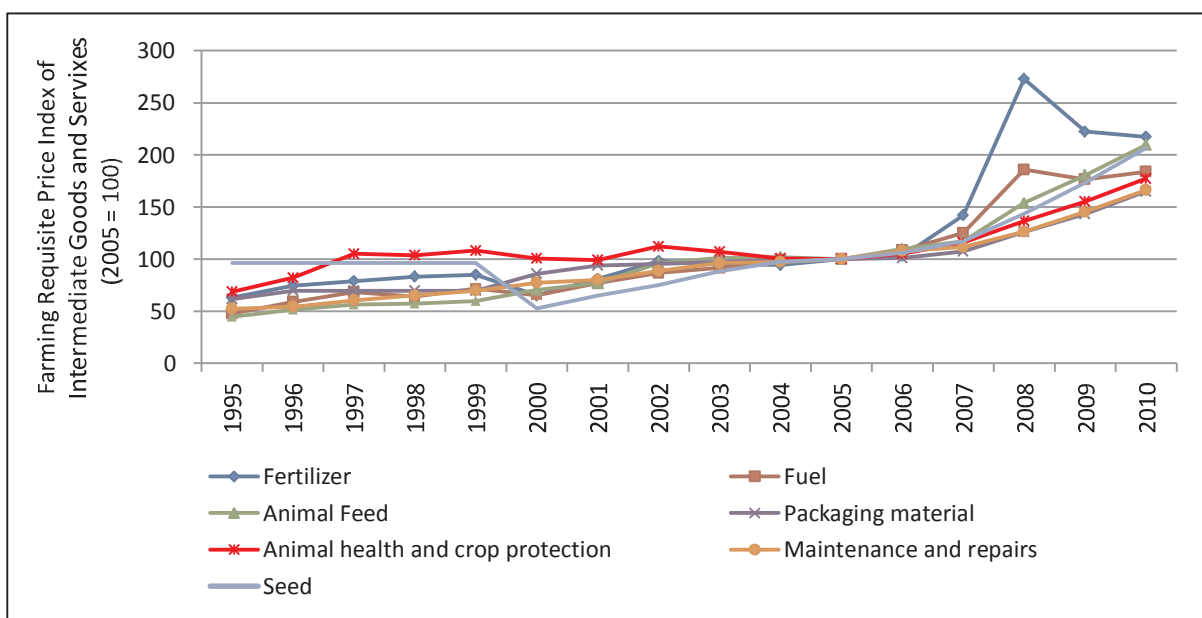


Figure 11: Farming requisite price index of intermediate goods and services

Source: DAFF, 2011

The rise in inputs costs at farm level creates what is known as the cost-price squeeze effect. This is best illustrated by calculating the terms of trade at the primary agricultural level by dividing the primary producer price index (PPI) with the FRPI; i.e. the prices received by farmers for their output divided by the prices pay for farm inputs. From Figure 12 it is evident that the terms of trade at the primary agricultural level has deteriorated significantly over time. There was however some relief during the commodity price boom in 2007 and 2008.

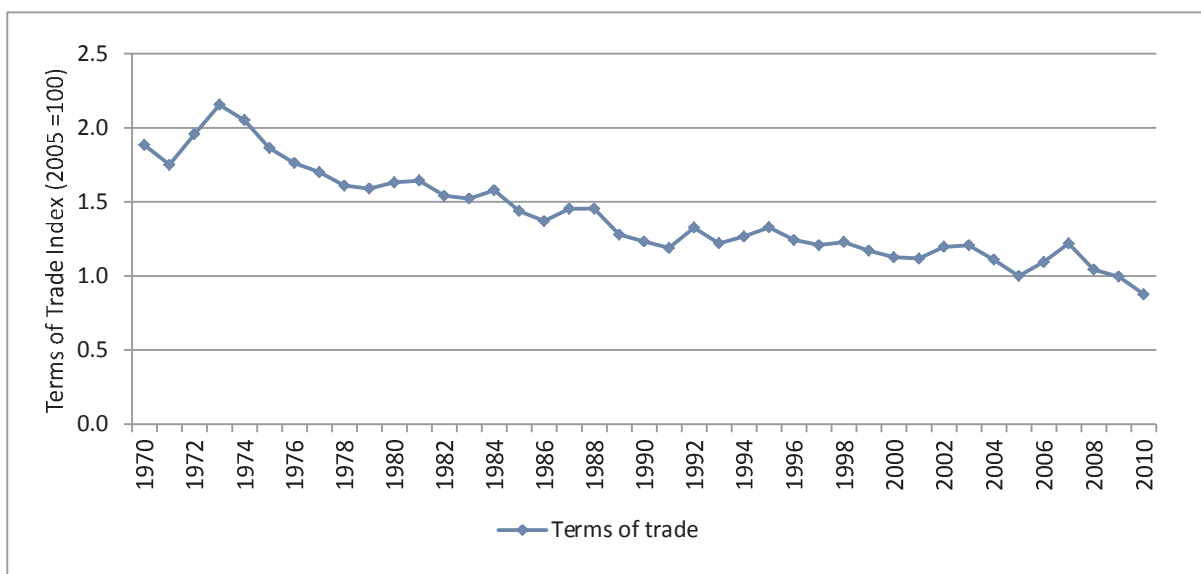


Figure 12: Terms of trade

Source: Own calculations based on data from DAFF, 2011

3.3 Producer Price Index Trends

As mentioned, the cost of food manufacturing is not just influenced by the prices of raw commodities as inputs but also by non-food inputs. Amongst these are the costs of diesel, packaging material, electricity as well as labour. The PPI as calculated by the Stats SA measures the trends of manufacturing prices of goods at first point of sales (factory level). This index includes manufacturing prices of products destined for local use, destined for exports as well as for imported components for further value adding. This index implies, but does not directly measure, the cost of services involved in the production process.

The PPI is measured at industry level and is a weighted average index to indicate the production inflation of the economy. Figure 13 shows the PPI for all industry groups as well as some selected industries. From 2000 to 2010, the PPI of all industry groups increased by 91.7 %; contributing to this increase was an increase of 148.8 % in gas and water prices, a 134.4 % increase in electricity prices, a 126 % increase in the price of petroleum and coal products, a 68.7 % increase in plastic products prices, a 62 % increase in agricultural food industry prices and a 59 % increase in the manufacturing price of pulp, paper and paperboard products.

Price trends between 2009 and 2010 for the items depicted were as follows: all groups increased by 6 %, gas and water increased by 9.5 %, electricity increased by 24 %, petroleum and coal products increased by 7.1 %, plastic products increased by 1.1 %, agriculture food decreased by 6.3 % and paper, pulp and paperboard products increased by 1.4 %.

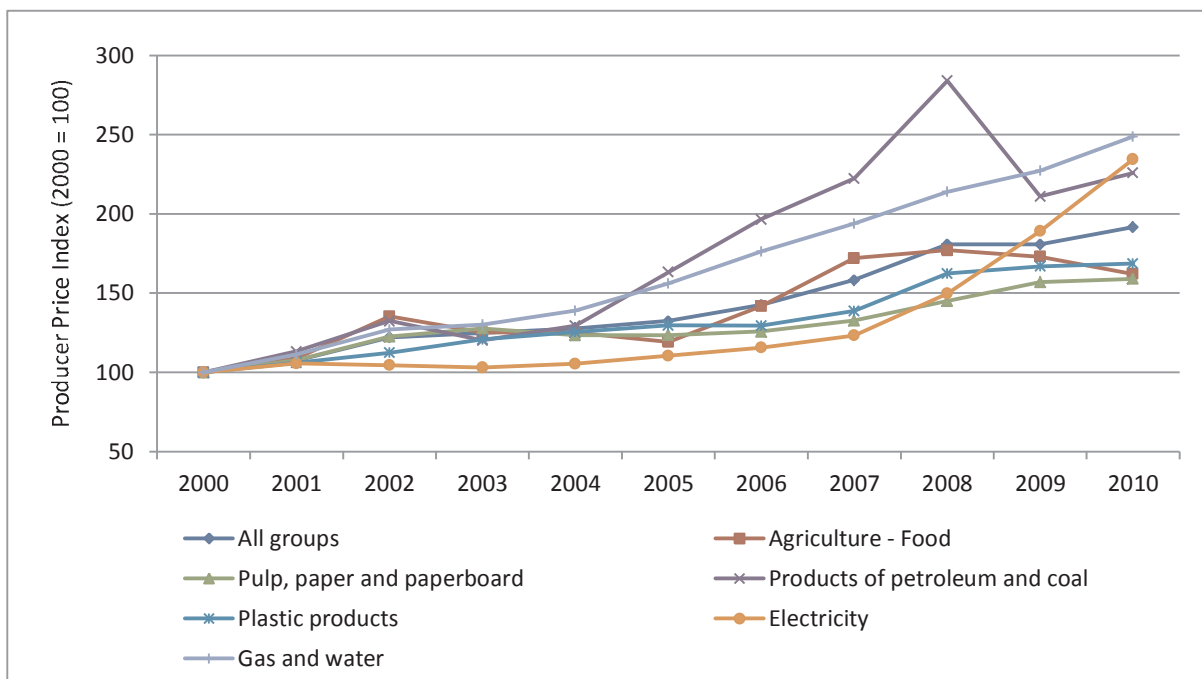


Figure 13: Producer price index for selected industry groups

Source: Stats SA, 2011

Figure 14 shows the PPI for selected materials. These items are not industry specific but indicate price trends on the input side to industries. From 2000 to 2010, the PPI of diesel at retail outlets increased by 195 % and at refinery level by 192.2 %, the PPI of plastic bottles increased by 151.3 %, tinplate increased by 102.2 %, kraft paper prices increased by 74.6 % and boxes, corrugated cardboard increased by 60.8 %.

Price trends between 2009 and 2010 for the items depicted were as follows: diesel at retail outlets decreased by 13.4 %, diesel at refinery level increased by 10.8 %, plastic bottles increased by 0.6 %, tinplate decreased by 5.7 %, kraft paper increased by 4.9 % and boxes, corrugated cardboard increased by 2.7 %.

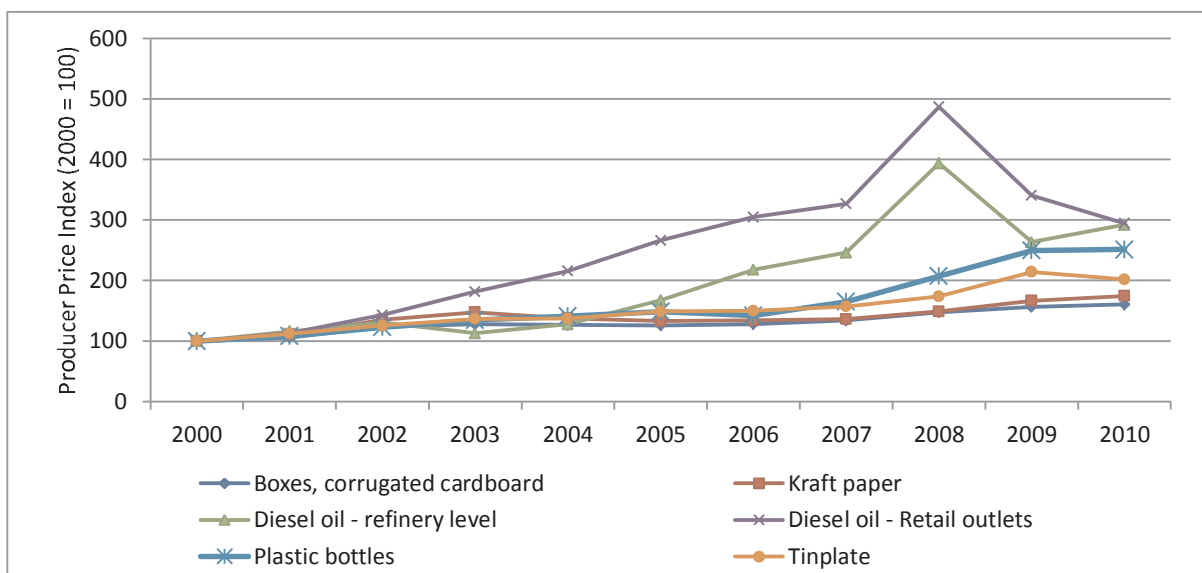


Figure 14: Producer price index for selected input items

Source: Stats SA, 2011

3.4 Trends in the Costs of Selected Inputs

3.4.1 Fertilizer Prices

- International Fertilizer Prices

According to the IFA (2011), global total nutrient production in 2010 converged with world consumption, marking a significant 11 % rebound over 2009. Production increased in all nutrient segments, but potash registered the largest gain. Ammonia production increased by 4 %, while urea output expanded marginally. Phosphate rock production and that of phosphoric acid grew in parallel, at the same rate of 10 % over 2009. Potash production increased by 57 % over 2009, fully recovering from the depressed conditions existing since mid-2008. Globally, the Fertilizer industry operated at 82 % of installed capacity, compared with 74 % in 2009. While this indicates a rebound, it does not yet signal the emergence of a potential shortfall in supply compared with 2007.

Figure 15 shows the international fertilizer price movements. Price changes for the items depicted in Figure 15 between 2009 and 2010 were as follows: the price for Urea increased by 1.7 %, the Di-Ammonium Phosphate (DAP) price increased by 35.6 % and the price of Muriate of Potash (MOP) decreased by 51.2 %.

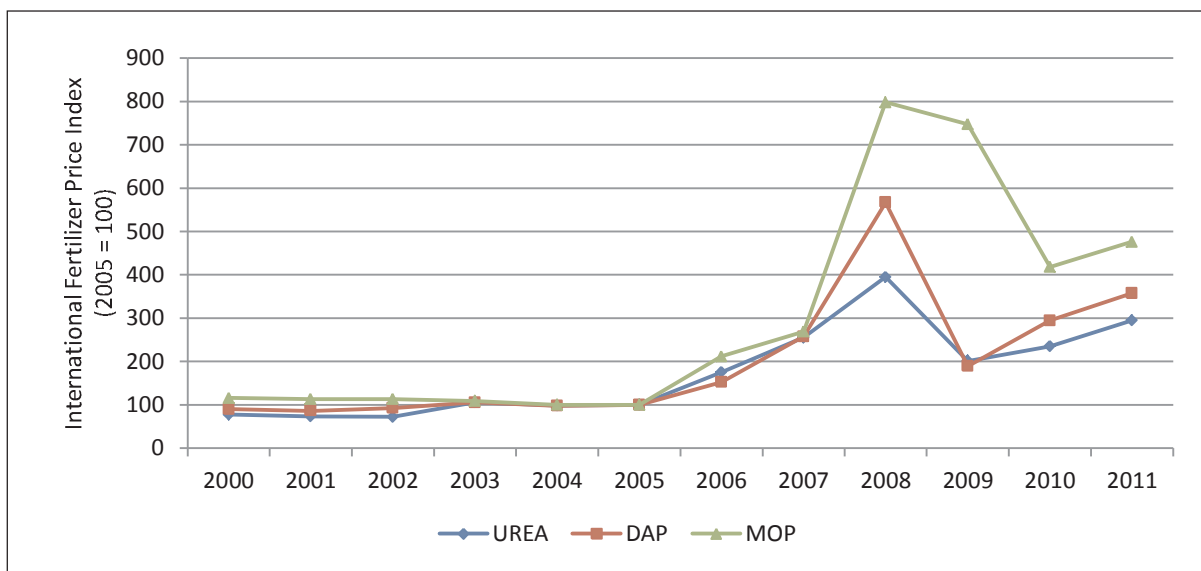


Figure 15: International fertilizer prices

Source: Grain SA, 2011

- Domestic Fertilizer Prices

The South African Fertilizer industry is fully exposed to world market forces in a totally deregulated environment, with no import tariffs or government sponsored measures. The local demand for fertilizer is in the region of 2 million physical tons; this amounts to approximately 750 000 tons of plant nutrient (N + P₂O₅ + K₂O). Table 5 shows the South African Fertilizer demand, domestic production and import situation.

Table 5: The South African fertilizer demand, domestic production and imports

Nutrient	Demand ('000 t)	Domestic production ('000 t)	Imports ('000 t)	Products
Nitrogen (N)	400	250	150	Mostly Urea
Phosphate (P ₂ O ₅)	200	Over 90 % of demand	<10 % of demand	Mostly DAP
Potassium (K ₂ O)	160	None	All	Mostly MOP

Source: FSSA, 2010

South Africa is a net importer of potassium and imports approximately 40 % of its nitrogen requirements. Thus, the domestic prices are impacted significantly by international prices of raw materials and fertilizers as well as shipping costs and the Rand/\$ exchange rate.

Figure 16 depicts the price movement of local fertilizer prices. From 2000 to 2010, the local prices of MAP, Urea Pril (46) and Potassium Chloride increased by 174.9 %, 154.8 % and 211.6 %, respectively. Figure 16 further shows that, on average, price movements were generally sideways and with some smaller fluctuations until the end of 2007, after which they escalated during 2008. Price trends between 2009 and 2010 for the items depicted were as follows: MAP increased by 6.9 %, Urea Pril (46) decreased by 15.1 % and Potassium Chloride decreased by 38.9 %.

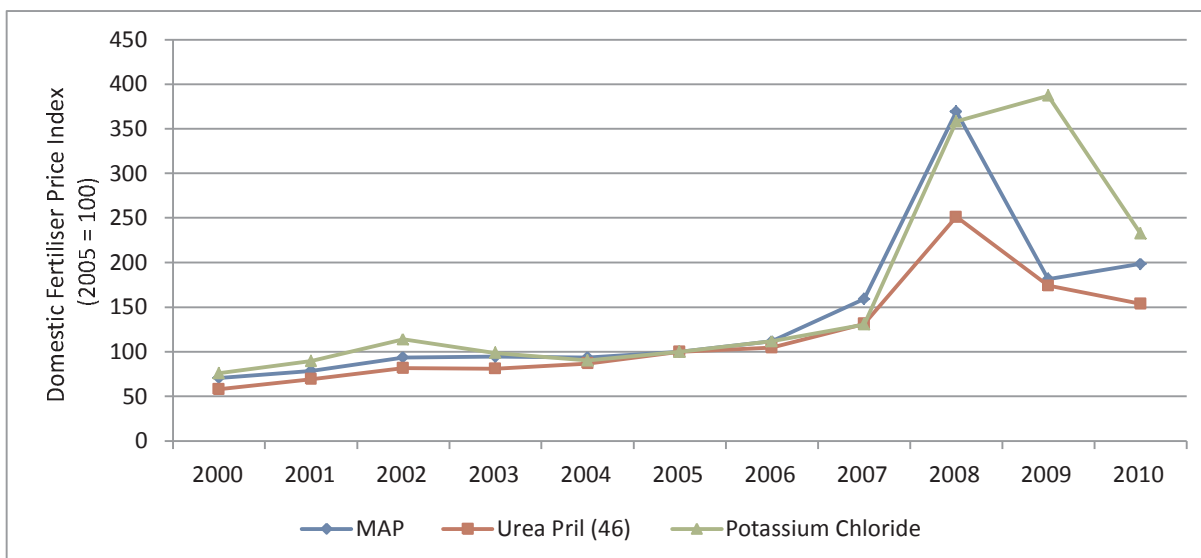


Figure 16: Local fertilizer price trends

Source: Own calculations from listed prices

3.4.2 Administered and Regulated Prices

An administered price is defined as the price of a product which is set consciously by an individual producer or group of producers and/or any price which can be determined or influenced by government, either directly or through a government agency/institution without reference to market forces. Examples of administered prices are:

- ◆ Housing (assessment rates, sanitary fees, refuse removal, water, electricity and paraffin);
- ◆ Transport (petrol, public transport – trains, motor licenses and motor registration);
- ◆ Communication (telephone fees, postage, cell calls);
- ◆ Recreation and culture (television licence);
- ◆ Education (school fees and Universities/Technicons/colleges); and
- ◆ Restaurants and hotels (university boarding fees).

Regulated prices are those administered prices that are monitored and controlled by government policy. To this end, price regulation does not necessarily imply the presence of an economic regulator, but a restriction on the extent to which prices may vary, depending on government's policy objective. Examples of administered prices that are regulated are:

- ◆ Housing (water, electricity and paraffin),
- ◆ Transport (petrol),
- ◆ Communication (telephone fees, postage, cellphone calls).

3.4.2.1 Transport

- International Crude Oil Prices

Crude oil prices affect food value chains in several complex ways, i.e. from influencing the prices of primary agricultural inputs, to inputs used in value addition processes (e.g. packaging) to the distribution of food. Hence trends in the crude oil price are an important indicator of trends in prices throughout the food value chain. Figure 17 shows the trends in the crude oil price. Crude oil prices rocketed from the early part of 2007 to reach a peak of US\$145 per barrel in July 2008. The average price per barrel in 2008 was US\$97.55 per barrel. The oil price has decreased significantly since the peak in 2008. According to the International Energy Agency (IEA) (2009), the price of oil is dependent on a multitude of global economic factors such economic growth, future demand and supply of oil and speculation in the oil market. Tighter credit availability, the slowdown in economic activity as a result of the global financial and economic crises and less speculation in the oil market are reasons provided by the IEA (2009) for the significant drop in oil prices since mid-2008. On an average annual basis, the price decreased by 36.65 % from US\$97.55 per barrel in 2008 to US\$61.80 per barrel in 2009. Unfortunately, this downward trend did not continue during 2010 and the crude oil price increased by 28.9 % on an average annual base.

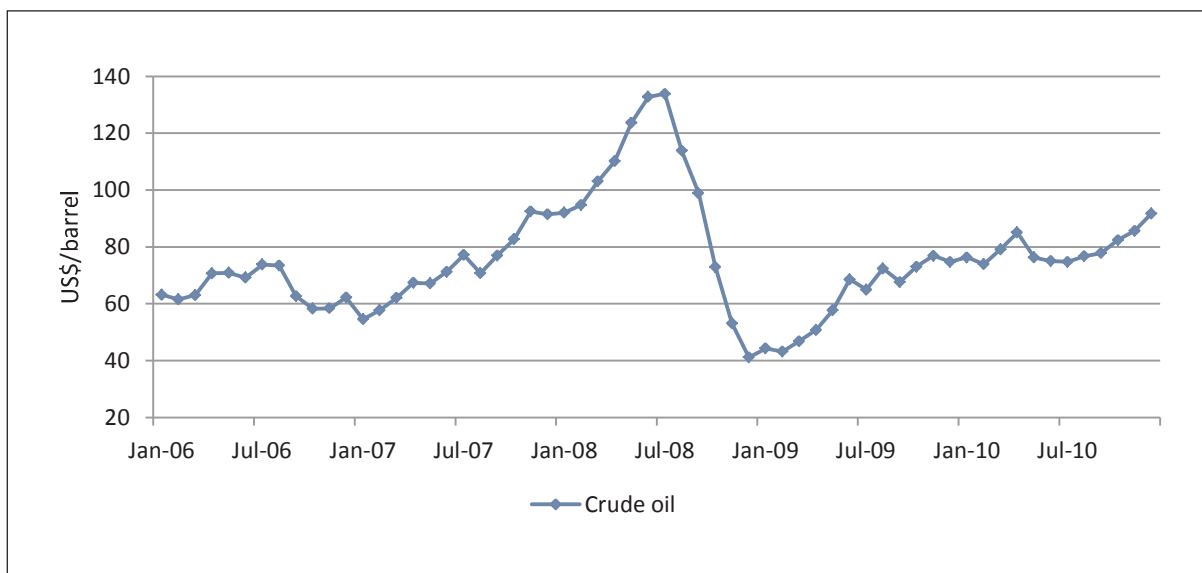


Figure 17: Crude oil price

Source: Grain SA, 2011

- Domestic Fuel and Transport Costs

Fuel makes a significant contribution towards the variable costs of primary agricultural production, as well as in food distribution costs. Figure 18 illustrates trends in the crude oil price and 0.05 % sulphur diesel price in Gauteng and at the coast. Variation in the diesel price is affected by the international oil price, the R/US\$ exchange rate and changes in taxes and levies. The crude oil price (\$/barrel) increased by 45.2 % from January 2006 to December 2010 and the price of 0.05 % sulphur diesel in Gauteng and at the coast by 46.9 % and 48 %, respectively. The diesel price also peaked in July 2008, achieving an average rate of R11.36/l, with R11.43/l in Gauteng and R11.30/l at the coast. The average diesel price, however, decreased significantly towards December 2009 (i.e. by 38.6 %). Over this same period, the crude oil price decreased by 44.1 %.

Price trends between December 2009 and December 2010 for the items depicted were as follows: 0.05 % sulphur diesel in Gauteng increased by 8.1 %, 0.05 % sulphur diesel at the coast increased by 8 %, and the crude oil price increased by 22.7 %. It is evident from Figure 18 that the diesel price follows the international oil price with a slight time lag.

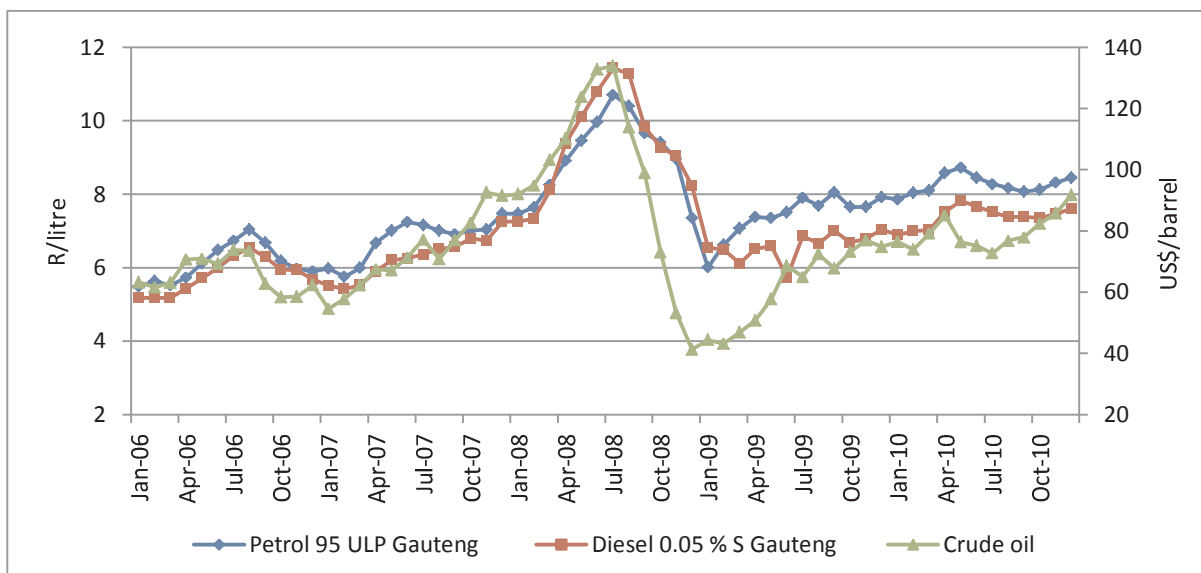


Figure 18: Diesel prices in Gauteng and at the coast

Source: South African Petroleum Industry Association (SAPIA), 2011

Transport and logistical costs account for a substantial portion of the overall cost of food. The diverse nature, location and size of the various agricultural value chains from farm gate to consumer present a highly complex transport matrix. Furthermore, there is a perception that food prices are driven up by high fuel prices but never come down when fuel prices drop. Cognisance should be taken of the fact that there are also other cost drivers affecting transport and logistical costs.

Based on the National Freight Database (NFD), three vehicle categories were chosen to represent vehicles typically used to transport agricultural products and livestock. The NFD categorises vehicles by their number of axles; this method is similar to that applied in the calculation of toll road fees.

Figure 19 illustrates the vehicle cost composition over time for different sized vehicles.¹ Fixed costs include depreciation, cost of capital, licence, insurance and wages. Running costs include fuel, oil, maintenance, tyres and incidental costs. The sum of the fixed and running costs is the total operational cost

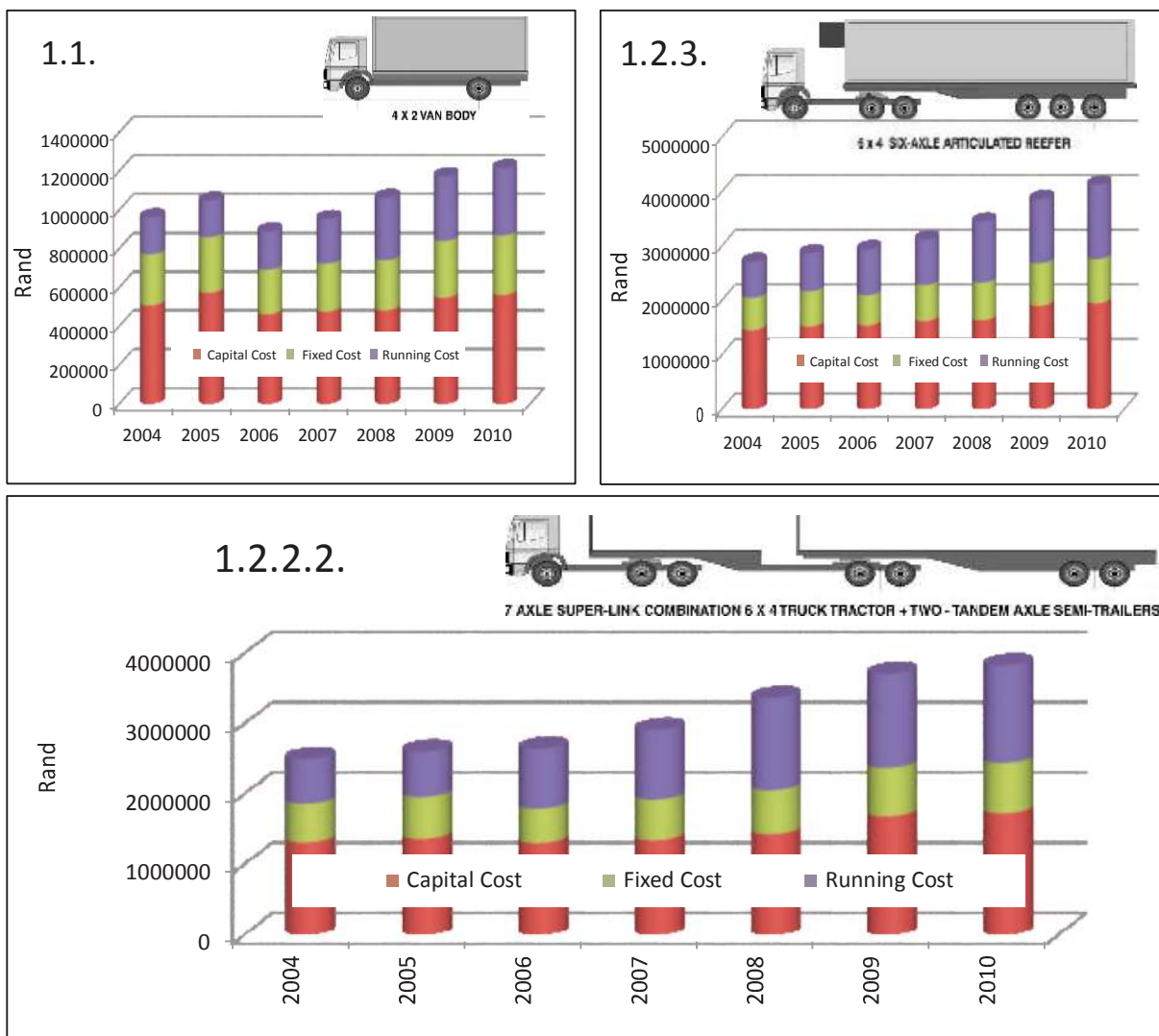


Figure 19: Vehicle costs over time for different sized vehicles

Source: Max Braun Consulting Services, 2010

Note: The headings refer to the number of axles of each vehicle illustrated; 1.1 represents 2-axle vehicles etc.

Assumptions:

- 1 – 85,000 km per annum, 260 work days, 8-ton payload and est. economical life of 8 years.
- 2 – 180,000 km per annum, 286 work days, 28-ton payload and est. economical life of 5 years.
- 3 – 200,000 km per annum, 286 work days, 36-ton payload and est. economical life of 4 years.

Table 6 shows the increases in the different costs to operate large vehicles.

Table 6: Vehicle cost changes from 2004 to 2010

2-axle vehicles:	6-axle vehicles:	7-axle vehicles:
Capital cost: 10.7 %	Capital cost: 33.9 %	Capital cost: 31.4 %
Fixed cost: 16.3 %	Fixed cost: 36.7 %	Fixed cost: 30.8 %
Running cost: 81.9 %	Running cost: 105.8 %	Running cost: 117.9 %

Source: Max Braun Consultancy Services, 2011

3.4.2.2 Electricity

Figure 20 shows the electricity usage by different industries. The primary agricultural industry consumed 5 931 GWh (3 %), whilst industry consumed 117 744 GWh or 58 % of the total South African electricity usage in 2008. In 2009 the total cost of electricity for the primary agricultural and forestry sectors amounted to approximately R1.8 billion. If the planned electricity costs over the next three years are taken into account the cost of electricity is estimated to increase to nearly R3 billion if electricity usage by the primary agricultural and forestry sector remains at more or less current levels.

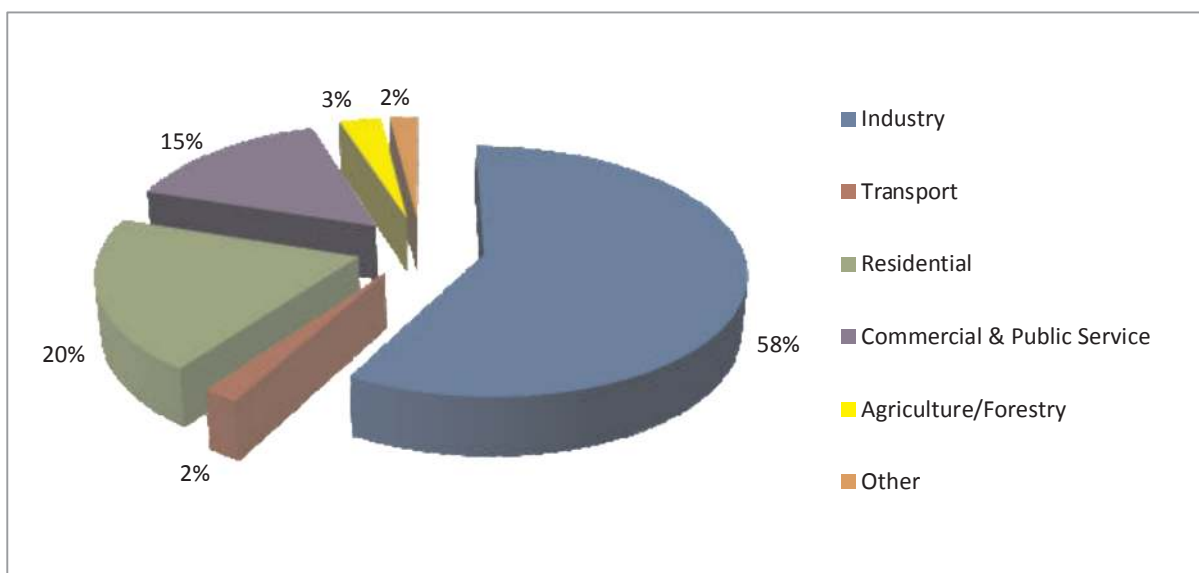


Figure 20: Electricity usage by different industries

Source: IEA, 2011

3.4.2.3 Labour Cost

Figure 21 shows the regulated minimum wages for primary agriculture. This minimum wage is always revised for the beginning of the year. In the past different wages were distinguished in two different areas, but from 2008 the wages are the same for the areas. The minimum wage for Area A increased by 64.4 % from 2003 to 2008 and the wage in Area B increased by 102.4 % over the same period. Wages increased by 6.8 % between 2009 and 2010.

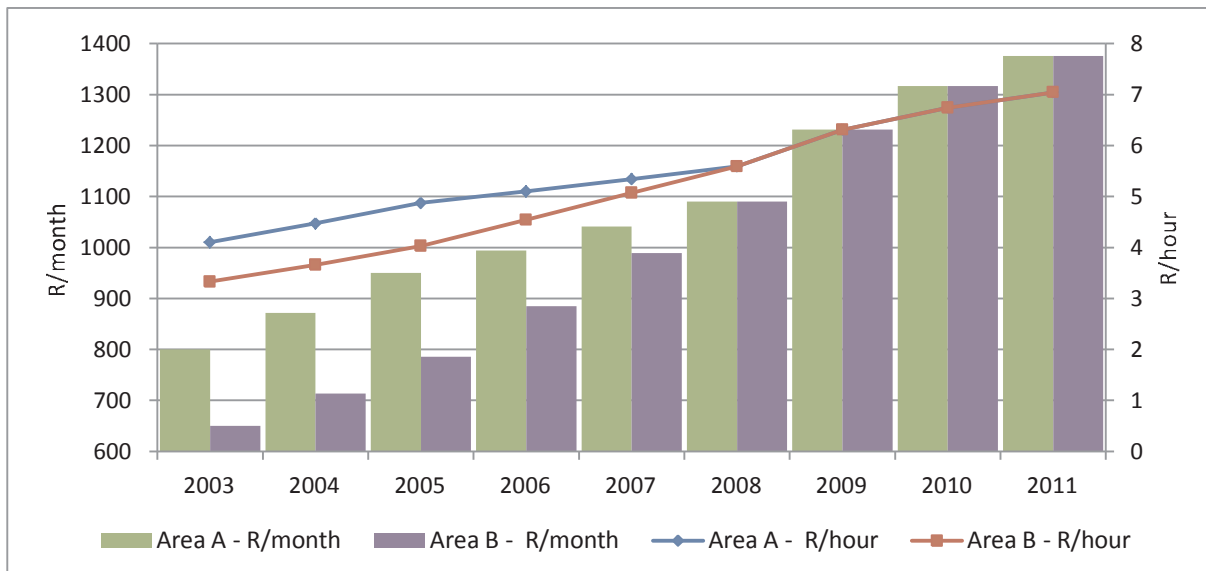


Figure 21: Minimum wages

Source: Department of Labour, 2011

3.4.2.4 Contribution of Selected Regulated Prices to the Cost of Production

Figure 22 shows the average percentage contribution of regulated fuel, labour and electricity cost to the total production cost of animal feed from 2001 to 2010. The percentage contribution to total production cost of animal feed showed fluctuations during the depicted period and varied between 46.6% in 2007 and 54.8% in 2010.

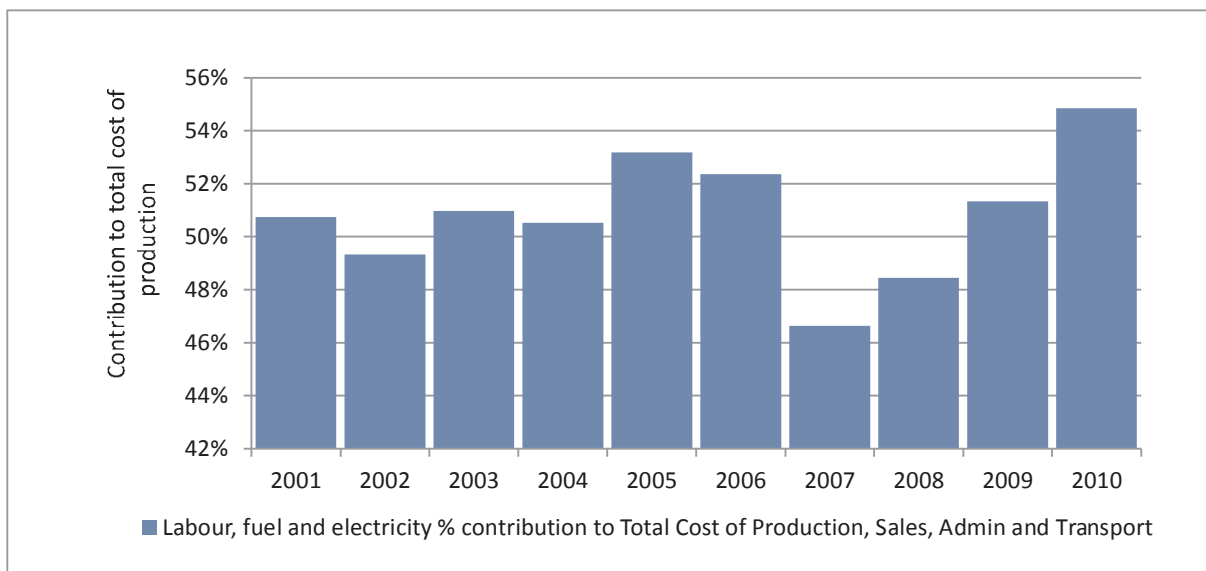


Figure 22: Average percentage contribution of regulated fuel, labour and electricity cost to total production cost of animal feed

Source: Own calculations based on data from AFMA, 2011

When looking at the individual regulated cost components role in the cost of producing a ton of animal feed over time, it can be seen from Figure 23 that all three items showed increasing trends during the depicted period. From 2001 to 2010, the cost of labour increased by 68.3 %, the cost of electricity increased by 204.1 % and the cost of fuel for delivery increased by 34.2 %. Cost trends between 2009 and 2010 for the items depicted were as follows: labour increased by 6.8 %, electricity increased by 24.8 % and fuel for delivery increased by 12.2 %.

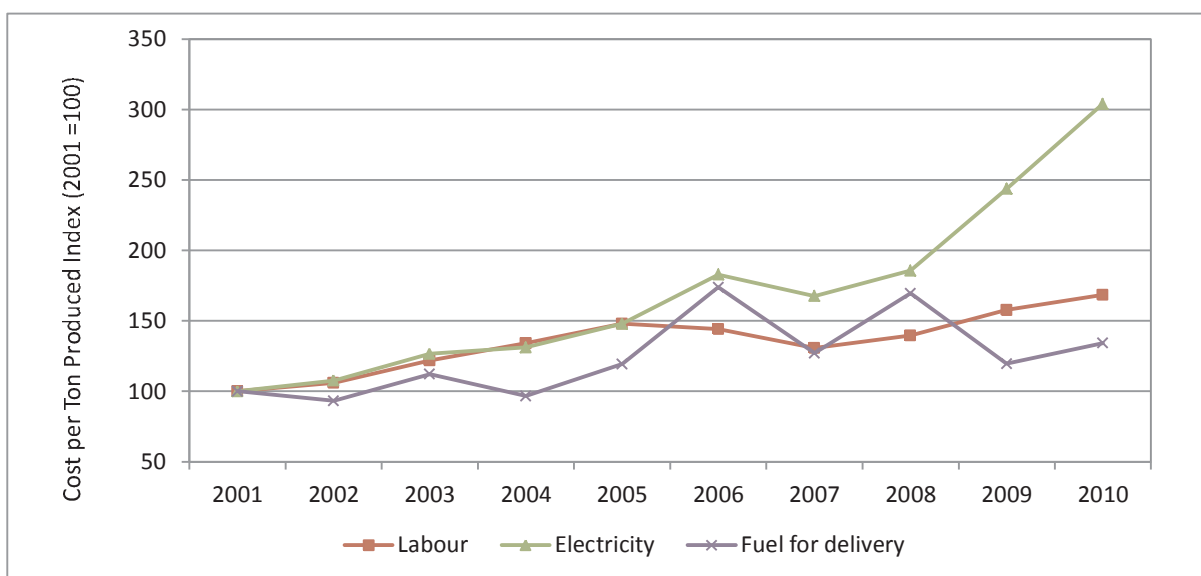


Figure 23: Regulated fuel, labour and electricity cost for the production of a ton animal feed
Source: Own calculations based on data from AFMA, 2011

Figure 24 shows the regulated electricity, water and transport cost for the production of a kilogram of poultry from 2008 to 2010. From 2008 to 2010, the cost of electricity increased by 55.3 %, the cost of water increased by 52 % and the cost of transport increased by 3.6 %. Cost trends between 2009 and 2010 for the items depicted were as follows: electricity increased by 33.9 %, water increased by 18.6 % and transport decreased by 2.4 %.

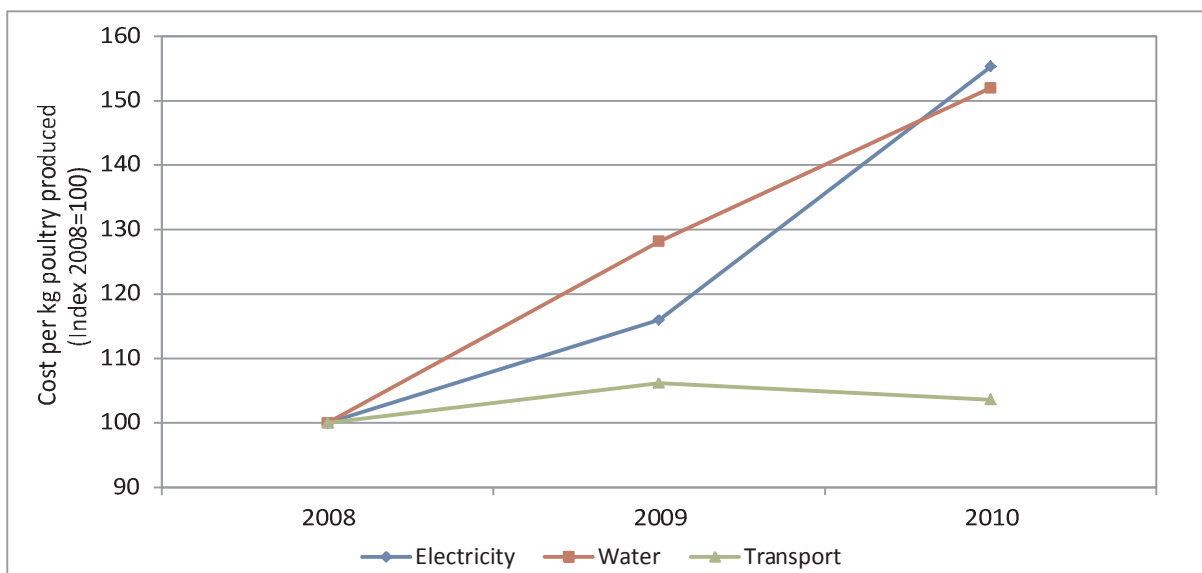


Figure 24: Regulated electricity, water and transport cost for the production of a kilogram of poultry

Source: Own calculations based on data from role players in the industry, 2011

4 INFLATIONARY TRENDS FOR SELECTED FOOD STUFFS

4.1 Introduction

The Consumer Price Index (CPI) is a current social and economic indicator that is constructed to measure changes over time in the general level of prices of consumer goods and services that households acquire, use, or pay for (Stats SA, 2009). The CPI rate or inflation rate indicates the percentage change in the CPI on an annual basis; it compares the CPI of a certain month with the CPI of the same month in the previous year.

The average headline CPI rate for 2010 was 4.29 %, i.e. 2.85 percentage points lower than the average headline CPI rate of 2009 (7.14 %). On average, price increases were 2.85 % lower in 2010 than in 2009. From 2008 to 2009 the average headline CPI rate decreased by 4.38 percentage points. This indicates that although prices increased from 2008 to 2009 to 2010, the rate of price increases were lower in 2010 than in 2009 and 2008.

In order to calculate the CPI, prices for consumer goods and services are classified into fourteen different categories. Each of these categories in the CPI has a weight attached to it which reflects its relative importance in the overall index. These weights represent the portions of consumption expenditure by households in a specific period. The weighted sum of changes in the price of the specific products or services in the CPI provides the rates of inflation. The weight of the food category in the CPI is 14.27, while the weight of food and non-alcoholic beverages is 15.68. Housing and utilities has the largest weight in the CPI of 22.56. Figure 25 shows the different categories and their contribution to the CPI.

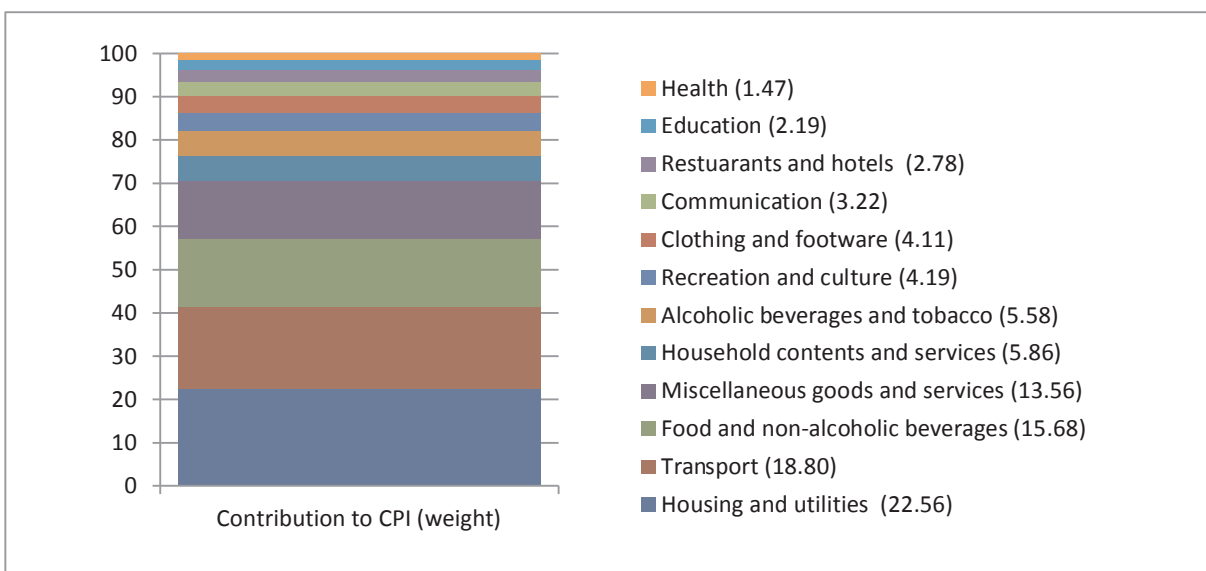


Figure 25: Contribution of different categories of consumer goods and services to the CPI

Source: Stats SA, 2010

Food and non-alcoholic beverages CPI averaged 111 index points in 2010, only one point higher than the 110 index points in 2009. The CPI rate for food and non-alcoholic beverages averaged 1.36 % for 2010, indicating that consumers paid only 1.36 % more for food and non-alcoholic beverages in 2010 than in 2009. Figure 26 shows the CPI for food and non-alcoholic beverages, as well as the CPI rate of change for food and non-alcoholic beverages. It is evident from the Figure 26 that although food prices at retail level continued to increase in 2010 (left axis), the rate of prices increases (right axis) were significantly lower than those experienced in 2009.

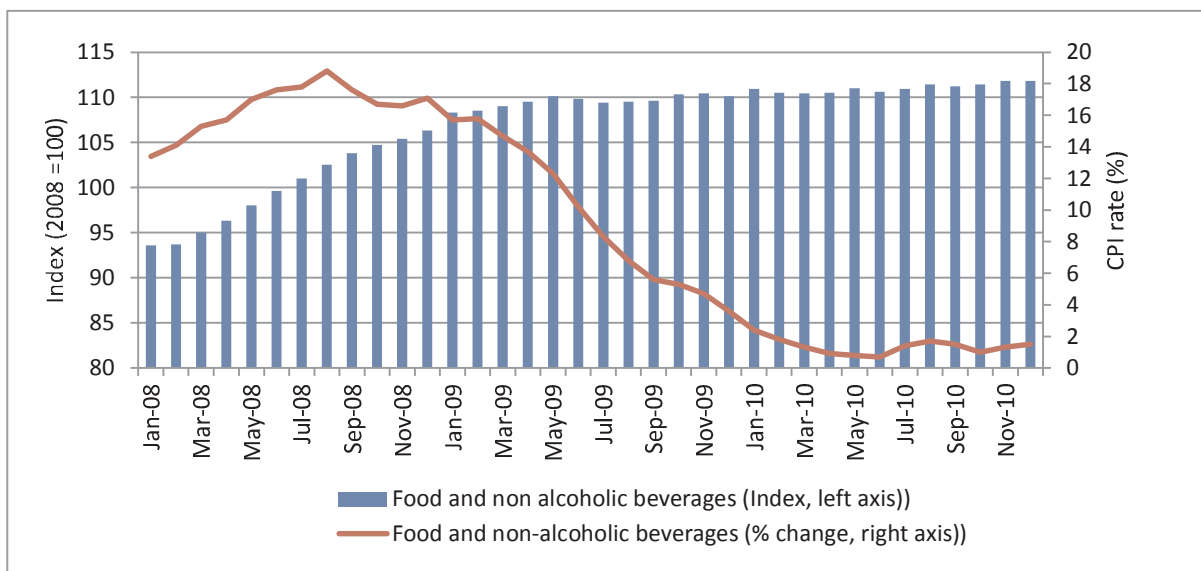


Figure 26: CPI and CPI rate of change for food and non-alcoholic beverages

Source: Stats SA, 2011

Figure 27 shows the headline CPI and the food and non-alcoholic beverages CPI. During 2010, the headline CPI rate continued to be higher than the CPI for food and non-alcoholic beverages, while during 2008 and the larger part of 2009, the CPI rate for food and non-alcoholic beverages exceeded the headline CPI rate. This indicates that food and non-alcoholic beverages inflation contributed less to headline inflation in 2010 compared to its contribution in 2008 and 2009.

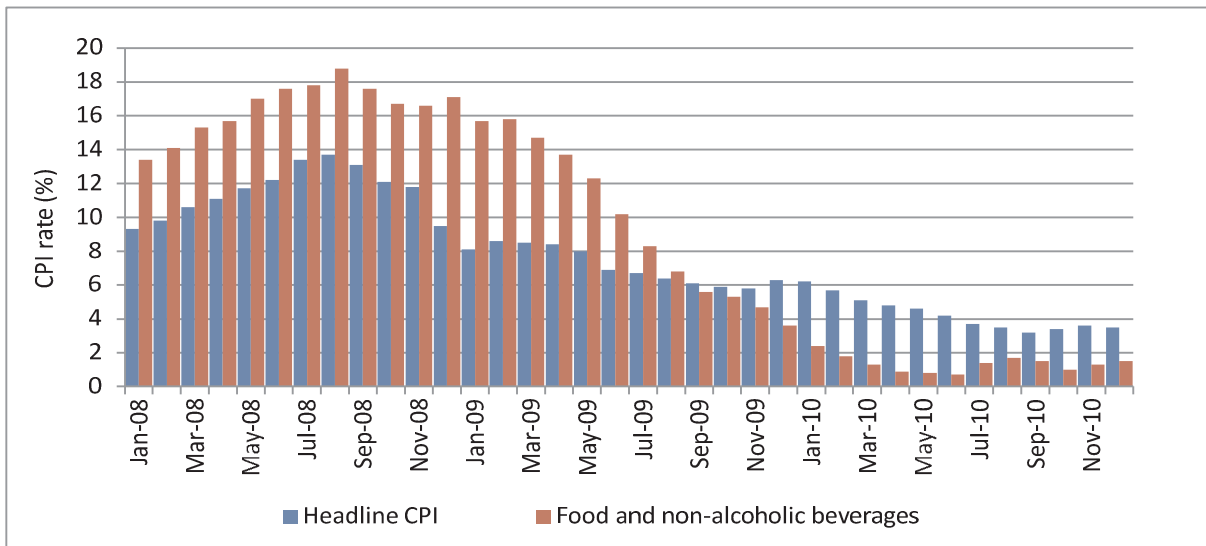


Figure 27: Headline CPI rate and the CPI rate for food and non-alcoholic beverages

Source: Stats SA, 2011

The contribution of food and non-alcoholic beverages to the headline CPI declined significantly since 2009/09. Figure 28 shows the contribution of the food and non-alcoholic beverages CPI to the headline CPI from 2008 to 2010.

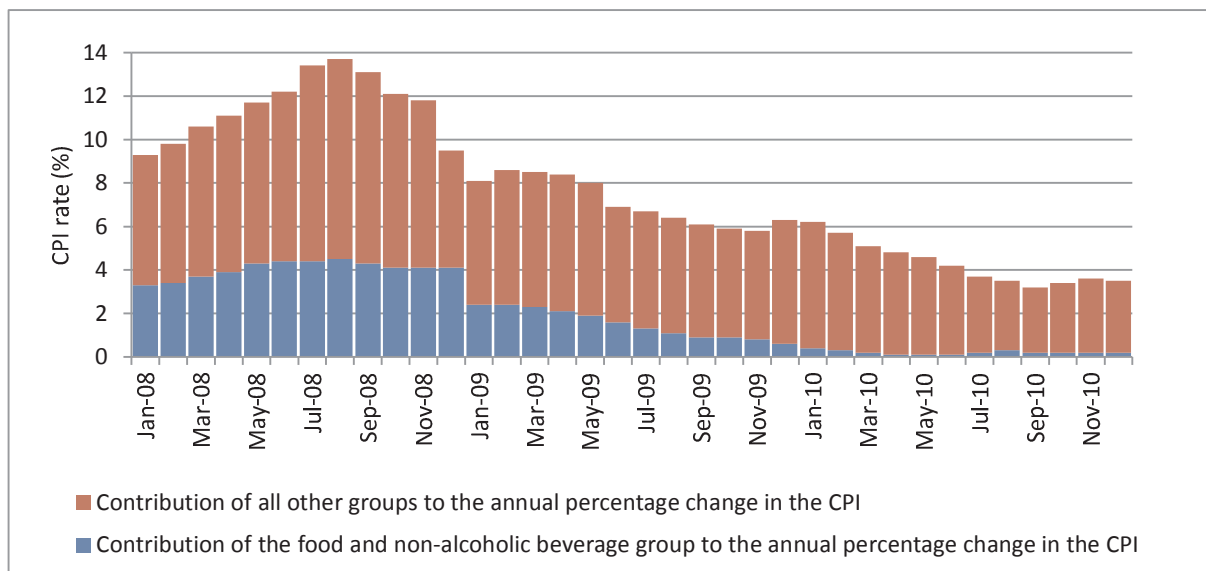


Figure 28: Contribution of the food and non-alcoholic beverages group to the annual percentage change in the headline CPI rate

Source: Stats SA, 2011

A comparison of the CPI for food and non-alcoholic beverages in the different provinces in South Africa shows that the Eastern Cape, Limpopo and the Northern Cape experienced the highest food price increases in the country. The Western Cape and North West experienced the slowest rate in increase food and non-alcoholic beverages prices. Figure 29 shows the CPI for food and non-alcoholic beverages for the different provinces on monthly basis for 2010.

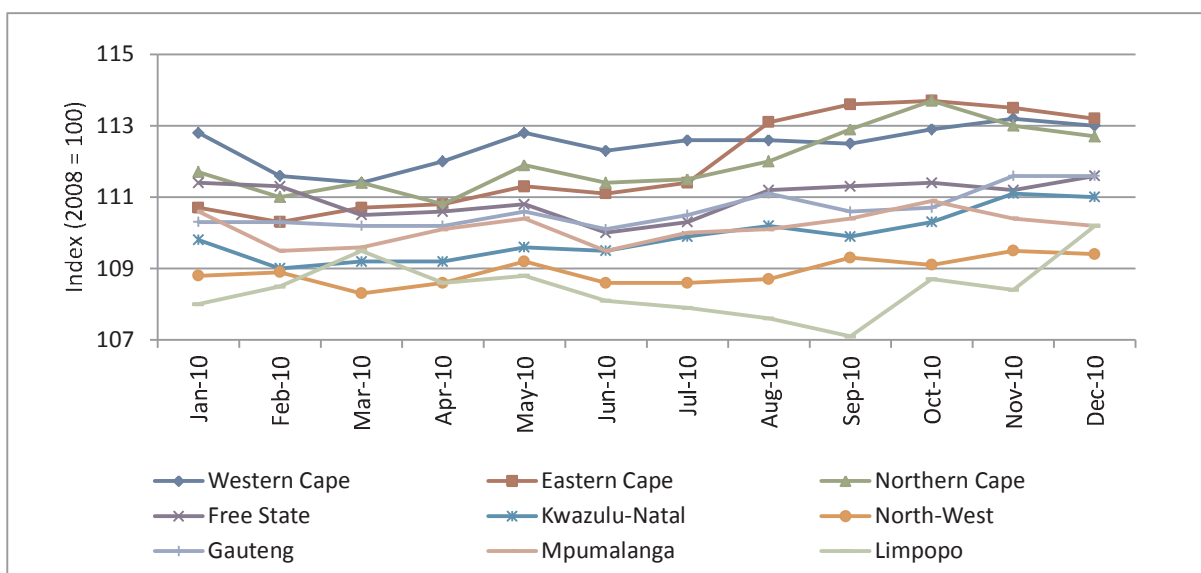


Figure 29: CPI for food and non-alcoholic beverages in different provinces in South Africa
Source: Stats SA, 2011

The food CPI consists of the CPI of all the different food groups, such as, bread and cereals, meat, fish, milk, eggs and cheese, oils and fats, fruit, vegetables, sugar, sweets and desserts and other food products. All of these products are assigned a different weight which determines their contribution to the food CPI. The non-alcoholic beverages CPI consists of two groups, hot beverages and cold beverages.

Figure 30 shows the trends in the CPI for different food items. A closer look at the price movements of the different food groups shows that sugar, sweets and desserts, fruit and other food products showed the largest price increases in 2010 compared to 2009, i.e. prices increased respectively by 5.79 %, 4.14 % and 3.72 %. The fish and the milk, eggs and cheese price indices showed a 2.65 % and 2.01 % increase in average prices from 2009 to 2010. The vegetable price index shows that vegetable prices increased by 1.19 %. Meat showed a small increase of 0.53 % on average from 2009 to 2010. For oils and fats prices decreased by 5.32 % between 2009 and 2010, while for bread and cereal products there was also a price decrease off 1.62 %.

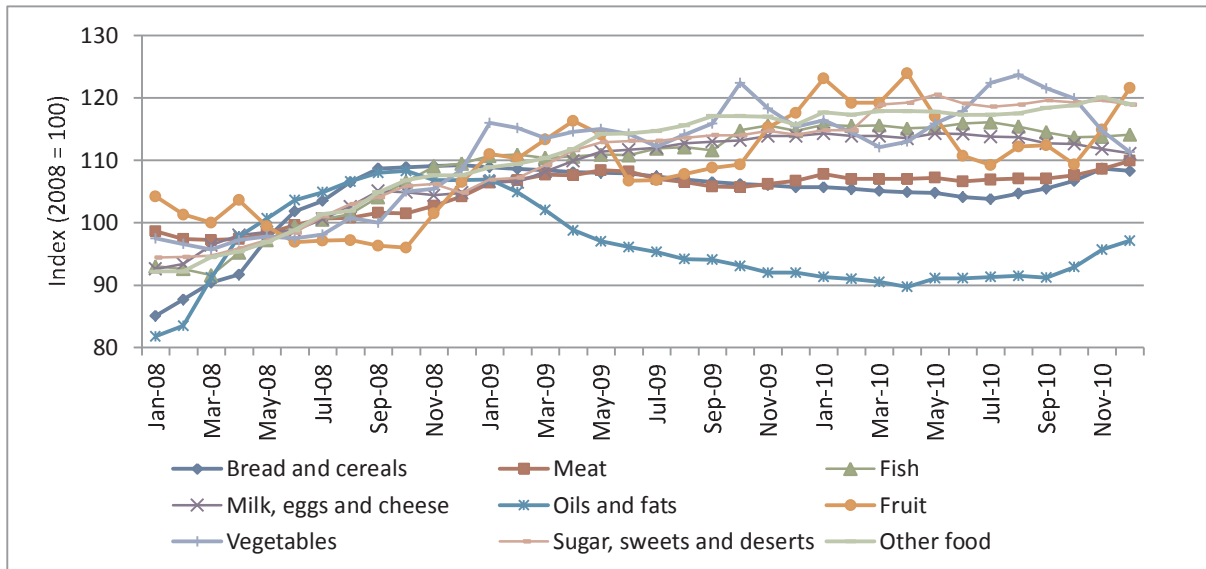


Figure 30: CPI for different food groups

Source: Stats SA, 2011

Figure 31 shows the price index for processed and unprocessed products. Prices for processed and unprocessed food products are also measured. The index for prices of processed and unprocessed food products indicate that prices decreased on average by 0.17 % from 2009 to 2010 for unprocessed products, while the average prices for processed food products increased by 1.95 %. It is evident a gap started opening up between the two indices from the beginning of 2010.

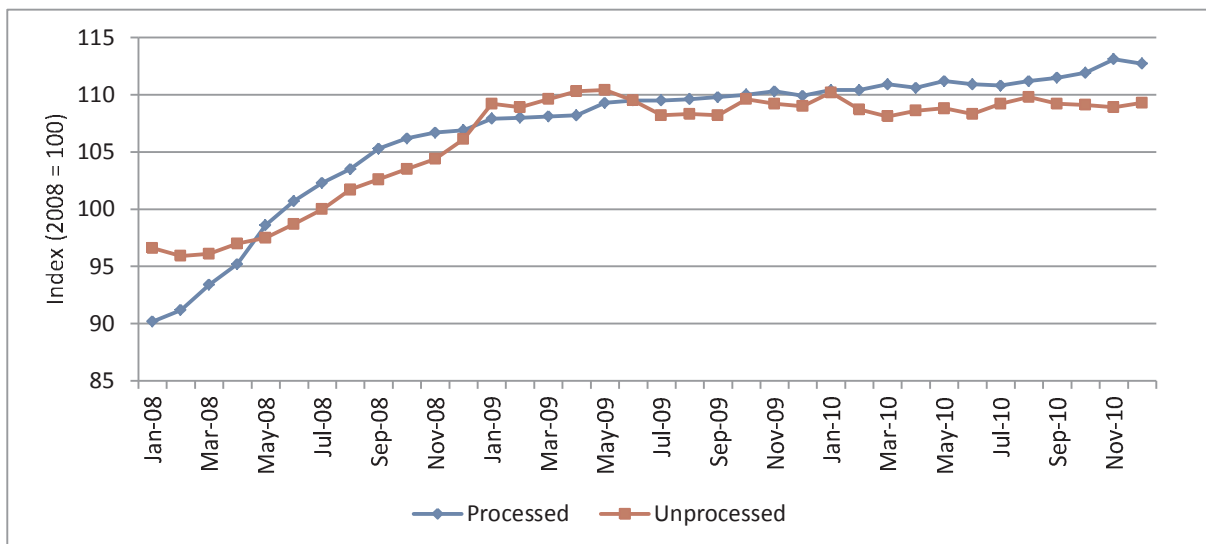


Figure 31: CPI for different food groups

Source: Stats SA, 2011

4.2 Urban Food Price Trends

This section provides insight into the average retail prices of specific food items in urban areas for 2010 and how it compared to the retail prices of 2009 and 2008.

Table 7 shows selected retail prices in the bread and cereals group. On average, the retail prices of bread and cereals decreased from 2009 to 2010 (i.e. by 2.43 %). The most significant price decrease was in the price of rice, which decreased from 2009 to 2010 by 14.55 %, 14.23 % and 15.23 % respectively for a 500 g, 1 kg and 2 kg packet. Maize meal prices also decreased by 4.68 % for special maize meal (5 kg) and 5.90 % for super maize meal (5 kg). The largest retail price increase from 2009 to 2010 was seen for 400 gram cereal, 10.77 %. The retail price for cereals increased on average by 7.25 % for the different weights. Compared to 2008 prices, the 2010 prices for the products listed below shows an average percentage increase of 7.56 %.

Table 7: Average annual retail prices for certain food items in the bread and cereals group

Bread and cereals	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Cake flour 1 kg	9.66	9.10	8.66	-10.41	-4.88
Cake flour 2.5 kg	19.41	18.01	16.14	-16.83	-10.34
Cereals 300 g	14.76	17.12	18.20	23.32	6.27
Cereals 400 g	19.82	23.26	25.76	29.96	10.77
Cereals 450 g	15.19	16.07	16.78	10.47	4.44
Cereals 500 g	18.13	20.38	22.05	21.62	8.20
Cereals 750 g	24.73	27.49	29.30	18.48	6.58
Loaf of brown bread 600 g	4.75	5.00	4.93	3.82	-1.25
Loaf of brown bread 700 g	6.47	7.12	7.08	9.50	-0.53
Loaf of white bread 600 g	5.54	5.86	5.90	6.48	0.64
Loaf of white bread 700 g	7.20	7.88	7.91	9.88	0.42
Maize special 5 kg*	18.00	17.39	16.58	-7.93	-4.68
Maize super 5 kg*	21.88	23.15	21.78	-0.43	-5.90
Mielie meal 1 kg	5.50	5.61	5.25	-4.64	-6.44
Mielie meal 2.5 kg	11.41	11.95	11.55	1.28	-3.34
Mielie meal 5 kg	22.29	23.32	22.08	-0.92	-5.31
Rice 500 g	6.30	8.29	7.09	12.55	-14.55
Rice 1 kg	12.16	16.31	13.99	15.01	-14.23
Rice 2 kg	19.86	25.20	21.36	7.56	-15.23
Spaghetti 500 g	9.42	10.36	9.49	0.74	-8.41
Macaroni plain 500 g*	7.26	8.24	7.82	7.58	-5.17
Porridge 1 kg	13.68	16.82	20.05	25.63	2.14
Porridge 500 g	15.36	16.27	17.07	11.16	4.95

Source: Stats SA, *AC Nielsen 2010

Table 8 shows retail prices for selected meat products. The retail price of lamb showed the largest price increase of 7.17 % on average from 2009 to 2010. The retail price of beef rump steak increased by 2.20 % from R74.85/kg R76.49/kg. Frozen chicken portions and whole frozen chicken prices decreased by 8.93 % and 4.99 %, respectively, while fresh chicken portions and whole fresh chicken prices decreased by 0.28 % and 1.35 %, respectively. The price of pork chops decreased by 3.84 % from 2009 to 2010. Compared to 2008 prices, the price of processed pork products increased by 29.76 % for picnic ham and 26.50 % for polony.

Table 8: Average annual retail prices for certain food items in the meat group

Meat	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Beef brisket - fresh per kg	40.96	44.79	45.29	10.57	1.12
Beef chuck - fresh per kg	42.86	46.57	47.01	9.67	0.94
Beef mince - fresh per kg	43.83	47.25	47.68	8.79	0.91
Beef rump steak -fresh per kg	71.34	74.85	76.49	7.23	2.20
Beef t-bone - fresh per kg	57.34	60.56	60.66	5.79	0.17
Chicken portions - fresh per kg	34.51	37.57	37.67	9.18	0.28
Chicken portions - frozen per kg	22.43	24.20	22.04	-1.72	-8.93
Ham per kg	86.72	97.83	94.26	8.70	-3.65
Lamb - fresh per kg	73.77	69.38	74.36	0.80	7.17
Picnic ham 300 g*	19.72	24.81	25.59	29.76	3.15
Polony per kg	20.80	26.43	26.32	26.50	-0.43
Pork chops - fresh per kg	51.69	51.35	49.38	-4.47	-3.84
Pork sausage per kg	44.35	51.37	52.34	18.00	2.47
Whole chicken - fresh per kg	26.60	28.66	28.28	6.31	-1.35
Whole chicken - frozen per kg	24.37	25.82	24.53	0.66	-4.99

Source: Stats SA, *AC Nielsen, 2010

The retail prices for smaller sized tinned fish (excluding tuna) generally increased, i.e. price increases from 2009 to 2010 were 6.35 % for 155 g and 1.62 % for 215 g (see Table 9). The retail prices of tinned fish (excluding tuna) 400 g and 425 g decreased by 9.22 % and 2.23 %, respectively. The price of tinned tuna (170 g) increased by 6.39 % from 2009 to 2010. Compared to 2008 retail prices, all the tinned fish products listed below increased by more than 20 %, except tinned fish (excluding tuna) 400 g.

Table 9: Average annual retail prices for certain food items in the fish group

Fish	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Fish (excl tuna) - tinned 155 g	5.08	5.91	6.28	23.63	6.35
Fish (excl tuna) - tinned 215 g	6.96	8.26	8.40	20.69	1.62
Fish (excl tuna) - tinned 400 g	13.53	14.07	12.77	-5.63	-9.22
Fish (excl tuna) - tinned 425 g	9.77	12.35	12.08	23.60	-2.23
Tuna - tinned 170 g	8.90	10.82	11.51	29.23	6.39

Source: Stats SA, 2010

Retail prices for milk, listed in Table 10, showed an average decrease of 0.49 %. Fresh milk prices in general decreased, while prices for processed milk products such as long life milk and powdered milk showed price increases from 2009 to 2010. The retail price for the different sizes of powdered milk products shows different price movements. The 500 g and 1 kg units of powdered milk shows price decreases where as the other units showed price increases.

Table 10: Average annual retail prices for certain food items in the milk group

Milk	2008	2009	2010	2008-2010	2009-2010
Full cream milk - fresh 1 l	8.08	8.62	8.53	5.54	-1.13
Full cream milk - fresh 2 l	15.97	16.78	16.47	3.13	-1.90
Full cream milk - fresh 500 ml	5.24	5.61	5.77	10.18	2.82
Full cream milk - long life 1 l	8.30	9.17	9.56	15.18	4.31
Full cream milk - long life 500 ml	5.89	5.92	6.13	4.09	3.55
Fresh milk low fat 1 l *	6.59	7.18	6.67	1.30	-7.13
Fresh milk low fat 2 l *	14.93	15.95	15.75	5.50	-1.30
Powdered milk 250 g	20.96	22.95	23.66	12.88	3.09
Powdered milk 400 g	34.54	37.38	38.70	12.06	3.53
Powdered milk 500 g	33.56	37.36	36.90	9.95	-1.22
Powdered milk 900 g	72.76	78.66	82.08	12.80	4.34
Powdered milk 1 kg	40.03	38.72	33.42	-16.52	-13.69
Skimmed powder milk 1 kg*	57.86	56.96	56.01	-3.20	-1.68

Source: Stats SA, *AC Nielsen, 2010

The retail price of eggs increased by 4.78 % for ½ a dozen and 3.23 % for 1 ½ dozen between 2009 and 2010 (see Table 11). Compared to the retail prices of 2008, the 2010 retail prices increased by 27.6 %, 23.23 % and 15.27 % respectively for the ½ dozen, 1 ½ dozen and 2 ½ dozen eggs. The retail price for 1 kg of cheddar cheese increased by 7.80 % from 2009 to 2010. From 2008 to 2010 the price of cheddar cheese increased by 17.25 %.

Table 11: Average annual retail prices for eggs and cheese

Eggs	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Eggs 1/2 dozen	7.29	8.88	9.30	27.61	4.78
Eggs 1.5 dozen	20.37	24.31	25.10	23.23	3.23
Eggs 2.5 dozen	29.82	34.95	34.37	15.27	-1.67
Cheese					
Cheddar cheese per kg	74.07	80.07	86.85	17.25	8.46

Source: Stats SA, 2010

Table 12 shows that in the oils and fats group, all the retail prices, except for butter and peanut butter, declined from 2009 to 2010. Retail prices of sunflower products all showed decreases; the price of 4 litres sunflower oil decreased by 13.66 % and the price of margarine spread decreased by 9.36 %. The retail price of butter increased by 5.56 %. Peanut butter 400 g also showed a price increase of 2.03 % from 2009 to 2010, which is much lower compared the price increase of 24.40 % from 2008 to 2010.

Table 12: Average annual retail prices for certain food items in the oils and fats group

Oils and fats	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Brick margarine 250 g	8.79	9.93	9.30	5.78	-6.31
Margarine spread 1 kg	28.93	30.33	27.49	-4.96	-9.36
Margarine spread 500 g	13.11	15.62	15.19	15.90	-2.75
Medium fat spread 1 kg tub*	19.32	20.33	19.70	1.94	-3.13
Total butter 500 g*	21.28	24.09	25.43	19.47	5.56
Sunflower oil 750 ml	15.18	13.95	13.26	-12.64	-4.97
Sunflower oil 4 l	37.59	27.47	23.72	-36.91	-13.66
Peanut butter 400 g	12.53	15.28	15.59	24.40	2.03

Source: Stats SA, *AC Nielsen, 2010

The retail prices of fruit increased on average by 10.38 % for apples, 3.71 % for bananas and 16.88 % for oranges from 2009 to 2010 (see Table 13). The retail price of oranges decreased by 12.70 % from 2008 to 2009 and then recovered in 2010.

Table 13: Average annual retail prices for fruit

Fruit	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Apples - fresh per kg	10.14	11.12	12.29	21.17	10.54
Bananas - fresh per kg	7.69	9.33	9.68	25.88	3.71
Oranges - fresh per kg	8.44	6.31	7.37	-12.70	16.88

Source: Stats SA, 2010

Table 14 shows average retail prices for selected vegetable products (fresh vegetables as well as processed vegetables). Average retail prices for vegetables showed an increase of 4.93 % between 2009 and 2010. Prices for the pea products declined, i.e. canned peas (1.23 %), green peas (5.17 %) and frozen peas (0.43 %). The price of onions decreased by 19.54 % and the price of sweet potatoes decreased by 0.11 %. The largest price increases were for tinned sweetcorn, fresh pumpkin, fresh and frozen carrots and cauliflower. The retail prices for the vegetables listed in Table 14 all showed significant prices increased between 2008 and 2010.

Table 14: Average annual retail prices for certain food items in the vegetable group

Vegetables	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Baby carrots 1 kg*	27.71	30.63	30.86	11.35	0.73
Baked beans - tinned 410 g	4.41	5.84	6.29	42.53	7.63
Baked beans - tinned 420 g	5.14	7.16	7.73	50.40	8.08
Butter beans - tinned 400 g	7.61	9.80	10.43	36.99	6.43
Butter beans - tinned 410 g	8.22	10.28	10.72	30.37	4.21
Butter beans - tinned 420 g	9.35	11.57	12.38	32.44	7.07
Canned peas 410 g*	5.91	6.92	6.83	15.63	-1.23
Carrots - fresh per kg	7.93	9.40	10.99	38.71	16.92
Carrots - frozen 1 kg	21.56	24.05	26.91	24.82	11.92
Cauliflower - fresh per kg	18.37	21.47	24.80	34.95	15.47
Chopped peeled tomato 410 g*	7.98	10.18	10.71	34.18	5.26
Corn 1 kg*	25.51	27.78	28.85	13.10	3.87
Green peas 1 kg*	21.34	26.27	24.91	16.75	-5.17
Lettuce - fresh per kg	15.14	19.41	21.24	40.31	9.46
Peas - frozen 1 kg	20.85	24.61	24.50	17.53	-0.43
Onions -fresh per kg	7.38	11.83	9.52	29.02	-19.54
Sliced beans 1 kg*	26.33	28.34	29.62	12.51	4.54
Potatoes - fresh per kg	7.35	9.27	9.94	35.27	7.28
Pumpkin - fresh per kg	8.80	10.45	11.51	30.80	10.13
Sweetcorn - tinned 410 g	6.07	7.68	8.62	42.02	12.31
Sweetcorn - tinned 420 g	6.77	8.81	9.58	41.52	8.73
Sweet potatoes - fresh per kg	8.86	9.95	9.94	12.11	-0.11
Tomato & onion mix 410 g*	6.88	8.36	8.39	21.98	0.31
Tomatoes - fresh per kg	10.86	14.00	14.63	34.74	4.50

Source: Stats SA, *AC Nielsen, 2010

Table 15 shows that retail prices of sugar continued to increase. The retail price for 1 kg white sugar and 2.5 kg white sugar increased by 9.54 % and 5.89 %, respectively from 2009 to 2010. If the 2010 prices are compared to 2008 prices, the retail price of 1 kg white sugar increased by 21.04 % and the retail price of 2.5 kg white sugar increased by 20.42 %. Price increases of sugar experienced by consumers from 2009 to 2010 were much less than those experienced from 2008 to 2009.

Table 15: Average annual retail prices for sugar

Sugar	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
White sugar 1 kg	7.71	8.52	9.33	21.04	9.54
White sugar 2.5 kg	15.61	17.75	18.80	20.42	5.89

Source: Stats SA, 2010

The retail price of Ceylon/black tea for 62.5 g and 125 g increased by 5.25 % and 4.19 %, while the retail price of Ceylon/black tea 250 g and 500 g increased by only 1.30 % and 1.07 % from 2009 to 2010. Instant coffee followed the same trend as tea, where the larger price increases were experienced for the smaller units. The retail price of 100 g coffee increased by 7.50 % while the 250 g and 750 g increased by only 3.98 % and 3.36 % from 2009 to 2010 (see Table 16).

Table 16: Average annual retail prices for tea and coffee

Tea and coffee	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Ceylon/black tea 62.5 g	5.83	6.87	7.23	24.04	5.25
Ceylon/black tea 125 g	10.34	15.47	16.12	55.83	4.19
Ceylon/black tea 250 g	15.10	17.51	17.74	17.49	1.30
Ceylon/black tea 500 g	26.36	32.57	32.92	24.87	1.07
Instant coffee 100 g	15.06	18.20	19.57	29.94	7.50
Instant coffee 250 g	16.38	21.69	22.56	37.73	3.98
Instant coffee 750 g	36.98	48.89	50.53	36.65	3.36

Source: Stats SA, 2010

4.3 Rural Food Price Trends

This section provides insight into the average prices of specific food items in rural areas for 2010 and how it compared to prices of 2009 and 2008.

Table 17 shows that in 2010, consumers in the rural areas paid on average 2.26 % more for a loaf of brown bread (700 g) and 0.76 % more for a loaf of white bread (700 g) than in 2009. The average price of maize meal (2.5 kg and 1 kg) decreased by 9.65 % and 15.24 % respectively from 2009 to 2010, while the average price of rice decreased by 9.05 % during that same period.

Table 17: Average annual retail prices for bread and cereals in rural areas

Bread and cereals	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Loaf of brown bread 600 g	6.23	6.94	6.55	5.04	-5.67
Loaf of brown bread 700 g	6.38	6.90	7.05	10.47	2.26
Loaf of white bread 600 g	6.69	7.35	7.13	6.66	-2.93
Loaf of white bread 700 g	7.15	7.75	7.81	9.27	0.76
Maize meal 12.5 kg	53.73	55.83	50.45	-6.12	-9.65
Maize meal 1 kg	6.47	7.24	6.14	-5.17	-15.24
Maize meal 2.5 kg	13.45	14.57	14.37	6.86	-1.34
Maize meal 5 kg	26.23	28.77	26.08	-0.60	-9.38
Rice 1 kg	11.28	15.21	13.78	22.11	-9.38
Rice 2 kg	21.46	29.59	27.17	26.58	-8.19
Rice 500 g	5.92	7.89	7.13	20.46	-9.57
Samp 1 kg	6.75	7.15	6.48	-3.92	-9.31
Samp 2.5 kg	13.05	13.03	13.52	3.60	3.75
Sorghum meal 1 kg	9.62	10.64	10.91	13.36	2.48
Sorghum meal 500 g	5.59	6.62	6.13	9.62	-7.40

Source: Stats SA, 2010

Table 18 shows that the average price of margarine increased by 3.52 % from 2009 to 2010. On average, the price of peanut butter increased by 7.04 % from 2009 to 2010. The average price of sunflower oil showed a significant decrease in 2010 compared to the average price in 2009 (i.e. a 19.92 % decrease in the price of a 2 l bottle of sunflower oil).

Table 18: Average annual retail prices for oils and fats in rural areas

Oils and fats	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Margarine 125 g	5.03	5.54	5.78	14.97	4.42
Margarine 250 g	8.01	9.92	9.87	23.18	-0.59
Margarine 500 g	11.45	14.03	14.97	30.68	6.72
Peanut butter 270 g	10.90	12.44	13.02	19.42	4.71
Peanut butter 400 g	13.13	15.37	16.82	28.04	9.41
Sunflower oil 2 l	35.20	31.45	25.19	-28.44	-19.92
Sunflower oil 500 ml	10.82	11.38	9.39	-13.17	-17.50
Sunflower oil 750 ml	14.99	13.98	13.06	-12.90	-6.59

Source: Stats SA, 2010

From 2009 to 2010, the price of beans decreased by 16.58 % for 1 kg and 1.45 % for 500 g. During the same period, the price of tinned butter beans increased by 5.63 % for 410 g and 19.33 % for 420 g (see Table 19).

Table 19: Average annual retail prices for beans in rural areas

Vegetables	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Beans 1 kg	13.80	16.82	14.04	1.68	-16.58
Beans 500 g	7.86	8.59	8.47	7.67	-1.45
Butter beans 410 g	7.66	8.82	9.32	21.71	5.63
Butter beans 420 g	6.35	6.84	8.16	28.49	19.33

Source: Stats SA, 2010

In the case of full-cream milk, the price change from 2009 to 2010 varied among the different unit sizes, i.e. a 10 % increase in the price of 1L full-cream long-life milk and a 0.25 % decrease in the price of 500 ml of the same milk (See Table 20).

Table 20: Average annual retail prices for milk in rural areas

Milk	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Full-cream long-life milk 1 l	9.53	9.88	10.87	14.04	10.00
Full cream long-life milk 500 ml	6.56	6.72	6.70	2.14	-0.25

Source: Stats SA, 2010

Table 21 shows that the average price of both tagless teabags and instant coffee increased from 2009 to 2010, with the price of 62.5 g tagless teabags increasing by 14.42 % and the price of 100 g and 250 g instant coffee increasing by 11.28 % and 12.40 % respectively.

Table 21: Average annual retail prices for tea and coffee in rural areas

Tea and coffee	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
Tagless teabags 250 g	15.79	17.78	18.87	19.53	6.17
Tagless teabags 62.5 g	5.90	6.99	7.99	35.42	14.42
Instant coffee 100 g	8.85	11.69	13.00	46.99	11.28
Instant coffee 250 g	18.28	23.20	26.07	42.61	12.40

Source: Stats SA, 2010

On average the retail price of sugar in the rural areas showed no price increase from 2009 to 2010. The price of a 2.5 kg bag of sugar increased by 4.97 %, but the 500 g bag experienced a price decrease of 5.07 % (see Table 22).

Table 22: Average annual retail prices for sugar in rural areas

Sugar	2008	2009	2010	Percentage change 2008-2010	Percentage change 2009-2010
White sugar 1 kg	8.17	9.61	9.62	17.73	0.13
White sugar 2.5 kg	18.36	20.68	21.70	18.20	4.97
White sugar 500 g	5.38	5.66	5.37	-0.09	-5.07

Source: Stats SA, 2010

4.4 Comparison between Rural and Urban Food Prices

Table 23 compares the prices of selected products in rural and urban areas. In 2010 urban consumers paid R12.61 more for the basket of products included in Table 23. In 2009 rural consumers paid R5.46 more for the basket in Table 23. Products that had a significantly higher price in rural area include, amongst others, mielie meal (2.5 kg and 5 kg), rice (2 kg), instant coffee (250 g) and white sugar (2.5 kg).

Table 23: Comparison of rural and urban food prices

Product	Rural retail prices			Urban retail prices			Price difference		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
Loaf of brown bread 700 g	6.38	6.90	7.05	6.47	7.12	7.08	-0.08	-0.22	-0.03
Loaf of white bread 700 g	7.15	7.75	7.81	7.20	7.88	7.91	-0.06	-0.13	-0.10
Mielie meal 1 kg	6.47	7.24	6.44	5.50	5.61	5.25	0.97	1.63	1.19
Mielie meal 2.5 kg	13.45	14.57	14.37	11.41	11.95	11.55	2.04	2.62	2.82
Mielie meal 5 kg	26.23	28.77	26.08	22.29	23.32	22.08	3.94	5.45	3.99
Rice 500 g	5.92	7.89	7.13	6.30	8.29	7.09	-0.38	-0.41	0.04
Rice 1 kg	11.28	15.21	13.78	12.16	16.31	13.99	-0.88	-1.11	-0.21
Rice 2 kg	21.46	29.59	27.17	19.86	25.20	21.36	1.60	4.39	5.80
Margarine spread 500 g	11.45	14.03	14.97	13.11	15.62	15.19	-1.65	-1.60	-0.22
Peanut butter 400 g	13.13	15.37	16.82	12.53	15.28	15.59	0.60	0.09	1.23
Sunflower oil 750 ml	14.99	13.98	13.06	15.18	13.95	13.26	-0.18	0.03	-0.20
Butter beans - tinned 410 g	7.66	8.82	9.32	8.22	10.28	10.72	-0.56	-1.46	-1.40
Butter beans - tinned 420 g	6.35	6.84	8.16	9.35	11.57	12.38	-3.00	-4.73	-4.22
Full cream milk long life 1 l	9.53	9.88	10.87	8.30	9.17	9.56	1.23	0.72	1.31
Full cream milk long life 500 ml	6.56	6.72	6.70	5.89	5.92	6.13	0.67	0.80	0.57
Ceylon/black tea 250 g	15.79	17.78	18.87	15.10	17.51	17.74	0.69	0.26	1.13
Ceylon/black tea 62.5 g	5.90	6.99	7.99	5.83	6.87	7.23	0.07	0.11	0.76
Instant coffee 100 g	8.85	11.69	13.00	15.06	18.20	19.57	-6.21	-6.52	-6.56
Instant coffee 250 g	18.28	23.20	26.07	16.38	21.69	22.56	1.91	1.50	3.52
White sugar 1 kg	8.17	9.61	9.62	7.71	8.52	9.33	0.46	1.09	0.29
White sugar 2.5 kg	18.36	20.68	21.70	15.61	17.75	18.80	2.75	2.92	2.91
Total							3.94	5.46	12.61

Source: Stats SA, 2010

5 TRENDS IN PRICES, FARM VALUES AND PRICE SPREADS

5.1 Introduction

This section provides an overview of price trends for selected products. Where information is available international trends are also discussed. This section also provides more detail on the different cost components that contribute to the margin between farm gate prices and the price the consumer pays for selected food items. This is done by, amongst others, investigating the farm values of selected products and the farm-to-retail price spreads (FTRPS). The farm value is the value of the farm product's equivalent in the final food product purchased by the consumers. Farm values are calculated by multiplying disappearance quantities on a farm-weight basis by prices received by farmers. The farm value does not include the value of by-products. The farm value share is computed by dividing the farm value by consumer food expenditures, and is reported as a percentage. Over time, the share reflects relative changes in expenditures for farm products, food marketing services and retail food products. The FTRPS is the difference between what the consumer pays for the retail food product and the value of the farm products used in that product. Price spreads measure the aggregate contributions of food manufacturing, distribution, wholesaling and retailing firms that transform farm commodities into final food products.

5.2 Meat Sector

- Poultry Industry

According to the FAO Poultry Meat Price Index, annual average international poultry prices increased by 10.4 % between 2009 and 2010 (see Figure 32). International poultry prices were nevertheless lower than in 2008. Price movements in 2010 were more or less sideways and more stable than in 2009.

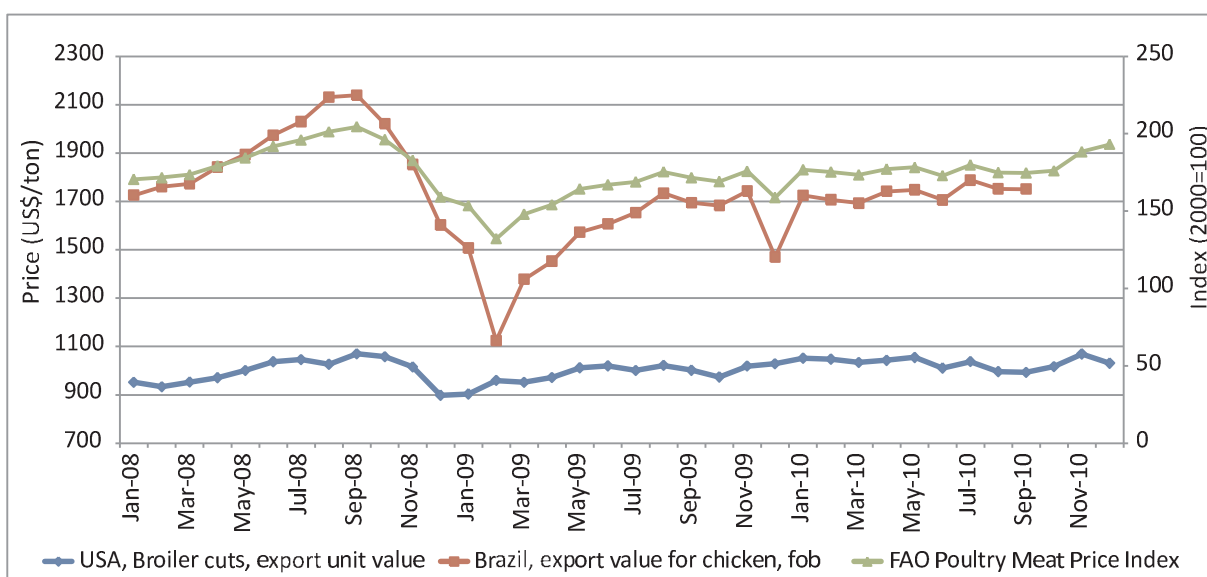


Figure 32: International poultry price trends

Source: FAO, 2011; IMF, 2011

Figure 33 shows the trends in retail prices for selected poultry products. Retail prices for fresh chicken portions increased considerably over 2008 and 2009, but moved more or less sideways during 2010. On the other hand, retail prices for frozen chicken portions move significantly lower since the beginning of 2009, but started to show signs of recovery during the last quarter of 2010. The annual average retail price of fresh whole chickens decreased by 1.4 % from R28.66/kg in 2009 to R28.28/kg during 2010. The average retail price of frozen whole chickens decreased by 5 % from R25.82/kg to R24.53/kg between 2009 and 2010, whereas the average retail price of frozen chicken portions decreased by 8.9 % from R24.20/kg to R22.04/kg in the same period.

Retail price trends in real terms showed a negative trend for poultry meat prices. In real terms, the prices of the different products decreased over 2010 from 2009 levels. The annual average real retail price for frozen chicken portions showed the largest decrease of 12.7 %. Real retail prices for fresh whole chicken, frozen whole chicken and fresh chicken portions decreased by 5.4 %, 8.9 % and 3.8 %, respectively, on average, from 2009 to 2010.

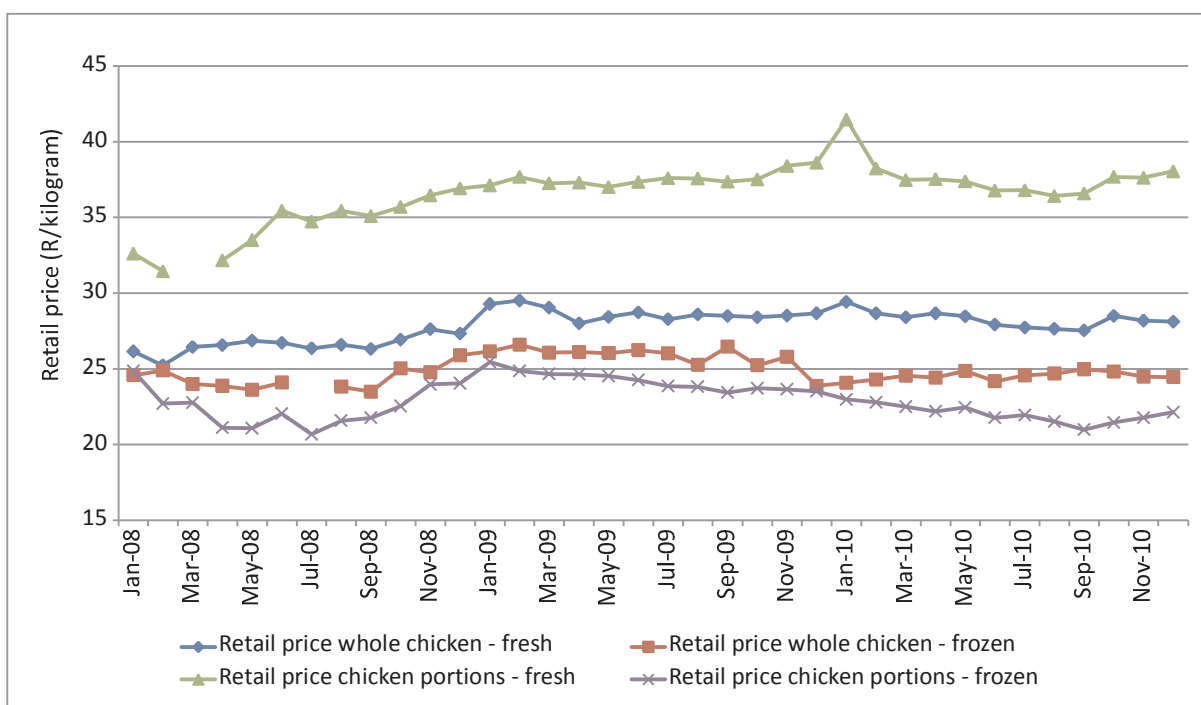


Figure 33: Poultry retail price trends

Source: Stats SA, 2011

Figure 34 shows the trends in the producer prices of poultry. The annual average producer price of frozen chicken decreased by 2.9 % from R14.91/kg in 2009 to R14.47/kg in 2010. The annual average producer price of fresh chicken decreased by 1.7 % from R19.33/kg to R18.96/kg in the same period. Compared to 2008 price levels, the 2010 average annual prices of fresh and frozen chickens increased by 13.5 % and 1.2 % respectively.

In real terms, fresh chicken producer prices showed a sideways trend during 2010, whereas the real producer prices for frozen chicken showed an increasing trend for the same period. The annual average real producer price for fresh and frozen chicken decreased by 6.3 % and 6.9 % between 2009 and 2010. If compared to 2008 real producer price levels, the price of frozen chickens decreased by 9.1 % and the price of fresh chickens increased by 1.5 %.

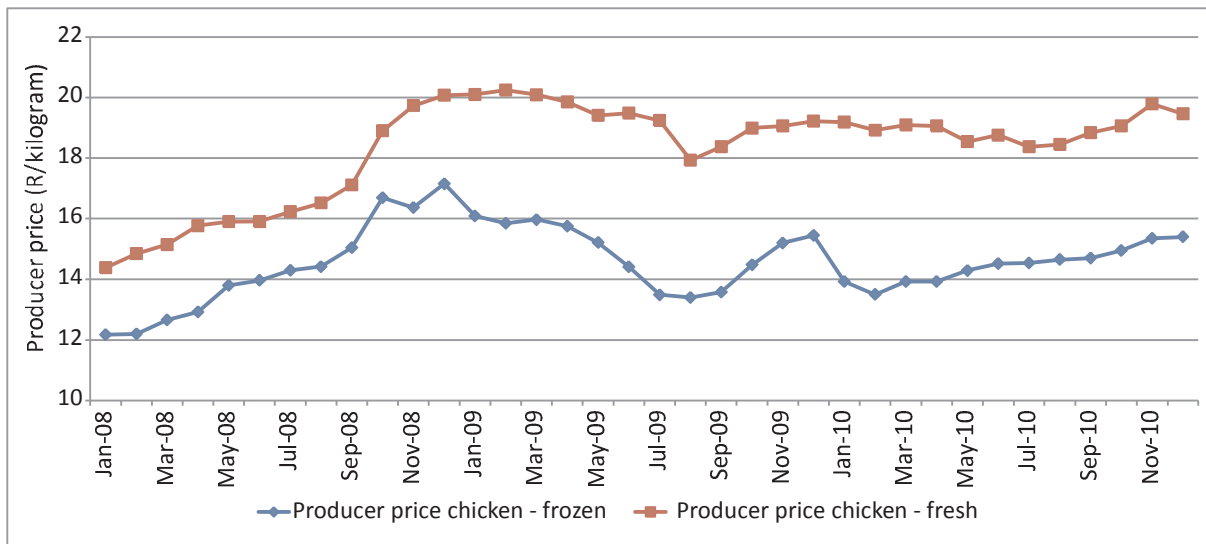


Figure 34: Poultry producer price trends

Source: AMT, 2011

Figure 35 shows the real FTRPS and farm value share of fresh whole chicken. The real FTRPS of fresh whole chicken decreased by 4.20 % on average from 2009 to 2010. During the same period the farm value share of fresh whole chicken decreased by 0.55 %. The average farm value share for a fresh whole chicken per kg in 2010 was 67 %.

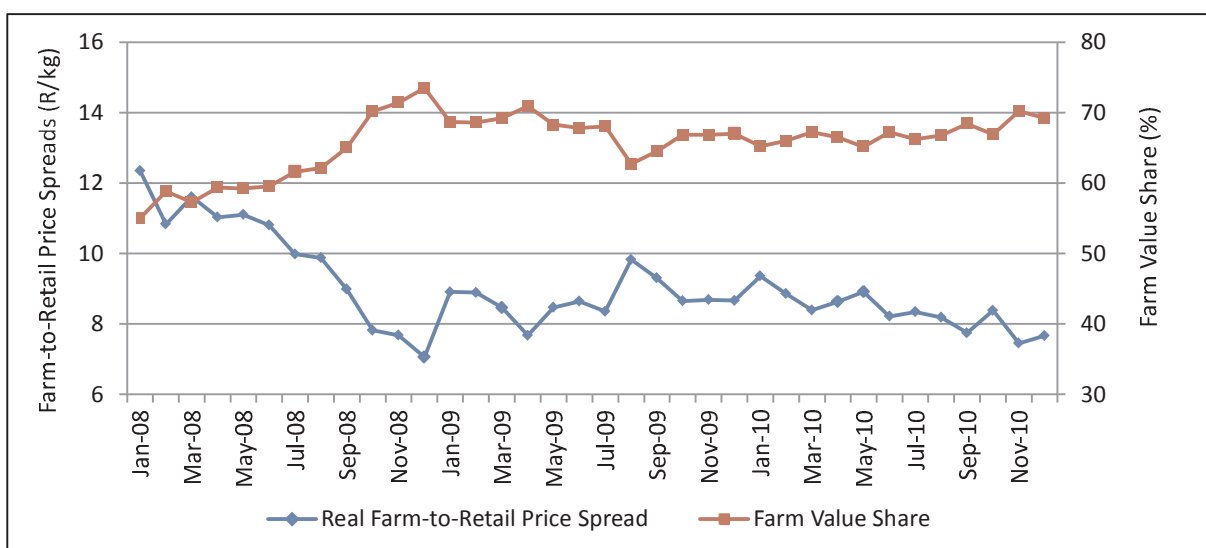


Figure 35: Real farm-to-retail price spread and farm value share of poultry

Source: Stats SA, 2010; AMT, 2010 and own calculations

- Beef

Figure 36 shows international beef price trends. According to the FAO Bovine Meat Index, annual average international beef prices increased by 21.5 % between 2009 and 2010 after contracting significantly between 2008 and 2009. In 2010 annual average international beef prices were 3.9 % higher than in 2008.

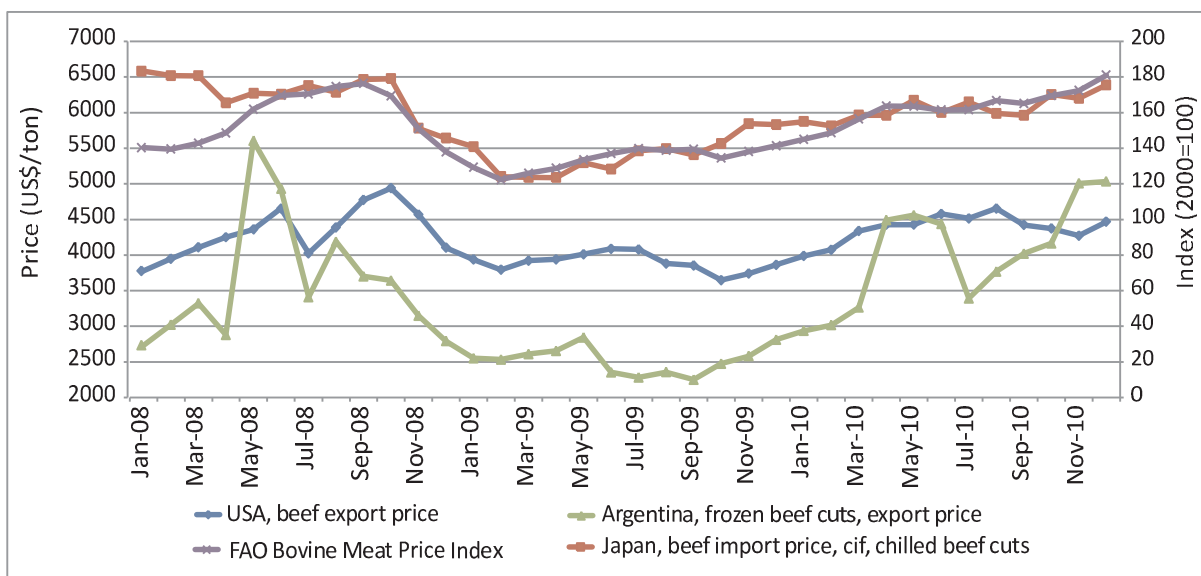


Figure 36: International beef price trends

Source: FAO, 2011; IMF, 2011

From Figure 37 it appears as if the strong upward trend in beef prices during 2008 for beef products in South Africa have slowed significantly. The largest average retail price increase for beef cuts from 2009 to 2010 was 2.2 % for rump steak. The prices for the other cuts increased marginally when comparing average annual prices for 2009 and 2010. The annual average retail price of beef t-bone increased by only 0.2 %, beef chuck and mince prices both increased by only 0.9 % on average and the price of beef brisket increased by 1.1 %. During December, retail prices of beef reached their highest level for 2010.

Retail price trends in real terms shows the opposite from the nominal retail price trends for beef. In real terms the prices in 2010 of the different beef cuts all showed a decrease from the average prices of 2009. The annual average real retail price for beef t-bone decreased by 4 %. Retail prices for beef chuck, mince, brisket and rump steak decreased by 3.2 %, 3.2 %, 3 % and 2 %, respectively, on average, from 2009 to 2010.

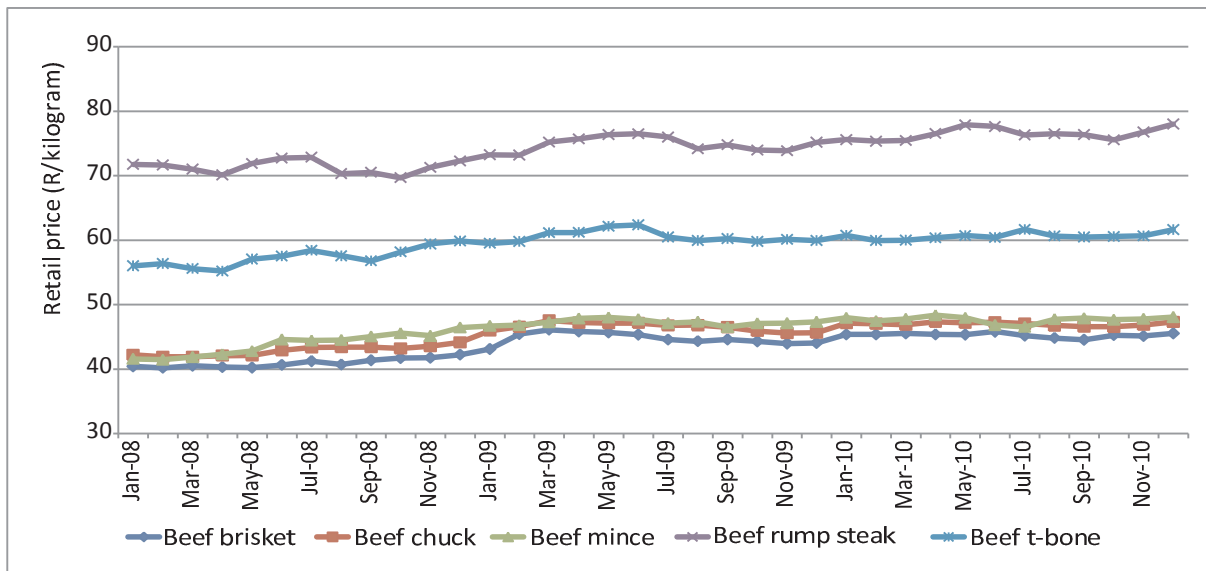


Figure 37: Retail price trends for different beef cuts

Source: Stats SA, 2011

Figure 38 shows producer prices for difference classes of beef. The annual average producer price of beef class A2/A3 increased by 2.4 % from 2009 to 2010, while that of classes B2/B3 and C2/C3 increased by 1.2 % and 1.7 % respectively from 2009 to 2010. Interesting to note is that during 2010, the price of beef class A2/A3 reached its highest point during June at R25.49/kg and its second highest point during December at R25.18/kg.

In real terms, beef producer prices showed a declining trend. The annual average real producer price for beef class A2/A3 decreased by 1.9 % from 2009 to 2010, while the annual average real producer price for classes B2/B3 and C2/C3 decreased by 3 % and 2.5 % respectively.

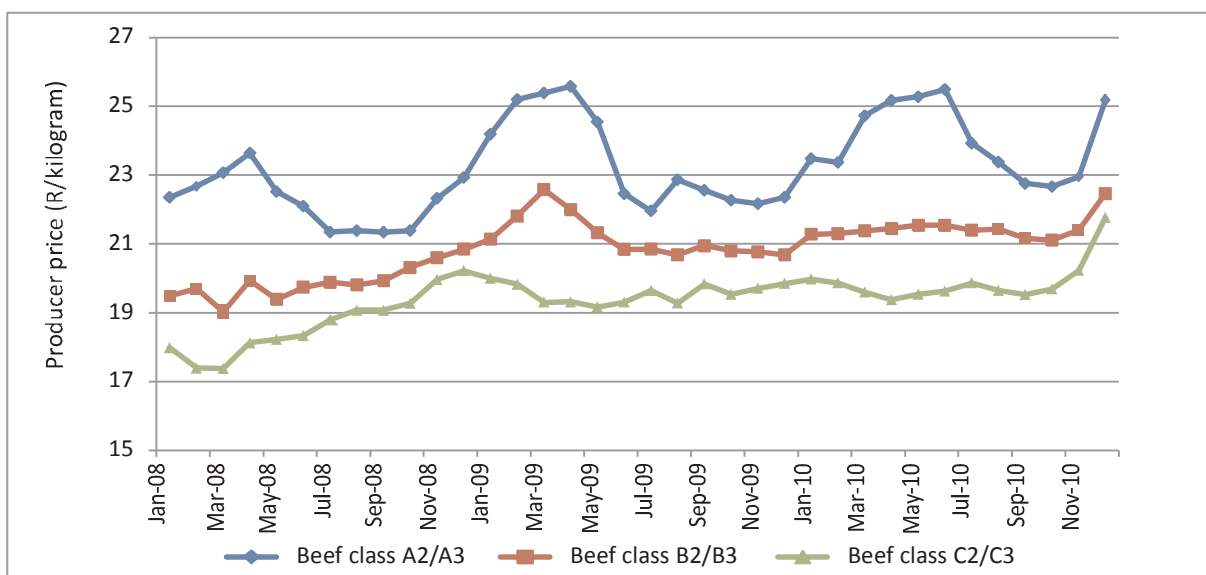


Figure 38: Beef producer price trends

Source: AMT, 2011

The real FTRPS and the farm value share for beef are depicted in Figure 39. The real FTRPS of beef decreased by 3.33 % on average from 2009 to 2010 and reached R27.70 in December 2010. The farm value share of beef decreased by 0.92 % on average from 2009 to 2010. The farm value share was at 44 % in December 2010.

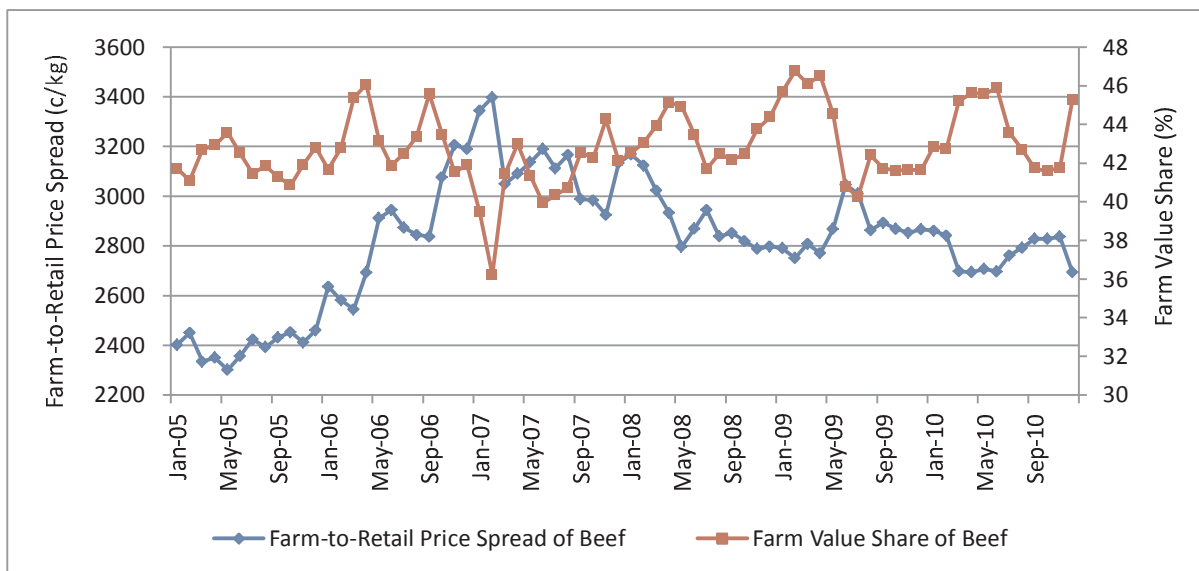


Figure 39: Real farm-to-retail price spread and farm value share of beef

Source: Stats SA, 2010; AMT, 2010 and own calculations

- Lamb

Figure 40 shows that contrary to poultry and beef, lamb prices showed strong growth since the middle of 2009. According to the FAO Ovine Meat Price Index, annual average international lamb prices increased by 17 % between 2009 and 2010. Annual average international lamb prices increased 9.2 % between 2008 and 2010.

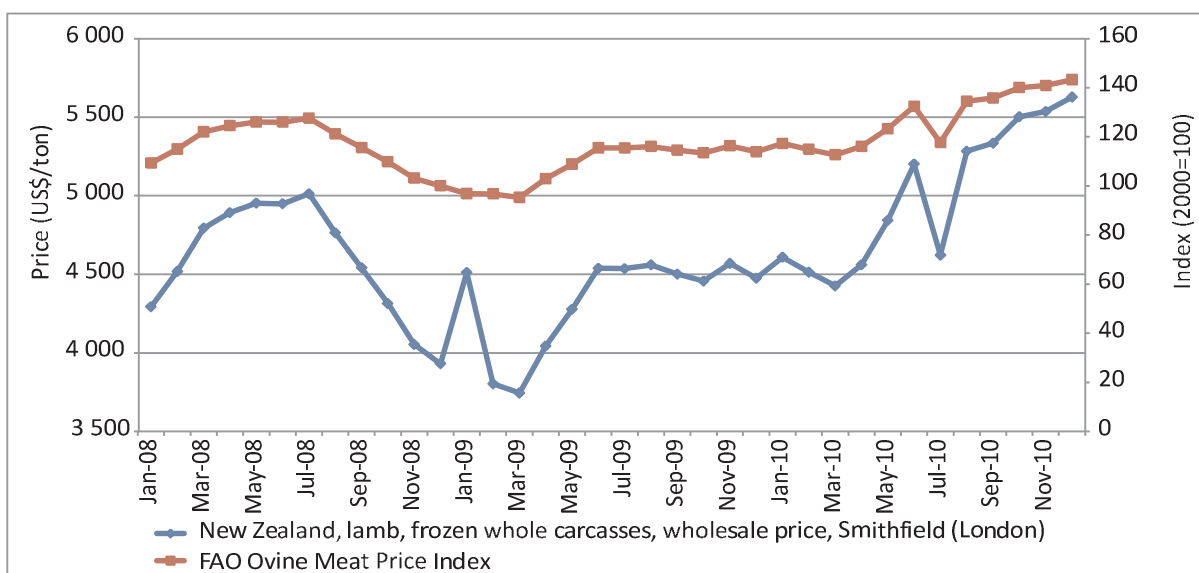


Figure 40: International lamb price trends

Source: FAO, 2011; IMF, 2011

Figure 41 shows that the retail prices for lamb increased significantly since the end of 2009. The annual average retail of price was well below the levels experienced during most of 2008. The annual average retail price for lamb increased by 7.2 % from R69.38/kg in 2009 to R74.36/kg in 2010.. The retail price recorded for December 2010 was higher than any previous price for the period under investigation.

In real terms lamb retail prices increased since April 2010, i.e. the real retail price of lamb increased by 2.7 % in 2010 compared to the average price in 2009. The increase in real terms for lamb is contrary to the trends experienced in the beef and poultry sectors.

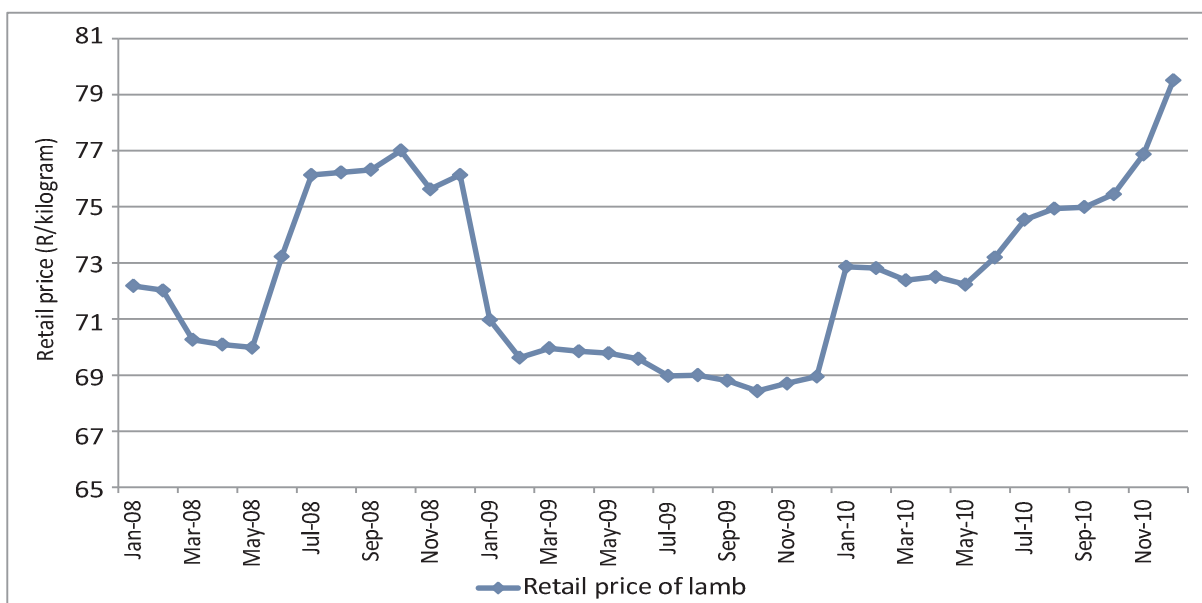


Figure 41: Lamb retail price trends
Source: Stats SA, 2011

Figure 42 shows that producer prices for different classes of lamb showed an increasing trend in recent years. The annual average producer price for lamb class A2/A3 increased by 18.9 % from R33.29/kg in 2009 to R39.59/kg in 2010. The annual average producer price for lamb class B increased by 17.3 % and that of class C2/C3 increased by 15.9 %.

In real terms all the classes of lamb depicted in Figure 42 showed price increases. The annual average real producer price for lamb class A2/A3 increased by 13.9 % from 2009 to 2010, while that of class B and class C2/C3 increased by 12.4 % and 11.1 %, respectively. If compared to 2008 real producer price levels, the price of class A2/A3, B and C2/C3 increased by 8 %, 9.9 % and 9.6 % respectively during 2010.

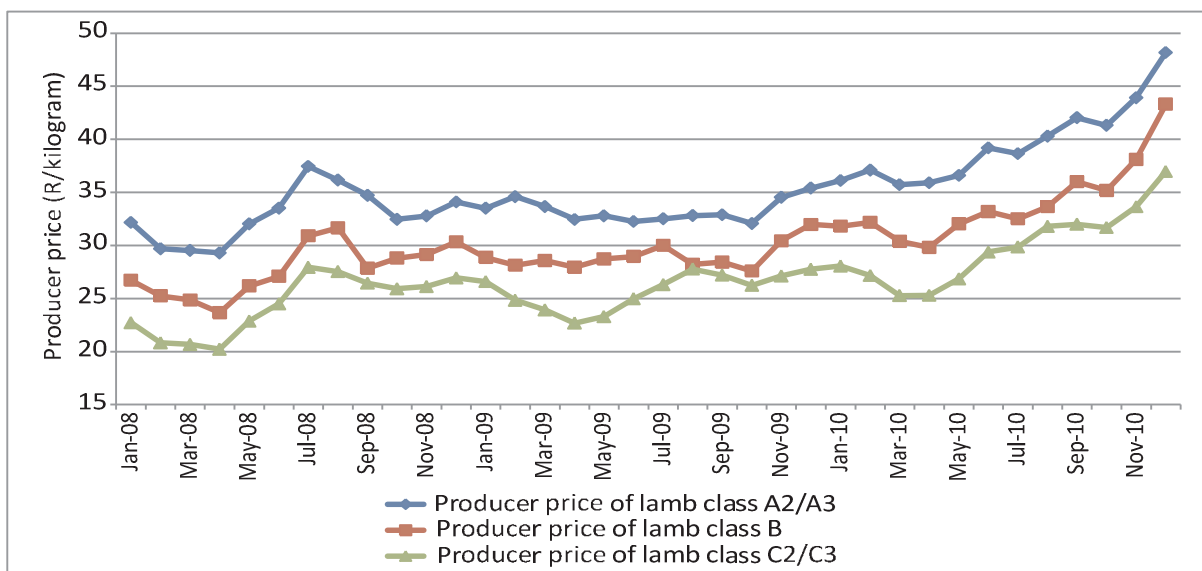


Figure 42: Lamb producer price trends

Source: AMT, 2011

Figure 43 shows the real FTRPS and farm value share for lamb chops. On average, the real FTRPS for lamb chops in a lamb carcass decreased from 103.77 index points in 2009 to 95.84 index points in 2010 (i.e. 7.64 %). The farm value share increased on average from 48 % in 2009 to 53 % in 2010.

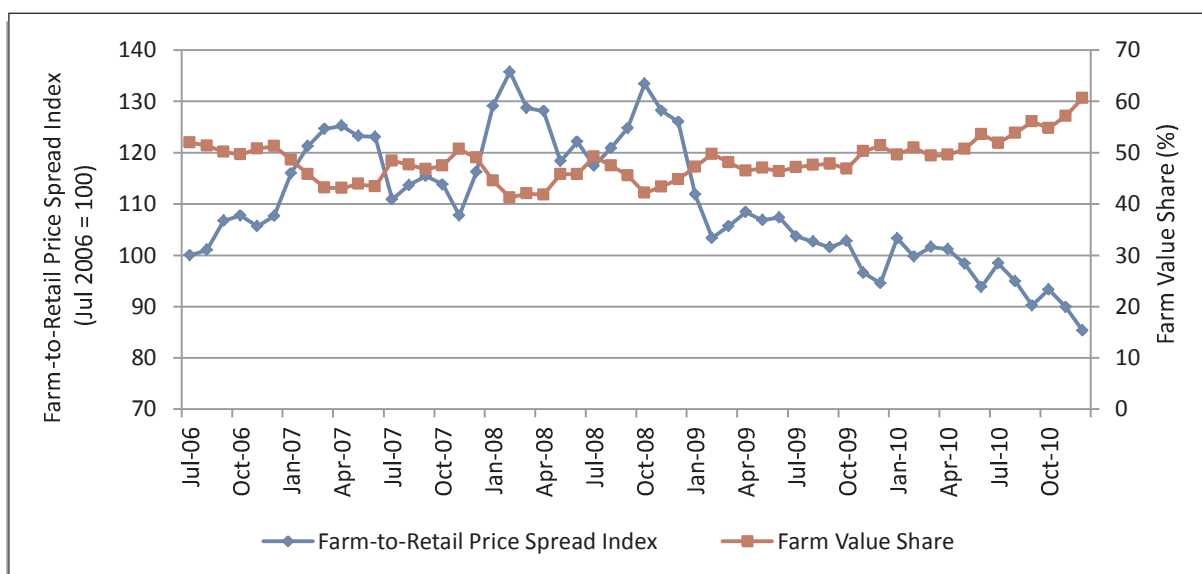


Figure 43: Real farm-to-retail price spread and farm value share of lamb

Source: Stats SA, 2010; AMT, 2010 and own calculations

- Pork

According to the FAO Pig Meat Price Index, annual average international pork prices increased by 4.7 % between 2009 and 2010. Annual average international pork prices decreased by 9.7 % between 2008 and 2010.

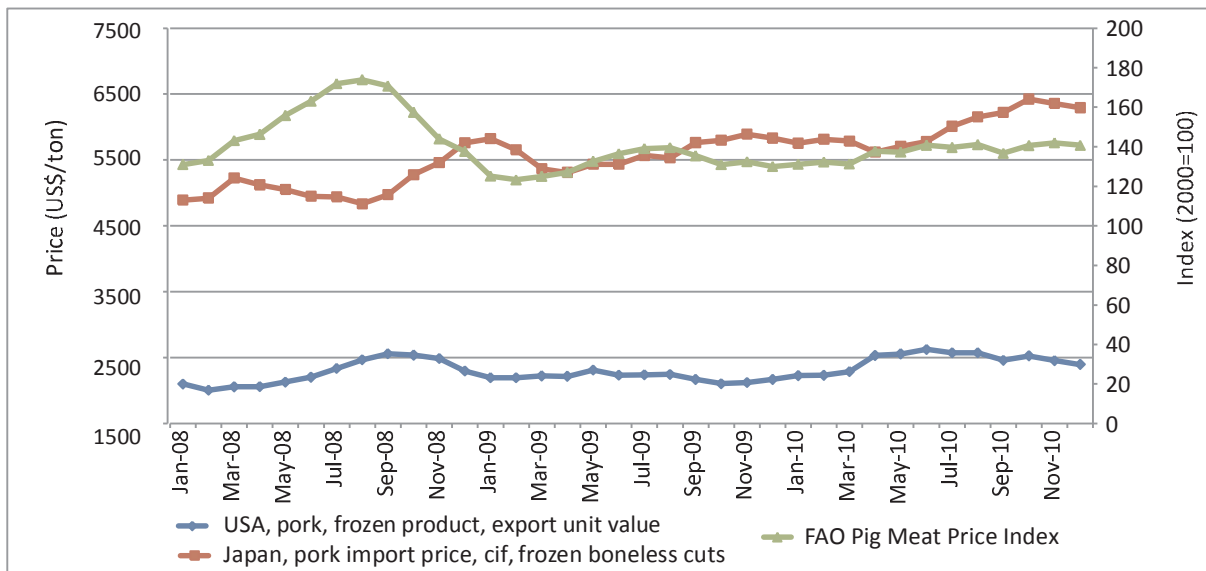


Figure 44: International pork price trends

Source: FAO, 2011; IMF, 2011

Retail prices for pork chops and bacon remained more or less stable during 2010 (see Figure 45). From 2008 to 2009, the retail price of pork chops decreased by 0.7 %. The annual average retail price for bacon increased by 3.5 % from R85.32/kg in 2009 to R88.33/kg in 2010. The retail price for pork chops decreased by 3.7 % from R51.35/kg in 2009 to R49.44/kg in 2010. In real terms pork chop prices showed a negative trend from May 2010. The real price of pork chops decreased by 7.6 % during 2010.



Figure 45: Pork retail price trends

Source: Stats SA, 2011

Figure 46 shows that annual average producer prices of porkers and baconers decreased from 2009 to 2010. The annual average producer price for porkers decreased by 4.3 % from R16.88/kg in 2009 to R16.15/kg in 2010, while the annual average producer price for baconers decreased by 4.9 % from R15.64/kg in 2009 to R14.88 in 2010/kg. As expected the annual average real producer price of porkers and baconers decreased, i.e. by 8.3 % and 8.8 % respectively between 2009 and 2010.

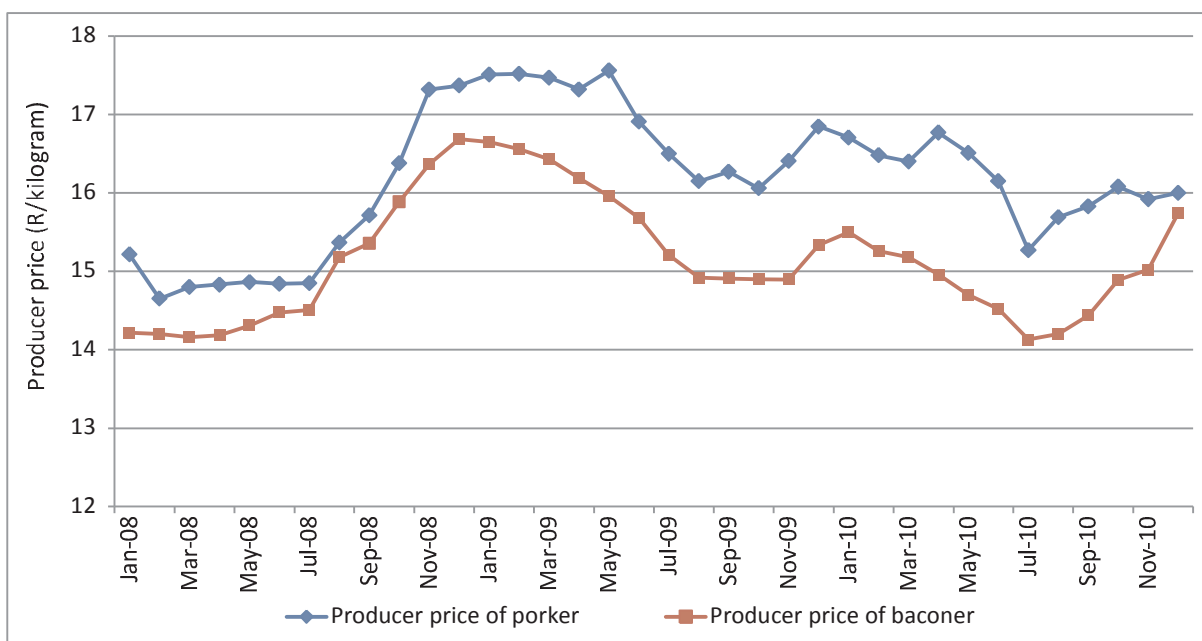


Figure 46: Pork producer price trends

Source: AMT, 2011

Figure 47 shows the real FTRPS and farm value share for pork chops. Between 2009 and 2010, the average real FTRPS decreased from 105.93 index points to 97.82 index points. The farm value share, on average decreased from 32.9 % to 32.71 %.

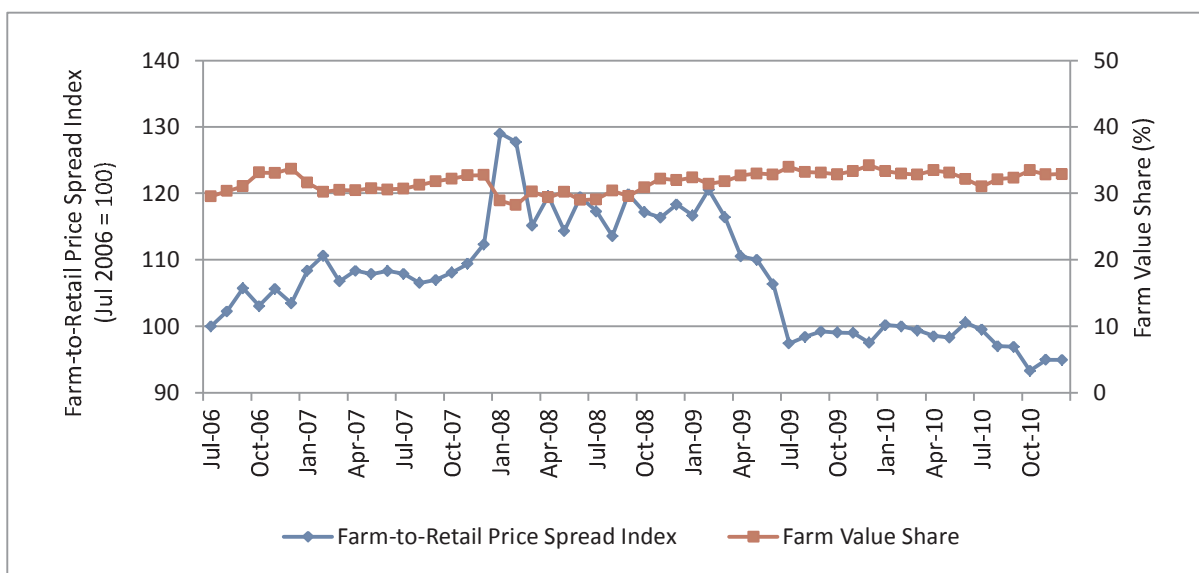


Figure 47: Real farm-to-retail price spread and farm value share of pork

Source: Stats SA, 2010; AMT, 2010 and own calculations

5.3 Dairy Sector

- Price Trends

Figure 48 shows the trends in the raw milk price and retail values for full cream and low fat milk between January 2008 and December 2010. The average retail price in 2009 was R8.62/l and R7.18/l, respectively for full cream and low fat milk, compared to the R8.53/l and R6.67/l in 2010. Between 2009 and 2010, the prices decreased, on average, by 1.13 % and 7.13 % for full cream milk and low fat milk, respectively. The average raw milk price decreased from R3.05/l to R2.95/l (-3.17 %) between 2009 and 2010.

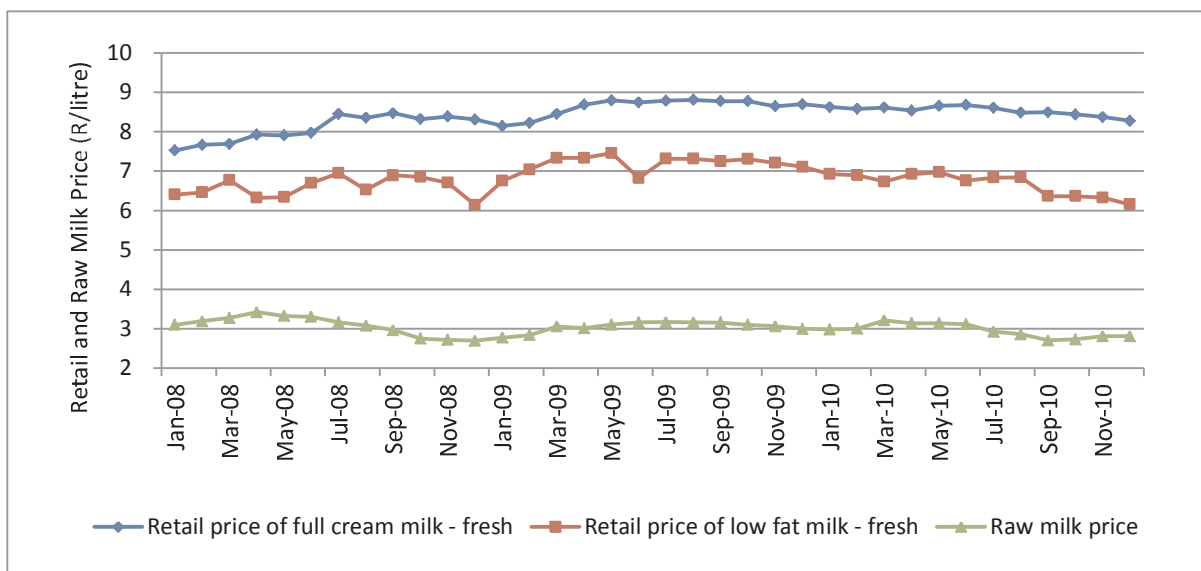


Figure 48: Raw milk price and the retail values for full cream and low fat milk, sachets

Sources: Stats SA, 2011; AC Nielsen, 2011; MPO, 2011; SAMPRO, 2011 and own calculations

Cognisance should be taken of the complexity of the different processes involved from sourcing raw milk from a cow until milk and its by-products are sold. This is important in an attempt to explain the difference between what farmers receive for their milk and what consumers pay for milk (Food Cost Review, 2010).

In order to explain the relationship between the raw milk price and packaged standardized pasteurized milk a number of assumptions should be made regarding factors such as the fat content of milk produced in South Africa, the price of cream, the production, packaging, administration, marketing and management cost of cream, and the quantity of each fat class of milk (fat free, low fat and full cream) that are sold (Office of SAMPRO, 2010). Due to the complex process and the number of assumption that should be addressed the rest of this section will only discuss the price spread between full cream milk and the retail price of milk.

Figure 49 shows the farm value share as a percentage of the real retail value for full cream milk, between January 2008 and December 2010. In January 2008, the farm value share of full cream milk was 41 %. The farm value shares for full cream milk increased to peak at 43 % in April 2008 after which it declined to reach 33 % in December 2008. In December 2010 the farm value share for full cream milk increased slightly to 34 %. The average farm value share in 2009 was 35.37 %, compared to the 34.64 % in 2010. Between 2009 and 2010, the farm value share decreased, on average, by 2.07 %.

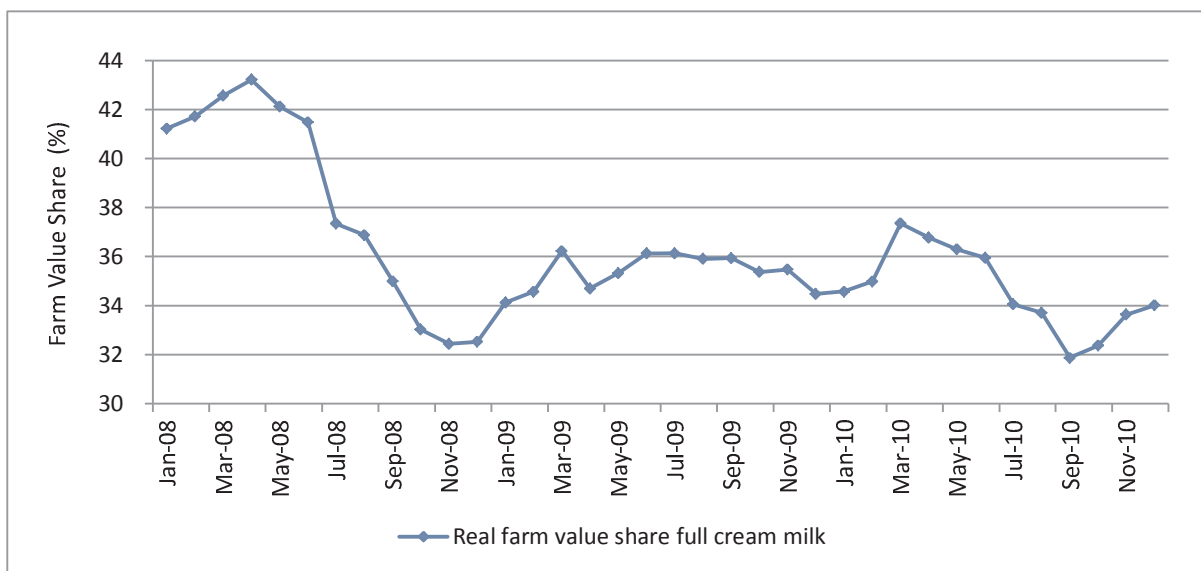


Figure 49: Real farm value shares for full cream milk, sachets (R/litre)

Sources: Stats SA, 2011; MPO, 2011; SAMPRO, 2011 and own calculations

Figure 50 shows the trends in the real FTRPS for full cream milk between January 2008 and December 2010. From January 2008, the spread was R4.68/l and increased to reach a peak of R5.48/l December 2008. The real FTRPS then decreased by 11.9 % over two years to reach R4.83/l in December 2010. The average real FTRPS decreased from 5.20 % to 4.99 % (-4.11 %) between 2009 and 2010.

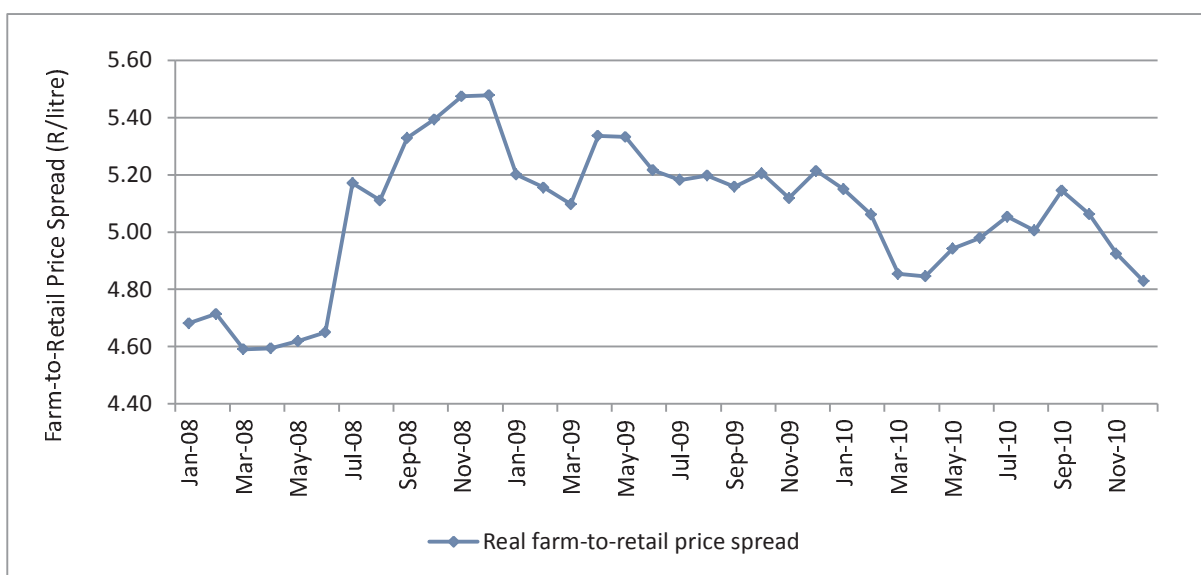


Figure 50: Real farm-to-retail price spread for full cream milk and low fat milk, sachets

Sources: StatsSA, MPO, SAMPRO and own calculations

In order to explain the FTRPS for dairy, a simplified diagram was constructed of the activities in the dairy value chain to deliver fresh milk to the consumer. Four main activities were identified, all of which require a diverse set of resources and inputs (see Food Cost Review, 2009).

In order to get a better understanding of the margins and costs in the fresh milk dairy chain, industry stakeholders were consulted with regard to the off-farm value chain, which included the Office of SAMPRO. Two different scenarios were constructed to explain the costs and margins in the fresh milk value chain as applicable to full cream pasteurized milk in a 2 l container, namely:

- (i) A low value-added scenario:
 - Raw milk close to processing plant;
 - Less complex technology;
 - Cheaper with respect to type and size of packaging;
 - Direct surroundings of distribution; and
 - Limiting marketing- and advertising costs.
- (ii) A high value-added scenario:
 - Raw milk farther from processing plant;
 - More complex technology;
 - Type and size of packaging are more expensive;
 - Distribution to further outlets; and
 - Marketing- and advertising costs.

It should be noted that the typical contribution of each value-adding activity to the retail selling price of full cream pasteurized milk in a 2 l container will differ from firm to firm, from region to region, from one to the other type and size of packaging and from season to season.

Information revealed by a number of highly experienced and informed milk processors was requested to indicate what they regard as typical low- and high-cost scenarios in South Africa for each of the value-adding activities. Table 24 shows the distribution costs and margins along the fresh milk dairy chain per action as described in detail in the Food Cost Review of 2009.

From Table 24 it is evident that in 2010 the raw milk price contributed between 34.2 % and 38.7 % of the total selling price to the consumer, whereas in 2009 it contributed 35.6 % to 40.3 %. Action 1 contributed between 3.6 % and 3.7 % to the total price consumers paid in 2010. Action 2 contributed between 16 % and 18.6 %, while Action 3 (excluding the selling price to the retailer) contributed a significant proportion, of between 25.7 % and 28.9 % in total, to the selling price in 2010.

When considering 2010's individual items of the actions mentioned, marketing and distribution by the milk processor (part of action 3) contributed the greatest proportion of 16.4 % to 17.7 % of the selling price. The retailer mark-up (part of action 4) constituted approximately 13.5 % to 17.1 % of the difference between the price the consumer pays and the price at which the retailer procured the milk.

This spread included all costs, e.g. electricity, labour, distribution costs, etc., at retail level. Interest, profit and overhead costs constituted the third highest proportion, which included depreciation, administration and management costs.

Table 24: Typical cost composition of pasteurized full cream milk in 2 litre containers offered for sale in a retail store

Item	2009		2010		2009		2010	
	Rand per 2 litre							
	Low cost scenario	% of selling price	Low cost scenario + 5 %	% of selling price	High cost scenario	% of selling price	High cost scenario + 5 %	% of selling price
Raw milk price (2 l) (administration cost excluded)	5.8	40.3	5.7	38.7	6.8	35.6	6.7	34.2
Action 1:								
Raw milk collection and transport to processing plant (truck driver's labour included, management costs excluded)	0.5	3.5	0.5	3.6	0.7	3.7	0.7	3.7
Action 2:								
Processing and quality assurance (firm labour included)	1.2	8.3	1.3	8.6	1.4	7.3	1.5	7.5
Container (2 l plastic of 2 l gable top)	1.3	9.0	1.4	9.3	1.5	7.9	1.6	8.0
Filling of 2 l containers	0.1	0.7	0.1	0.7	0.1	0.5	0.1	0.5
Action 3:								
Marketing and distribution by milk processor	2.3	16.0	2.4	16.4	3.3	17.3	3.5	17.7
Interest, profit and overhead costs	1.3	9.0	1.4	9.3	2.1	11.0	2.2	11.2
Selling price to retailer	12.5	87.5	12.7	86.5	15.9	83.2	16.3	82.9
Action 4:								
Retailer mark-up	1.9	13.2	2.0	13.5	3.2	16.8	3.4	17.1
Selling price to consumer	14.4	100.0	14.7	100.0	19.1	100.0	19.6	100.0

Source: Office of SAMPRO and own calculations, 2010

Note: Fully researched figures do not exist and the costs were determined as follows in December 2010: A number of highly experienced and informed milk processors were requested to indicate what, in their judgment, can be regarded in the South African dairy industry, as typical low- and high-cost scenarios for each value-adding activity.

From Table 24 it is evident in 2010 that the raw milk price contributed between 34.2 % and 38.7 % of the total selling price to the consumer, whereas in 2009 it contributed 35.6 % to 40.3 %. Action 1 contributed between 3.6 % and 3.7 % to the total price consumers paid in 2010. Action 2 contributed between 16 % and 18.6 %, while Action 3 (excluding the selling price to the retailer) contributed a significant proportion, of between 25.7 % and 28.9 % in total, to the selling price in 2010.

5.4 Maize Sector

- Production and Consumption

South Africa produced 12 million tons of yellow (4.5 million tons) and white (7.5 million tons) maize in the 2009/10 season (See Figure 51). This was the third year in a row that South Africa had a bumper crop. South Africa consumed 8.86 million tons of maize in 2009/10 season; the result was a maize surplus of more than 3 million tons in the 2009/10 season. White maize is predominately used for human consumption and yellow for animal feed. During 2009/10 white maize consumption reached 5.8 million tons of which 1.6 million tons was absorbed in the animal feed industry. Yellow maize consumption was 2.9 million tons of which 356 thousand tons was absorbed in the human consumption market.

When considering 2010's individual items of the actions mentioned, marketing and distribution by the milk processor (part of action 3) contributed the greatest proportion of 16.4 % to 17.7 % of the selling price. The retailer mark-up (part of action 4) constituted approximately 13.5 % to 17.1 % of the difference between the price the consumer pays and the price at which the retailer procured the milk. This spread included all costs, e.g. electricity, labour, distribution costs, etc., at retail level. Interest, profit and overhead costs constituted the third highest proportion, which included depreciation, administration and management costs.

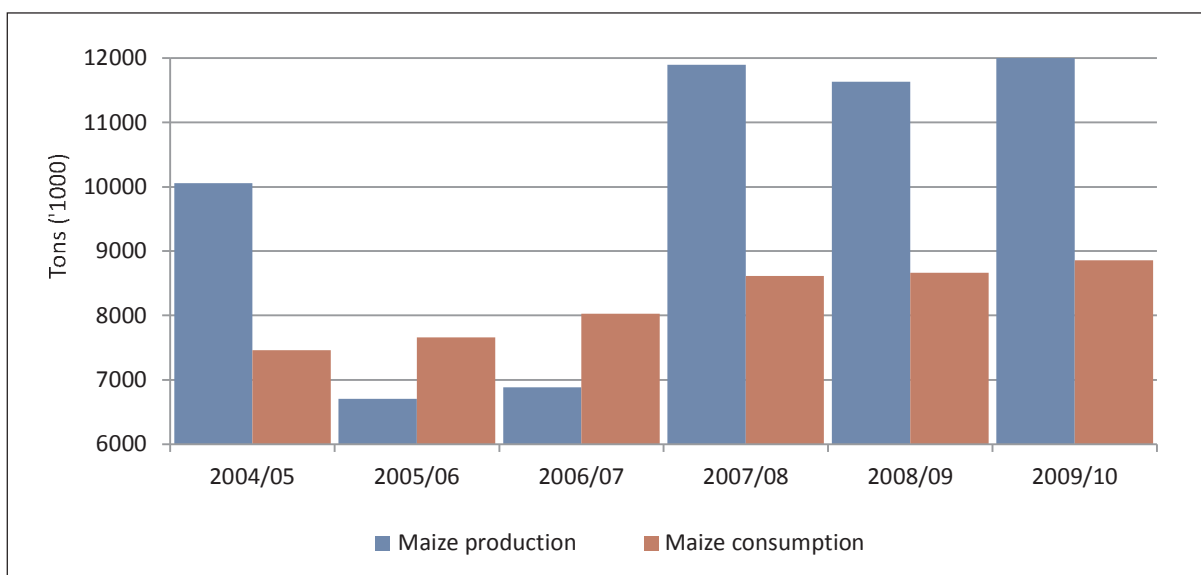


Figure 51: Domestic maize production and consumption

Source: SAGIS, 2011; Grain SA, 2011

- Price Trends for Maize

Figure 52 shows the trends in the white and yellow maize prices in South Africa. White and yellow maize prices move close to export parity prices for most of 2010, and dropped below export parity in November 2010. Another bumper crop in 2010, and resultant high stock levels, was the main reasons why maize prices moved at such low levels. This combined with the logistical challenges experienced to export maize caused prices to move below export parity. The price of yellow maize decreased on a year-on-year basis with 8.65 % from R1 532 to R1 400/t, while the prize of white maize decreased on a year-on-year basis with 18.26 % from R1 640 to R1 340/t. The export parity price increased with 43.66 % from R959 to R1 378/t during 2010 due to low global stock levels.

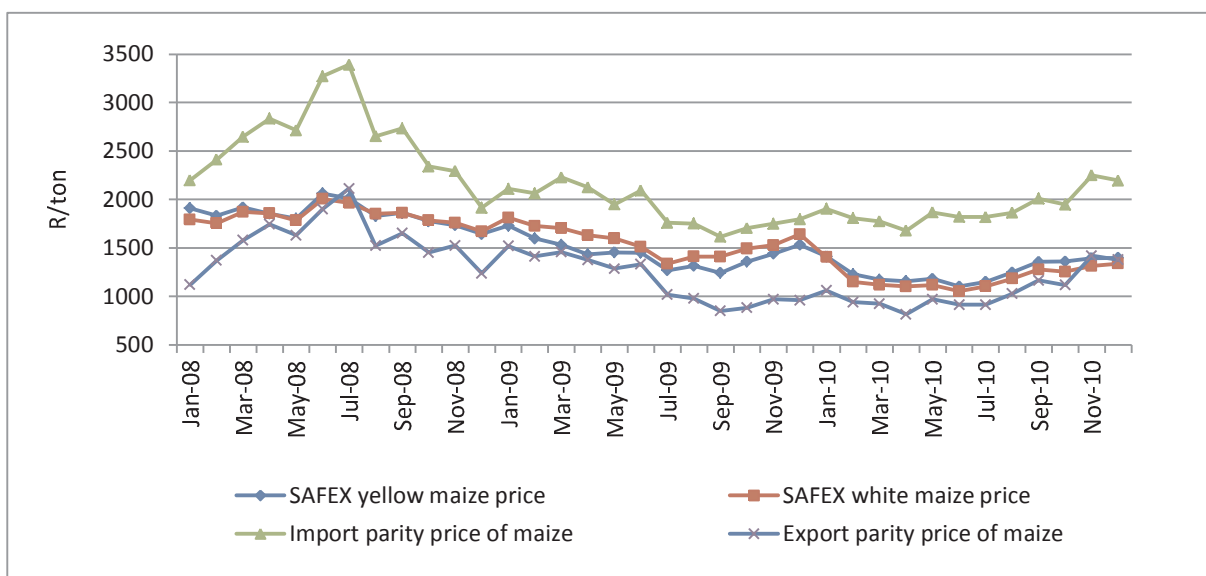


Figure 52: Import parity, export parity and SAFEX maize prices

Source: SAFEX, 2011; SAGIS, 2011

- Real Farm Gate Price and Retail Price of Maize Meal

Figure 53 shows the trends in the real farm gate price² and real retail value of special maize meal between January 2005 and December 2010. Between December 2009 and December 2010, the farm gate price of special maize meal decreased by 22.20 % from R1 473/t to R1 145/t. The retail value of special maize meal followed a similar trend. The year-on-year decrease was 3.63 % from R2 928/t to R2 822/t.

²Farm value = SAFEX white maize spot price - (transport cost to the silo + silo handling, grading & commission) + 1% physical loss + average storage cost for 60 days + Transport differential/extraction rate.

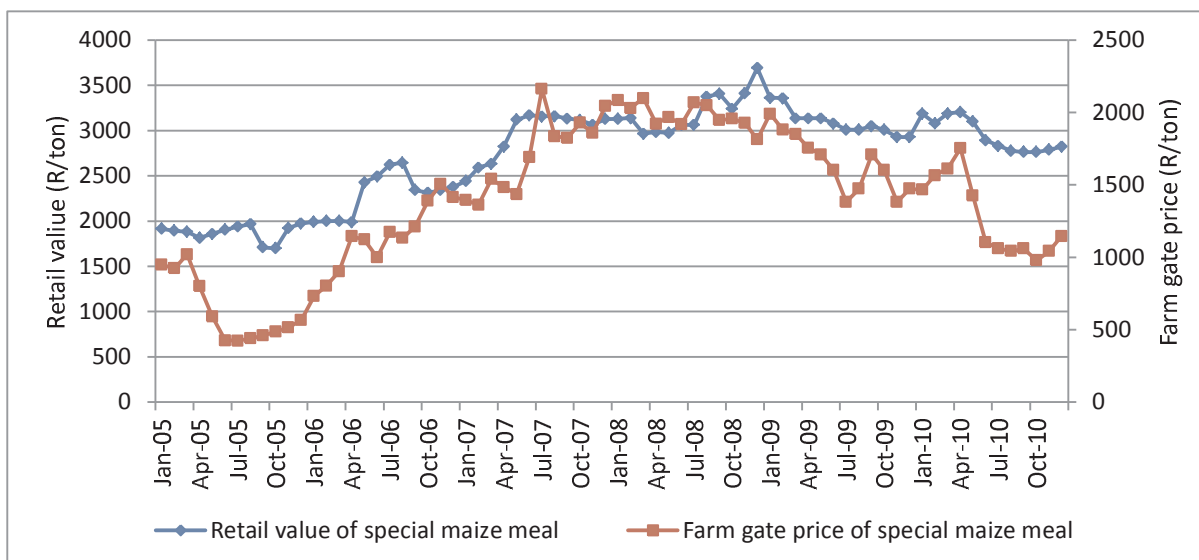


Figure 53: Real retail value and farm gate price of special maize meal

Source: SAFEX, 2011; Stats SA, 2011 and own calculations

Figure 54 shows the trends in the farm gate price and retail value of super maize meal between January 2005 and December 2010. Between December 2009 and December 2010, the farm gate price of super maize meal decreased by 22.20 % from R1 823/t to R1 419/t. The retail value of special maize meal followed a similar trend. The year-on-year decrease was 4.29 % from R4 133/t to R3 956/t.

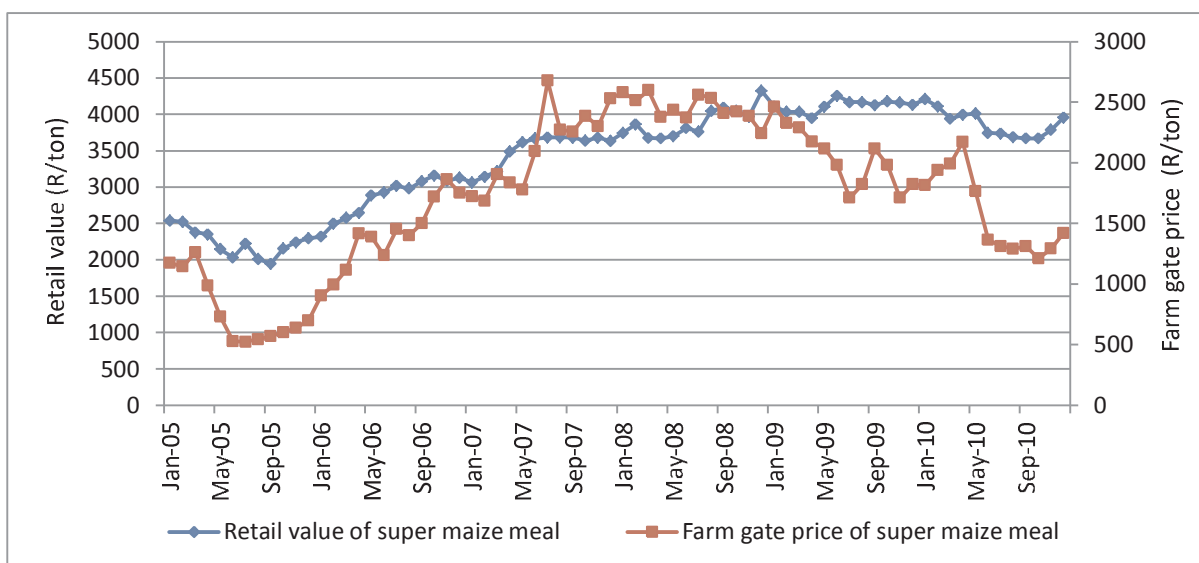


Figure 54: Real retail value and farm gate price of super maize meal

Source: SAFEX, 2011; Stats SA, 2011 and own calculations

Figure 55 shows the trends in the real farm value shares for super maize meal and special maize meal. Between 2009 and 2010 the average farm value share of special and super maize meal declined by 18.71 % from R1 671.78/t to R1 256.92/t and with 19.27 %, from R1 350.29/t to R1 015.21/t, respectively.

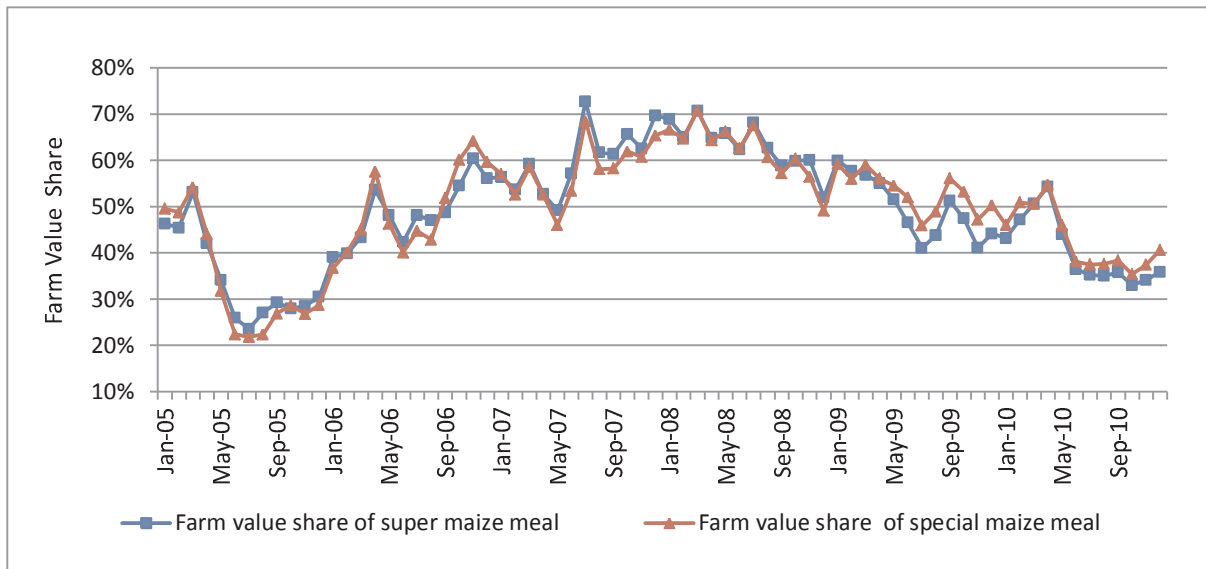


Figure 55: Real farm value share of special and super maize meal

Source: SAFEX, 2011; Stats SA, 2011 and own calculations

- Farm-to-Retail Spread (FTRPS)

Figure 56 shows the FTRPS for super maize meal and special maize meal between January 2005 and December 2010. From December 2009 to December 2010 the real FTRPS for super maize meal increased from R2 116.74/t to R2 247/t, or 6.17 %, and the real FTRPS for special maize meal decreased from R1 453/t to R1 414/t, or 2.16 %.

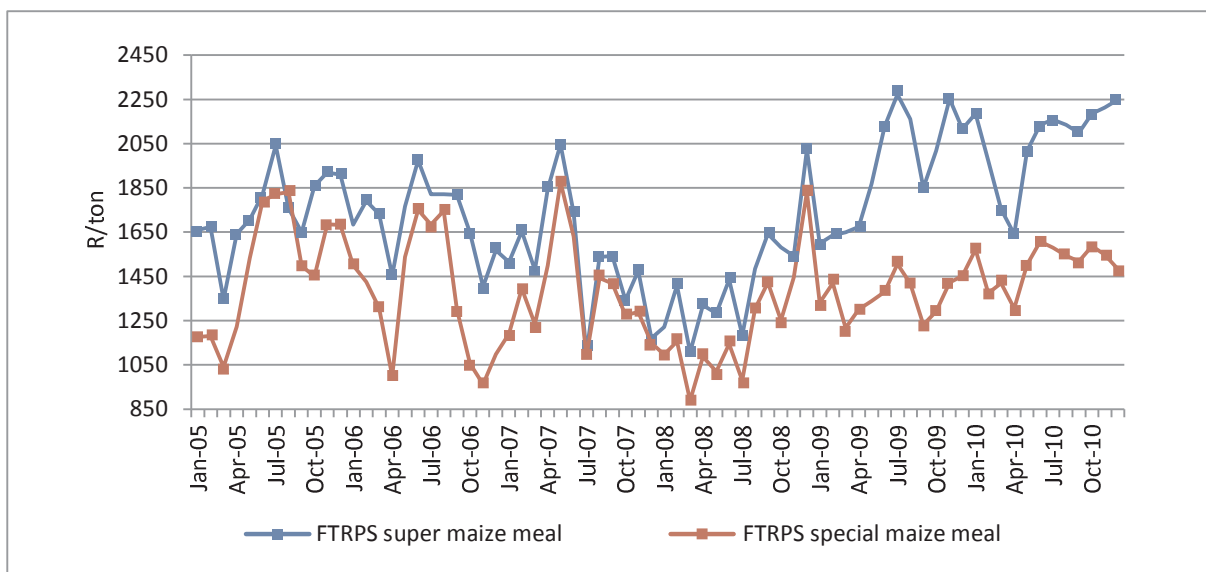


Figure 56: Real farm-to-retail price spread of special and super maize meal

Source: SAFEX, 2011; Stats SA, 2011 and own calculations

- Maize to Maize Meal Value Chain

This section discusses the maize-to-maize meal value chain. The methodology used is similar than the methodology used in the Food Cost Review of 2009. A comparison between 2009 and 2010 is also included in the analysis.

- A weighted price ratio between a 5 kg bag and a 12.5 kg bag of maize meal was used.
- A detailed cost breakdown was used to calculate the farm gate price (see Appendix B in Food Cost Review 2009 for details on how different items were calculated). The value chain from the manufacturing phase onward was split into two scenarios, i.e. a low cost scenario (scenario 1) and a high cost scenario (scenario 2). This reflects different economics of scale and efficiencies.

Table 25 (Component A) represents the value chain for maize-to-super maize meal for 2009/10 and 2010/11. The farm gate price for maize was R387/t, or 38.5 %, lower than the previous season, while the mill door price for maize was R354/t, or 38 %, lower than in the previous season. The estimated gap between the farm gate price and the SAFEX spot price decreased from R286.56 per ton to R270/t; indicating a marginal drop in the cost of sales by the producer of maize. The cost for the miller to land maize at the mill door increased, on average, by 6.78 %, while the income received from the sales of chop decreased by 10.21 %.

Table 25: Average costs in the maize-to-meal (super maize meal) value chain (Component A)

No	Item	Units	2009	2010
1.	Farm gate price lagged 4 months	R/ton grain	1 392.53	1 005.46
2.	Transport costs: farm gate to silo	R/ton grain	41.20	43.76
3.	Average handling, grading, procurement fee & 1 % physical loss fee.	R/ton grain	83.56	59.27
4.	Average storage cost for the farmer	R/ton grain	34.03	34.78
5.	SAFEX derived price for the producer at the silo	R/ton grain	1 551.32	1 143.27
6.	Average location differential		127.77	132.19
7.	Averages SAFEX spot price for white maize (2010) 4 months lagged		1 679.08	1 275.46
8.	Storage and handling costs: cost to miller	R/ton grain	55.85	56.77
9.	Transport costs: silo to mill door	R/ton grain	102.21	112.01
10.	Income from sale of chop		423.98	380.69
11.	Mill door price for maize	R/ton grain	1 285.40	931.36

Source: Discussions with different industry stakeholders at various levels of the maize value chain.
Average annual chop price: South Africa Feedlot Association. SAFEX, 2011

Table 25 (Component B) shows costs from the mill door to the retail level. On average, milling costs increased with 8.91 %, packaging cost by 9.38 %, packing material by 10 % and admin, warehouses and selling by 8.59 %. The increase in total mill site costs between 2009/10 and 2010/11 was 9.09 %. Total mill site costs that include distribution costs increased on average by 9.06 %; average distribution cost increased by 9.01 %. Total manufacturing and distribution costs that include capital expenditures increased with 9.32 %. The cost of producing maize meal (measured as Rand per ton of meal) decreased with 11.96 % (i.e. low cost scenario from 2009 to 2010) and 12.85 % (i.e. high cost scenario from 2009 to 2010), respectively. The miller-to-retail margin increased from an average of 20.4 % to 30 %.

Table 25: The maize-to-maize meal (super maize meal) value chain (Component B)

No	Item	Units	2009		2010	
11.	Mill door price for maize	R/ton grain	1 285.40		931.36	
	MANUFACTURERS		Scenario 1	Scenario 2	Scenario 1	Scenario 2
	Production cost (milling costs)	R/ton grain	95.95	106.05	104.50	115.50
	Packing cost	R/ton grain	30.40	33.60	33.25	36.75
	Packing material costs and losses	R/ton grain	114.00	126.00	125.40	138.60
	Administration, warehouses and selling	R/ton grain	188.10	207.90	204.25	225.75
12.	Mill site cost	R/ton grain	428.45	473.55	467.40	516.60
	Distribution costs	R/ton grain	210.90	233.10	229.90	254.10
13.	Total mill site cost	R/ton grain	639.35	706.65	697.30	770.70
14.	Fixed capital cost	R/ton grain	146.97	162.45	161.50	178.50
15.	Floating capital costs	R/ton grain	65.31	72.19	72.20	79.80
16.	Total Manufacturing and Distribution Cost	R/ton grain	851.64	941.28	931.00	1 029.00
	Cost of production of super maize meal					
17.	Conversion cost (Maize to Maize Meal)	R/ton grain	851.64	941.28	931.00	1 029.00
18.	Average cost of maize (mill door price)	R/ton grain	1 285.40	1 285.40	931.36	931.36
19.	Total super maize meal cost	R/ton grain	2 137.03	2 226.68	1 862.36	1 960.36
20	Average extraction rate for super maize meal		0.63	0.63	0.63	0.63
21	Average cost of super maize meal	R/ton meal	3 419.25	3 562.69	2 979.77	3 136.57
22 ¹	Miller to retail margin	R/ton meal	698.35	554.92	895.06	738.26
23	Average monthly retail price	R/ton meal	4 117.60	4 117.60	3 874.83	3 874.83

Note: The average retail price is based on a weighted price of 30 % for 5 kg and 70 % for 12.5 kg bags of maize meal.

5.5 Wheat Sector

• Production and Imports

South Africa produced 1.89 million tons of wheat in the 2009/10 season³. The average for the last 10 years was 1.985 million tons. The lowest level was recorded in the 2003/04 season, with 1.5 million tons as illustrated in Figure 58. Wheat production as depicted represents actual deliveries by farmers (SAGIS, 2011).

South Africa showed an increasing trend in the importation of wheat for the period depicted in Figure 58. This can be attributed to an increase in per capita consumption of bread and production not responding to this trend. Imports increased with 317 % over the last 10 years. South Africa imported 43 % of its domestic use in 2009/10. The total value of imports was over R2 billion. South Africa's biggest trade partners for wheat was Germany (47 %), the US (24.8 %), Brazil (8.49 %), Canada (9.31 %), Australia (4.21 %) and Argentina (2.68 %) in the 2009/10 season. South Africa exported 205 000 tons in the 2009/10 season to neighbouring countries (Global Trade Atlas, 2011).

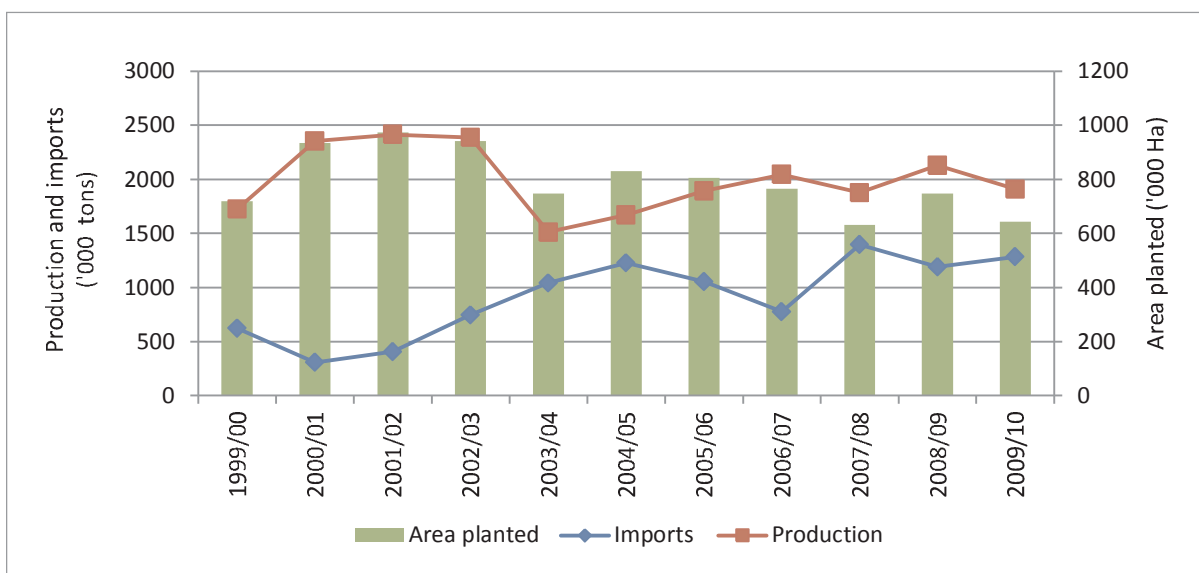


Figure 57: Area planted, production and imports (tons)

Source: SAGIS, 2011

• Consumption

South African consumed 3 million tons of wheat in the 2009/10 season. Less than 1 % of wheat consumed in South Africa is for the feed market; the rest is for the human market. Figure 59 shows domestic wheat consumption and production. The per capita consumption in South Africa increased from 53.54 kg to 60.35 kg between 1999/2000 and 2009/2010.

³RSA production season for 2009/2010 starts 1 October 2009 to 30 September 2010.

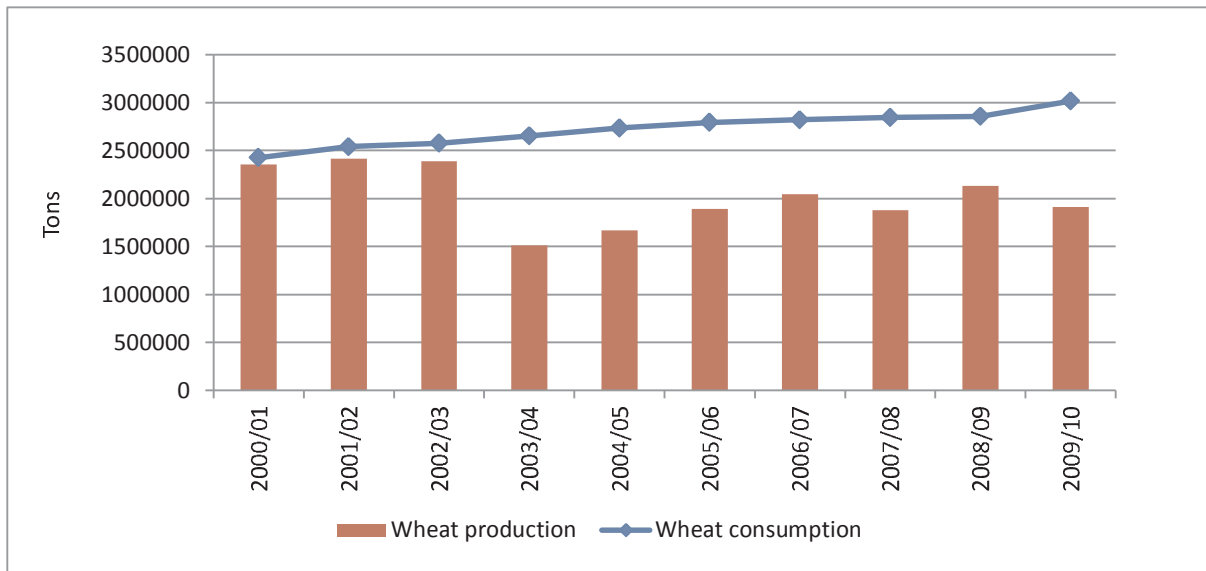


Figure 58: Wheat consumption and production

Source: SAGIS, 2011

• Price Trend for Wheat

As mentioned earlier, South Africa is a net importer of wheat and hence the local wheat price tends to trade at import parity prices (see Figure 60). This entails, amongst others, that changes in the exchange rate and the world price for wheat will be reflected almost immediately in the local price wheat.

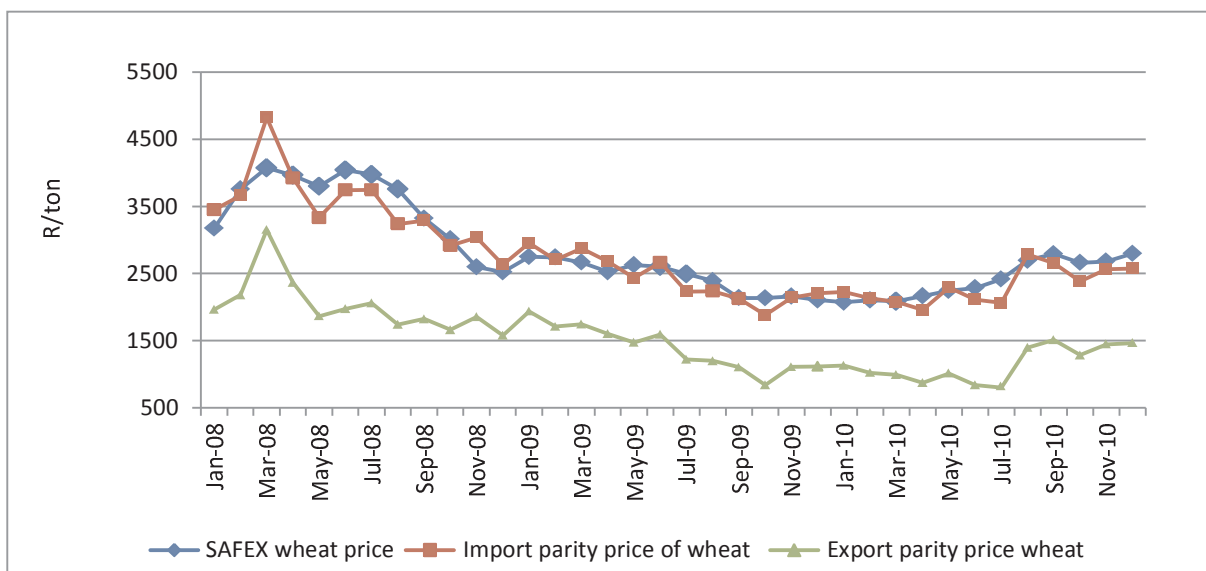


Figure 59: Import parity, export parity and SAFEX wheat price

Source: SAGIS, 2011; SAFEX, 2011

- Real Farm Gate and Retail Prices of Brown and White Bread

Figure 60 shows the farm gate price of wheat per ton lagged for 4 months compared to the retail price of brown and white bread. The average farm gate price of wheat (lagged by 4 months) decreased with 20.4 % from R2 323/t in 2009 to R1 848/t in 2010. The average real retail price for white bread and brown bread was also lower in 2010 compared to 2009. The average retail price of brown bread decreased with 0.53 % from R7.12/loaf in 2009 to R7.08/loaf in 2010. The average retail price of white bread increased with 1.33 % from R7.88/loaf in 2009 to R7.99 per loaf in 2010.

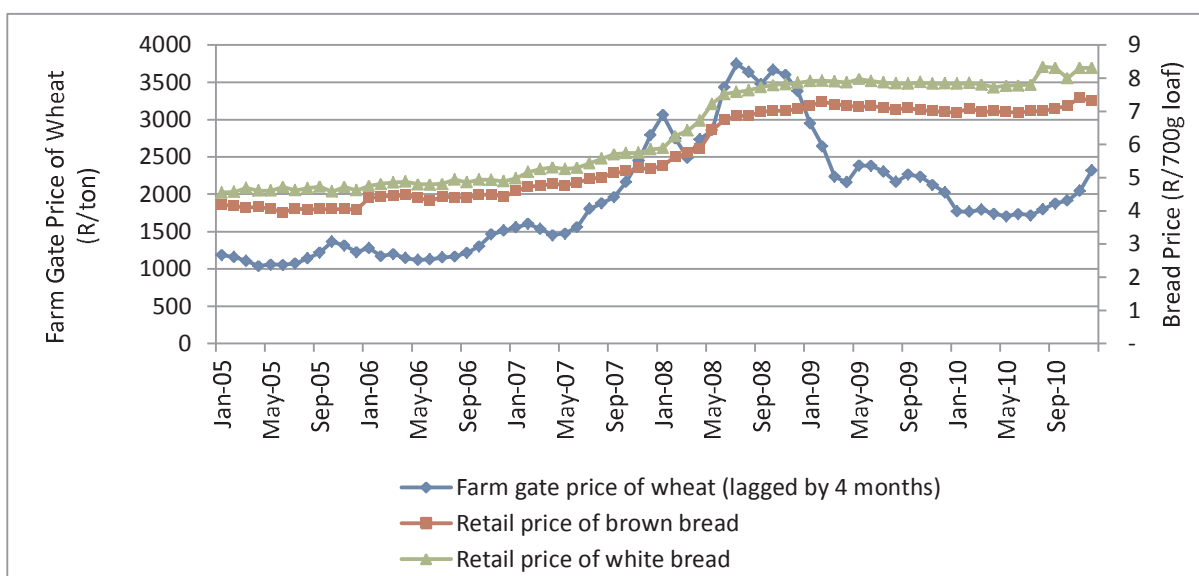


Figure 60: Farm gate price of wheat and real retail price of brown and white bread

Source: SAFEX, 2011; Stats SA, 2011 and own calculations

Figure 61 shows the percentage difference in prices between white and brown bread. On average during 2010, white bread was 11.74 % more expensive than brown bread. Brown bread is zero rated for value added tax (VAT), while 14 % VAT is charged on white bread.

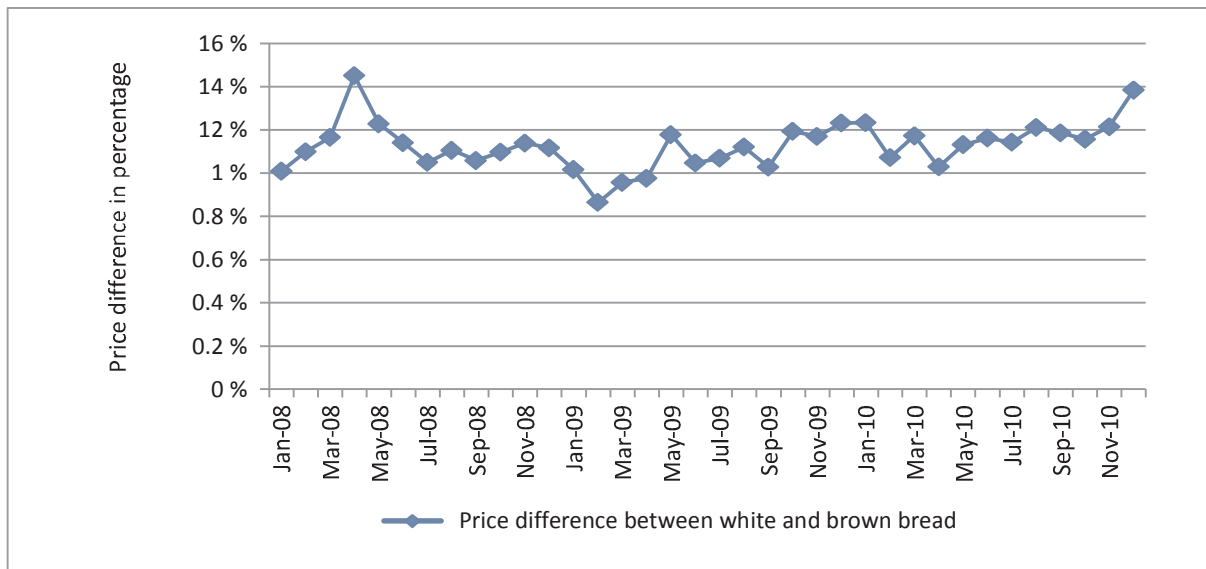


Figure 61: Percentage price difference between white and brown bread

- Real Farm Value Share of Brown and White Bread

Figure 62 shows that the real farm value share for both brown and white bread was at 13 % to 14 %, respectively, during the first half of 2010; this was significantly lower when compared to the latter half of 2007 and 2008. From September 2010 onwards the farm value share for both brown and white bread increased and reached 17 % in December 2010.

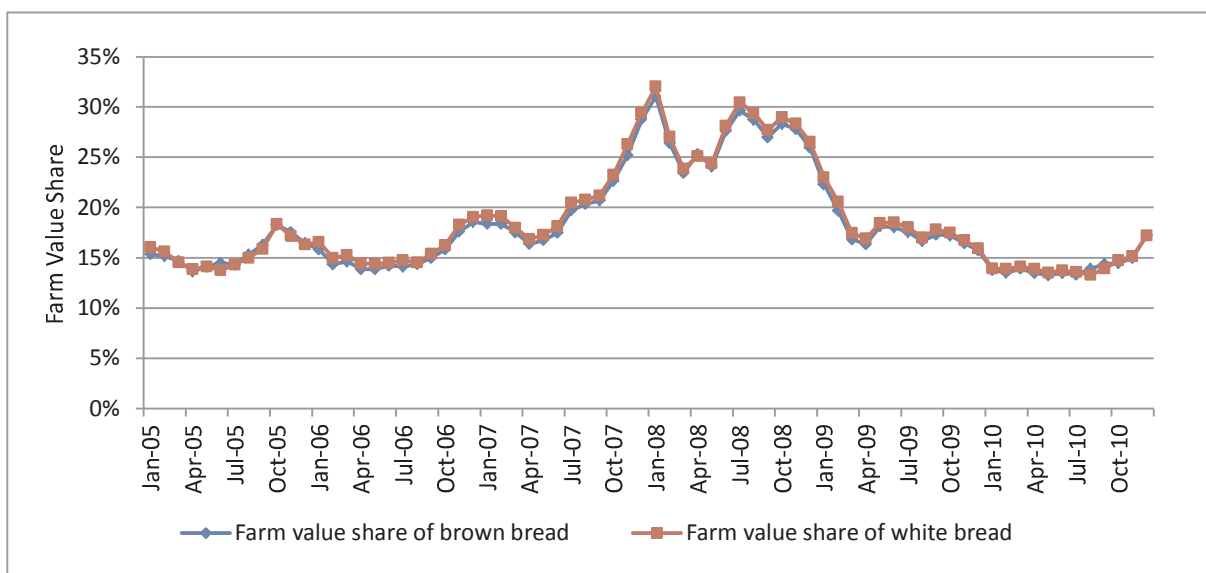


Figure 62: Real farm value share of brown and white bread

Source: SAFEX, 2011; Stats SA, 2011 and own calculations

Note: In order to calculate the real farm value and real retail value of a ton of flour used for a 700 gram loaf of white bread the following assumptions was made. The extraction rate from 1 ton of wheat is 0.76 tons of white bread flour and 1 ton of white bread flour can produce 2275 loaves of white bread (700g).

- Farm to Retail Spread (FTRPS)

Figure 63 shows the real FTRPS for brown and white bread. On average the FTRPS for brown bread was R12 379.30/t of flour in 2010; this is slightly down from the average of R12 442.23/t of flour in 2009. In the case of white bread the average FTRPS was R13 084.24/t of flour in 2010, which is an increase from the 2009 average of R12 851/t of flour. Cognisance should be taken that the FTRPS since 2008 is significantly higher than the preceding period depicted in Figure 63.

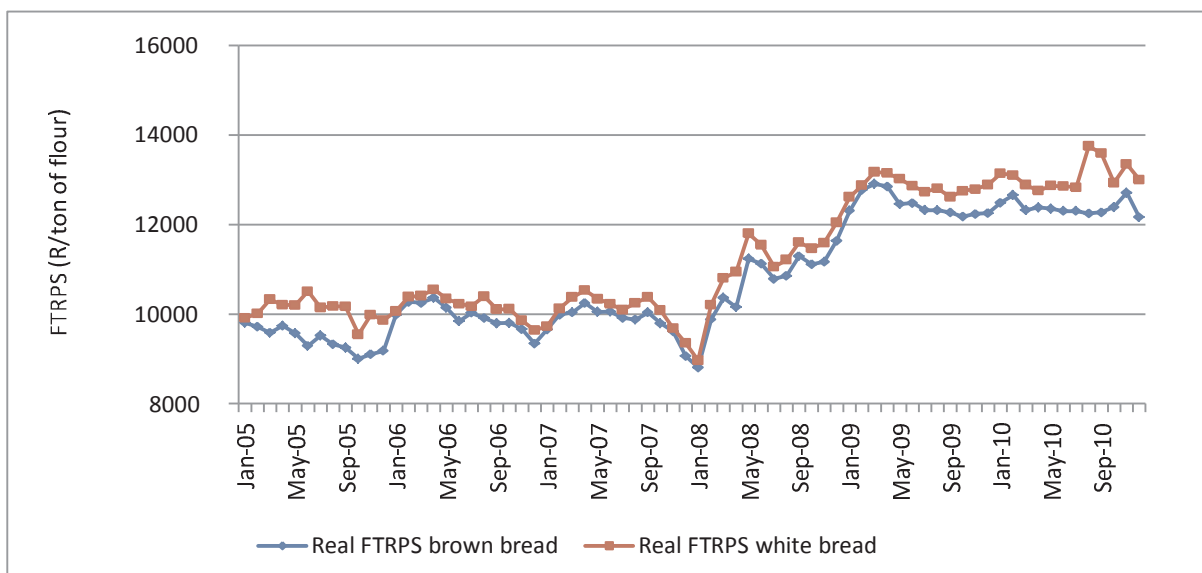


Figure 63: Real farm to retail price spread of brown and white bread

Source: SAFEX, 2011; Stats SA, 2011 and own calculations

- Wheat to White Bread Chain

Table 27 and Table 28 shows the costs and margins in the wheat-to-white and -brown bread value chains, respectively, from farm gate to retailer. It also provides a comparison of margins and costs between the 2009/10 season and the 2010/11 season. The calculation from the manufacturing phase onward was split into different scenarios, i.e. low cost and high cost scenarios combined with different quantities used to bake a bread. Scenarios 1 and 3 represent typical high cost scenarios, but in scenario 1 more flour is required than in scenario 3 to bake bread. Scenarios 2 and 4 represent typical low cost scenarios, but in scenario 2 more flour are required to bake a bread compared to scenario 4. The high and low costs scenarios reflect the impact of different economics of scale, while the amount of flour used reflects different efficiencies in converting wheat into bread.

Table 27 shows the different cost and value adding activities in the wheat-to-white bread value chain. In order to make the discussion more manageable the Table is divided into three different components. Each component is then discussed separately. Table 27 (Component A) shows that the producer price (farm gate price) for wheat was R480/t (or 72 %) lower in 2010/11 than in 2009/10, while the average wheat spot price was R470/t (or 21.21 %) lower in 2010/11.

Note: The real farm to retail price spread is calculated by deducting the real farm value for ton of flour from the real retail value of a ton of flour. The price spread is representative of all the cost involved in the value adding process.

Component A of Table 26 indicates that the mill door price for wheat was R437/t (or 21.67 %) lower in 2010/11 than in 2009/10. The main contributor to the lower mill door price was a lower wheat price.

Table 26: Average costs in the wheat-to-white bread supply chain (Component A)

No.	Item	Units	Value 2009/10	Value 2010/11
1.	Wheat avg. producer price lagged 4 months	R/ton	2 327.85	1 848.24
2.	Transport cost: Farm gate to silo	R/ton	41.20	44.95
3.	Average handling, grading, procurement fee & 1 % physical loss fee.	R/ton	85.78	85.10
4.	Average storage cost for the farmer (2 months)	R/ton	28.78	32.08
5.	SAFEX derived price for the producer at the silo	R/ton	2 483.61	2 010.38
6.	Average location differential	R/ton	204.10	207.05
7.	Averages SAFEX spot price for wheat. Lagged with 4 months	R/ton	2 687.71	2 217.43
8.	Storage and handling costs: cost to miller	R/ton	63.33	63.33
9.	Transport costs: silo to mill door	R/ton	163.28	165.64
10.	Income from sale of bran	R/ton	255.41	221.74
11.	Mill door price	R/ton	2 454.82	2 017.61

Component B of Table 26 shows that mill site costs have increased considerably. The increase in total mill site costs range between 9 % and 10 %, respectively for the low and high cost scenarios, between 2009/10 and 2010/11. The main cost items that contributed to the increase in total mill site costs were milling, packaging and distribution costs. The total cost of white bread flour was however lower in 2010/11 for the different scenarios due to the lower mill door price.

Component C of Table 26 shows that the cost of flour to bake one white bread (line 21) decreased from 2009/10 to 2010/11. Packaging cost ranged between R0.25 and R0.27 in 2010/11, which was a slight increase compared to 2009/10. Distribution and overhead costs increased, on average, by 13.3 % to 13.62 %, respectively from 2009/10 to 2010/11. Overall, the cost of producing a white bread has increased, on average, by 3 % (cost of flour included) from 2009/10. The price of a loaf of white bread has increased by 1.34 % during the period applicable to this analysis. The margin between the selling price of a loaf of white bread and the cost of producing it has decreased, on average, by 5.12 %. This margin is made of VAT (R0.98/loaf), a retailer margin of 15 % (R0.91/loaf), costs associated with rebates, losses and returns (R0.60/loaf), and a baker and miller margin that varies according the cost structure of the baking facility and its efficiency (-R0.04 to R0.69/loaf).

Table 26: Average costs in the wheat-to-white bread supply chain (Component B)

No.	Item	Unit	Value 2009/10		Value 2010/11	
11.	Mill door price	R/ton	2 454.82		2 017.61	
	MANUFACTURING COST		Scenario 1 & 3	Scenario 2 & 4	Scenario 1 & 3	Scenario 2 & 4
	Production cost (milling costs)		161.7	146.67	177.44	160.95
	Packing cost & losses		31.5	28.57	34.57	31.35
	Administration, warehouse and selling		220.5	200	241.97	219.47
12.	Mill site costs	R/ton grain	413.7	375.24	453.98	411.77
	Distribution costs	R/ton grain	222.6	201.9	244.27	221.56
13.	Total mill site costs	R/ton grain	636.3	577.14	698.25	633.33
14.	Fixed capital costs	R/ton grain	228.69	207.43	250.96	227.62
15.	Floating capital costs	R/ton grain	95.55	86.67	104.85	95.10
16.	Total millers costs	R/ton grain	960.54	871.24	1 054.06	956.06
17.	Total wheat flour cost for white bread (11 + 16)	R/ton grain	3 415.36	3 326.05	3 071.66	2 973.67
18.	Average extraction for white bread		0.80	0.80	0.80	0.80
19.	Total cost of white bread flour (17 ÷ 18)	R/ton meal	4 269.2	4 157.57	3 839.58	3 717.09

Table 26: Average cost in the wheat-to-white bread value chain (Component C)

No.	Item	Unit	Value 2009/10				Value 2010/11			
			Scenario 1 (508 g - high)	Scenario 2 (508 g - low)	Scenario 3 (420 g - high)	Scenario 4 (420 g - low)	Scenario 1 (508 g - high)	Scenario 2 (508 g - low)	Scenario 3 (420 g - high)	Scenario 4 (420 g - low)
19.	Average cost of white bread flour	R/ton meal	4 269.2	4 157.6	4 269.2	4 157.6	3 839.58	3 717.09	3 839.58	3 717.09
20.	Extraction rate of white bread from 1 ton flour (508 g & 420 g loaves/ton flour)	Loaves/ton	1966	1966	2381	2381	1966	1966	2381	2381
21.	Cost of flour per loaf	R/loaf	2.17	2.11	1.79	1.75	1.95	1.89	1.61	1.56
22.	Packaging	R/loaf	0.24	0.22	0.24	0.22	0.27	0.25	0.27	0.25
23.	Other raw materials	R/loaf	0.42	0.38	0.42	0.38	0.48	0.44	0.48	0.44
24.	Production & maintenance	R/loaf	0.95	0.86	0.95	0.86	1.05	0.95	1.05	0.95
25.	Distribution	R/loaf	0.95	0.86	0.95	0.86	1.05	0.95	1.05	0.95
26.	Overheads (Admin + sales)	R/loaf	0.63	0.57	0.63	0.57	0.71	0.65	0.71	0.65
27.	Cost of producing white bread	R/loaf	5.36	5.00	4.98	4.64	5.52	5.13	5.18	4.80
28.	Bakers & millers margin	R/loaf	0.07	0.42	0.45	0.79	-0.04	0.36	0.31	0.69
29.	Wholesale price	R/loaf	5.42	5.42	5.42	5.42	5.49	5.49	5.49	5.49
30.	Rebates, losses & returns	R/loaf	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
31.	Retailers purchase price	R/loaf	6.01	6.01	6.01	6.01	6.09	6.09	6.09	6.09
32.	Retailers margin	R/loaf	0.90	0.90	0.90	0.90	0.91	0.91	0.91	0.91
33.	White bread retail price (VAT Excl)	R/loaf	6.91	6.91	6.91	6.91	7.01	7.01	7.01	7.01
34.	VAT (14%)	R/loaf	0.97	0.97	0.97	0.97	0.98	0.98	0.98	0.98
35.	White bread retail price (VAT Incl)	R/loaf	7.88	7.88	7.88	7.88	7.99	7.99	7.99	7.99
36.	Margin between selling price and the cost of producing a loaf of white bread (35 - 27)	R/loaf	2.52	2.88	2.90	3.24	2.46	2.86	2.80	3.19

- Wheat to Brown Bread Chain

Table 27 shows the different cost and value adding activities in the wheat-to-brown bread value chain. The calculation of the mill door price for brown bread is similar to that of white bread, with the exception that the income received from bran differs due to different extraction rates to produce brown bread flour. Table 27 (Component A) shows that the mill door price for wheat when used to produce brown bread decreased from R2 544.21/t to R2 011.45/t.

* The different extraction rates were calculated as 508 g flour/bread per 1 ton for scenario 1 and 2 and 420 g flour/bread per 1 ton flour for scenario 3 and 4. An extraction rate of 468 g flour/bread per 1 ton flour was used in the 2003 Food Price Monitoring Committee Report.

Table 27: Average costs in the wheat-to-brown bread supply chain (Component A)

No.	Item	Units	2009/10	2010/11
1.	Wheat avg. producer price lagged 4 months	R/ton grain	2 327.85	1 848.24
2.	Transport cost: farm gate to silo	R/ton grain	41.20	44.95
3.	Average handling, grading, procurement fee & 1 % physical loss fee.	R/ton grain	85.78	85.10
4.	Average storage cost for the farmer (2 months)	R/ton grain	28.78	32.08
5.	SAFEX derived price for the producer at the silo	R/ton grain	2 483.61	2 010.38
6.	Average location differential	R/ton grain	204.10	207.05
7.	Averages SAFEX spot price for wheat (2009). Lagged with 4 months	R/ton grain	2 687.71	2 217.43
8.	Storage and handling costs: cost to miller	R/ton grain	63.33	63.33
9.	Transport costs: silo to mill door	R/ton grain	163.28	165.64
10.	Income from sale of bran	R/ton grain	155.02	127.9
11.	Mill door price	R/ton grain	2 544.21	2 111.45

Table 27 (Component B) shows that total mill site costs increase on average with 10 % from 2009/10 to 2010/11. The main cost items that contributed to the increase in total mill site costs were milling, packaging and distribution costs. Total millers costs that include capital expenditures increased by 9.7 %. The total cost to produce a brown bread (measured in Rand per ton of meal) decreased with 9.6 % between 2009/10 to 2010/11.

Table 27: Average costs in the wheat-to-brown bread supply chain (Component B)

No.	Item	Unit	Value 2009/10		Value 2010/11	
11.	Mill door price	R/ton grain	2 544.21		2 111.45	
	MANUFACTURING COST		Scenario 1 & 3	Scenario 2 & 4	Scenario 1 & 3	Scenario 2 & 4
	Production cost (milling costs)	R/ton grain	161.70	146.67	177.44	160.95
	Packing cost & losses	R/ton grain	31.50	28.57	34.57	31.35
	Administration, warehouse and selling	R/ton grain	220.50	200.00	241.97	219.47
12.	Mill site costs	R/ton grain	413.70	375.24	453.98	411.77
	Distribution costs	R/ton grain	222.60	201.90	244.27	221.56
13.	Total mill site costs	R/ton grain	636.30	577.14	698.25	633.33
14.	Fixed capital costs	R/ton grain	228.69	207.43	250.96	227.62
15.	Floating capital costs	R/ton grain	95.55	86.67	104.85	95.10
16.	Total millers costs	R/ton grain	960.54	871.24	1 054.06	956.06
17.	Total wheat flour cost for brown bread (11 + 16)	R/ton grain	3 504.75	3 415.45	3 165.51	3 067.52
18.	Average extraction for brown bread		0.87	0.87	0.87	0.87
19.	Total cost of brown bread flour (17 ÷ 18)	R/ton meal	4 028.45	3 925.80	3 638.52	3 525.88

Table 27 (Component C) shows that the cost of flour to bake one brown bread from 2009/10 to 2010/11 decreased between 9.68 % and 10.19 % depending on whether a high or low cost scenario is applicable and according to the level of efficiency of a baking plant. Packaging increased, on average, by 13 %, while production and maintenance costs have increased, on average, by 14 %. Distribution and overhead costs increased, on average, by 10.53 % and 10.47 %, respectively from 2009/10 to 2010/11. Overall, the cost of producing a brown bread has increased, on average, by a 4.12 % from 2009/10 to 2010/11.

The price of a loaf of brown bread has decrease by 0.42 %. The margin between the selling price of a loaf of brown bread and the cost of producing it has decreased with 7 %. This margin is made of a retailer margin of 15 % (R0.92/loaf), costs associated with rebates, losses and returns (R0.61/loaf), and a baker and miller margin that varies according to the cost structure of the baking facility and its efficiency (R0.24 to R0.88/loaf).

Table 27: Average cost in the wheat-to-white bread value chain (Component C)

No	Item	Unit	Value 2009/10				Value 2010/11			
			Scenario 1 (480 g - high)	Scenario 2 (480 g - high)	Scenario 3 (405 g - high)	Scenario 4 (405 g - low)	Scenario 1 (480 g - high)	Scenario 2 (480 g - high)	Scenario 3 (405g - high)	Scenario 4 (405g - low)
21.	Average cost of brown bread flour	R/ton meal	4 028.4	3 925.8	4 028.4	3 925.8	3 638.5	3 525.9	3 638.5	3 525.9
22.	Extraction rate of white bread from 1 ton flour (480 g & 405 g loafs/ton flour).	loaves/ton	2095	2095	2469	2469	2095	2095	2469	2469
23.	Cost of flour per loaf	R/loaf	1.92	1.87	1.63	1.59	1.74	1.68	1.47	1.43
24.	Packaging	R/loaf	0.24	0.22	0.24	0.22	0.27	0.25	0.27	0.25
25.	Other raw materials	R/loaf	0.42	0.38	0.42	0.38	0.48	0.44	0.48	0.44
26.	Production labour	R/loaf	0.95	0.86	0.95	0.86	1.05	0.95	1.05	0.95
27.	Distribution	R/loaf	0.95	0.86	0.95	0.86	1.05	0.95	1.05	0.95
28.	Overheads	R/loaf	0.63	0.57	0.63	0.57	0.71	0.65	0.71	0.65
29.	Cost of producing brown bread	R/loaf	5.10	4.75	4.81	4.47	5.31	4.92	5.04	4.67
30.	Bakers & millers margin	R/loaf	0.48	0.83	0.77	1.11	0.24	0.63	0.50	0.88
31.	Wholesale price	R/loaf	5.58	5.58	5.58	5.58	5.55	5.55	5.55	5.55
32.	Rebates, losses & returns	R/loaf	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
33.	Retailer's purchase price	R/loaf	6.19	6.19	6.19	6.19	6.16	6.16	6.16	6.16
34.	Retailers margin	R/loaf	0.93	0.93	0.93	0.93	0.92	0.92	0.92	0.92
35.	Brown Bread retail price (VAT Excl)	R/loaf	7.12	7.12	7.12	7.12	7.08	7.08	7.08	7.08
37.	VAT (14 %)	R/loaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	Brown bread retail price (VAT Incl)	R/loaf	7.12	7.12	7.12	7.12	7.08	7.08	7.08	7.08
39.	Brown bread margin from miller to retailer	R/loaf	2.02	2.37	2.31	2.65	1.77	2.16	2.04	2.42

5.6 Vegetable Sector

Figure 64 shows the volumes of selected fresh vegetables sold at the National Fresh Produce Markets (NFPM) from January 2008 to December 2010. The volume of tomatoes, onions, potatoes and cabbage sold was 2.7 %, 8.0 %, 10.7 % and 9.6 % respectively higher in 2010 than in 2009.

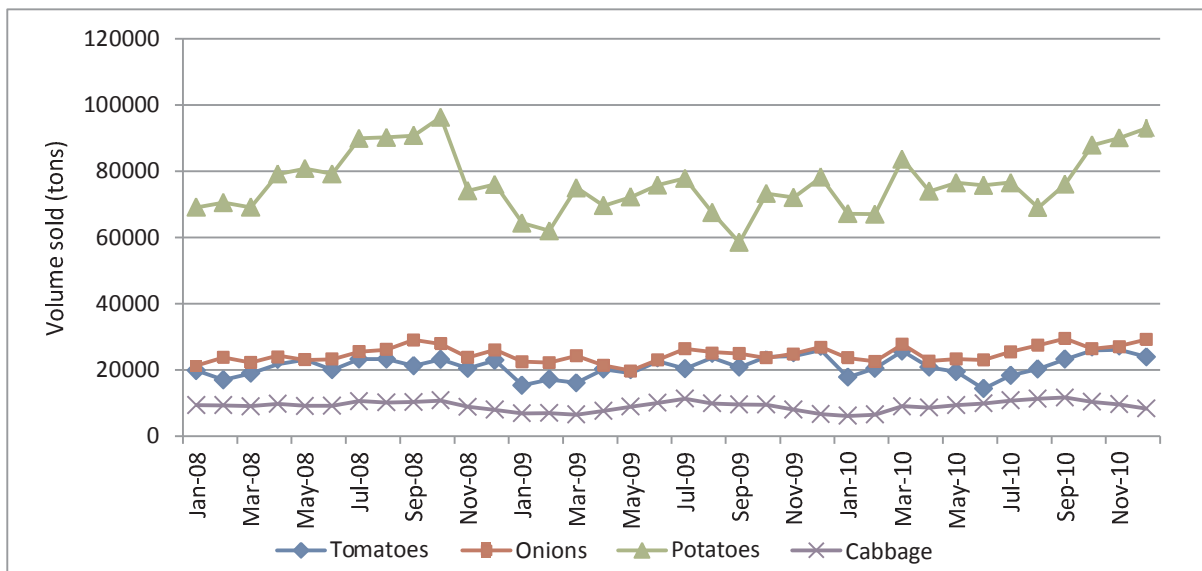


Figure 64: Volume of selected vegetables sold at fresh produce markets

Source: DAFF, 2011 and own calculations

Figure 65 shows the market price trends for selected fresh vegetables from January 2008 to December 2010. The market prices for the selected vegetables were on average lower in 2010 compared to 2009. In nominal terms, the average market price per ton of cabbage, onions and potatoes were 13.05 %, 18.48 % and 22.50 % lower in 2010 than in 2009. The nominal market price for tomatoes was 2.12 % higher in 2010 compared to 2009. In real terms, the average market price per ton of cabbage, onions, tomatoes and potatoes decreased by 17.10 %, 21.74 %, 2.4 % and 25.60 % respectively in 2010.

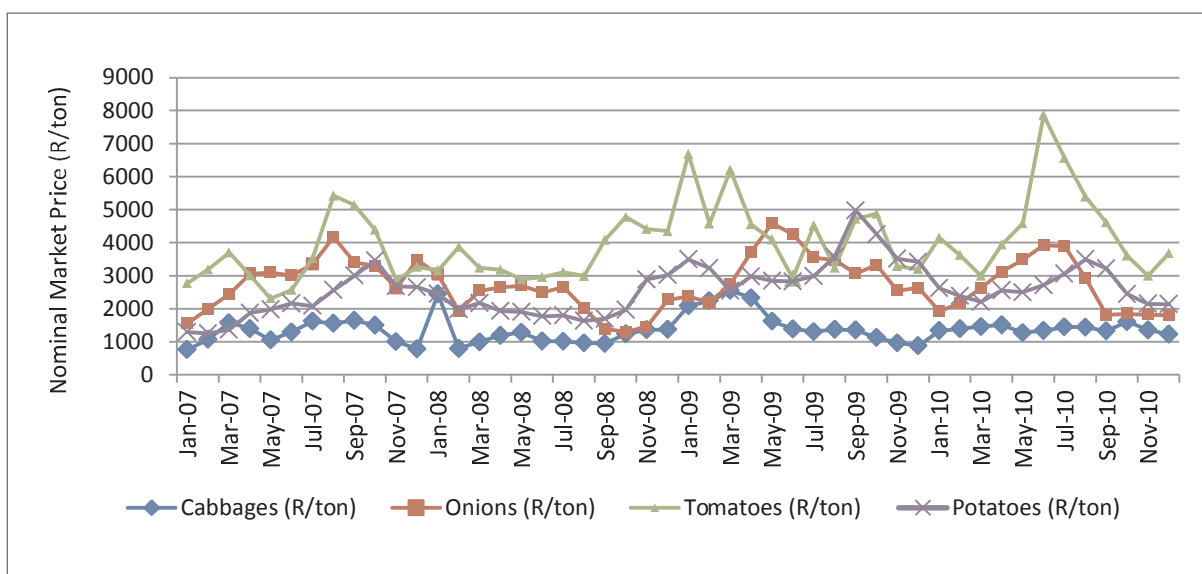


Figure 65: Market price trends for selected fresh vegetables

Source: DAFF, 2011 and own calculations

The nominal retail price trends for selected fresh vegetables from January 2008 to December 2010 are shown in Figure 66. The average nominal retail prices for cabbages, onions and potatoes were 1.2 %, 6.5 % and 1 % lower in 2010 than in 2009. The average retail price for tomatoes in nominal terms was 4.5 % higher in 2010 than in 2009. In real terms, the average retail prices for cabbages, onions and potatoes were 5.3 %, 10.3 % and 5 % lower in 2010 than in 2009. The real retail price for tomatoes was 0.1 % higher in 2010 than in 2009.

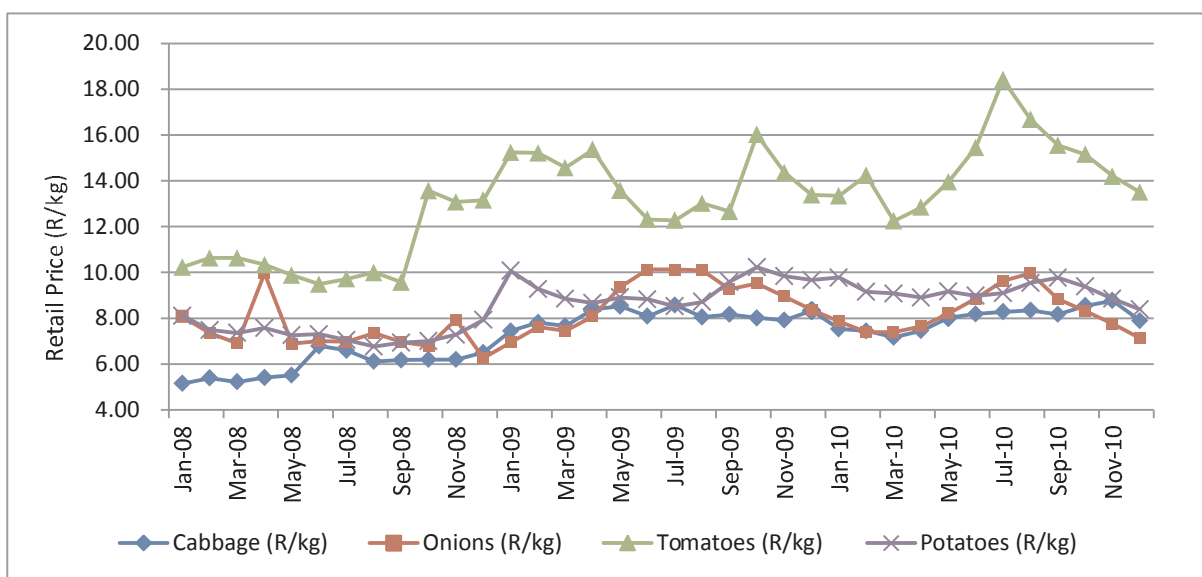


Figure 66: Retail price trends for selected fresh vegetables

Source: Stats SA, 2011 and own calculations

Figure 67 depicts the real FTRPS and the real farm value share for cabbages. The farm gate price used in the calculations is the realised price on all NFPMs minus the maximum of 12.5 % market and agent commissions permissible. The factors that affect the FTRPS are transport costs, packaging, marketing and retailing charges. The real FTRPS of cabbages decreased by 2.76 % on average between 2009 and 2010. The real farm value share of cabbage decreased on average by 12.35 % from 2009 to 2010.

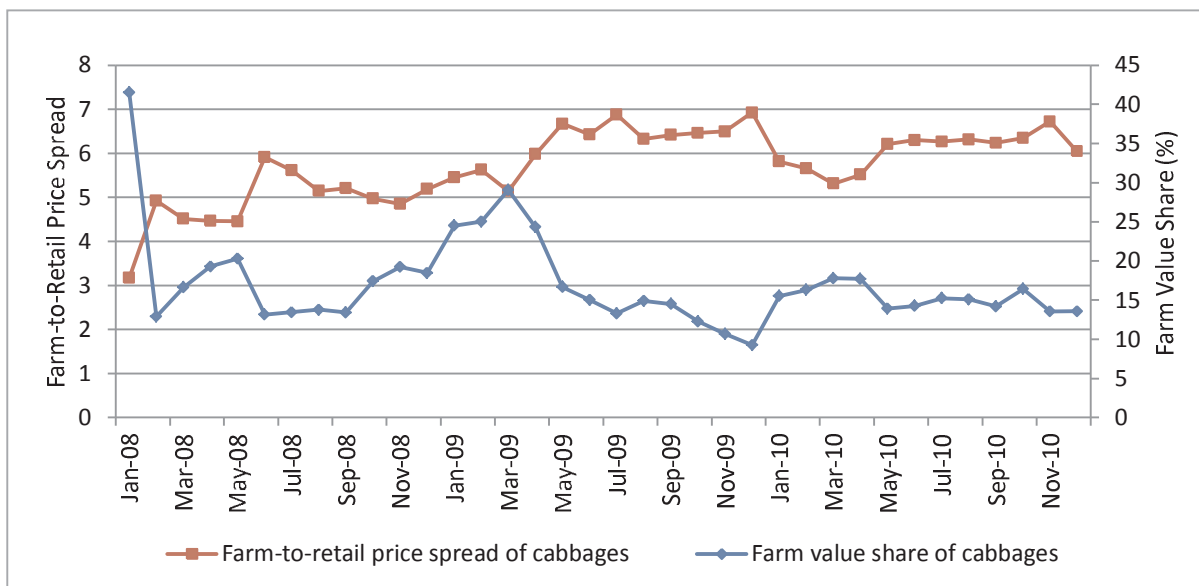


Figure 67: Real farm-to-retail price spread and farm value share of cabbages

Source: DAFF, 2011; Stats SA, 2011 and own calculations

The real FTRPS and the real farm value share for onions are depicted in Figure 68. The real FTRPS of onions decreased by 3.69 % on average between 2009 and 2010. The real farm value share of onions decreased by 13.56 % on average from 2009 to 2010. The real farm value share reached a high of 38.85 % in June 2010, after which it decreased again to 19.60 % in December 2010.

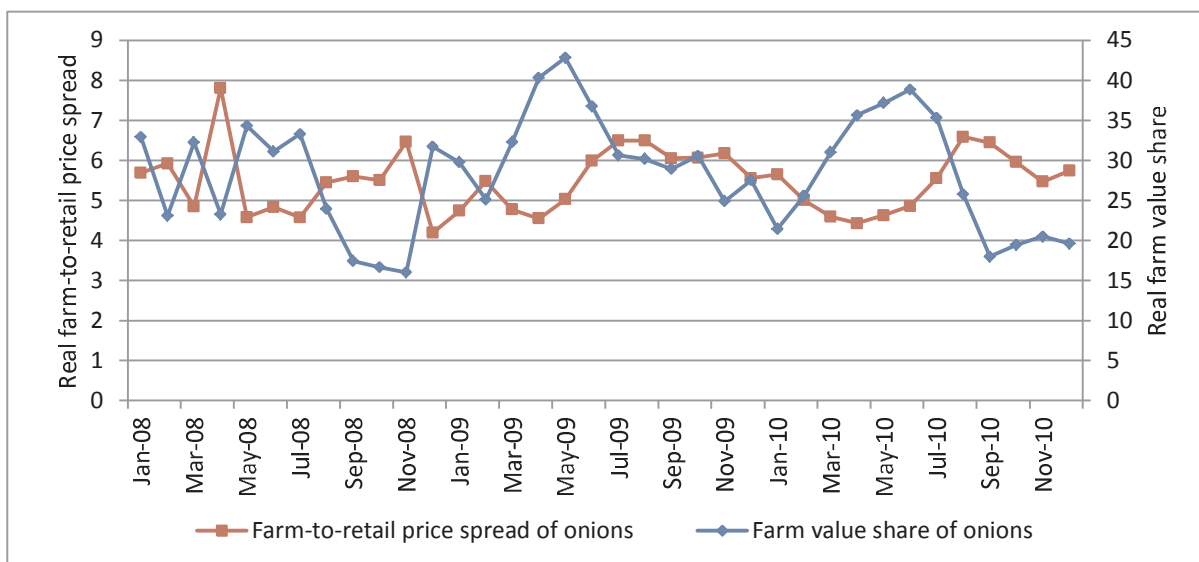


Figure 68: Real farm-to-retail price spread and farm value share of onions

Source: DAFF, 2011; Stats SA, 2011 and own calculations

Figure 69 shows the real FTRPS and the real farm value share of tomatoes from January 2008 to December 2010. The real FTRPS of tomatoes increased by 1.02 % on average between 2009 and 2010 and reached R11.30/kg in July 2010. In December 2010 the real FTRPS of tomatoes was R9.10/kg. The real farm value share for decreased by 2.9 % on average from 2009 to 2010. In 2010 the average farm value share for tomatoes was 26.62 %.

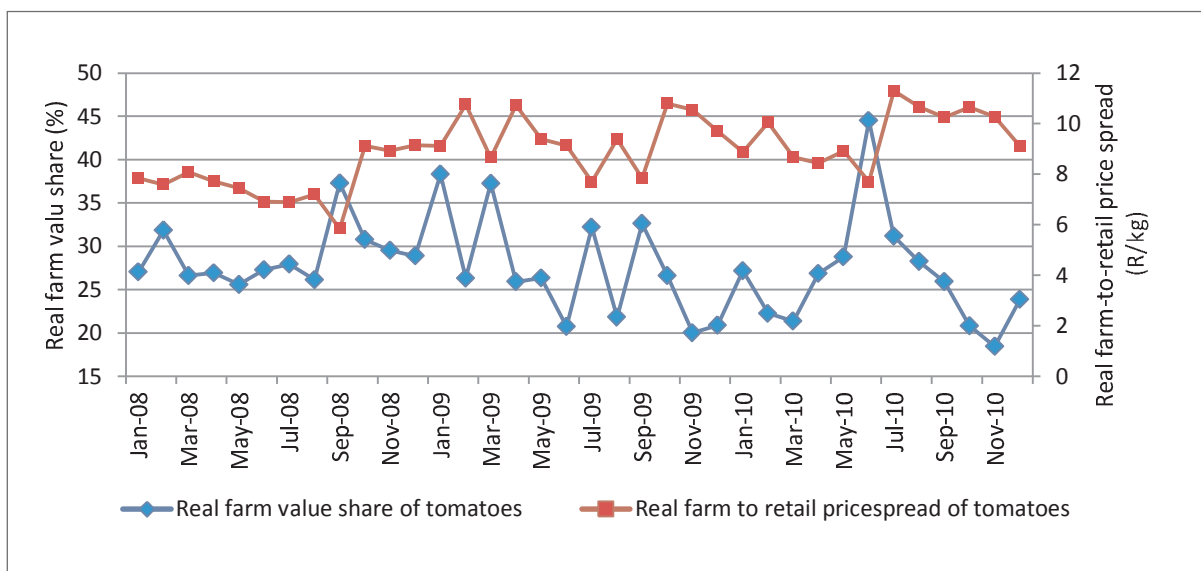


Figure 69: Real farm-to-retail price spread and farm value share of tomatoes
Source: DAFF, 2011; Stats SA, 2011 and own calculations

The real FTRPS and the real farm value share of potatoes are shown in Figure 54. The average real FTRPS of potatoes increased by 4.62 % from 2009 to 2010. The real farm value share of potatoes decreased, on average, by 21.66 % from 2009 to 2010. The highest real farm value share of potatoes of 29.45 % was reached in July 2010.

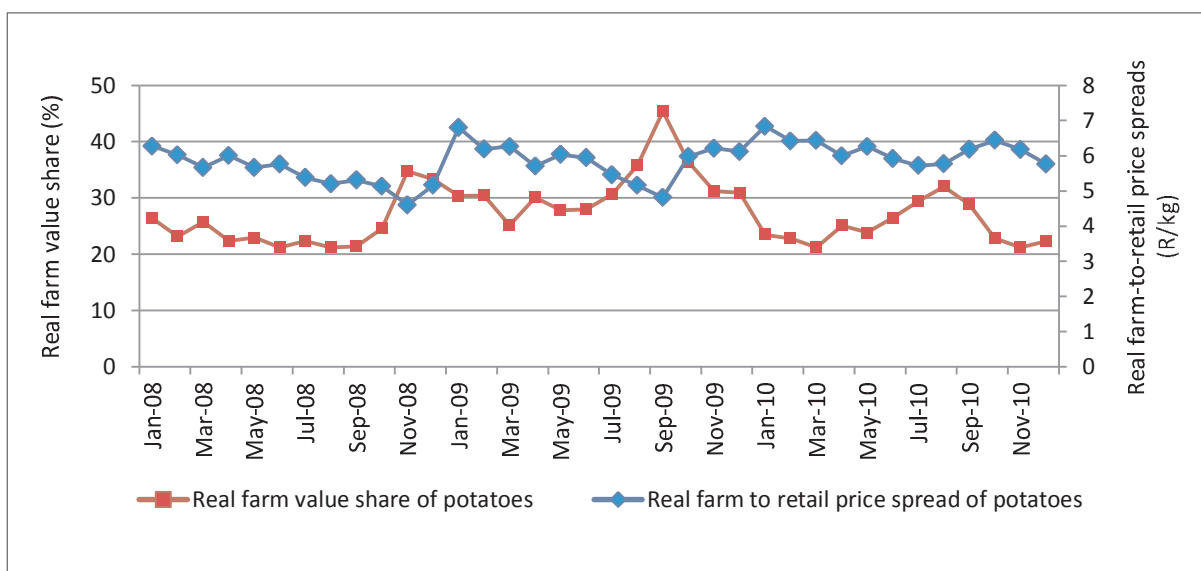


Figure 70: Real farm-to-retail price spread and farm value share of potatoes
Source: DAFF, 2011; Stats SA, 2011 and own calculations

5.7 Sugar

Figure 71 shows the South African sugarcane production trends from 2000/01 to 2009/10. Sugarcane production for 2009/10 season was 18 655 million tons, about 3.12 % (600 000 tons) lower than in the 2008/09 season. The total sugar production was 2 178 million tons, representing a 3.59 % decrease (81 545 tons) on a season-to-season basis. Crop estimates dropped throughout the season as dry conditions took toll on the initial favourable cane delivery expectations. Heavy rains also played a part in many of the cane growing regions at the end of the cutting season, which impeded the harvesting and transport operations. Overall, the declining trend in sugarcane production is concerning.

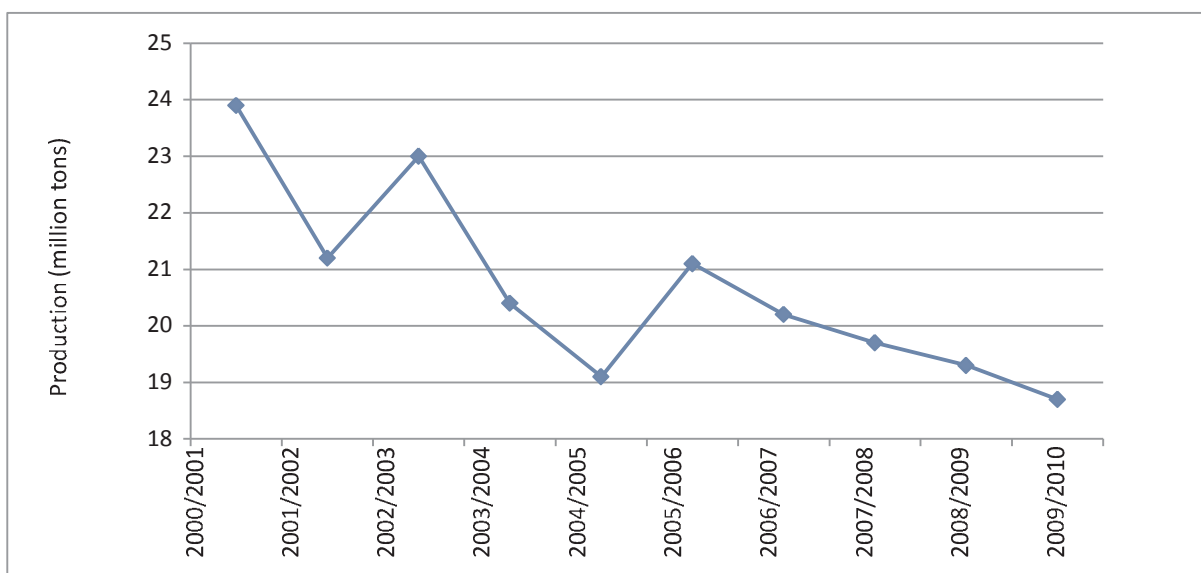


Figure 71: Sugarcane production in South Africa

Source: SASA, 2011

Figure 72 shows the direct, industrial and per capita consumption of sugar from 2000/01 to 2009/10. The direct sales of sugar increased from 822 thousand tons in 2008/09 to 858 thousand tons in 2009/10. The industrial sales of sugar increased from 605 thousand tons in 2008/09 to 628 thousand tons in 2009/10. The per capita consumption of sugar declined from 35.8 % in 2008/09 to 34.5 % in 2009/10.

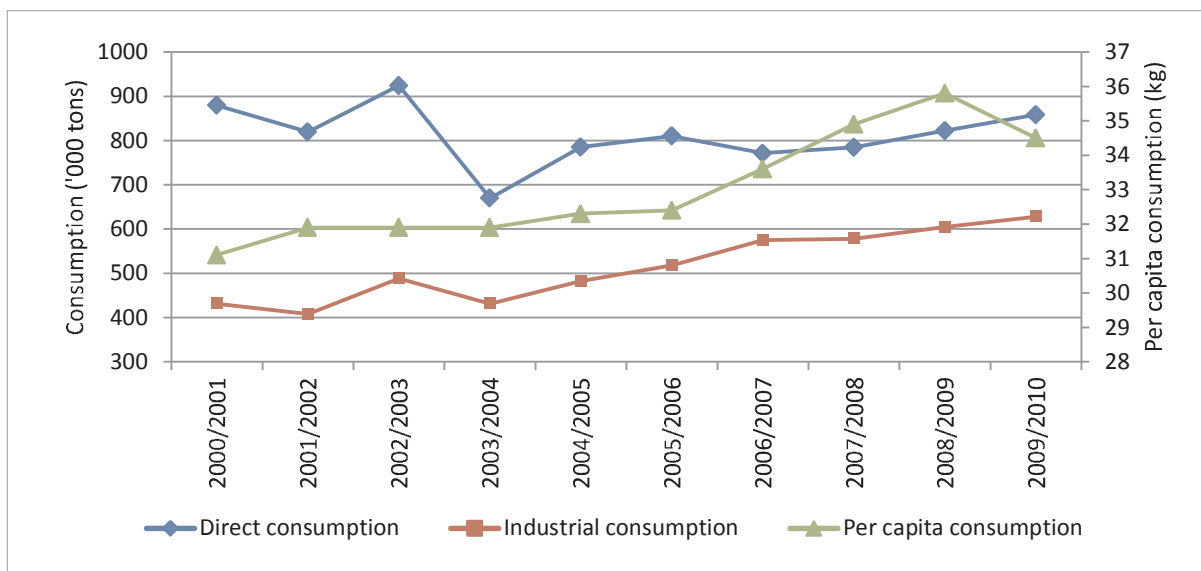


Figure 72: Total sugar consumption in South Africa

Source: SASA, 2011

The Recoverable Value (RV) price increased by 13.6 % from the 2008/09 season, with the final price for the 2009/10 season being R2 284.20/t. The cane price increased from R251.00/t in 2008/09 to R284.15/t in 2009/10, an increase of 13.2 % season-on-season.

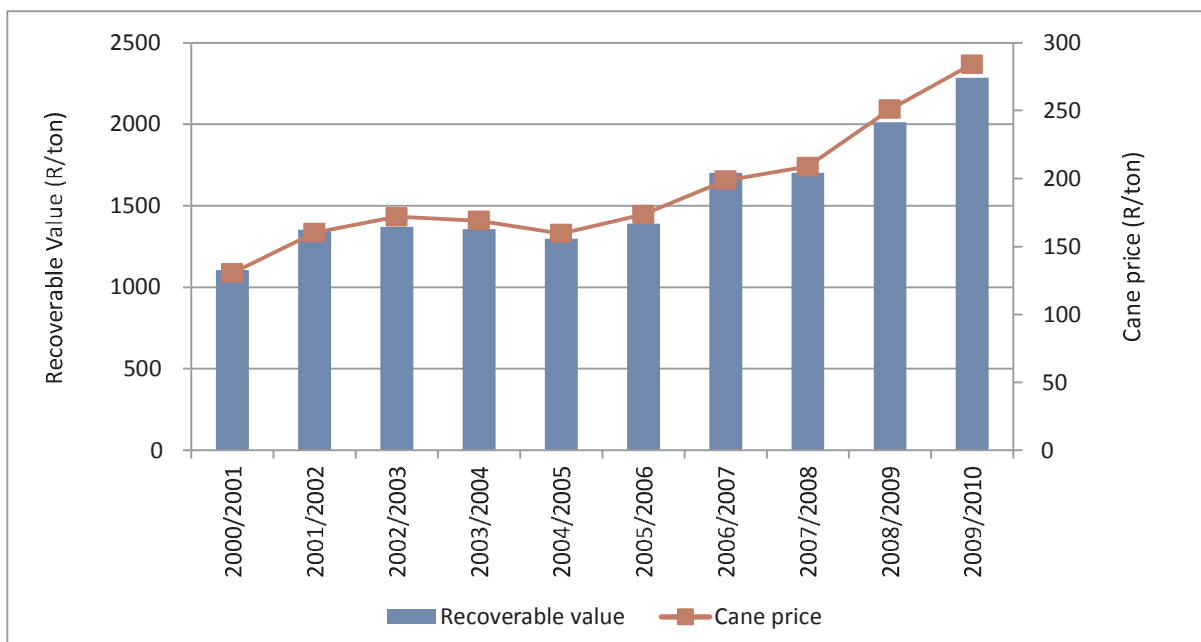


Figure 73: Recoverable value and cane prices

Source: SASA, 2011

The nominal and real retail prices of white sugar are shown in Figure 74. The nominal retail price of white sugar increased by 9.5 % on average between 2009 and 2010. The real retail price of white sugar increased by 5.03 % on average between 2009 and 2010 and peaked at R8.46/kg in May 2010.

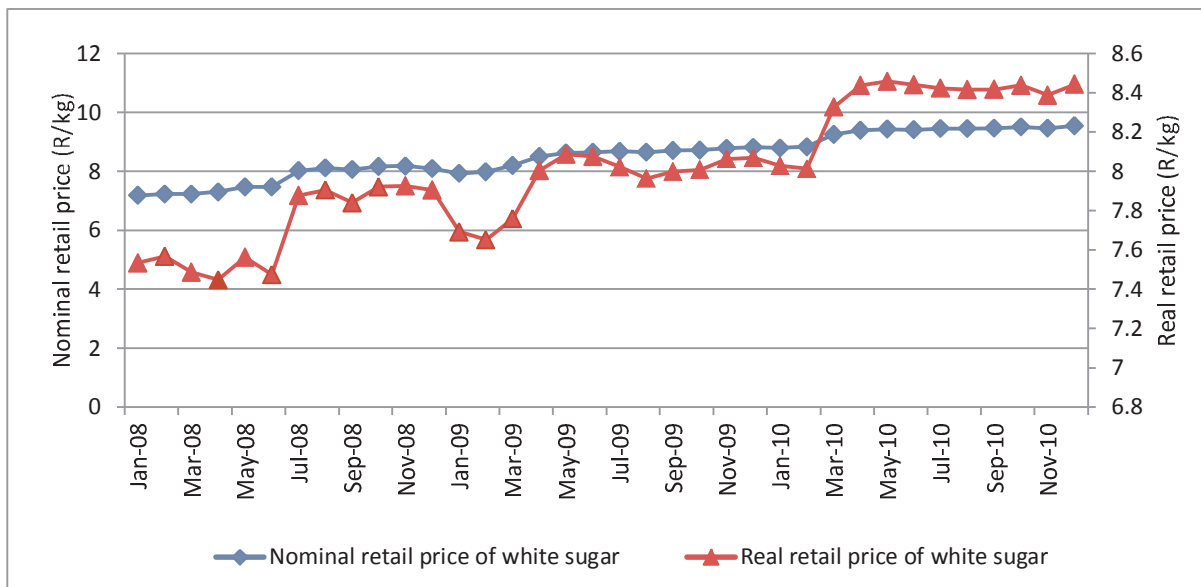


Figure 74: Nominal and real retail prices of white sugar
Source: Stats SA, 2011

5.8 Coffee and Tea

Figure 75 shows the South African retail price and the international price of coffee expressed in Rand and US cents per pound respectively. The international price of Arabica coffee averaged 141.597¢ per pound in 2009 and 194.365¢ per pound in 2010 (37.27 % higher than in 2009). The international price of Robusta coffee averaged 77.128¢ per pound in 2009 and 84.104¢ per pound in 2010 (9.05 % higher than in 2009). Overall, the international price of Arabica coffee is higher than that of Robusta coffee.

The South African retail price of 100 g instant coffee averaged R18.20 in 2009 and R19.57 in 2010 (7.50 % higher than in 2009). The price of 200 g instant coffee averaged R21.69 in 2009 and R22.56 in 2010 (3.98 % higher than in 2009). Finally, the retail price of 750 g instant coffee averaged R48.89 in 2009 and R50.56 in 2010 (3.36 % higher than in 2009).

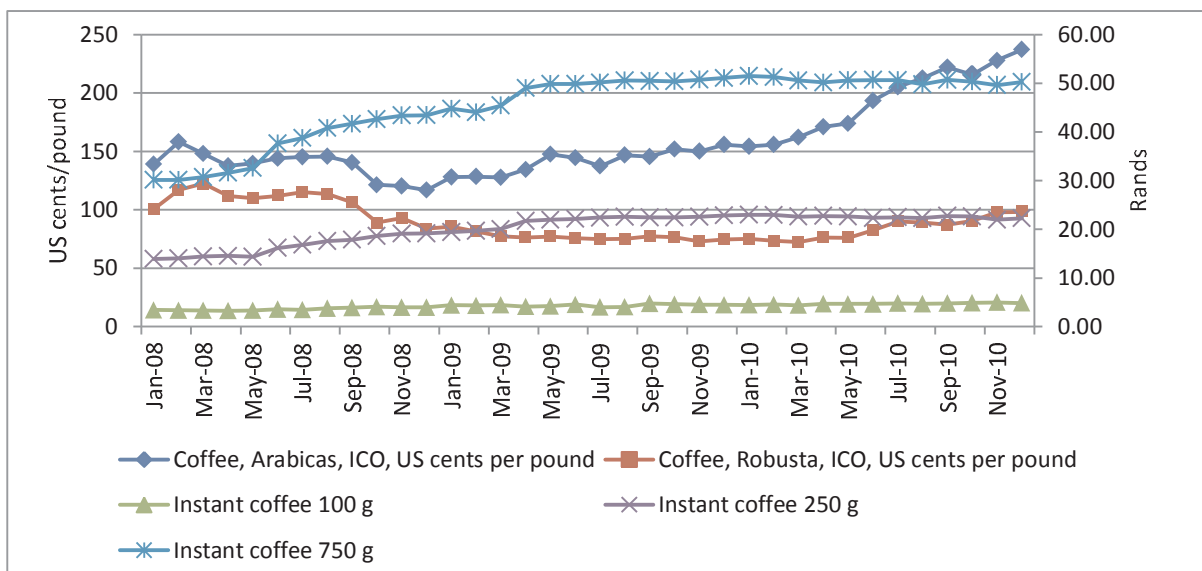


Figure 75: International and South African price of coffee

Source: Stats SA, 2011

Figure 76 shows the international price and South African retail price of tea expressed in US cents per kilogram and Rand respectively. The international price of tea averaged 313.96¢/kg in 2009 and 316.74¢/kg in 2010 (0.089 % higher than in 2009). The retail price of 62.5 g Ceylon tea averaged R6.87 in 2009 and R7.23 in 2010 (5.25 % higher than in 2009). The retail price of 125 g Ceylon tea averaged R15.47 in 2009 and R16.12 in 2010 (4.19 % higher than in 2009).

The average retail price of 250 g Ceylon tea was R17.57 in 2009 and R17.74 in 2010 (1.30 % higher than in 2009), while the average retail price of 500 g Ceylon tea was R32.57 in 2009 and R32.92 in 2010 (1.02 % higher than in 2009).

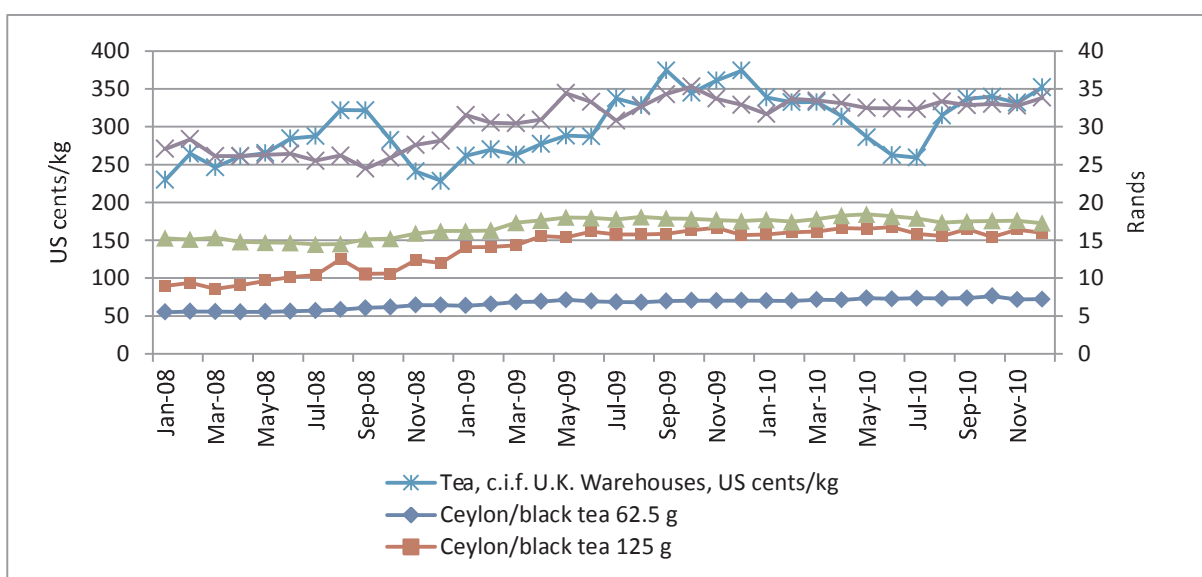


Figure 76: International and South African prices of tea

Source: Stats SA, 2011

5.9 Oilseed Sector

South Africa is a net importer of vegetable oil and high protein meal. The South Africa domestic oilseed market consists of sunflower, soybeans, canola seed, cotton seed and groundnuts. The two main products derived from sunflower seed are sunflower oil (primarily for human consumption) and sunflower oilcake (for the animal feed industry). Full-fat soybean meal, high protein meal (oilcake) and oil are the main products that are produced from soybeans; about 88 % of the domestic production of soybeans is used to produce these products. The remaining 12 % are used to produce products for human consumption (9 %) and other uses (3 %), such as seed for planting purposes. Canola is mainly produced for its oil, cotton for its fibre, and the cottonseed, the by-product of the fibre recovery process, is then processed to cotton oil and cotton meal. Groundnuts are produced for the human edible market, and only a small percentage of the low-quality groundnuts are crushed for groundnut oil and meal (Van Zyl, 2010).

5.9.1 Sunflower Seeds

- Production and Consumption of Sunflower Seeds

Figure 77 shows the area planted, production and consumption of sunflower seeds in South Africa. The area planted varies significantly from year to year. The decision to plant by producers depends on, amongst others, the price of substitute products such as maize, as well as planting conditions. Sunflower seed production is well conditioned for the South African climate, and hence sunflower seed can be produced economically even if planting conditions are not favourable for the planting of other crops. Yields varied from 0.94 to 1.54 tons/ha over the last 10 years. The consumption also showed high variation over the past 10 years. Consumption decreased with 6.6 % from December 2009 (821 300 tons) to December 2010 (767 100 tons).

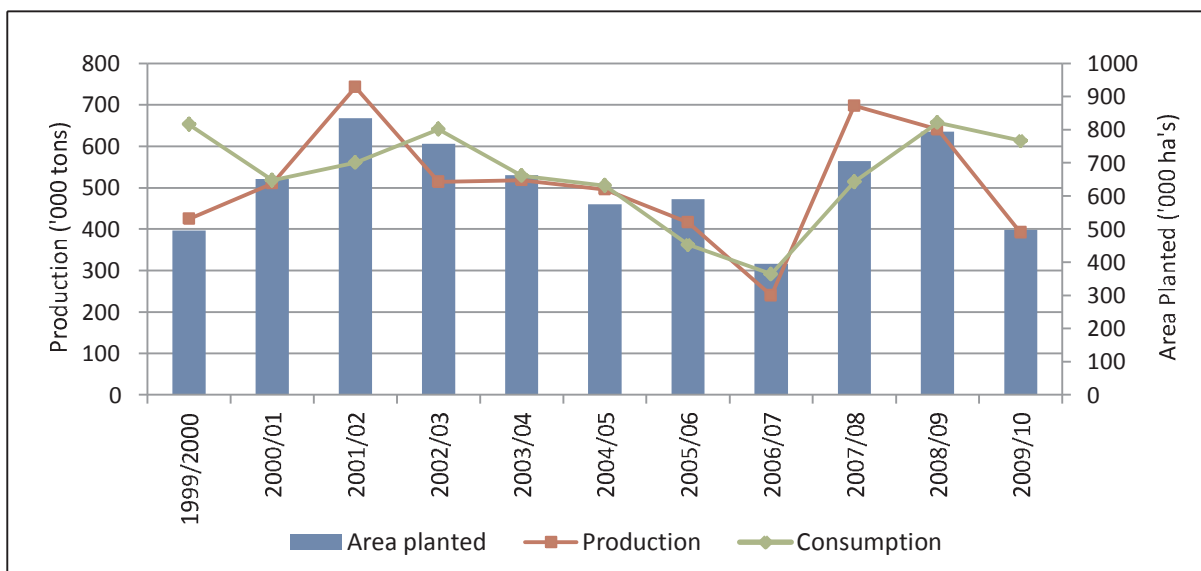


Figure 77: Area planted, production and consumption of sunflower seeds in South Africa

Source: SAGIS, 2011 and own calculations

- Price Trends for Sunflower Seeds

The international price of sunflower seed increased with 53.79 % from December 2009 to December 2010 in U\$ dollar terms. Figure 78 shows the domestic sunflower seed price and the retail price of sunflower oil. The domestic sunflower price increased with 52.92 % from December 2009 (R3 294/ton) to December 2010 (R5 038/ton). The retail price of sunflower (750 ml) increased with 11.46 % from December 2009 (R12.84/750 ml) to December 2010 (R14.49/750 ml).

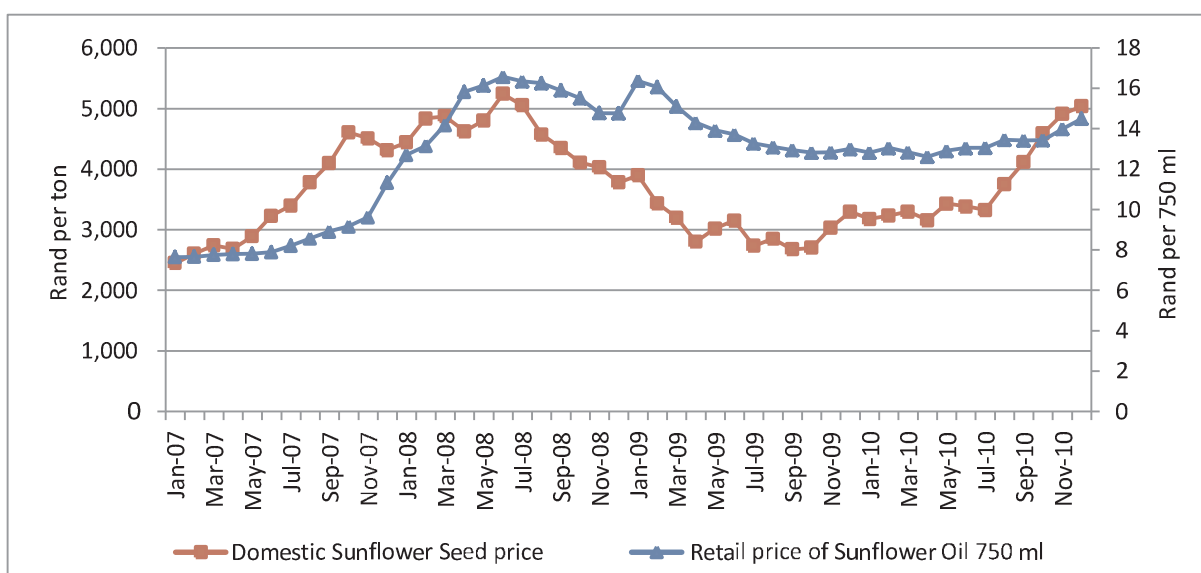


Figure 78: Domestic sunflower seed price and retail price of sunflower oil (750 ml)

Source: SAGIS, 2011; Own calculations, 2011

5.9.2 Soybeans

In 2011 a comprehensive report on the structure, conduct and performance of the soybean industry was published. This report is available on the NAMC website:

<http://www.namc.co.za/dnn/PublishedReports/CommodityProductStudies/PerCategory.aspx>

- Area Planted, Production and Consumption of Soybeans

Figure 79 shows the area planted, production and consumption of soybeans in South Africa. The area planted increased with 23.66 % from 2008/09 (237 000 ha) to 2009/10 (311 500 ha). The average yield for this period was 1.9 t/ha. South Africa's produced 566 000 tons of soybeans in the 2009/10 season, this was 8.83 % higher than in 2008/09. The major soybean production areas in 2009/10 were Mpumalanga (239 250 tons), the Free State (147 250 tons) and KwaZulu-Natal (73 250 tons). Soybean production in these three provinces represented 82 % of total soybean production in South Africa.



Figure 79: Area planted and production of soybeans in South Africa

Source: SAGIS, 2011 and own calculations

The majority of soybeans produced in South Africa are utilized for the production of full-fat soybeans. Members of the Animal Feed Manufacturing Association (AFMA) consumed 164 840 tons of full-fat soybeans in the 2009/10 season, which was 78.26 % higher than in 2008/09 (92 474 tons) (see Figure 80).

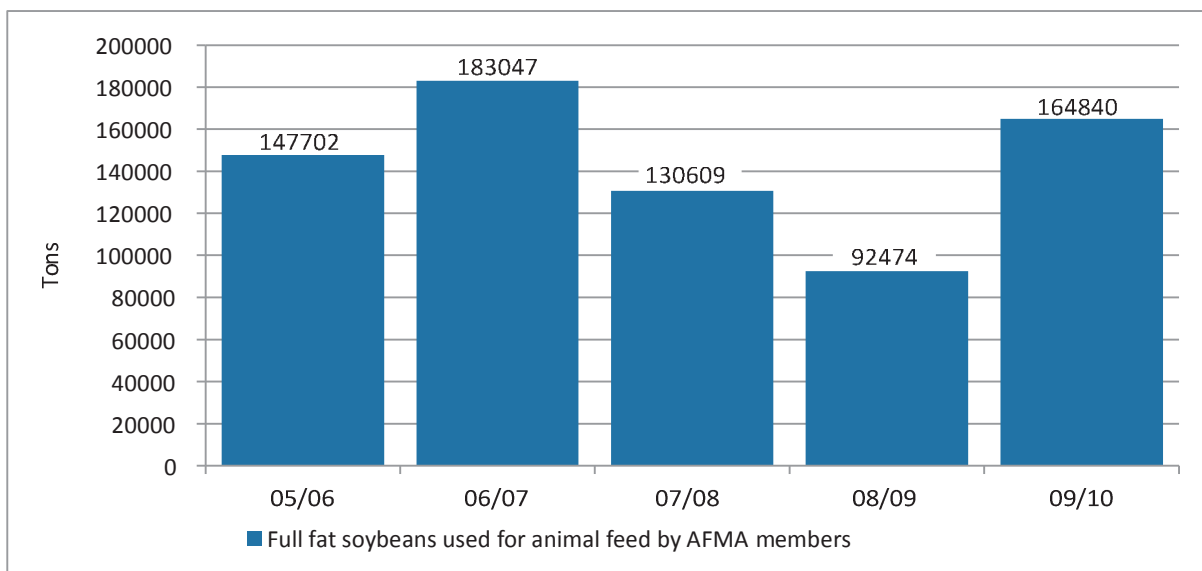


Figure 80: Production of full fat soybeans

Source: AFMA, 2011

Domestic soybean meal production meets only 10 % of the domestic soybean meal demand (on average). The demand for soybean meal is determined by the animal feed industry, especially for feed utilized in the poultry industry. On average 90 % of the soybean meal consumed domestically is imported from Argentina. Soybean meal imports increased with 9 % on an annual basis between 2005 and 2010. Figure 81 shows the utilization of domestically produced soybeans to produce soybean meal and oil. Soybeans processed into oil and high protein meal increased with 39 % from 2009 to 2010.

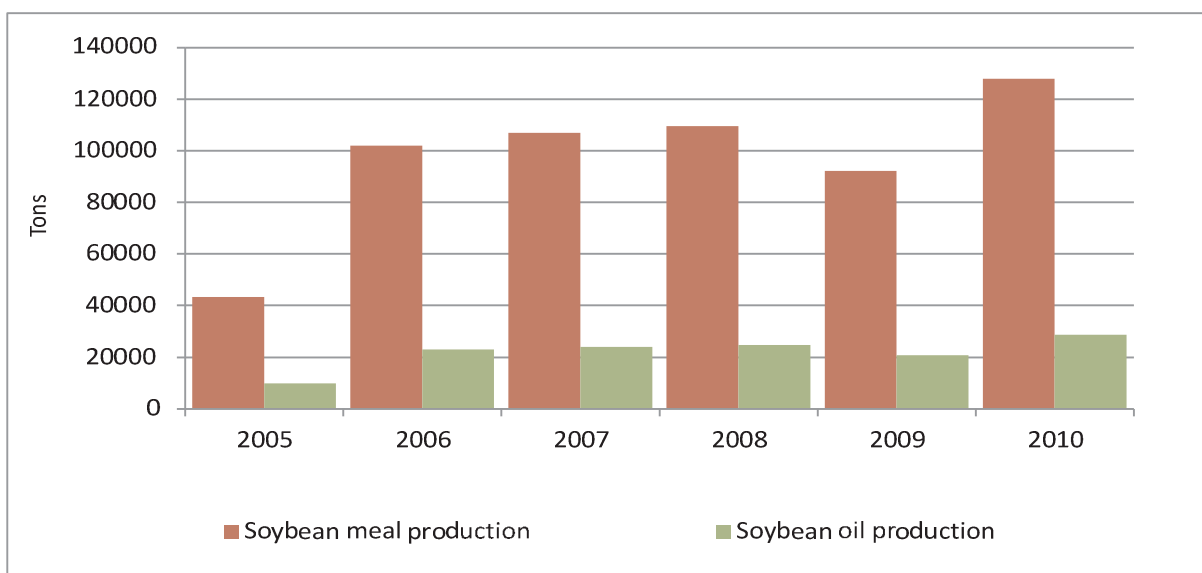


Figure 81: Utilization of domestically produced soybeans to produce soybean meal and oil

Source: SAGIS, 2011

- Price Trends for Soybeans

Figure 82 shows the import, export parity and domestic soybean price. The domestic price increased with 6.2 % from December 2009 (R3 169/ton) to December 2010 (R3 366/ton). The import parity price increased with 10 % and the export parity price with 16 %.

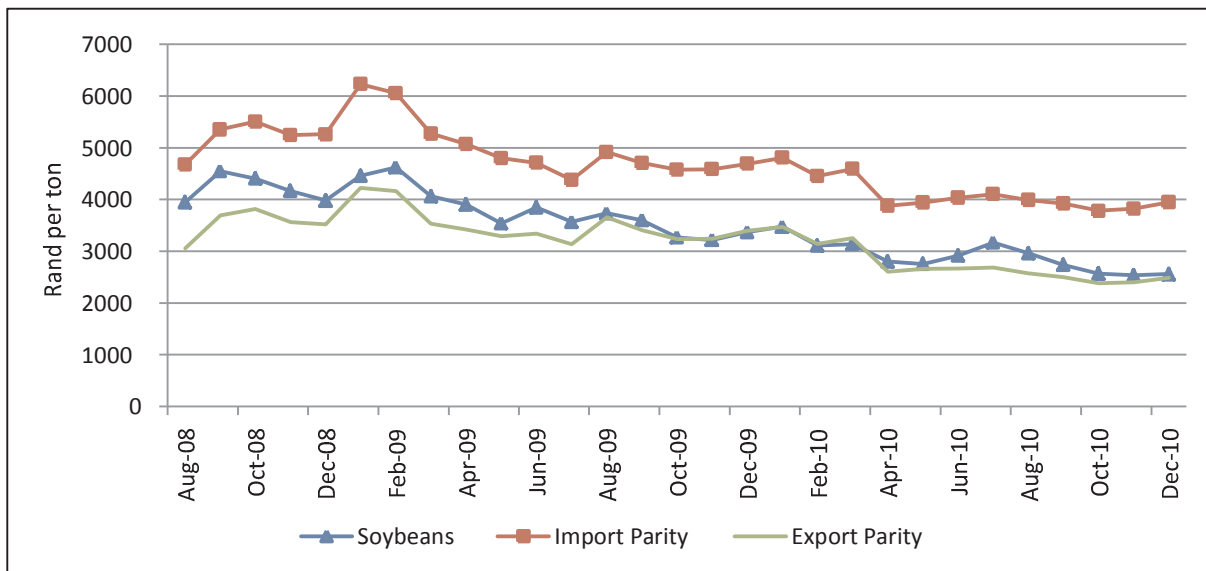


Figure 82: Import parity, export parity and domestic price of soybeans

Source: Grain SA, 2011

6 SELECTED TOPICS

6.1 Introduction

With each publication of the Food Cost Review (FCR) a number of selected topics are discussed. The topics generally fall within the ambit of a country being able to provide access to nutritious food in an affordable manner, but on a sustainable basis. For example, in previous FCR publications issues such as South Africa's agricultural potential, the role of research and development to increase food security and farming sustainability were discussed. In this publication the role of social grants and policies/programmes to shield consumers against high food prices are discussed briefly. The purpose of these special topics is to create increased awareness and stimulate and promote further discussion/research regarding these topics.

6.2 Social Grants in South Africa: Implications and Future Trends

6.2.1 Background

Historically, records trace the social grants as emerging after the establishment of the Union of South Africa (Reddy and Sokomani, 2008; Liebenberg et al., 1998) in 1913, when the Child Protection Act No. 25 was enacted which led to the first programme of social grants (Pauw and Mncube, 2007). This was further extended to an Old Age Pension grant through the establishment of Old Age Pension Act No. 22 of 1928. However, these grants were unequally distributed along racial lines due to the political dispensations of that era (Samson et al., 2006; Reddy and Sokomani, 2008).

The inequality problem was addressed in late 1944 when the Old Age Pension and Blind Schemes were extended to blacks and Indians (Pauw and Mncube, 2007). Further, the disability grants that favoured the whites and coloureds from 1937 were extended to blacks and Indians in 1947. The government has since adopted social assistance policy as a tool to maintain social well-being (White Paper, 1997; ISSA, 2010) and address vulnerabilities such as health, poverty, life productive assets and (Jacobs et al., 2010; National Treasury, 2010) to ensure the welfare and improve the livelihoods of the population.

The democratic government recognises seven official social grants. According to SASSA (2011), these include the State Old Age Pension (SOAP), the Disability Grant (DG), the Child Support Grant (CSG), the Foster Child Grant (FCG), the Care Dependency Grant (CDG), the War Veteran's Grant (WVG) and Grant-In-Aid (GIA). Samson et al. (2006) states that these social grants are financed through tax revenues collected annually by the South African Revenue Services (SARS) from company and individual tax payers; they are paid as cash or deposited to the beneficiaries account on a monthly basis. There is a large portion of the population that depends on social grants. This is supported by Van der Berg and Siebrits (2010), who acknowledge that social grants have increasingly become a common source of income for a large part of the population.

The number of people receiving social grants has been increasing very fast in recent years. According to many scholars (for example, Dlamini, 2010; Makino, 2004; Samson et al., 2006), from 1994 to 1999 grant recipients grew from 2.5 to 3.7 million. In 2001 the recipients were estimated at 3.5 million and in 2003 approximately 7 million received social grants. At the end of 2005, a total of approximately 10.6 million (22 % of the South African population) received social grants (Steele, 2006). Triegaardt (accessed 2011) suggests that over 10 million of the population receive social grants as from 2006. According to Jacobs et al. (2010), in the financial year of 2009/10, there were 13.9 million recipients, and by 2013 the number is estimated to rise to 16 million recipients. Currently, the number of social grant recipients is estimated at 14.6 million (SASSA, 2011). Currently, the social grants fall under the Department of Social Development (formerly known as Department of Welfare), but are administered by South African Social Security Agency (SASSA) (Jacobs et al., 2010; Pauw and Mncube (2007).

Recent years have seen a higher uptake of social grants, particularly the CSG, which greatly affects the increase in spending on social grants (Armstrong and Burger, 2009), and is attributed by many schools of thought (moral precepts, religious rules, tradition and cultural beliefs) to the high rate of teenage pregnancy. This view is strongly condemned by Makiwane and Udjo (2006), who state that the large proportion of CSG recipients are approximately 35 years old, not teenagers. Furthermore, they argue that the trend is increasing simply because the government registration of eligible individuals has improved. The Department for International Development (DFID, 2006) argues that the great challenge for the government lies on maintaining an appropriate balance between economic incentives and greater provision on social protection. Conversely, the increasing rate of unemployment among the population, along with a decline in registration of Companies for Income Tax (CIT) and Trusts, could mean that in the long run the individual taxpayers (i.e. Personal Income Taxpayers) will carry a greater tax portion going towards social grants. The new proposals such as social grant assistance for people with chronic diseases as discussed by the Aids Law Project (ALP, 2010) may further influence the government to increase spending on social protection.

6.2.2 Social Grants Structure and Administration: Globally and Domestically

- Global Overview

In the process of addressing poverty and food insecurity the government in Brazil has designed Bolsa Familia, a social security system that emerged in 2003 through the amalgamation of Bolsa Escola and the CCT scheme (Jacobs et al., 2010; Van der berg and Siebrits, 2010), that served approximately 46 million individuals in 2007. This social welfare programme provides social assistance in four categories; (i) education scholarships for children, (ii) food to eradicate hunger, (ii) energy and gas for cooking, and (iv) health nutrition grants for pregnant women and children aged between 6-15 (Jacobs et al., 2010; Pauw and Mncube, 2007). At the beginning (in 2003), the overall expenditure was slightly more than US\$ 1.1 billion and mounted to US\$ 4.1 billion in 2007. Samson et al. (2007) found that in Brazil, 42 % of social pensions is spent on food purchases.

The Procampo is a Mexican social safety net that was introduced in 1994, to protect farmers from free trade. In 1997, the government of Mexico introduced Progresas as a means of poverty alleviation in its social welfare system. The main objective for this social grant was to target education, health and nutrition. However, Progresas was found to be gender-biased against women and the government introduced social policy reforms which led to Oportunidades, launched in 2002 (Jacobs et al., 2010; Van der Berg and Siebrits, 2010; Holmes and Slater, 2007; ODI, 2009). The poor household beneficiaries were found to increase expenditure on food more than non-beneficiaries (Jacobs et al., 2010). The budget allocated for Oportunidades was more than US\$3.2 billion in 2005, covering 25 million beneficiaries. The results have been a 41.5 % increased enrolment for education, increased public health by 35 % and improvement in student's ability to do mathematics, reading and writing (Instituto Nacional de Salud Publica, accessed 2011; Prado et al., accessed 2011).

In the EU, social grants are extended for job-seekers and the unemployed (ISSA, 2006), whereas in South Africa the social security system does not make provisions for the unemployed, self employed and those employed (in the informal sector) and in the labour force who are not benefitting from Unemployment Insurance Fund Triegaardt (accessed 2011). In the pilot cash transfer programme of Zambia and Namibia, 29 % of the money was spent by the government on agriculture activities such as small stock and poultry enterprise (DFID, 2006). Therefore, the nature of social grants differs from one country to the other, depending on population's needs and vulnerabilities (health, poverty and risks).

- South Africa

The social grants are aimed at poverty alleviation and improving the standard of living and social dignity of the population (White Paper, 1997; Booysen, 2004; EPRI and DSD, 2004). When social grants are received by individuals who live in the same house, they become a household grant that can effectively contribute to poverty alleviation (Makino, 2004). Samson et al. (2007) and SARPN (2004) mention that social grants reduced the poverty gap by 47 %, provide access to primary education and health care, and help beneficiaries to partially deal with unexpected events such as death, orphanage, widowhood and sickness. Social grants also play a crucial role in facilitating access to food, hence Samson et al. (2007) mention that a large proportion of social grants is spent on food. Slater and McCord (2009) argues that the provision of social grants reduces food consumption constraints, prevents and minimises the risk of households selling their productive assets.

6.2.3 Trends in Social Grants and Tax Payments

The SARPN (2004) mentions that between 1994 and 2003, the expenditure on social grants increased from R10 billion to R34.8 billion. The EPRI (2006) gives the following trend; In 2000/01, spending amounted to R18 billion (approximately US\$3 billion), which represented 2.0 % of GDP. Total spending in the fiscal year 2004/05 amounted to R41 billion (approximately US\$7 billion). This represented 10.2 % of total government spending, and 3.1 % of GDP. According to the SPII (2008) and the National Treasury (2011), R61 billion was spent on social grants in the 2006/07, increasing to more than R67 billion in 2007/08 and approximately more than R76 billion in 2008/09.

Jacobs et al. (2010) mention that at the end of the 2009/10 fiscal period more than R80 billion from the national budget was spent on social grants, at an administrative cost in excess of R5 billion. The National Treasury (2011) projected the social grant budget for 2010/11 at R95 billion and above R104 billion for 2011/12. It is estimated that the budget could increase up to R113 billion in 2012/13.

The total number of grant recipients has increased to approximately 14 million recipients by 2008/09 (National Treasury, 2011 SASSA, 2011). Table 28 shows that the largest portion of the budget goes to the OAG, followed by the CSG, due to the large number of beneficiaries in these grant types. However, the CSG trend shows that by 2012/13 the expenditure will be only slightly less than that of the OAG; this can be attributed to the high rate of increase in the number of CSG beneficiaries and a slower rate of increase in the number of OAGs due to declining life expectancy.

Table 28: Social grant expenditure by grant type

Grant type	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
OAG	21 222	22 801	25 934	29 991	34 058	37 521	39 973
WVG	25	22	20	18	15	13	12
DG	14 261	15 280	16 474	16 853	17 379	18 012	19 432
FCG	2 851	3 414	3 934	4 362	5 232	6 159	6 704
CDG	1 006	1 132	1 292	1 356	1 580	1 799	1 898
CSG	17 559	19 625	22 348	27 273	30 860	34 830	38 513
GIA	67	87	90	95	102	108	115
SRD	41	106	623	132	143	151	160
Total expenditure (million R)	57 032	62 467	70 715	80 080	89 368	98 594	106 808
Total budget (billion R)	61	67	76	85	95	104	113
Total recipients (million people)	11	12	13	13	14	15	16

Source: National Treasury and SASSA, 2011

As mentioned earlier social grants are financed through government revenue of which the largest portion is raised through several forms of taxes. It is therefore important to also consider this important source of income for government in terms of its ability to sustain the current trend in social grant expenditure.

Table 29 shows the different sources of taxes between 2004/05 and 2009/10. This includes Personal Income Tax (PIT), Company Income Tax (CIT), Trust, Pay-As-You-Earn (PAYE), Value Added Tax (VAT), Skills Development Levy (SDL) and Unemployment Insurance Fund (UIF).

According to Table 29, the number of individual taxpayers rose from 4.1 million in 2004/05 to 5.9 million in 2009/10. The growth in the number of individual tax payers has showed a declining trend since 2004/05. The number of companies registered for income tax increased from just of 900 000 in 2004/05 to nearly 1.9 million in 2009/10. For the other registered tax entities numbers remained more or less stable. From data presented in Table 29 one could postulate that the growth in the number of entities paying taxes have slowed significantly.

Table 29: Registered taxpayers and percentage year-on-year growth

Year	Individuals ¹ (PIT)	Companies (CIT) ¹	Trusts ¹	PAYE ¹	VAT ¹	SDL ²	UIF ²
2004/05	4 115 293	933 136	318 967	302 880	578 138	N/A	N/A
2005/06	4 476 261	1 054 969	344 882	330 194	633 703	N/A	N/A
2006/07	4 764 105	1 218 905	374 411	349 077	677 153	168 933	379 646
2007/08	5 204 805	1 584 002	384 747	379 675	745 487	168 646	380 218
2008/09	5 540 646	1 834 009	392 260	393 974	737 885	168 997	390 388
2009/10	5 920 612	1 878 856	331 954	395 575	685 523	174 165	392 398
Percentage year-on-year growth							
2004/05	9.0 %	14.2 %	12.4 %	10.2 %	7.8 %		
2005/06	8.8 %	13.1 %	8.1 %	9.0 %	9.6 %		
2006/07	6.4 %	15.5 %	8.6 %	5.7 %	6.9 %		
2007/08	9.3 %	30.0 %	2.8 %	8.8 %	10.1 %	-0.2 %	0.2 %
2008/09	6.5 %	15.8 %	2.0 %	3.8 %	-1.0 %	0.2 %	2.7 %
2009/10	6.9 %	2.4 %	-15.4 %	0.4 %	-7.1 %	3.1 %	0.5 %

Source: National Treasury and SARS, 2010

According to the National Treasury and SARS (2010), the PIT, CIT and VAT are the core of tax revenue, and account for around 80 % of the total tax revenue, whereas the fuel levy, and excise and customs duties account for approximately 11 %, and the remainder accounts for 9 %. Figure 83 shows the tax income from individuals and companies between 2004/05 and 2009/10. The tax income from individuals increased substantially, as did tax income from companies, but in the case of the latter tax income declined substantially in 2009/10.



Figure 83: Taxes on income and profit - PIT and CIT

Source: National Treasury and SARS, 2010

Notes: 1 - Excludes cases where status is in suspense, estate and address unknown
2 - Skills Development Levy (SDL) and Unemployment Insurance Fund (UIF) contributions. Data prior to 2006/07 not available

Figure 84 shows the main sources of tax revenue as percentage of Gross Domestic Product (GDP). Individual income tax as percentage of GDP shows an increasing trend, but in the case of company income tax and VAT the opposite trend emerged in recent years.

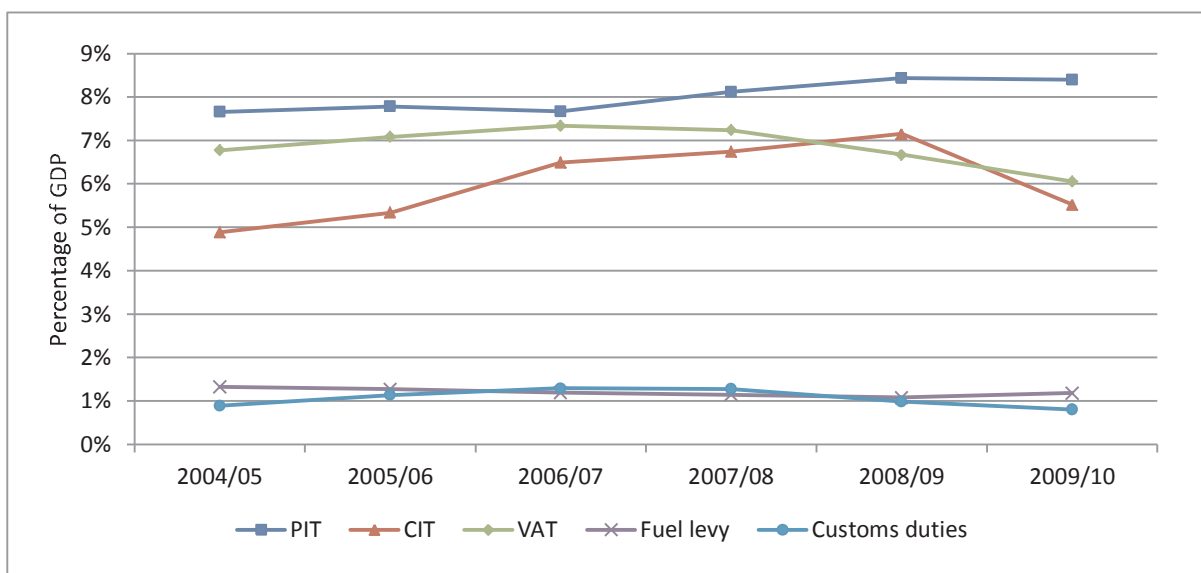


Figure 84: Main sources of tax revenue as percentage of GDP

Source: National Treasury and SARS, 2010

The trends discussed above does not bode well if one considers the envisaged growth in additional social grant payments. If the number of tax paying entities do not increase, the trends above suggest that taxes could be increased to sustain government payments on social grants. It is therefore no surprise that increased employment is one of government's main priorities.

6.2.4 Social Grants: Controversy and Challenges

As indicated in Table 26 the SASSA provided access to social grants for approximately 14 million people in 2009/10. The question is, however, whether or not social grants are enough to meet the needs of individual households. Steele (2006) argues that attaching the means test as a prerequisite to access social grant, creates a poverty trap that reduces motivation to earn wages or save money. This is supported by National Treasury (2011), stating that social grants do not address the impact of income inequalities and creates no opportunities for the beneficiaries to participate in the economy. Hence, Van der Berg and Siebrits (2010) further argue that social grants are not designed as livelihood interventions that take people out of the poverty trap.

The direct and indirect cost of disbursing social grants are significant. In rural communities, banks are largely absent. This challenge increases the cost of social grant administration and the cost of tightening security in order to prevent hijacking of social grant cash in transit. Furthermore, the poor and inadequate road infrastructure in rural areas forces the grant recipients to walk long distances to

centres where social grant are paid as cash. This practice of collecting social grants as cash from far away places poses a risk to those who have weak health, as well as a high probability of being robbed.

It is estimated that an amount of approximately R1 billion is lost through corruption every year. The Department of Social Development (DSD) (2009) stated that, by September 2008, it had removed 333 233 illegal grant recipients from the system, amounting to over R1 billion. Progress in this regard is however made. The DSD ensured that 21 189 irregular private beneficiaries and public servants repay illegally obtained grants worth R114 374 million. Furthermore, according to SASSA (2010), 8 383 persons signed acknowledgment of debt as agreement to repay the grant money fraudulently received, with the total value of R51.22 million. Table 30 explores some of the advantages and disadvantages of social grants.

Table 30: The advantages and disadvantages of social grants

Advantages	Disadvantages
<ul style="list-style-type: none"> • They can help to address food insecurity, hunger and poverty. • Provide an additional shield to consumers against emergencies that could lead to short term food insecurity and hunger. • Since the majority of South African population purchase food, social grants can partly offset the cost of food. • It can be used to partially finance education and access to health care. 	<ul style="list-style-type: none"> • Help to encourage dependency upon government. • Discourage help from family and friends. • Social grants can create longer unemployment lines. • Discourage independence and self-actualisation. • In cases where these social grants are received as cash, some recipients can use the money for other things not intended for the purpose of the grants. • There are few incentives to get out of the scheme. • It encourages corruption at the expense of tax payers.

6.3 Policy Measures/Programmes to Shield Consumers Against High Food Prices

Haggblade and Hazell (2010) argue that investing in agriculture is the best tool of shielding consumers against high food prices. The FAO (2009) emphasizes the importance of incentive for agricultural productivity and policies that promote agricultural investment and self-reliance in order to reduce dependency from other countries for food.

Several policy measures have been used by countries across the globe in an effort to mitigate the impact of high food prices. These include amongst others food price controls, reduced tariffs, other taxes on foodstuffs and implemented export taxes and bans⁴. Von Braun et al. (2008) argue that some of these policy measures can lead to greater commodity price volatility and bring about trade imbalances.

⁴See the following publication for more details: World Bank (2008). Rising food prices: Policy options and World Bank response, available online at http://siteresources.worldbank.org/NEWS/Resources/risingfoodprices_backgroundnote_apr08.pdf

Besides the policy measures mentioned above, various governments have been using or have introduced food programmes such as food stamps/aid, promotion of food reserves, school nutrition systems, social grants and subsidies to shield consumers against high food prices and to incentivise production. In this section some of these policy measures/programmes are explored further.

6.3.1 Food Aid

Food aid programmes emerged around the 1950s and were defined as commodity aid, disposing surplus produce to poor countries as a result of overproduction in the agricultural sector of the donor country (Maunder, 2006; Rupiya, 2004). According to the Overseas Development Institute (ODI) (2000), food aid refers to “commodity aid that is used either to support food assistance actions or to fund development more generally, by providing balance-of-payments support in substituting for commercial imports, or budgetary support through the counterpart funds generated from sales revenue”. The core reason for food aid is to improve the food security of poor households when disrupted by both natural and/or manmade disasters in the short and long term (Mabuza, 2007). Rupiya (2004) argues that the mitigation of food deficits and food insecurity has been prevented through food aid, particularly on the African continent.

6.3.1.1 Food Aid Categories and Recipients

According to Maunder (2006), the WFP (2009) and Heri and Häberli (2009) there are three broad categories of food aid. These categories are highlighted in Table 31. The food aid categories serve dual purposes, firstly, to beat hunger and cushion vulnerable populations from inevitable shocks, and secondly, to respond to emergencies, so that disasters like hurricanes, droughts and earthquakes do not turn into humanitarian tragedies (WFP, 2010).

Table 31: Categories of food aid

Programme	“Foreign aid that involves transfer in a form of commodity, from one government to the other with the purpose of generating sale in local market”.
Project	“Allocated to various stakeholders such as governments, multi-laterals and NGOs for development purposes. The distribution of project aid, further goes on to include Food for Work (FFW) and School Feeding Programmes (SFP). Some of this aid may be sold or monetized”.
Emergency	“This food aid is provided specifically in response to disasters including droughts, floods, earthquakes and civil strife, to provide short term relief and supply immediate food requirements”.

Figure 85 shows that from 1988 to 1996, world food aid was dominated by programme food aid; this aid reduced significantly from 1993 to 1997. It increased significantly in 1999, but since then showed a declining trend and is currently least preferred method of food aid. Project food aid has also been showing a declining trend since 2001. Since the late 1990’s emergency food aid had emerged as the predominant measure to provide food aid. One can postulate that this is due to the higher prevalence of disasters such as droughts, earthquakes, tsunamis and other disasters manmade disasters, such a

civil strife, but also due to the more market distorting effects of the other two categories of food aid. For example, Clay (2006) argues that food aid is seen as a threat to advance the progress in the World Trade Organization (WTO) agricultural negotiations (Clay, 2006). Others such as The Share the World's Resources (STWR) (2009) argue that heavy reliance on food aid and cheap imported goods creates unfair competitive conditions in markets for local farmers, often leading to land displacement, a loss of income and the destruction of local economies.

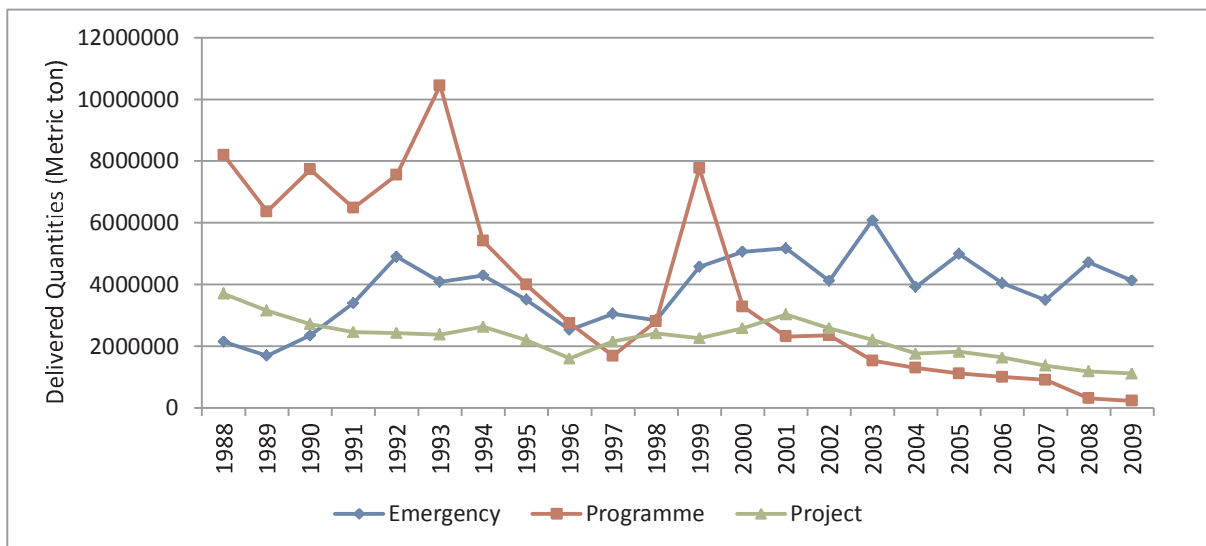


Figure 85: Trends of food aid

Source: WFP, 2010

In 2009, global food aid deliveries went to 89 countries (41 were in sub-Saharan Africa, 16 in Asia, 13 in Latin America and the Caribbean, 11 in the Middle East and North Africa and 8 in Eastern Europe and the CIS (WFP, 2009). The top five recipient countries of food aid included Ethiopia, Sudan, Somalia, Zimbabwe and Afghanistan, receiving a total of 2.6 million tons of emergency food aid and representing 54 % of the total delivered (Harvey et al., 2010). Table 32 highlights some of the advantages and disadvantages of food aid programmes.

Table 32: Advantages and disadvantages of food aid programmes

Advantages	Disadvantages
<ul style="list-style-type: none"> It can ensure food security even in the event of drought, tsunamis and earthquakes or other manmade events. It can provide an importance food security safety net. It can encourage local investment in agriculture by the recipient countries, depending on the type and mechanism of delivering food aid. 	<ul style="list-style-type: none"> It can create unfair competitive conditions in markets for local farmers. The food aid donors run the risk of overriding the decisions of responsible individuals managing the disaster, conflict and food provision for social protection and development in the local governments of recipient countries.

6.3.1.2 Food Aid in the Future

According to Von Braun (2008), globalization, climate change, civil strife, inequality and weak governance have had a great impact on the current global food system. The WFP (2010) argues that these factors have increased the vulnerability of poor households to poverty and severe hunger. As these new drivers continue to influence the way the global food system evolve, for many governments, food aid will become a more important instrument to shield consumers against high food prices and bridge the balance against shortages. However, the ability to provide food aid could be hampered in the long run as some of the donor countries, such as the US that divert land away from food production for bio-fuel production.

6.3.2 Food Stamps

The Food Stamp Program (FSP) is regarded as the largest and most comprehensive nutritional programme in the US. This programme was established around the early 1960s with the purpose to help low-income families and individuals to purchase a nutritionally adequate diet. The entire FSP is funded by the government and, it allows eligible recipients to purchase nutritious foods in authorised retail food stores. The programme operates by an electronic debit card used in grocery stores only to buy food. This electronic system has advantage of reducing both fraud and stigma (Center for Civil Justice, 2005).

This programme can be viewed as a defense mechanism system against hunger which also assures the ability to acquire acceptable foods in socially acceptable ways (without resorting to emergency food supply, scavenging, stealing, or other coping strategies). The FSP has an important benefit for primary producers in that each \$1 billion of food stamps generates \$340 million in farm production and 3 300 farm jobs. Each \$5 of food stamps spent generates almost \$10 in total economic activity (Hernandez, 2006).

The FSP can be received by all low income Americans regardless of age and household type. However, certain prerequisites are attached to the programme for eligible households. These include: a household must be both income and asset-poor (in addition to meeting citizenship and work requirements). For most households, this means gross income levels of less than 130 % of the poverty line and assets below \$2 000. The amount of food stamp benefits a household receives declines as household income rises (Winicki et al., 2002). Table 33 shows some of the advantages and disadvantages of the FSP.

Table 33: Advantages and disadvantages of the FSP

Advantages	Disadvantages
<ul style="list-style-type: none"> · Can supplement food shortage. · Ensures enough food to meet individual's needs until their next pay. · The administration of the program through electronic transfer has the potential to reduce fraud. · Allows beneficiaries to buy various kinds of food ranging from cereal, dairy product, fruit and vegetables. · Creates jobs, increase income and stimulates the domestic economy. · It an effective tool to address household food security. 	<ul style="list-style-type: none"> · Only those vendors who have signed up with the government to receive and process food stamps will accept stamps as payment. This favours certain kinds of vendors over others. · To receive food stamps, the recipient must be assessed for eligibility purposes. For many, telling sensitive personal information to a stranger can constitute an embarrassing invasion of privacy. · In certain areas, receiving food stamps carries with it a social stigma. · Receiving food stamps, and the fact that individuals must meet certain criteria to qualify, could provide a disincentive to seek work or additional work. · Lack of information on how to access the program. · Lengthy administration and application procedures.

Source: Wolfe, 2011 and own calculations

6.3.3 Food Reserves

The primary purpose of grain reserves is to help cope with food emergencies, but grain reserves are also used to stabilize grain prices and as a loan commodity. Food reserves have a long history of serving as a way to respond to short-term supply (Institute for Agriculture and Trade Policy, 2010). The new drivers of the world food situation, such as climate change, high price volatility, globalization, growing uncertainty in imports to reduce hunger by developing countries and a weak economies (Von Braun, 2007), have led to renewed attention to food reserves as an alternative tool for fighting poverty and hunger and improve food security (IATP, 2010).

Food reserves as part of food security strategy, may provide several benefits, which include enhanced trade, stabilization of production, better strategies to cope with climate change, creation of bigger markets, cheaper and more guaranteed sources of food both in times of shortages and decline in world stocks (SADC, 2007; IATP, 2010). Further, they can improve both access and distribution of food, reduce dependency on donor countries for food aid, reduce heavy dependence on imports, and reduce excessive price volatility for consumers and farmers.

Governments however need to take into account the financial implications in terms of cost involved in building up food reserves and actions with regard to export and price controls, distortions in domestic markets, cross-border import barriers, quality harmonization and phyto-sanitary standards for food commodities (SADC, 2007).

In addition, although food reserves could be an important component of a food security strategy, it does not necessary guarantee direct access to food for households, since they may be designed to address national and regional food security concerns. Table 34 shows some the advantages and disadvantages of food reserves.

Table 34: The food reserves' advantages and disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> · Enhance disaster preparedness and food security through collective food stockholding programs. · Stabilize the supply of, for example, important staple foods. · More stable food prices. · Harmonised trade policies. · Provide addition means to deal with food emergencies. · Avoid sharp increases in food retail prices to consumer in periods of shortages by releasing grain from the reserve. 	<ul style="list-style-type: none"> · Government intervention depresses participation by private traders in markets. · It could create instability if poorly wrongly managed · Inefficient and costly, especially when managed by government agencies. · It may results in unequal access to stocks. · Stocks are kept over long periods when not really necessary, which can be costly and market distorting. · Externalities, such as lack of infrastructure, could result in failing to achieve intended objectives of a Food Reserve as great costs.

6.3.4 Food Banks

Riches (1986) defined a Food Bank (FB) as a centralized warehouse or clearing house registered as a non-profit organization for the purpose of collecting, storing and distributing food (donated/shared), free of charge, to front-line agencies which provide supplementary food and meals to the hungry. The FB procures food (and essential non-food groceries) usually from donors such as producers, manufacturers, retailers, government agencies, supermarkets, services clubs, individuals and other organizations (Riches, 1986; FBSA, 2011). Further, it operates as voluntary/charitable and non-profit registered charities having their roots in the church and non-government organization (NGO) sector (Riches, 1986).

Fbs intend to make food that would otherwise be dumped available to organizations which can put it to good use. FBs act in a coordinating role or fulfil a clearing-house function, and are not directly involved in feeding of the hungry (FBSA, 2011), i.e. FBs issue food to food aid agencies. These are essentially the numerous organizations in the community which provide food to the needy. Agencies include orphanages, crèches, old age homes, shelters, soup kitchens and HIV/AIDS clinics (FBSA, 2011). However, it should be noted that FBs are there as a supplement, not as a long term, direct feeding programme (Riches, 1986). Table 35 shows some of the advantages and disadvantages of a FB.

Table 35: Advantages and disadvantages of Food Bank programmes

Advantages	Disadvantages
<ul style="list-style-type: none"> · Is can supplement food shortages. · They focus on the needy through agencies and community networks. · Low procurement costs. · Reduce waste and provide access to food. · Provide the vehicle to distribute food for those that have excess supply or want to dispose of food that are still suitable for human consumption, but do not have the means to access the needy. 	<ul style="list-style-type: none"> · The administration of a FB involves many people and agencies. · Storage and handling costs can be high. · FBs do not necessarily address the daily or weekly food needs of individuals.

In South Africa, the Global Food Banking Network initiative resulted in four community food banks being established. According to GFN (2010), one major goals of the FB system is that by the end of 2011, 20 community FBs in urban and rural areas of South Africa shall be established to distribute food for 100 million meals.

6.3.5 School Nutrition System

Harvey et al. (2010) define school feeding as “a set of interventions supporting both medium term nutritional and long-term education objectives that are being implemented with food as the primary resource”. According to the Public Service Commission (PSC, 2008), the Department of Basic Education (DBE, 2009) and Harvey et al. (2010), this programme is aimed at improving the nutritional status of students/learners and improving education (i.e. to increase enrolment, attendance, enhance cognitive development and improve academic performance). The PSC (2008) and Wildeman and Mbebetho (2005) state that, in South Africa, the school nutrition system emerged in 1994 when the democratic government established the Primary School Nutrition Programme (PSNP). After an intensive review, this programme was later changed to the National School Nutrition Programme (NSNP).

The NSNP uses a quintile system of ranking and funding schools considering the inequalities and poverty line of learners. The quintile 1 and 2 which represent the poorest schools tends to receive more funding (DBE, 2010). In 2007/08, the NSNP provided daily nutritious meals for approximately 6 million learners, in 2008/09 for 6.2 million, and the number increased to 7.1 million learners in 2009/10 (DBE, 2010; DBE, 2009).

The PSC (2008) found an improvement in the learning capacity of learners, better academic performance and reduction of drop outs. The DBE (2009) and PSC (2008) state that an improvement in cooking, storage facilities, record-keeping, variety of menus, eating utensils and minimising of delays in the delivery of food can lead to better efficiency and contribution of the programme. Table 36 shows some of the advantages and disadvantages of a school nutrition system.

Table 36: The advantages and disadvantages of a school nutrition system

Advantages	Disadvantages
<ul style="list-style-type: none"> · Alleviate short-term hunger in malnourished or otherwise well-nourished school children to increase students' concentration, producing higher levels of cognitive function and learning. · Motivate parents to enrol their children in school and have them attend more regularly. · Reduce absenteeism and increase the duration of schooling and performance. Dropout rates and school year repetition diminish with school feeding. · To improve nutritional knowledge, perceptions, attitudes and behaviour amongst primary school children, their parents and teachers. 	<ul style="list-style-type: none"> · Schools in need may not have access to the system since they are not easily accessible. · Food losses through spoilage or black market activities or theft.

In countries that receive food aid, the WFP (2010) estimates an annual expenditure of approximately US\$3.2 billion, required for 66 million hungry school-age children. An amount of US\$1.2 billion from the needed expenditure serves 23 million pre-school children on the African continent.

6.4 Concluding Remarks

In this section of the FCR several programmes to shield vulnerable groups against high and volatile food prices have been highlighted. There is no doubt that these programmes can play an important role to lessen the impact of high and volatile food prices, but the impact will depend on the scope and nature of the programme. The long run sustainability of the different programmes is however a debatable issue. These include, for example, possible market distortions, unequal access to the programmes, the ability to fund these programmes, etc.

Social grants are an important programme being utilised by the South African government to address the plight of the poor and vulnerable. Although research has shown that these grants are assisting vulnerable and poor individuals/households to, amongst others, access food, there are increasing concerns about the long run sustainability of social grants as a tool to address poverty in South Africa; these concerns have been raised by several researchers and even government departments. These concerns emanate, amongst others, from the ability of grants to reduce income inequalities and whether or not it acts as an incentive to seek employment against the background of a significant uptake of grants demanding increasing budget allocations annually. Further grounds for concern is that the revenue sources to fund social grants is also under increasing pressure due to, amongst others, high unemployment, job losses and slower growth in the tax base. Another important

consideration is that the grant system stimulates consumption (access to food, which per se is a favourable outcome), but ideally an increase in the availability of food through increased production should also be stimulated (increased imports are not necessarily the answer in light of international food price movements). In the absence increased availability of food, demand forces will push prices higher at the expense of not only recipients of grants, but the population at large. The end result could be a vicious circle where the demand for grants increases followed by higher food prices and so forth up to a point where it is not sustainable even in the medium run.

In light of the aforementioned, it is imperative that other options to address the plight of the poor and vulnerable are explored in a timely manner. It is therefore no surprise that one of the main imperatives of government is to increase employment. This notwithstanding and given the high level of poverty and inequality in South Africa, will require that other interventions apart from social grants to address the challenge of household food security in South Africa be explored. Such programmes could, amongst others, include the introduction of a country wide food stamp system and work for food programmes, as well as a significant expansion in the food bank and school nutrition programmes. However, neglecting to also stimulate the expansion of primary agricultural production and increased local processing of food could seriously impede on the potential impact of such programmes.

Finally, it is clear that food prices are emerging as a key driver of overall consumer inflation in South Africa and may continue to become a major risk factor in the overall inflation outlook in the future. In addition, price volatility has emerged as a major concern internationally and domestically. The aforementioned requires timely public and private sector interventions. These interventions include, amongst others, the following and require further investigation to ensure holistic, coordinated and sustainable approaches:

- Comprehensive and sustainable social national and regional programmes;
- Sustainable increase in productivity and agricultural output;
- Significant investment, expansion and consolidation of agricultural and food processing research and development;
- A transparent agricultural and food information system that is value chain orientated;
- High level intergovernmental policy and operational coordination that is geared to addresses issues (e.g. infrastructure, trade, regulations and standards, education and training, etc.) that are constraining a conducive environment for the agricultural and food sector to grow.

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