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Preparing for the (Mostly) Unknown:

The Implications of **Brexit** for South African Agriculture

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EXECUTIVE SUMMARY

On 23rd June 2016 a nationwide referendum signalled the will of a slight majority of the British public to leave the European Union. Following this, and the subsequent notification of withdrawal given by the British government to leave the single market state, the United Kingdom (UK) has started on the path to becoming the first ever country to leave the EU.

The exact outcomes of Brexit for South Africa are largely uncertain, dependent not only on South Africa's negotiations with British officials but also of negotiations between the UK and the EU and between the UK and everyone else. Key Brexit issues which will be of interest to the South African agricultural sector will be: tariffs and quotas; farmer subsidies; migrant policies; food standards; and government capacity arrangements.

The UK is a strong economy, accounting for almost 4% of global economic activity, despite the countries small geographic size. Economic growth has also historically exceeded population growth and inflation resulting in growing real average incomes. The good health of the economy is also highlighted through a strong currency and a world ranking of seventh in terms the ease of doing business.

Food and beverage consumption in the UK is significant and growing as the population grows. At the broad level the largest share of consumption in quantity terms is held by cereals (24%) and eggs and milk (18%), but long term growth has been fastest in consumption of oil crops (3% p.a.) and fruits and nuts (2% p.a.). The average UK consumer does, however, consume a diverse basket of food products with diversity increasing over time. Foods supplying these markets are subject to very stringent standards from both the public and private sectors. These standards place high requirements on producers in terms of health and safety, as well as environmental and ethical issues.

The UK is highly integrated into world markets with total imports in 2016 totalling R9.3 trillion. Over 9% of these imports were of agricultural imports totalling R860 billion. The UK's main agricultural import in terms of value has been beverages, and in particular wine, accounting for 13% of all agricultural imports in 2016. Significant imports were also observed for fruits and nuts as well as meat products.

South Africa's exports to the UK in 2016 totalled 43 billion with significant real export growth and a growing trade balance developing in the past few years. Whilst platinum makes up the bulk of the value of exports to the UK, a significant and growing share is made up of fruits and nuts, accounting for 13% of all real UK exports between 2011 and 2016 after real growth of 14% per annum over the five year period. Generally South Africa's agricultural exports have grown significantly over the past five years and have led to a substantial and growing positive trade balance. Agricultural exports

over this period grew at an average real rate of 11% per annum, falling just short of R10 billion in 2016 and accounting for more than 7% of South Africa's total agricultural exports.

Fruits and nuts have made up 64% of all South Africa's agricultural exports to the UK over the past five years and this is evident when looking at the top agricultural exports to the UK over the period. The top ten in terms of shares in the value of agricultural real exports to the UK between 2011 and 2016 have been: grapes (18%), bottled wine (12%), apples (12%), bulk wine (8%), soft citrus (8%), oranges (5%), plums and sloes (3%), lemons and limes (3%), avocados (2%) and cranberries and bilberries (2%). The main agricultural import into South Africa from the UK is whiskies accounting for 57% of agricultural imports between 2011 and 2016. Poultry exhibited a strong and growing share in imports, as did some other specific agri processing products such as processed cheese.

In terms of the main agricultural exports to the UK, the main competition is with Spain, with complementarities existing between the two countries due to growing seasons being at different times of the year. After Spain, South Africa was observed to be the biggest importer across the country's top ten agricultural exports to the UK.

Tariffs on South Africa's UK exports are primarily applied to agricultural products making up 99.5% of tariff payments in 2016. Particularly high tariff payments were a result of high tariff rates on grapes (19%), apples (15%); pears (14%); lemons and limes (11%); peaches and nectarines (4%); and plums and sloes (2%). There were also very high tariff rates applied to much smaller trade flows for grape juice (27%), apple juice (26% or 15% depending on brix value), citrus jams (18%), fruit jams (16%), maize meal (24%), corn flour (15%) and bakery products (15%). If South Africa were to be charged MFN rates the total tariff payments on UK exports would increase from R786 million as at current rates, to R2.0 billion.

Tariffs on UK imports into South Africa cover a much more diverse group of products, with agricultural products accounting for only 6% of tariff payments in 2016. Under a scenario where South Africa had to pay MFN rates total tariff payments would increase from R550 million to R1.9 billion.

The study carried out an economic impact assessment using a CGE model with seven developed scenarios all in relation to South Africa's trade with the UK:

1. **MFN:** Tariffs change from current rates to MFN rates on all products.
2. **FTA:** A free trade agreement (i.e. tariff elimination on all products).
3. **Free Exports:** Elimination on tariffs on exports only, import tariffs remain as is.
4. **Fruit Push:** Tariffs are eliminated on South Africa's fruit exports, other tariffs stay as is.
5. **Protectionism:** Export tariffs remain as is, but South Africa imposes MFN tariffs on UK imports.
6. **Pound Slump:** Tariffs remain as is but pound depreciates by 10%.

7. **CAP Cut:** Tariffs remain as is but the UK agrees to cut agricultural funding as previously done under the EU's Common Agricultural Policy (CAP).

The best case scenario was the free trade agreement, where the economy grew by R1 billion and in the process 3 155 new jobs were created. Free trade also led to economic growth in the agriculture sector to the value of R40 million. The MFN scenario was the worst scenario for South Africa across all measures. The economic cost, measured as the loss in Gross Domestic Product (GDP), was R1.9 billion, with employment losses reaching 6 666. The agricultural sector in this scenario was significantly impacted on with economic losses totalling R65 million.

There was a significant gap in the gains made under the "Free Trade Agreements" and the "Free Exports" scenario. As the only difference between the two scenarios is the tariffs imposed on UK imports, this finding suggests that by offering the UK freer trade will actually overall benefit South Africa too. This finding was further corroborated through serious negative economic impacts in the "Protectionism" scenario.

There were similar gains in the "Free Exports" and "Fruit Push" scenarios. This means that almost all the gains in obtaining free access into the UK market could be gained just by securing free access for fruit exports. This further highlights the importance of fruit tariffs and that their reduction should be a central point of South Africa's Brexit negotiations.

Whilst a cut in funding to UK farmers yielded significant gains for the South African agricultural sector, it had an overall negative impact on the economy due to the rising price of key imports used as inputs in production. Similarly whilst the "Pound Slump" yielded positive impacts for the economy overall the agricultural suffered a slight negative impact due to its dependence on the UK as an export destination.

In all the scenarios the impact, whether negative or positive, was greatest for middle income households. In terms of the employment impacts the biggest impact in terms of job numbers was in terms of medium-skilled labour. The "Fruit Push" scenario had the greatest proportion of jobs created being attributable to low skilled workers.

In light of the findings in this study, the following policy recommendations are made:

- **Avoid doing nothing:** The analysis showed the danger of an outcome which results in MFN tariffs between South Africa and the UK. Such an outcome would have severe negative impacts on the South African economy and be detrimental to certain industries
- **Free Trade is optimal:** The optimal outcome in terms of overall economic performance was one of free trade. For this reason South Africa should look to come to an agreement with the UK which as closely resembles a free trade agreement as is possible

- **Fruits are key:** If the UK can only be pushed to achieve tariff elimination in one area it should be on fruit exports. The impact assessment showed that eliminating fruit tariffs can make up most of the gains which can be made in the complete elimination of export tariffs to the UK.
- **Ensure integrity of sanitary and phyto sanitary environment:** Given the importance of the UK market for South African fruit exports, it is critical that South Africa do everything possible to ensure that it's sanitary and phyto sanitary institutions are of a standard that is highly regarded and trusted.
- **Be wary of protectionism:** Whilst protection will be needed in certain areas, government must be aware that there could be negative spillover effects to applying higher tariffs on imports from the UK.
- **Farmer subsidies could be a useful bargaining tool:** The removal of UK subsidies yields substantial gains for the South African agricultural sector but yielded a negative overall impact on the economy. These subsidies should not be ignored though and could be a useful bargaining tool to justify concessions in other areas, such as tariff elimination on key products such as fruits and vegetables.

As a final general comment, the more research done on Brexit issues, the more complex the situation appears to be. Policy makers involved in negotiations are thus strongly advised to do thorough background research to ensure they are prepared for the vast range of complex issues which need to be covered and considered.

1. INTRODUCTION: WHAT IS A "BREXIT"? WHAT DOES IT MEAN?

"Brexit" is the popular phrase used to refer to the notion of the United Kingdom (UK) leaving the European Union (EU). The phrase is a portmanteau word combining "British" and "exit".

Brexit became a reality for the UK after a nation-wide referendum was held on the 23rd June 2016 as to whether it should remain in or withdraw from the EU. The final voting tally yielded 52% votes for "leave" and 48% "remain", signalling the desire of a slight majority of the UK public to break away from the EU (UK Dep for Exiting the EU, 2017). The outcome also resulted in the resignation of the then Prime Minister David Cameron, a strong supporter of the "remain" campaign and thus, in his stated opinion, not the ideal person to lead the country as it negotiates a post-Brexit future (Cameron, 2016). The vacant Prime Minister's post was later filled by Theresa May after being elected as the new leader of the Conservative Party Mr Cameron had previously led (May, 2016).

The Brexit process officially got under way with the passing into law of the European Union (Notification of Withdrawal) Act on 16th March 2017. The Act gives the Prime Minister the legal authority to invoke Article 50 of the Treaty on European Union, the only legal route by which a country can leave the EU. This was then done through a letter written to Donald Tusk, President of the European Council, by Theresa May on 29th March 2017 (UK Dep for Exiting the EU, 2017). The letter also notified the European Council of the UK's intention to leave the European Atomic Energy Community (May, 2017). The UK is the first ever nation to leave the EU.

Although Article 50 has been invoked, the process of Brexit is likely to still take a long time to come into effect. The Article stipulates that a state only officially leaves the EU once either a withdrawal agreement has been reached between that state and the EU or a period of two years passes since Article 50 was invoked by the state. However the Article goes on further to state that the two year deadline can be extended by unanimous decision by the EU in agreement with the leaving state (OJEC, 2012). Over this period the UK will need to renegotiate not only its on-going relationship with the EU but also with the rest of the world as relationships have up to now been governed by agreements between partner countries and the EU. Given the UK's central economic position in Europe and the corresponding large amount of negotiating needed, it will be unlikely that all agreements will be finalised within two years (Juncker, 2017). Hence we may see extensions themselves becoming an additional point of negotiation and bargaining.

To add to the uncertainty around the exact Brexit outcomes, there are other external processes under way which could have a significant effect, such as the potential breaking away of Scotland from the UK, or France potentially following the UK and also leaving the EU (now termed "Frexit"). Whilst both these scenarios might appear unlikely to actually happen, one thing which has become clear in recent world politics is that unlikely outcomes are becoming more common

realities. To add yet more uncertainty to the situation, the UK prime minister announced on 18th April 2017 that she intended to hold a snap general election in the current year, despite not being due until 2020. This was then voted through in the House of Commons the following day and hence the UK will now be holding a general election in June 2017 where Theresa May will go up against Jeremy Corbyn, the leader of the main opposition the Labour Party.

Initial discourse over the UK's stance on post-Brexit agreements have tended to be polarised around what has been termed a "hard" and a "soft" Brexit. A hard Brexit refers to a complete breakaway from the ways of the EU and a complete new international agenda for the UK. On the other hand a soft Brexit refers to an outcome which as closely as possible mimics the UK's international position as when it was part of the EU. Such polar views are extremely generalised and in reality the stance on different issues is unlikely to be so homogenous, resulting in an outcome which is "soft" in some areas and "hard" in others depending on the negotiations which take place on each issue.

In order to help guide Brexit negotiations, the UK Government has set out twelve principles in line with what was interpreted as the will of the UK public. These principles are:

1. To provide certainty and clarity with regards to negotiations.
2. To take control of the nation's own laws and bring an end to the jurisdiction in the UK of the Court of Justice of the European Union.
3. Strengthen the Union of the United Kingdom (i.e. strengthen ties between England, Scotland, Wales and Northern Island).
4. Protect ties with the Republic of Ireland and maintaining a Common Travel Area between the UK and Ireland.
5. Control immigration into the UK, particularly from EU countries.
6. Secure the rights of EU nationals already living in the UK, and of UK nationals already living in other EU countries.
7. Ensure continued protection of workers' rights.
8. Secure the freest and most frictionless trade relationships with the EU as possible.
9. Secure new trade agreements with other countries, with an emphasis on striking up new free trade agreements.
10. Remain at the forefront of science and innovation and continue to collaborate with European partners on key science, research and technology initiatives.
11. Continue to work with the EU to fight crime and terrorism in the region.
12. Deliver a smooth and orderly exit from the EU (HM Government, 2017).

Over the next two years, the UK government will be looking to forge new relationships with countries and it is important that foreign governments are effectively able to negotiate the best deal for their respective countries. For the South African agricultural sector, the UK is a very important market and

international partner and the eventual outcome will have serious ramifications for the sector's future.

The UK has also expressed that South Africa is an important partner for post-Brexit UK going forward. This was evident when the UK Chancellor of the Exchequer, Philip Hammond, visited South Africa at the end of 2016 to meet with political leaders to come to agreement on key issues and make a commitment to building a strong relationship going forward (Hammond, 2016)

The most direct cause for concern over Brexit will concern the future market access for South African products into the UK market. The Brexit vote came just after an Economic Partnership Agreement (EPA) had just been signed between the EU and certain members of the South African Development Community (SADC), namely Botswana, Lesotho, Mozambique, Namibia, South Africa and Swaziland. The agreement gives 100% free access to five of the six members with South Africa the exception but still receiving 96.2% fully removed and 2.5% partially removed tariffs. In return, the SADC states involved agree to remove tariffs fully for 74.1% of EU imports, and for all but Mozambique partially remove tariffs for 12.1% of EU imports. Other key relevant provisions in the agreement include a number of safeguards, the elimination of EU agricultural export subsidies, the protection of infant industries, the protection of geographic indicators and the requirement that any advantage given to the EU also be grated to fellow SADC EPA member states (European Comission, 2016). Following Brexit, the UK will now fall outside the EU and no longer be subject to the provisions of the SADC EPA. As the UK is South Africa's biggest trading partner in the EU, this is a significant issue and one which needs to be realised.

A large focus point of negotiations with the UK will be on tariffs and quotas, with both sides trying to secure as freer trade as possible for each respective country's key exports. For this reason, and the ability to model the impact of tariff changes, this will be the main focus of this analysis. However there are other factors which should be central considerations for the South African agricultural sector in negotiations with the UK.

British farmers have historically received extremely high levels of subsidies under the EU's Common Agricultural Policy (CAP). The Financial Times recently reported that UK farmers receive 55% of their incomes from CAP payments (Daneshkhu, 2016). Whilst the UK Government has committed initially to providing farmers with the same amount of funding as they would have under CAP, this commitment only runs until the end of the Multiannual Financial Framework in 2020. It could be in South Africa's interest to push for a reduction in these subsidies to put an end to South African farmers being put at a competitive disadvantage. Even if this issue ends up being something the UK Government refuses to budge on, it could be used as a bargaining lever to try and make ground on other more attainable outcomes.

Another potential area which could indirectly lead to gains in South Africa's competitive advantage is the reclaiming of control by the UK on migrants coming into the country. This could restrict the access of farmers to a cheap seasonal labour force, driving up the cost of domestic production and making South African products more competitive relative to domestically produced agriculture in the UK.

The exchange rate will also need to be monitored closely going forward. The initial response of the markets to Brexit was a sharp depreciation of the pound. Whilst this may be good for bringing investment and capital into the country, it also makes exports relatively more expensive thus putting exporters at a disadvantage.

Another key issue for agricultural trade is around standards and in particular sanitary and phyto sanitary (SPS) measures. It is as yet unclear whether the UK will adopt more or less stringent standards than those imposed by the EU, and what this will mean for South Africa's exports.

As a final point, Brexit will place a huge burden on the UK Government. Thus far there appears a lack of a concrete plan as to how the government will develop and implement the capacity needed for such a massive task. With this added burden on government, and more pressing international relationships such as those with the United States of America, China and with the EU itself, a situation could arise where South Africa is not given the desired attention or has to wait a long time before South Africa's concerns and aspirations are heard. Whilst this situation might make it difficult to achieve objectives with Brexit negotiations, it may also strengthen South Africa's bargaining hand where representatives are able to push through agreements which benefit South Africa which may have been blocked had the UK government been more focused on it.

To sum up, Brexit is definitely a largely unknown beast. This is the first time a nation has left the EU and in addition there are numerous competing internal and external forces which will have an influence on Brexit outcomes. Scientifically predicting the exact outcomes is thus an impossible task. However, based on the reporting in this section, it is possible to look at how different scenarios impact on the South African economy to be able to highlight where key areas of pressure are likely to come from and to look at how South Africa can best position itself, in a general sense, for an optimal relationship with the UK going forward.

The rest of this paper looks to give input in this regard. The next chapter gives an overview of the UK economy, including looking at food consumption and regulation. This is followed by a look at the UK's recent trade trends. The following chapter then analyses the tariffs faced in the UK market, before a chapter which models some potential impacts using a computable general equilibrium (CGE) model. Finally the report ends off with some policy recommendations based on the analysis.

2. UK OVERVIEW

Despite its small geographic size, the United Kingdom (UK) is an economic powerhouse. With strong institutions, well developed industries and an advanced services sector, the country has historically enjoyed high levels of average incomes and has benefited over time from significant integration into the global economy.

2.1. The UK Economy

Despite only accounting for 0.19% of the world's total land area (241 930 km^2) and only 0.89% of the world population (65 million people), the UK recorded a Gross Domestic Product (GDP) of over US$ 74 trillion in 2015, making up 3.85% of the total world GDP (The World Bank, 2017a).

Historically the UK's GDP has generally grown significantly faster than the population, resulting in growing real GDP per capita, as shown graphically in Figure 1. Despite a few periods of decline, most notably around the global financial crisis of 2008/2009, the income per person in the UK as represented by GDP per capita shows a strong upward trend. Between 1960 and 2015 real GDP per capita has almost tripled in size, equating to an average annual increase of approximately 2%.

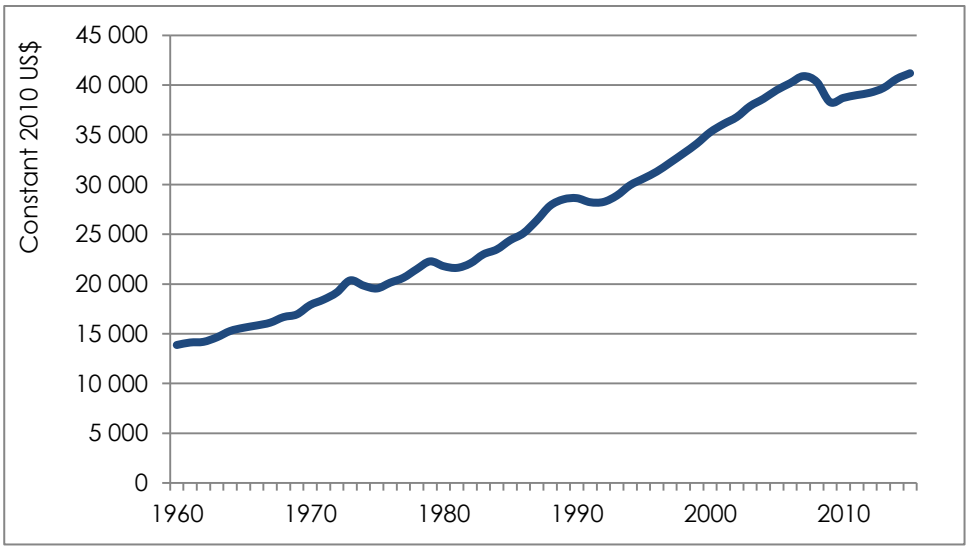


Figure 1: UK Real GDP per Capita, 1960-2015
Source: Compiled using World Bank (2017a)

Despite being at the centre of the industrial revolution which occurred in the late 18th and early 19th centuries, the UK economy has become very focused on tertiary service sectors. This can be seen in Figure 2 which shows the shares in GDP attributable to agriculture, industry and services between 1990 and 2015. The agricultural share in GDP is very small in comparison to the other series and hence is measured separately on the secondary right-hand axis. In 2015 the share of GDP attributable to the services sectors was approximately 80% and has been increasing steadily over

the 25 year period over which the data was available, from approximately 69% in 1990. Industry's share in the economy has been declining in recent years, falling from 29% in 1990 to only 19% in 2015. Agriculture makes up a relatively very small part of the UK economy, with the share in the economy in 2015 equalling only 0.7% in 2015, down from 1.4% in 1990.

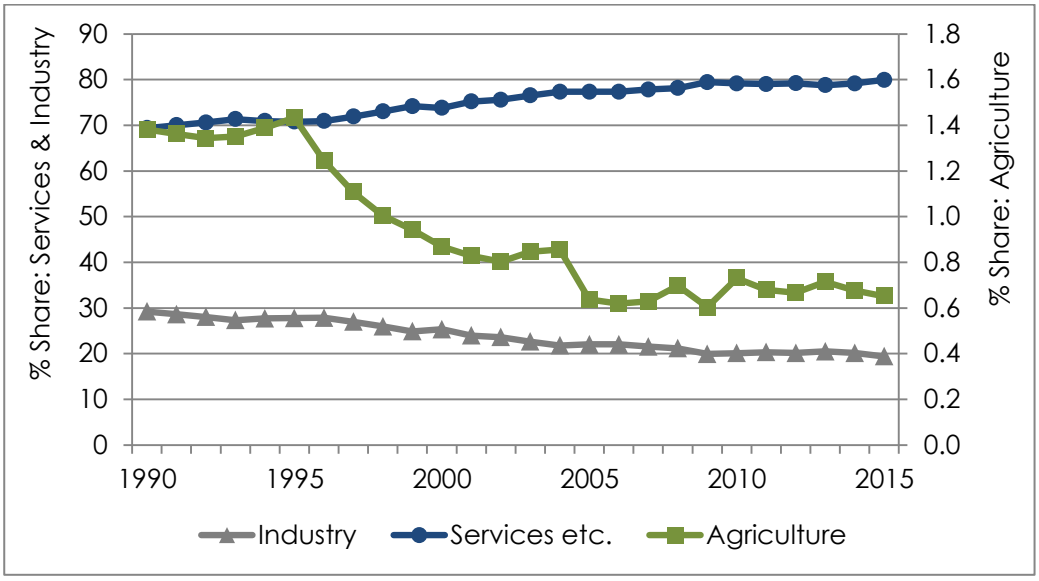


Figure 2: Share of UK GDP Value Added by Broad Industry Groupings, 1990-2015
Source: Compiled using World Bank (2017a)

The fact that economies will move into services sectors at advanced levels of development has long been an integral part of economic theory. This forms part of what has been termed the three-sector hypothesis, developed in the mid 1900's by Fisher (1935), Clark (1940) and Fourastié (1949), which postulates that as economies develop they move from a predominantly agricultural economy, into industrial sectors and then finally into services. The reliance of the economy on services also helps to explain why the economy contracted so significantly as a result of the global financial crisis of 2008/2009 (see Figure 1).

2.2. The UK Currency: The Pound

The United Kingdom's Pound Sterling (GB£) has historically been a relatively strong currency which has shown a general appreciation trend against the South African Rand. However recent events have seen cases of sudden depreciations against other major currencies.

Figure 3 shows the historical daily currency value of the International Monetary Fund's Special Drawing Rights (SDR) for the Pound (GB£), Euro, United States' Dollar (US$) and the South African Rand (ZAR). The pound is higher than all the currencies for the entire period. However, the currency lost ground against the other currencies in 2008/2009 where it dropped to level with the Euro. This was followed by a recovery until 2016 where it dropped again. The South African Rand is much

lower in value than the other three currencies and shows a gradual decline over the period reviewed.

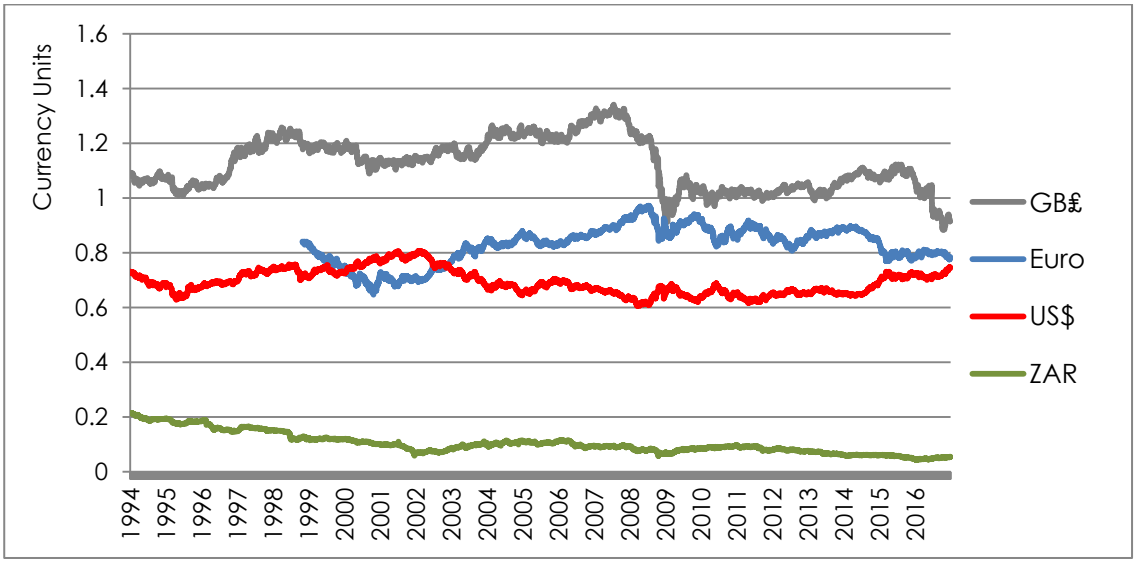


Figure 3: Daily Currency Values of the SDR, 1994-2016
Source: Compiled using (IMF, 2017a)

Looking at the exchange rate between the Pound and the US Dollar, the relative strength of the two currencies remained fairly stable between 1994 and 2004, at around US$ 1.5 = GB£ 1. This can be seen in Figure 4 which shows the exchange rate in terms of how many US Dollars are equal to one Pound. After 2004 the Rand strengthened significantly against the Dollar to a peak of US$ 2.1 per GB£ in November 2007. The 2008/2009 global financial crisis hit the Pound harder than the Dollar, resulting in a sharp depreciation of the Rand against the dollar in 2008/2009 where it fell back to around US$ 1.5 = GB£ 1. The exchange rate remained stable fluctuating around this ratio until 2016 when it started to depreciate again. The recent depreciation of the pound against the other major currencies in 2016 ties in with the lead up to and eventual decision for the UK to leave the EU (i.e. Brexit).

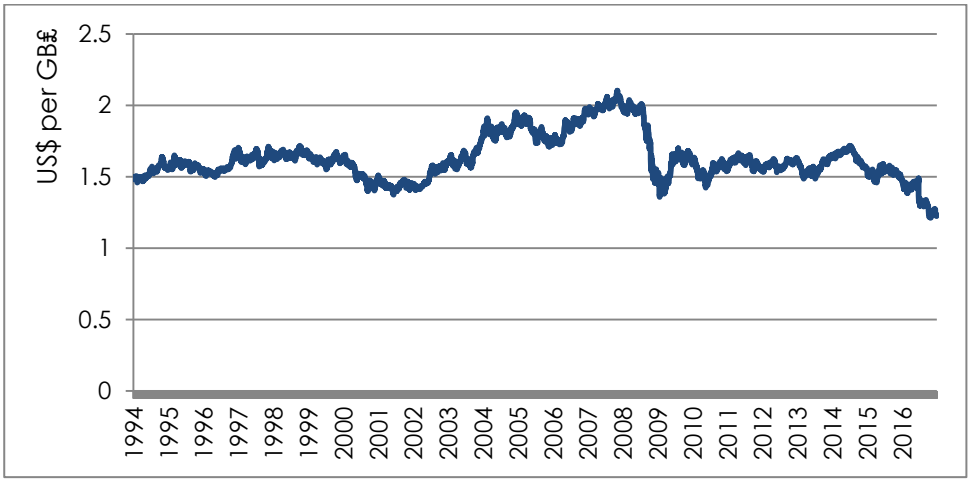


Figure 4: Daily Dollar - Pound Exchange Rate, 1994-2016
Source: Compiled using (IMF, 2017a)

In contrast to the dollar, the South African Rand has shown a more consistent depreciation against the Pound over time. This trend can be seen in Figure 5 which shows the historical daily exchange rate in terms of the amount of Rand equivalent to one Pound. Between the beginning of 1994 and the end of 2016, the Rand depreciated against the Pound from a rate of ZAR 5.0 = GB£ 1, to ZAR 16.8 = GB£ 1. The depreciation follows an upward linear trend, although there is a significant amount of volatility. There were 2 sharp spikes along the trend, in 2001 and 2008 where in both cases the exchange rate depreciated to a weaker level than was observed at the end of 2016. At the beginning of 2016 the Rand hit its highest ever value against the pound exceeding 24 Rand per Pound. Since then the Rand has appreciated against the Pound as was the case for the other major currencies.

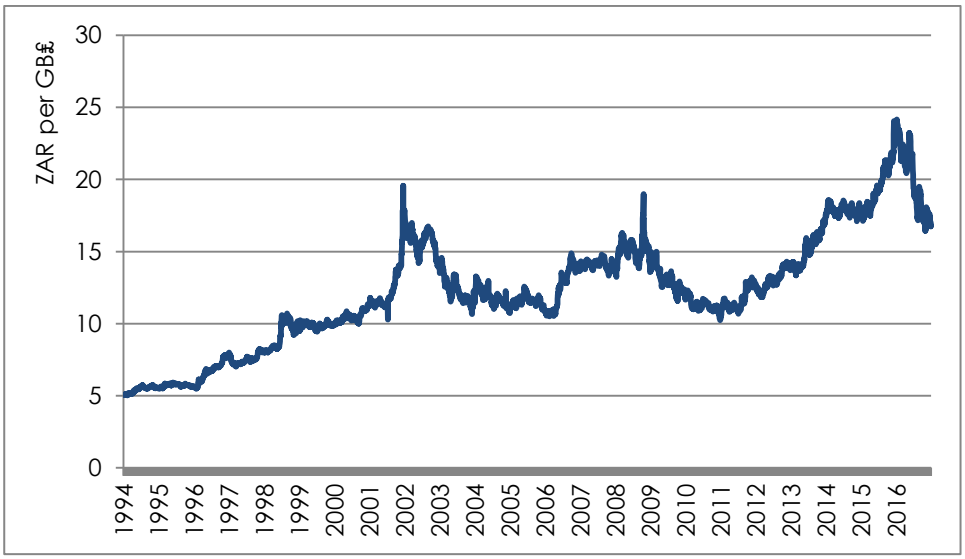


Figure 5: Daily Rand - Pound Exchange Rate, 1994-2016
Source: Compiled using (IMF, 2017a)

It is important to remember that the desirable exchange rate movement will differ for different parties. A weak Rand is good for exporters as the price of exported goods becomes cheaper for foreign buyers. It also has positive implications for tourism as South Africa becomes a cheaper, and hence more attractive, destination for foreign tourists. However a weak Rand also has negative implications for investment and for the inflow of capital and production inputs into the country. What is most important is that exchange rates are predicable so that planning can be done effectively. With this in mind it is a concern that the UK's currency has become notably more volatile in recent years.

2.3. Doing Business in the UK

According to the World Bank's 2017 Ease of Doing Business scoring, the UK is the seventh highest ranked country out of 190 surveyed, with an overall percentage score of 82.74. This score was up slightly from 2016 where the score was 82.73, but relative to the rest of the world the UK has fallen

one place from sixth to its current position. South Africa's latest ranking placed the country at 74th of 190 with an overall percentage score of 65.20. The top three scores on the overall ease of doing business rankings in 2017 went to New Zealand (87.01), Singapore (85.05) and Denmark (84.87) (The World Bank, 2017b).

The Ease of Doing Business Scoring is made up of several components, all of which are plotted graphically in Figure 6 below for the UK and South Africa. The UK's high overall ranking comes from consistently high scores across the board, ranging from the lowest score of 69 for "enforcing contracts" to the highest score of 95 for "starting a business". South Africa scores lower than the UK on all of the Ease of Doing Business scores with scores ranging from 54 for "enforcing contracts" to 81 for "paying taxes". The two countries closest scores are for "protecting minority investors" (78 and 70) and "paying taxes" (91 and 81). The biggest gap between the two countries' scoring is for "trading across borders" (94 and 58).

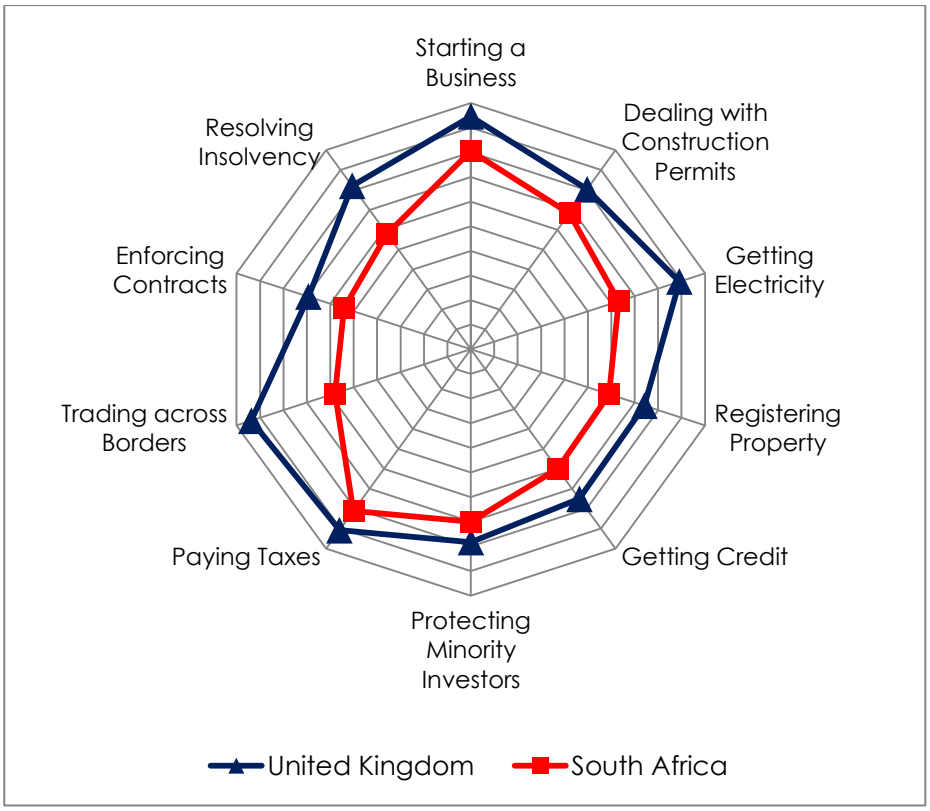


Figure 6: UK Ease of Doing Business Scoring, 2017
Source: Compiled using (The World Bank, 2017b)

Despite receiving the highest net score for "starting a business", the UK is only ranked 16th overall on this measure. The highest relative score comes from "protecting minority investors" where the UK's score of 78 is the 6th highest global score. Similarly, despite receiving the lowest net score for "enforcing contracts", this is still the 31st highest score out of the 190 countries. The lowest relative score is in "registering property" where the score of 74 is the 47th highest country score.

2.4. UK Food Consumption

The total quantity of food (including beverages) consumed in the United Kingdom since 1970 is shown graphically in Figure 7, broken down into food produced domestically and that which has been imported. Note that in order to get a full idea of the food demand in the UK the series included not just food consumed by households, although this makes up the most part of demand, but also included is food used for processing, animal feed and other related uses. Food exported from the UK was excluded from the analysis. Between 1970 and 2013 total food consumption in the UK grew more or less with the size of the population. This has meant that the amount consumed per person has remained relatively consistent, growing slightly from 1.46 tons per person in 1970 to 1.51 tons per person in 2013.

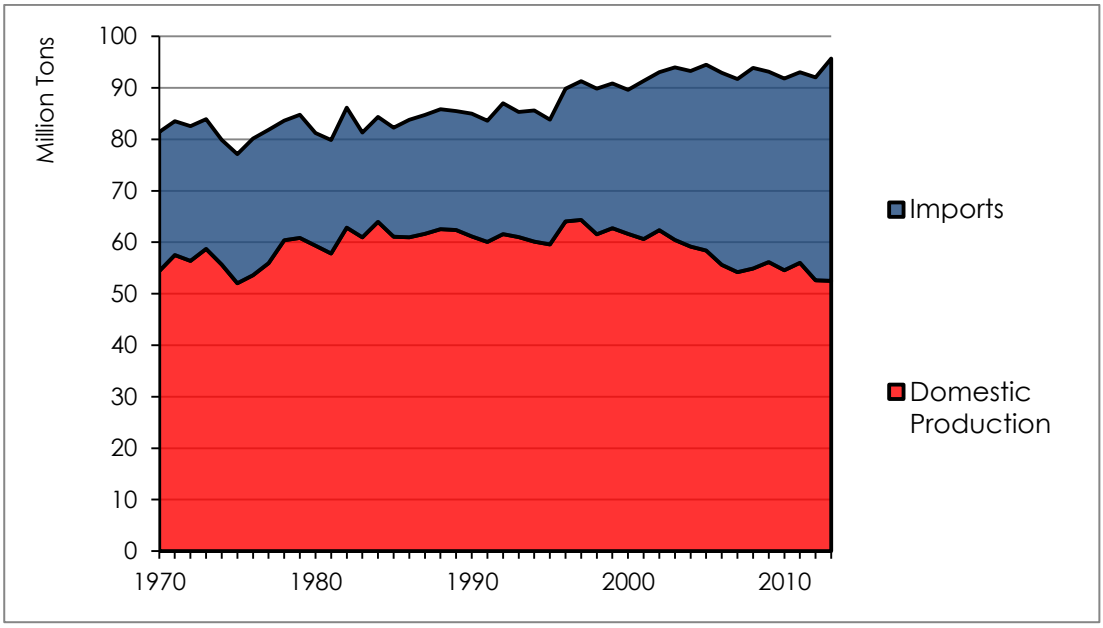


Figure 7: Total Food and Beverage Consumption in the UK, 1970-2013
Source: Compiled using (FAO, 2017)

The quantity of food imported into the UK initially declined over the period reviewed, from 27 million tons in 1970 to a low of 20 million tons in 1983. Since then imports have grown rapidly, both in absolute terms and relative to total food consumption. The growth in imports' relative share in consumption was particularly pronounced in the past 20 years as domestic production actually declined despite rising food demand. Over this period imports grew from 24 million tons in 1993 to 43 million tons in 2013, an increase of 78% at an average annual growth rate of 3%. This rapid growth, and concurrent fall in the quantity of domestically produced food products, has led to the share of UK food demand being provided by imports rising from 28% to 45% over the 20 year period.

The average consumer in the UK consumes a diverse mix of food products. Figure 8 shows the breakdown of food consumption in the UK in terms of food quantities (tons), measured using the total food supply going into the markets. Cereals make up almost a quarter of food consumption

and makes up the biggest portion of the average diet. Other significant shares are made up of eggs and milk (18%), sugar and sweeteners (12%), vegetables and pulses (10%), fruits and nuts (9%), and starchy roots (8%).

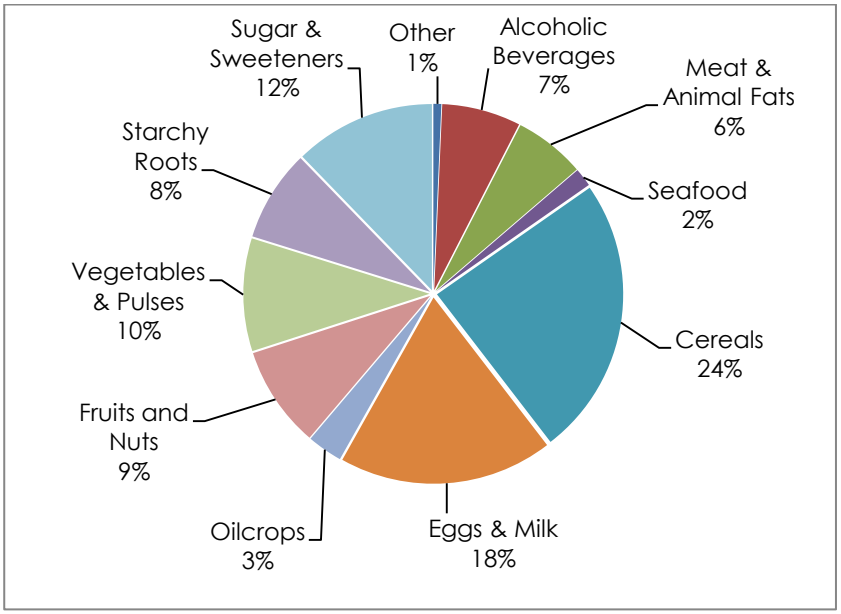


Figure 8: Breakdown of UK food Consumption by Quantity Consumed, 2013
Source: Compiled using (FAO, 2017)

The average food basket in the UK has also become more diverse over time. To illustrate this, Figure 9 shows the breakdown of UK food consumption in 1970. In 1970 cereals and eggs and milk together made up 48% of total consumption, in 2013 this share had fallen to 42%. The main relative increases were observed for fruits and nuts which increased from 4% in 1970 to 9% in 2013.

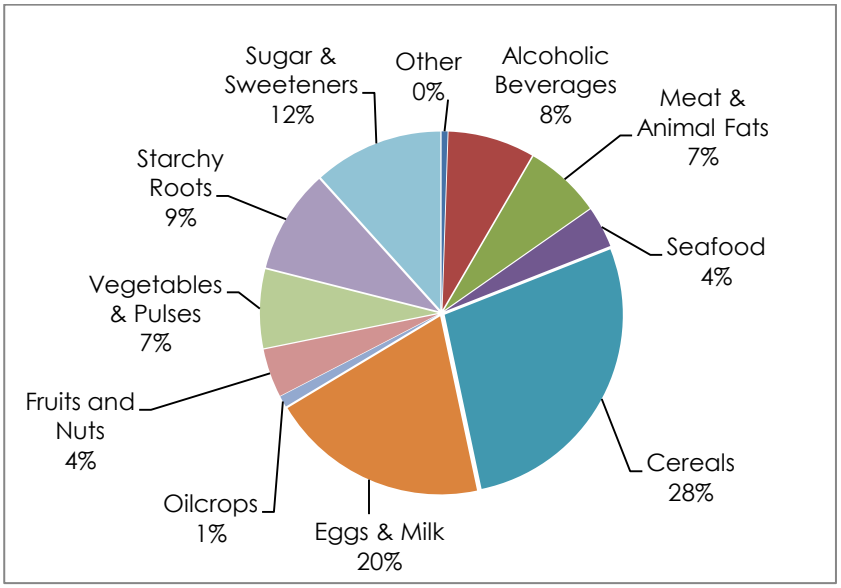


Figure 9: Breakdown of UK food Consumption by Quantity Consumed, 1970
Source: Compiled using (FAO, 2017)

To contrast UK consumption, Figure 10 shows the breakdown of food consumed in South Africa. Whilst the share of consumption made up of cereals is similar for South Africa in comparison with the UK, South Africans consume far more sugar and sweeteners relative to total consumption (36% compared with 12%), and significantly less eggs and milk, vegetables and pulses, fruits and nuts, and starchy roots.

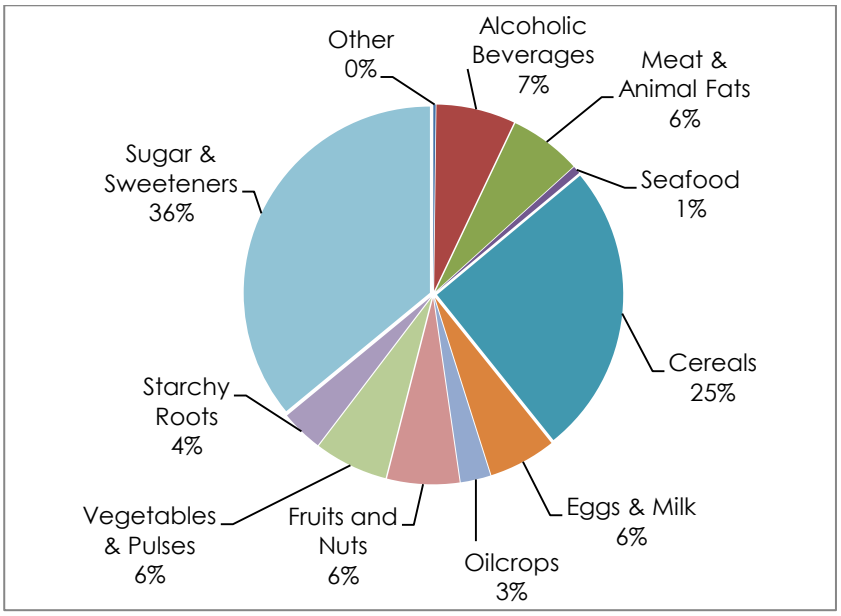


Figure 10: Breakdown of South African food Consumption by Quantity Consumed, 2013
Source: Compiled using (FAO, 2017)

Oilcrops make up only 3% of the quantity of foods and beverages consumed in the UK, however this has been the fastest growing of the product groups analysed, growing on average at 3% per annum. This can be seen in Figure 11 which shows the average annual growth in consumption of each product group between 1970 and 2013.

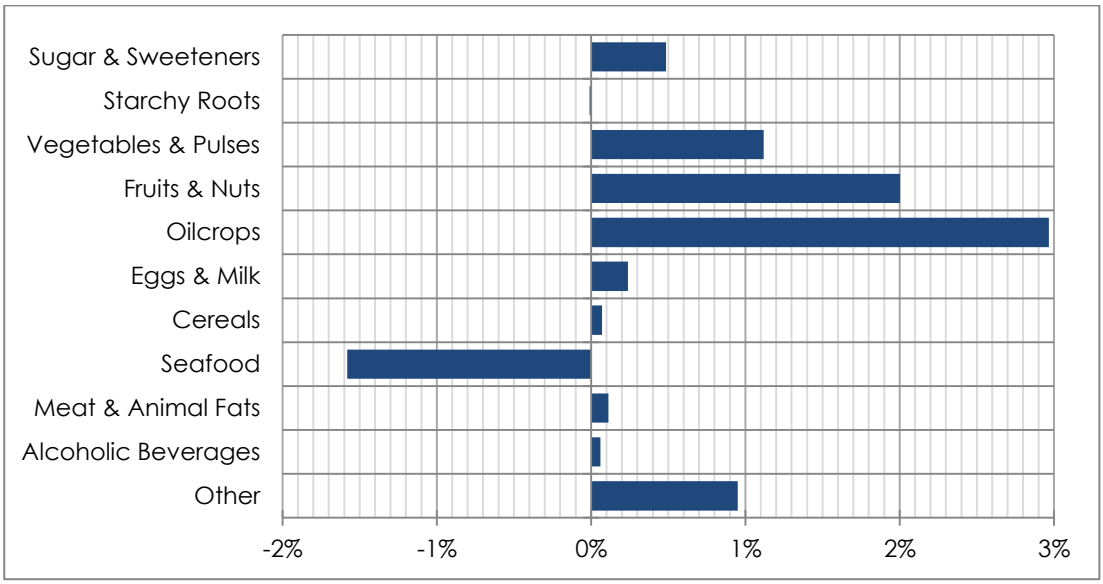


Figure 11: Average Annual Growth in Quantity of UK Foods Consumed, 1970-2013
Source: Compiled using (FAO, 2017)

Only oilcrops and fruits and nuts consumption have grown faster than the population growth and hence are the only products with net increases in quantity consumed per capita. Seafood and starchy roots exhibited a net decline over the period reviewed, and the growth in total consumption of cereals, alcoholic beverages and meat and animal fats has been negligible.

At the more detailed product level, milk makes up the biggest share of consumption in terms of quantity with 17 million tons of milk being consumed in 2017, 18% of total food consumption. Table 1 shows the top twenty food products in terms of quantity consumed at the detailed product level. Asides from milk, substantial levels of consumption were also observed for wheat products (14.5 million tons), sugar beet (8.4 million tons) and potato products (7.5 million tons). The twenty food products listed in Table 1 together make up more than 82% of the quantity of food consumed in the UK in 2013.

Table 1: Most Consumed Food Products in UK, 2013

Product	2013 Value (1000 tons)	National Share	Annual Growth, 2003-2013
Milk	17 005	17.77%	0.37%
Wheat products	14 529	15.18%	0.31%
Sugar beet	8 442	8.82%	-0.83%
Potato products	7 489	7.83%	-1.10%
Barley products	5 248	5.48%	0.64%
Beer	4 437	4.64%	-3.23%
Oranges & mandarins	2 456	2.57%	-0.51%
Sugar (raw equivalent)	2 453	2.56%	0.55%
Poultry	2 091	2.19%	1.30%
Maize products	2 074	2.17%	3.64%
Canola & mustard seed	1 887	1.97%	1.38%
Apples	1 728	1.81%	2.46%
Pork	1 635	1.71%	0.51%
Tomato products	1 382	1.44%	0.23%
Wine	1 185	1.24%	0.96%
Beef	1 148	1.20%	-0.90%
Bananas	1 108	1.16%	2.55%
Onions	785	0.82%	2.16%
Eggs	783	0.82%	1.63%
Oats	749	0.78%	3.19%

Source: Compiled using (FAO, 2017)

The earlier finding of increased diversity in UK food consumption is further highlighted by the fact that the main food products consumed, as listed above in Table 1, generally have not grown particularly fast over the past 10 years and in some cases have seen a decrease in consumption despite the growth in total national consumption already observed.

Table 2 shows the fastest growing twenty products in terms of the quantity of domestic UK consumption. These products together only make up just over 3% of total UK food consumption but have shown extremely strong growth over the past 10 years with growth rates all in excess of 4% per annum and going up to more than 69% per annum. Particularly high annual growth rates were observed for non-food alcohol (69%), fermented beverages (37%) and cream (33%).

Table 2: Fastest Growing Consumed Food Products in the UK, 2003-2013

Product	2013 Value (1000 tons)	National Share	Annual Growth, 2003-2013
Non-food alcohol	582	0.61%	69.35%
Fermented beverages	117	0.12%	37.06%
Cream	17	0.02%	32.75%
Sunflower oil	504	0.53%	18.93%
Infant food	95	0.10%	18.10%
Beans	79	0.08%	16.61%
Sweet potatoes	60	0.06%	16.53%
Cephalopods	13	0.01%	12.51%
Pepper	12	0.01%	9.15%
Sorghum products	14	0.01%	8.84%
Olives	39	0.04%	7.46%
Grapefruit products	251	0.26%	6.64%
Pimento peppers	9	0.01%	6.05%
Lemons & limes	144	0.15%	5.66%
Plantains	24	0.03%	5.54%
Cocoa products	216	0.23%	5.29%
Rye products	45	0.05%	5.24%
Pineapple products	223	0.23%	4.62%
Canola & mustard oil	659	0.69%	4.34%
Honey	42	0.04%	4.14%

Source: Compiled using (FAO, 2017)

This consumption analysis has attempted to give the best overall view of UK consumption as possible. This has revealed some interesting findings but it should be noted that it is still a broad overview of a very large and complex system. To get a more detailed picture will require a more in depth analysis into each of the different product groups as there are also significant shifts which occur within the each group in line with changes in consumers' disposable incomes, as well as tastes and preferences.

2.5. UK Food Standards

The UK has in recent years had particularly stringent food standards, with an influential role played not just by public standards and regulations but also by private standards imposed particularly by domestic retailers.

The Food Standards Agency in the UK has developed a Food Law Code of Practice which gives statutory guidance with regards to food law as governed by various legislation, specifically the Food Safety Act of 1990; Regulation 6(1) of the Official Feed and Food Controls Regulations of 2009; and Regulation 26(1) of the Food Safety and Hygiene Regulations of 2013 (FSA, 2017). The Code of Practice gives a comprehensive overview of food standard requirements in the UK.

In addition to the UK's own standards, food safety has also been governed by a range of EU regulatory food standards. EU food standards are developed in accordance with the Codex Alimentarius Commission of the World Health Organisation (WHO) and the United Nation's Food and Agricultural Organisation (FAO) (BSI, 2016). Given the fact that the UK plans to convert EU law into UK law as part of the Brexit process (UK Dep for Exiting the EU, 2017), initially these binding food safety standards should remain consistent. However, going forward the UK may independently change it laws and so there could be significant diversions on certain issues. An added spin-off effect from the process will be the lack of influence of the UK on standard setting for the EU which could lead to changes in direction for certain food safety issues for the EU.

Interviews carried out by the Western Cape Department of Agriculture in 2012 with key industry bodies in the province's agricultural sector revealed that in order to export to the UK, exporters need to adhere to a number of standards on health and safety as well as environmental and ethical issues. Collective international standards such as Global GAP (Good Agricultural Practices), HACCP (Hazard Analysis Critical Control Point) and BRC (British Retail Consortium accreditation) are generally seen as a minimum requirement with additional private standards, particularly from UK retailers, needing to be met in order to effectively penetrate the UK market (Pheeha & Bitzer, 2012).

The rise of private standards is a global phenomenon but has been particularly evident in the UK fruit and vegetable markets. In these markets, supermarkets have come to dominate the retail of the various products and stringent standards are imposed on production processes along global value chains. These standards place a number of requirements on producers in other countries, particularly in developing countries, which are part of the global value chains (Dolan, C. & Humphrey, 2000; Gereffi, et al., 2005; Henson & Humphrey, 2010).

2.6. Conclusion

Overall the small island that is the UK represents a very substantial economy which poses a serious opportunity for South Africa's agricultural producers. The high and growing levels of real GDP, even at the per capita level, means that there are significant rising incomes and hence it is a substantial market for agricultural exports. Additionally the economy is highly focused on tertiary sectors with a

very small and shrinking portion of GDP attributable to the agricultural sector, highlighting the need for agricultural imports. The UK is also a very conducive business environment to expand into.

UK consumers consume a diverse mix of food and beverage products, as evident from the comparison with South Africa which is a lot more concentrated in a few products. The bulk of consumption in the UK is of cereals, as well as eggs and milk. However there has been strong growth in consumption of oil crops as well as fruit and nuts, and vegetables and pulses, meaning that these products are both sizeable markets and posing very promising potential to move into.

On a final note, whilst these markets are lucrative they are also tricky with stringent standards from both public and private bodies requiring that production of food products goings into these markets strictly adheres to health and safety, as well as environmental and ethical requirements.

3. TRADE HISTORY

In addition to being economically strong, the UK is well integrated in global trade relationships and has a strong presence in global value chains around the world. As such it is a lucrative trading partner and has become an important market for the export of certain South African goods as well as the supplier of certain key products into the South African market.

3.1. UK Trade Overview

Global imports into the UK over the past 10 years have increased more or less with inflation, meaning that the value of imports in real terms, plotted in 2016 prices as a line below in Figure 12, has remained relatively stable. This has occurred in a global context of increasing trade volumes, meaning the UK's share in total world imports has been falling. This is also plotted in Figure 12 by the bars which are measured on the secondary right-hand axis. The UK's share in world imports was more than 5% in 2006, but has fallen to 3.8% in 2015 even after an increase from a period low in 2013. Whilst the global imports are not yet available for 2016 it is expected that the UK would continue to improve its share after significant real import growth from 2015. In 2016 the UK's total imports reached GB£ 469 billion, the equivalent of 9.3 trillion South African Rand (ITC, 2017).

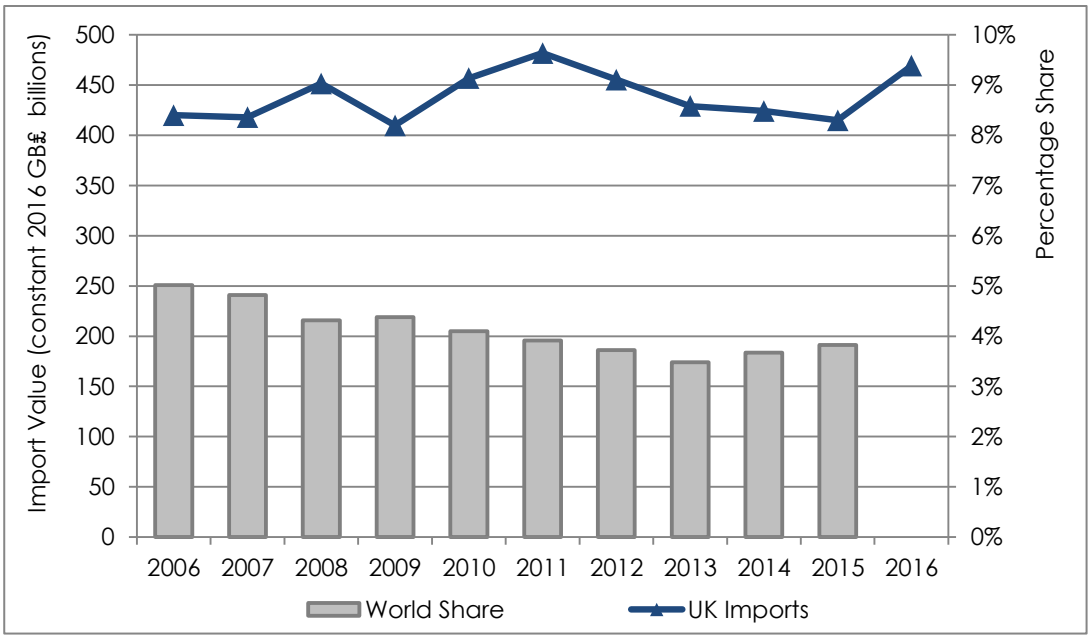


Figure 12: Real World Imports into the UK and the Total Share of World Trade, 2006-2016
Source: Compiled using (ITC, 2017) & (IMF, 2017b)

The top 5 imported product groups at the HS2 level accounted for more than half of total imports in 2016. These products were:

1. Machinery, mechanical appliances, nuclear reactors, and boilers (13%);
2. Vehicles other than railway or tramway rolling stock (12%);

3. Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, imitation jewellery, and coin (11%);
4. Electrical machinery and equipment, sound recorders and reproducers, and television image and sound reproducers (9%); and
5. Mineral fuels, mineral oils, bituminous substances, and mineral waxes (6%) (ITC, 2017).

Germany was the country of origin with the most imports into the UK in 2016, responsible for 13.6% of the country's imports in terms of value. Other significant importers were USA (9.3%), China (9.3%), Netherlands (7.3%) and France (5.2%). South Africa' holds a 1.5% share in UK imports, the same as it held ten years prior in 2006. This, however, is after rising to 2.2% in 2009, dropping to 0.72% in 2013 and then rising again to the 2016 level.

3.2. UK Agricultural Imports

Agricultural imports into the UK, taken broadly to include agri processing (HS 01-24; 50-53), have exhibited a slight upward trend over the past ten years, although have been mostly flat for the latter half of that period. This is shown in Figure 13 below which shows real agricultural imports in 2016 local currency (GB£), as well as the UK's share in total world agricultural imports, measured on the secondary right-hand axis. The UK's share in world agricultural imports fell from 6.1% in 2006 to 4.1% in 2012. It then grew slightly to 4.4% in 2015. In 2016 total agricultural imports into the UK equalled GB£ 43 billion, the equivalent of 860 billion South African Rand (ITC, 2017).

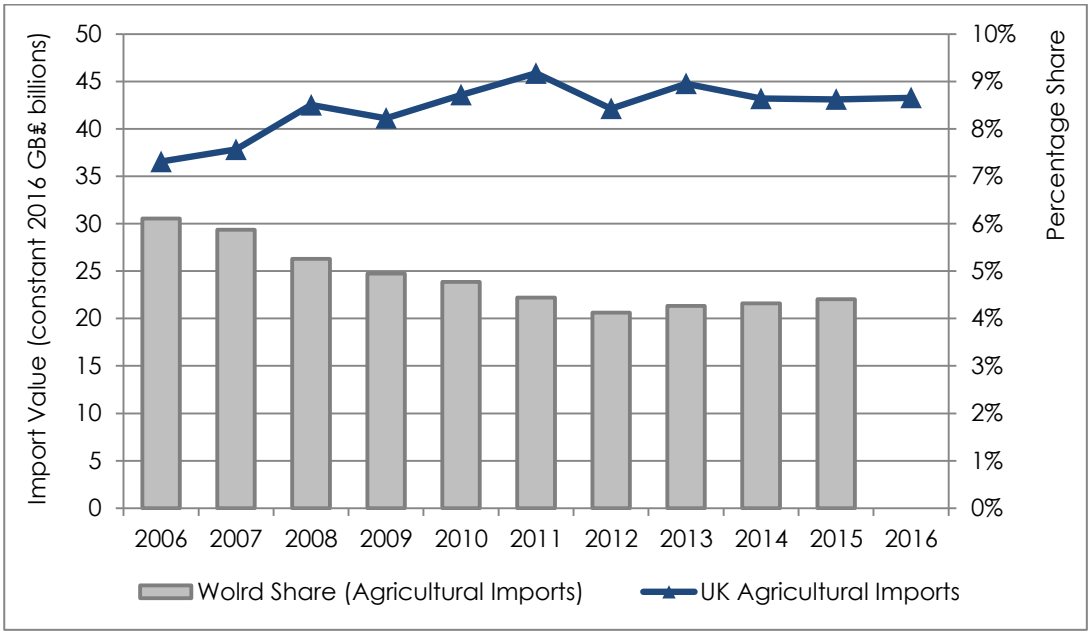


Figure 13: Real Agricultural Imports into the UK and Share in World Agricultural Imports, 2006-2016
Source: Compiled using (ITC, 2017) & (IMF, 2017b)

Agricultural imports into the UK have moved in a similar fashion to total UK imports, meaning that the share of UK imports made up of agricultural products has remained relatively constant. The lowest share over the ten year period reviewed, 8.7%, was observed in 2006. The highest share, 10.4%, was observed in 2013. In 2016 the share equalled 9.2% (ITC, 2017).

The top ten agricultural imports into the UK consisted of the same products at the HS2 level for 2006 and 2016, with slight changes in the composition thereof. This is illustrated in Figure 14 which shows the top ten agricultural imports for both years and the corresponding share of total agricultural imports.

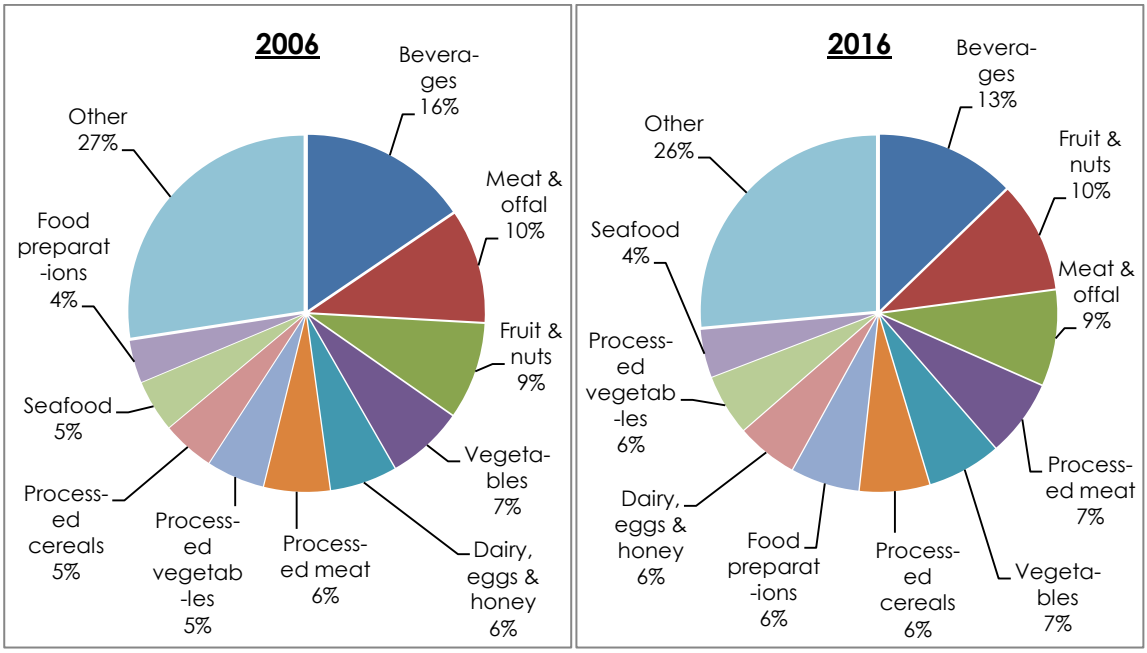


Figure 14: Product Breakdown (HS2) of UK Agricultural Imports, 2006 & 2016
Source: Compiled using (ITC, 2017)

The UK's main agricultural import has consistently been beverages, made up mostly of wine imports and making up 13% of agricultural imports in 2016. Fruit and nuts is a significant import and is more diverse in composition with significant imports of numerous different products including, but not limited to, bananas, grapes, apples, soft citrus, cranberries, avocados, strawberries and oranges. Similarly with regards to meat in 2016, whilst poultry imports exceeded beef and pork at the HS4 level, all three products had significant and fairly similar total import values.

3.3. Trade Flows between South Africa and the UK

South Africa has historically tended to be an overall net exporter of goods to the UK. This means that the value of exports from South Africa to the UK have tended to exceed South African imports from the UK. However this has not been true for all years and substantial differences exist in the relative trade flows within different industries. Total trade flows between the two countries are

shown for the past 10 years in Figure 15 below, with separate lines for South Africa's exports to the UK and imports from the UK, as well as the resultant trade balance for each year.

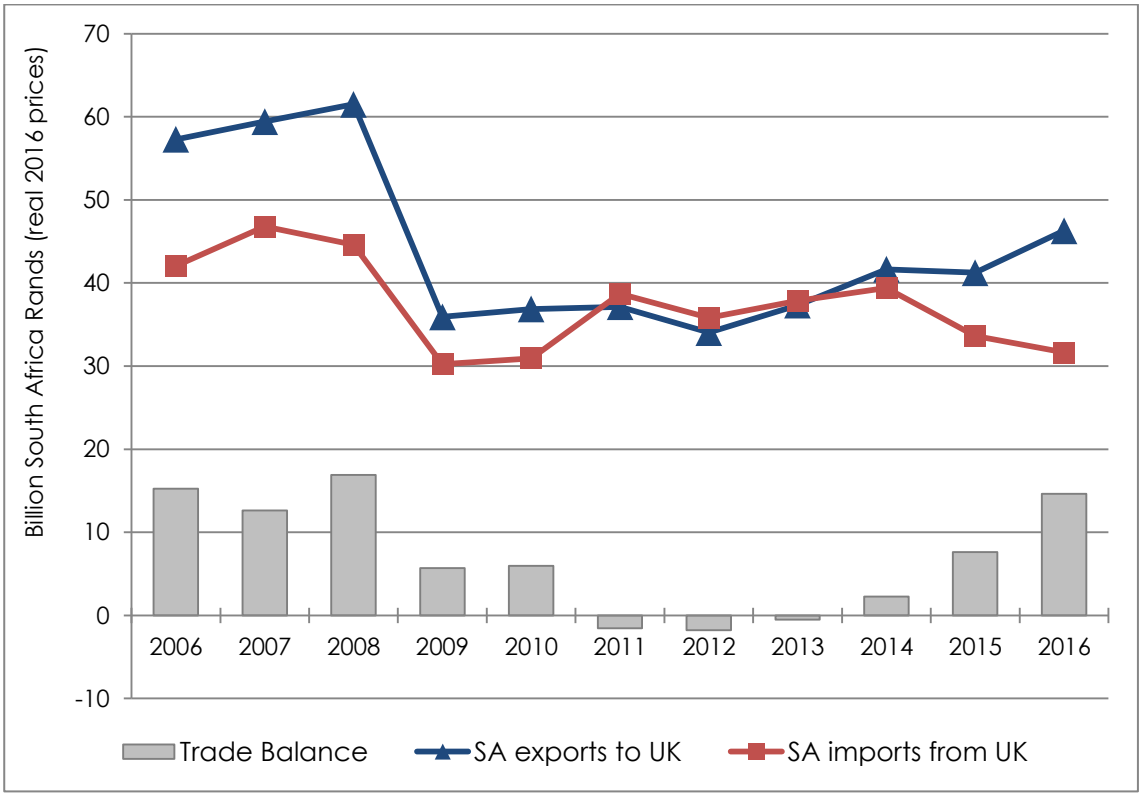


Figure 15: Real Total Trade Flows between South Africa and the UK, 2006-2016
Source: Compiled using (ITC, 2017) & (IMF, 2017b)

The impact of the global financial crisis, and subsequent recession in key international markets, including the UK, had a strong impact on South Africa's exports to the UK, falling by 42% in real terms between 2008 and 2009. The slow recovery of exports, and the fact that imports from the UK dropped less sharply over this period, led to a 3 year period between 2011 and 2013 where South Africa was a net importer from the UK.

Between 2012 and 2016 exports from South Africa to the UK have grown significantly in real terms, increasing from R34 billion to R43 billion over the four years. Most of the growth came from increased exports of platinum which grew slowly but from a very large base. Other big growth contributions came from motor vehicles, palladium, wine and certain fruits: specifically grapes, citrus and apples. During this period of export growth South Africa's imports from the UK experienced a net decline leading to a growing positive trade balance.

In 2016 the UK was South Africa's seventh biggest trading partner accounting for just over 4% of South Africa's total exports. The biggest export destination was China (9%), followed by USA (7%), Germany (7%), Botswana (5%), Namibia (5%) and Japan (6%).

The biggest UK export from South Africa in recent years has been of pearls, stones and precious metals, accounting for 42% of all exports between 2011 and 2016 in terms of real values. This product group is mainly made up of exports of platinum in various forms. Table 3 shows the top ten exports to and imports from the UK at the HS2 level between 2011 and 2016. For each product the table provides the share in exports of each product in the total value of real exports summed over the five year period, as well as the real annual growth rate. In total the top ten exports listed account for 86% of the total. The import breakdown is less concentrated with the UK top import, mechanical equipment, accounting for only 18% of the total and the top ten accounting for 76%.

Table 3: SA's Top 10 Real Exports to and Imports from the UK, 2011-2016

SA Exports to the UK				SA Imports from the UK			
HS2	**Description**	**Share**	**Annual Growth**	**HS2**	**Description**	**Share**	**Annual Growth**
'71	Pearls, stones and precious metals	42%	3%	'84	Mechanical equipment	18%	-5%
'08	Fruits and nuts	13%	14%	'87	Vehicles and accessories	17%	-8%
'87	Vehicles and accessories	10%	36%	'27	Mineral fuels and oils	10%	-10%
'84	Mechanical equipment	7%	-8%	'22	Beverages	7%	-2%
'26	Ores, slag and ash	5%	-30%	'85	Electrical machinery	6%	-1%
'22	Beverages	4%	4%	'30	Pharmaceutical products	5%	-6%
'27	Iron and steel	2%	2%	'99	Miscellaneous commodities	5%	1%
'85	Electrical machinery	1%	10%	'90	Optical and photographic	4%	2%
'27	Mineral fuels and oils	1%	-27%	'39	Plastics	3%	-1%
'76	Aluminium	1%	-12%	'49	Printed products	3%	-7%

Source: Compiled using (ITC, 2017) & (IMF, 2017b)

Although pearls, stones and precious metals still account for the bulk of exports, and has shown a positive real growth rate between 2008 and 2011, growth has been slow and the overall share has been falling. In 2011 these products accounted for 47% of exports, falling to 44% in 2016. A large amount of this has been made up for by strong real growth in fruits and nuts (14% p.a.) and vehicles and accessories (36% p.a.). This growth is on the back of a strong base and significantly exceeds growth in overall exports. This is evident from the fact that between 2011 and 2016, the share in exports made up of fruits and nuts increased from 9% to 14%, leading to an overall real share of 13% over the five year period. Similarly the share in exports made up of vehicles increased from 4% in 2011 to 16% in 2016, leading to an overall real share of 10% over the five year period.

There was also strong real growth in a number of other exports between 2011 and 2016. Of particular mention, the following products had exports in 2016 in excess of R100 million and real growth rates higher than 20% per annum (listed in order of the total value of exports in 2016): railway and tramway locomotives (33% p.a.); vegetables (28% p.a.); (organic chemicals (34% p.a.); soaps (88% p.a.); and clocks and watches (120% p.a.). Additionally, the following had very high real growth rates but from a very small base and hence exports in 2016 were still under R100 million (listed in order of the total value of exports in 2016): food wastes and residues (66% p.a.); animal and vegetable fats and oils (40% p.a.); processed meats (441% p.a.); miscellaneous manufacturing items (36%); explosives and pyrotechnic products (43% p.a.); processed cereals (34% p.a.); cereals (53% p.a.); man-made staple fibres (114% p.a.); knitted or crocheted fabrics (71% p.a.); umbrellas, walking sticks and riding-crops (21% p.a.); musical instruments (108% p.a.); fertilisers (23% p.a.); and vegetable textile fibres (37% p.a.).

Most of the UK imports in the top ten experienced negative growth rates between 2011 and 2016, as expected after observing the negative growth in aggregate real imports observed in Figure 15. There was only positive growth for miscellaneous commodities (1% p.a.) and optical and photographic (2% p.a.). There was strong positive real growth in certain other products making up smaller shares of total imports. In particular the following products at the HS2 level had annual growth rates in excess of 20% per annum (listed in order of the total value of imports in 2016): meat products (22% p.a.); food preparations (24% p.a.); dairy products (46%); live animals (32% p.a.), miscellaneous animal products (70% p.a.); vegetables (21% p.a.); cereals (82% p.a.); straw products (122% p.a.); fur products (51% p.a.) ; and wood pulp products (36% p.a.). However, it should be noted that these growth rates are all from a relatively low base, with only meat products, food preparations, dairy and live animals having export values of greater than R100 million in 2016.

3.4. South Africa – UK Agricultural Trade

South Africa's agricultural exports have experienced significant real growth in recent years, where agricultural exports are again defined broadly to include agri processing products (i.e. HS01-24; 50-53). Between 2011 and 2016 South Africa's agricultural exports to the UK increased from R 5.8 billion (2016 prices) to R9.6 billion, a real increase of 68%, which averages out to 11% growth per annum. The growth can be observed in Figure 16 below which shows South Africa's real agricultural exports to and imports from the UK, along with the resulting trade balance. South Africa's agricultural exports to the UK have consistently been significantly greater in value than agricultural imports from the UK over the past decade. This has resulted in a strong positive agricultural trade balance being maintained over this period and in 2016 equalling R 5.4 billion.

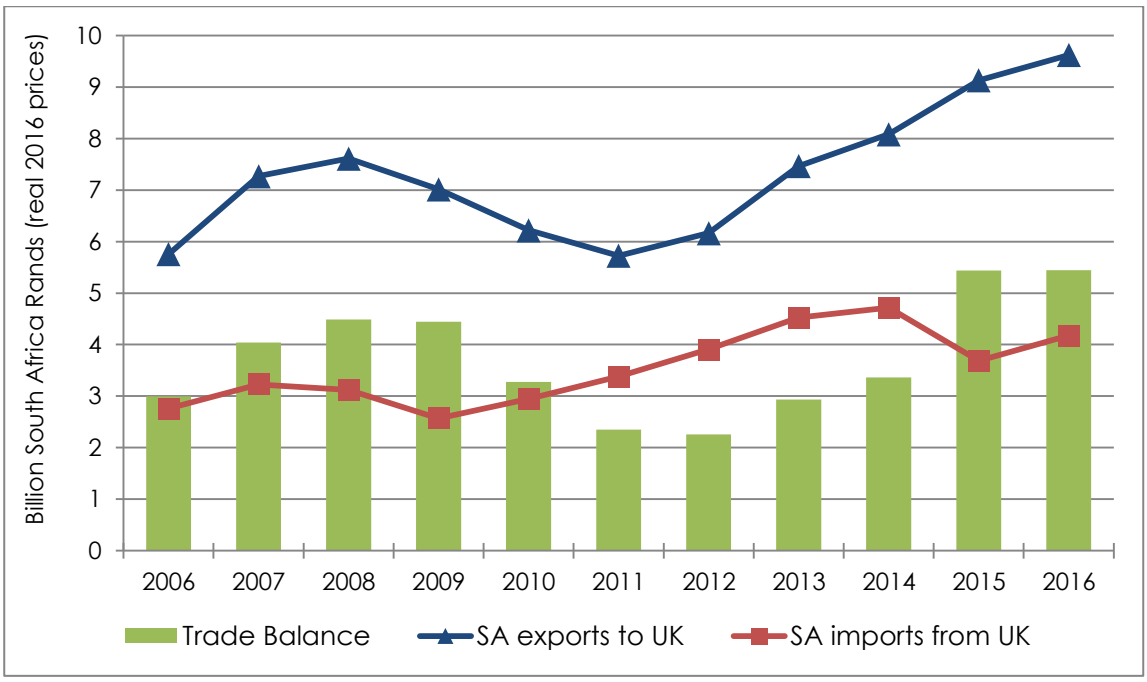


Figure 16: Real Agricultural Trade Flows between South Africa and the UK, 2006-2016
Source: Compiled using (ITC, 2017) & (IMF, 2017b)

The decrease in South Africa's agricultural exports to the UK after 2008 resulted in the UK becoming a less important export destination for South African agricultural products. This can be seen in Figure 17 which shows the share of South African agricultural exports going to the UK. This share fell from 13% in 2007 to 6% in 2011. Since then it has risen slightly to 7% in 2016. The share of South African imports coming from the UK has been relatively flatter, decreasing from 7% in 2016 to 4% in 2016.

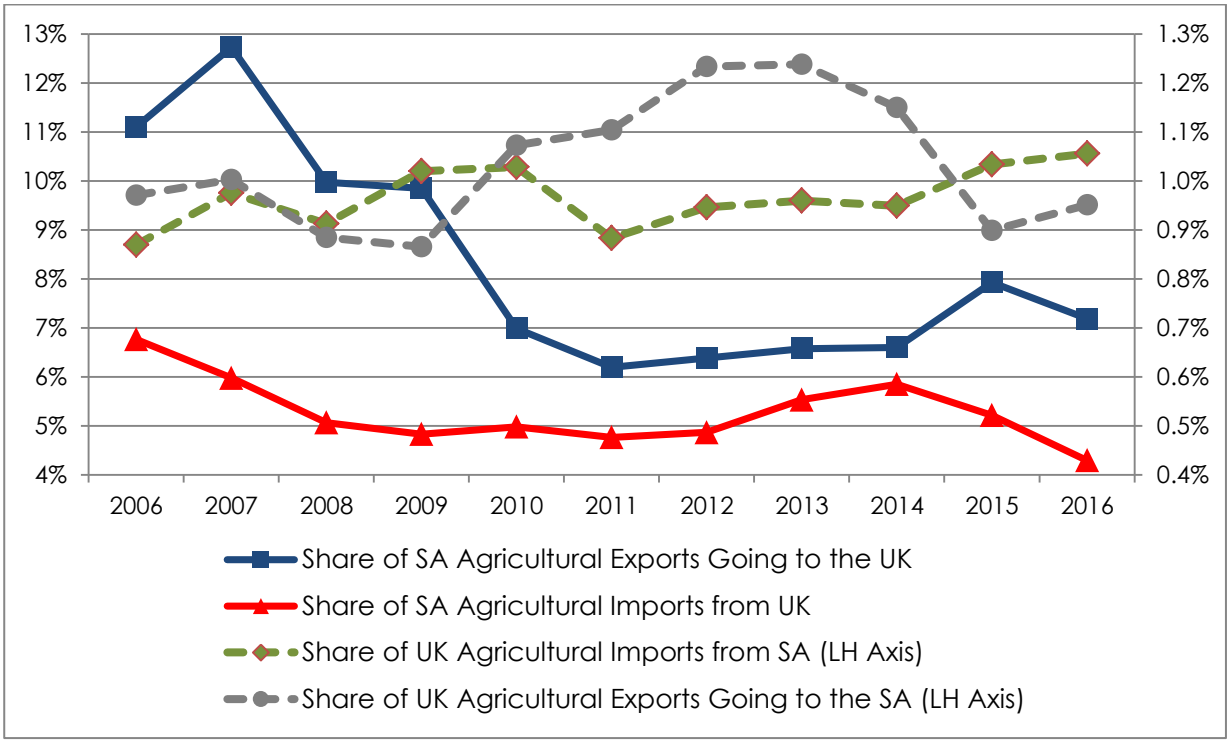


Figure 17: Relative Shares in Agricultural Trade between South Africa (SA) and the UK, 2006-2016
Source: Compiled using (ITC, 2017)

When looking at the UK's total imports and exports, South Africa is a relatively much smaller player. This can be seen in Figure 17 by the dashed series which show the share of UK agricultural imports coming from South Africa and the share of UK agricultural exports going to South Africa. Both of these are measured on the secondary left-hand axis. In terms of the former, the share of UK agricultural imports coming from South Africa has remained relatively flat between 0.8% and 1.1%. In terms of the UK's agricultural exports, the share of exports going to South Africa decreased between 2006 and 2009 after which it rose sharply from 0.9% to over 1.2% in 2013. Since then it has fallen to approximately 1.0% in 2016.

Most of South Africa's agricultural exports to the UK are fruits and nuts (HS08), accounting for 64% of all real agricultural exports between 2011 and 2016, and increasing on average at 14% per annum over the period (IMF, 2017b; ITC, 2017). Table 4 shows South Africa's top agricultural exports to the UK over the past five years at the more detailed HS-6 level, along with the average real annual growth rate over the five-year period and the average real value of exports. Given the high concentration of exports attributable to fruits and nuts, it is not surprising that the biggest export is a fruit product, namely grapes (HS080610). Exports of grapes averaged R1.5 billion between 2011 and 2016 in real 2016 prices, accounting for 18% of exports between 2011 and 2016, a period over which exports grew at an average real annual rate of 15%. There were also significant shares in agricultural exports held by several other fruit products, namely apples (12%), soft citrus (8%), oranges (5%), plums and sloes (3%), lemons and limes (3%), avocados (2%) and cranberries and bilberries (2%).

Table 4: South Africa's Top 10 Real Agricultural Exports to the UK, 2011-2016

HS6	Description	Real Total Export Share, 2011-2016	Real Average Annual Growth, 2011-2016	Real Average Annual Value, 2011-2016 (R million) (2016 prices)
'080610	Grapes	18%	15%	1 472
'220421	Bottled Wine (<=2l)	12%	2%	933
'080810	Apples	12%	5%	939
'220429	Bulk Wine (>2l)	8%	8%	634
'080520	Soft Citrus	8%	22%	640
'080510	Oranges	5%	6%	409
'080940	Plums & Sloes	3%	6%	208
'080550	Lemons & Limes	3%	27%	211
'080440	Avocados	2%	25%	195
'081040	Cranberries & Bilberries	2%	20%	175

Source: Compiled using (ITC, 2017) & (IMF, 2017b)

A further 21% of agricultural exports to the UK between 2011 and 2015 were of beverages (HS22). This was primarily wine exports, with bottled wine accounting for 12% of agricultural exports (R1.0 billion in 2016) and bulk wine 8% (R0.6 billion in 2016) (IMF, 2017b; ITC, 2017). Although bottled wine exports have exceeded those of bulk wine over the five year period, growth has been more rapid in respect of bulk wine suggesting a convergence of the two trends. The other broad group accounting for a significant share of real agricultural exports between 2011 and 2016 was processed fruits and vegetables (HS20) which maintained a 5% share over the five year period. At the detailed product level this is mainly attributed to exports of canned fruits such as pears (HS200840), peaches (HS200870) and apricots (HS200850).

There are some products which account for a relatively small share of exports but which have exhibited impressive growth in terms of South Africa's exports to the UK. These can be seen in Table 5 which shows the fastest growing South African agricultural exports to the UK over the past five years at the HS6 level. Processed meats other than poultry, beef and pork exhibited particularly strong growth averaging 436% in real terms and with an average annual export value of R22 million over the five year period. Asides from melons, vegetable seeds, sweetcorn, maize and cauliflower and broccoli, all the products in the table are agri processing products.

Table 5: Top Twenty Growing South African Agricultural Exports to the UK, 2011-2016

HS6	Description	Real Average Annual Value, 2011-2016 (R million) (2016 prices)	Real Average Annual Growth, 2011-2016
'160290	Processed meat excl. poultry, beef and pork	21.9	436%
'200919	Orange juice	2.4	213%
'090112	Unroasted decaffeinated coffee	0.5	200%
'080719	Fresh melons excl. watermelons	48.3	191%
'200939	Single citrus fruit juice excl. orange & grapefruit	2.3	186%
'090121	Roasted caffeinated coffee	8.7	155%
'081330	Dried apples	6.2	154%
'200559	Unshelled preserved beans	0.5	144%
'150990	Non-virgin olive oil	0.4	128%
'220290	Non-alcoholic beverages excl. water, juices and milk	6.7	107%
'120991	Vegetable seeds	1.7	100%
'071040	Sweetcorn	2.6	92%
'080590	Miscellaneous citrus	4.6	91%
'071190	Miscellaneous preserved vegetables	0.2	86%
'210111	Coffee extracts, essences and concentrates	0.2	85%
'190190	Miscellaneous malt preparations	0.1	82%
'190120	Mixes and doughs	0.4	77%
'100590	Maize	11.9	75%
'070410	Cauliflower and broccoli	0.1	74%
'190590	Miscellaneous bakery products	10.1	73%

Source: Compiled using (ITC, 2017) & (IMF, 2017b)

The bulk of agricultural imports from the UK into South Africa are of whiskey. This can be seen in Table 6 which shows the main agricultural imports into South Africa from the UK. The table columns show the share in real exports over the five year period along with the real annual growth rate and average real annual value of exports. Even at the detailed product whiskies accounted for 57% of all agricultural imports with an average real annual value of R2.3 billion.

Table 6: South Africa's Top 10 Real Agricultural Imports from the UK, 2011-2016

HS6	Description	Real Total Export Share, 2011-2016	Real Average Annual Growth, 2011-2016	Real Average Annual Value, 2011-2016 (R million) (2016 prices)
'220830	Whiskies	57%	-2%	2 306
'020714	Frozen Poultry Cuts	10%	23%	417
'210690	Miscellaneous Prepared Foods	3%	34%	124
'180690	Cocoa Preparations	2%	-7%	71
'040690	Processed Cheese	1%	64%	56
'230110	Inedible meat products	1%	-9%	56
'220840	Rum & Sugar-Cane Spirits	1%	-13%	51
'110412	Rolled or Flaked Oats	1%	6%	43
'230990	Prepared Animal feed	1%	18%	43
'010511	Live Poultry	1%	38%	42

Source: Compiled using (ITC, 2017) & (IMF, 2017b)

Whereas all of South Africa's top agricultural exports to the UK exhibited real increases between 2011 and 2016, there were real declines in some of the top agricultural imports from the UK such as whiskies, chocolate products, inedible meat products and rum and sugar-cane spirits. In contrast there was extremely high growth in some key imports over the five year period. Of particular mention is poultry where frozen cuts (HS020714) achieved real annual growth of 23% per annum, building it up to a 2016 import value of R0.5 billion, 10% of total agricultural exports. Live poultry also grew strongly over the period reviewed, with real annual growth of 38% per annum, albeit from a significantly smaller base. Strong growth from a sizeable base was also observed for a number of agri processing imports, in particular processed cheese (HS040690) which grew at 64% per annum in real terms between 2011 and 2016 to end up with exports to the value of R119 million in 2016.

3.5. Competition for UK Agricultural Exports

The UK is an important market for some key South African agricultural exports. This is evident from high shares in South African exports of these products going to the UK. Figure 18 shows the percentage of the exports going to the UK in 2016 for the main agricultural exports as observed in

Table 4. Also indicated on the graph is the UK's rank in terms of South Africa's export destinations for each product. The UK was South Africa's biggest export destination for wine (bottled and bulk), apples, soft citrus and cranberries and bilberries. It is also the second biggest destination for grapes, avocados and plums and sloes. For all three of these products where the UK is second, the biggest export destination is the Netherlands. The Netherlands is also the biggest destination for South Africa's oranges where the UK is only eighth in terms of export value. South Africa's most important destination for lemon and limes is the United Arab Emirates, followed by the Netherlands, Saudi Arabia and then the UK.

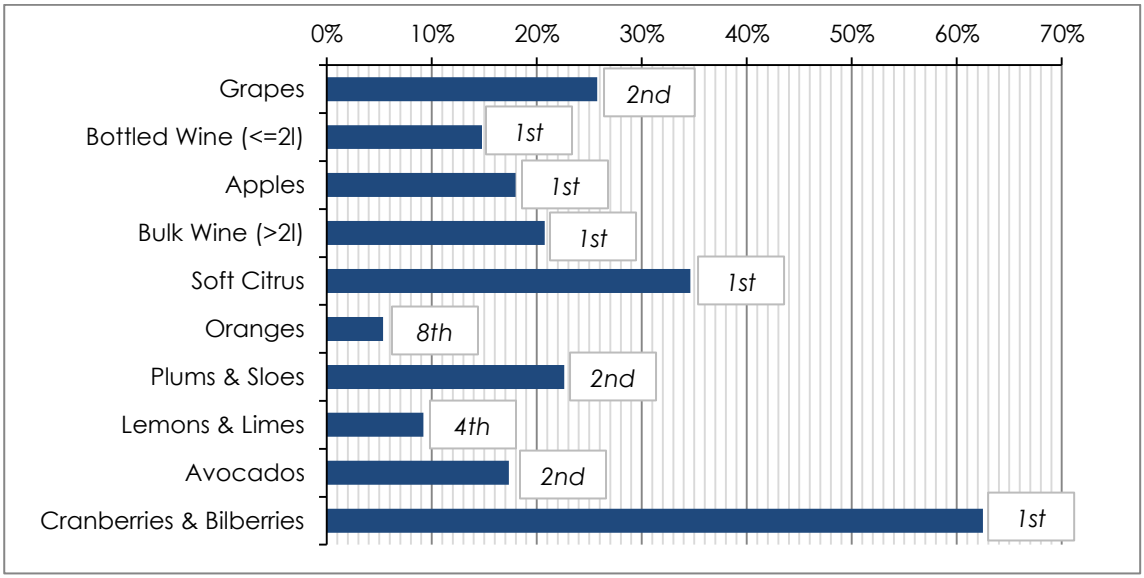


Figure 18: Share of SA Exports Going to the UK and the UK's Rank in terms of Destinations, 2016
Source: Compiled using (ITC, 2017)

As well as the UK being such a vital export destination for these products, South Africa is also an important supplier for the UK market. Table 7 shows South Africa's share in the UK market for the eight fruit products identified in the top ten agricultural exports to the UK (i.e. excluding wine). For all eight products South Africa is in the top ten supplying countries into the UK.

South Africa is the biggest supplier of grapes to the UK capturing 21% of the market in 2016. Spain is a close second with 20%. The next highest share was held by Chile with 10%, representing Latin America along with Peru (6%). Spain's European counterparts Germany, Greece, Netherlands and Italy all feature in the top 10 with 4% to 5% shares. Other key competitors are Egypt (8%) and India (5%).

For the three citrus products analysed (soft citrus, oranges and lemons and limes), as well as plums and sloes, Spain is the biggest supplier to the UK with South Africa in second. South Africa's share in the plums and sloes market, however, is significantly larger (31%) than the citrus products (22%, 21% and 15% respectively). South Africa is also the second biggest supplier of apples to the UK (17%), this time behind France who account for a third of the market, and followed by New Zealand (14%)

with the countries only appearance in the top ten suppliers of the fruit products analysed. Spain is also the largest supplier of cranberries and bilberries (26%), where South Africa is the fourth biggest supplier with an 8% share.

Table 7: Main Suppliers of Select Fruit into the UK, 2016

#	Grapes		Apples		Soft Citrus		Oranges	
1	***South Africa***	***21%***	France	33%	Spain	43%	Spain	35%
2	Spain	20%	***South Africa***	***17%***	***South Africa***	***22%***	***South Africa***	***21%***
3	Chile	10%	New Zealand	14%	Morocco	12%	Egypt	19%
4	Egypt	8%	Italy	8%	Peru	9%	Germany	6%
5	Peru	6%	Chile	8%	Germany	7%	Netherlands	5%
6	India	5%	Spain	4%	Netherlands	2%	Peru	3%
7	Germany	5%	Germany	3%	Israel	1%	Morocco	2%
8	Greece	5%	Netherlands	3%	Turkey	1%	Mexico	2%
9	Netherlands	5%	Belgium	2%	Chile	1%	Italy	2%
10	Italy	4%	USA	1%	Argentina	<1%	Brazil	1%

#	Plums & Sloes		Lemons & Limes		Avocados		Cranberries & Bilberries	
1	Spain	31%	Spain	42%	Chile	22%	Spain	26%
2	***South Africa***	***31%***	***South Africa***	***15%***	Peru	21%	Chile	19%
3	Italy	13%	Brazil	9%	Spain	11%	Peru	12%
4	Chile	10%	Germany	9%	Israel	11%	***South Africa***	***8%***
5	Germany	5%	Argentina	6%	***South Africa***	***11%***	Argentina	8%
6	France	3%	Mexico	6%	Netherlands	9%	Poland	7%
7	Portugal	3%	Netherlands	5%	Germany	5%	Germany	5%
8	Netherlands	2%	Chile	3%	Colombia	4%	Netherlands	5%
9	Israel	<1%	Italy	2%	Mexico	2%	Morocco	3%
10	Turkey	<1%	Turkey	1%	Kenya	1%	USA	2%

Source: Compiled using (ITC, 2017)

Spain is undoubtedly South Africa's biggest competitor across the board in terms of the fruit products analysed. In addition to being the biggest supplier for four of the products (soft citrus, oranges, lemons and limes, and plums and sloes), the second biggest supplier of grapes and the third biggest for avocados, the country also features in the top ten suppliers for all eight products, the lowest position being sixth for apples. Aside from South Africa, the only other countries which feature in the top ten across all eight products are fellow European countries Germany and the Netherlands. Italy features in terms of five of the eight products (grapes, apples, oranges, plums and sloes, and lemons and limes). Other European Union members observed are Greece (grapes), Belgium (apples), Portugal (plums and sloes) and Poland (cranberries and bilberries).

Chile is the biggest importer of avocados into the UK (22%), where Spain is still third (11%) but only slightly higher than South Africa as the fifth biggest (11%). Chile is another key competitor for South Africa, featuring in the top ten for seven of the eight fruit products. The only product where Chile does not feature is for oranges. Chile's position varies, from first (avocados) to ninth (soft citrus). Peru also has a strong presence featuring prominently with respect to five products, namely: avocados

(2nd); cranberries and bilberries (3rd); soft citrus (4th); grapes (5th); and oranges (6th). The other Latin American countries with strong presence in these markets are Brazil, the third biggest provider of lemons and limes and the tenth biggest of oranges, Columbia, the eighth biggest importer with regards to avocados, and Argentina which featured three times in respect of lemons and limes (5th), cranberries and bilberries (5th), and soft citrus (10th).

Asides from South Africa, African countries do not feature prominently in the UK markets for the fruit products analysed. Morocco is the most prominent other African country, making the top ten for soft citrus (3rd), oranges (7th) and cranberries and bilberries (9th). Egypt is the third biggest supplier of oranges to the UK and the fourth biggest supplier of grapes. But outside of these North African countries, there is only Kenya which is the tenth biggest importer of avocados into the UK.

Other countries which have not yet been mentioned but which compete strongly in the UK fruit markets analysed in Table 7 are:

- Israel: Soft citrus (7th), plums and sloes (9th), avocados (4th)
- Turkey: Soft citrus (8th), plums and sloes (10th), lemons and limes (10th)
- Mexico: Oranges (8th), lemons and limes (6th), avocados (9th)
- USA: Apples (10th), cranberries and bilberries (10th)

South Africa is not as prominent a player in the UK wine markets as with the UK fruit markets analysed. This is particularly the case for bottled wine where South Africa is only the eleventh biggest importer accounting for less than 3% of the market. South Africa holds a far more significant share with regards to bulk wine imports into the UK, accounting for 10% of the market as the fourth biggest importer. This is can be seen in Figure 19 below which shows the top five importers for bottled and bulk wine into the UK.

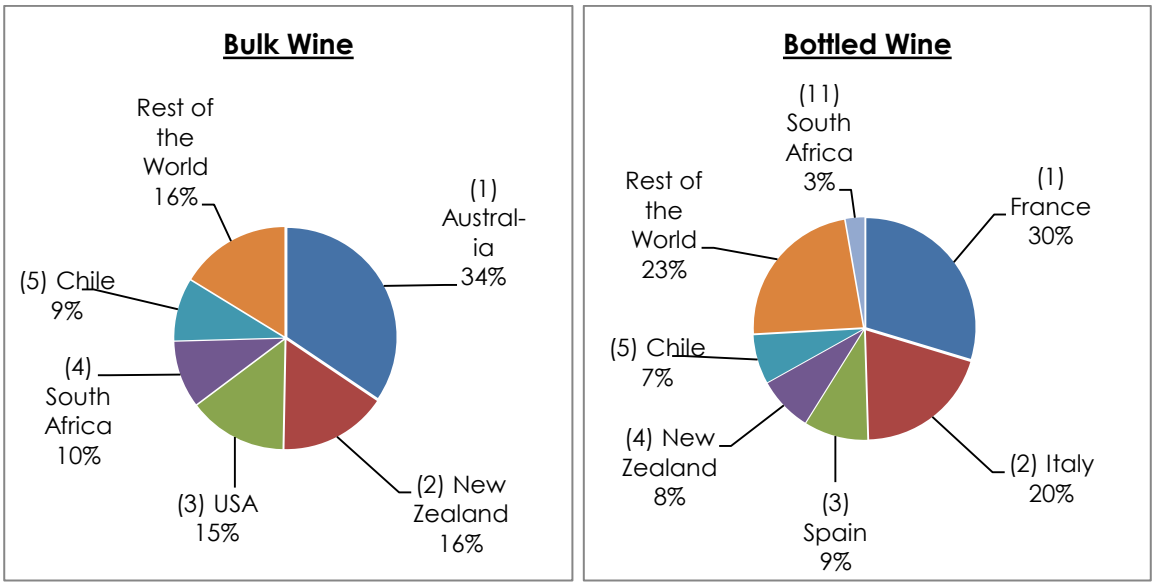


Figure 19: Main Importers of Wine into the UK, 2016
Source: Compiled using (ITC, 2017)

European countries dominate the UK bottled wine market with France accounting for 30% of imports as the biggest supplier. Italy and Spain are second and third biggest making up a combined share of 59% across the top three countries. Other big players are New Zealand (8%) and Chile (7%). For bulk wine the main importers are all from outside the EU, the biggest being Australia, accounting for 34% of imports, followed by New Zealand (16%), USA (15%), South Africa (10%) and Chile (9%). There is less space in the market for bulk wine than bottled wine, with importers outside of the top five making up only 16% compared with 26% in the case of bottled wine.

As a final point worth noting, whilst meat products have not come up much in the analysis, particularly from South Africa's export perspective, it still represents an important opportunity for the country's agricultural sector. South African meat producers have been unable to penetrate the UK market in the past mainly due to restrictions on South African meat imports into the EU due to issues like foot and mouth disease and avian flu (ostriches). As a result South Africa exports only a very small amount of meat to the UK. According to the International Trade Centre, UK meat imports from South Africa have only really been of game meat, with no significant imports of pork, beef and poultry. In recent years even the imports of game meats have been struggling after being completely banned and equal to 0 in 2012 and 2013 (ITC, 2017).

If South Africa could negotiate to have its meat exports allowed into the UK, it could open up a very lucrative market for South African meat producers. This is illustrated in Figure 20 which shows real meat imports for different meat categories, between 2006 and 2016. Over the ten year period total meat imports experienced significant real growth: from R69 billion in 2006 (2016 prices) to R80 billion in 2016.

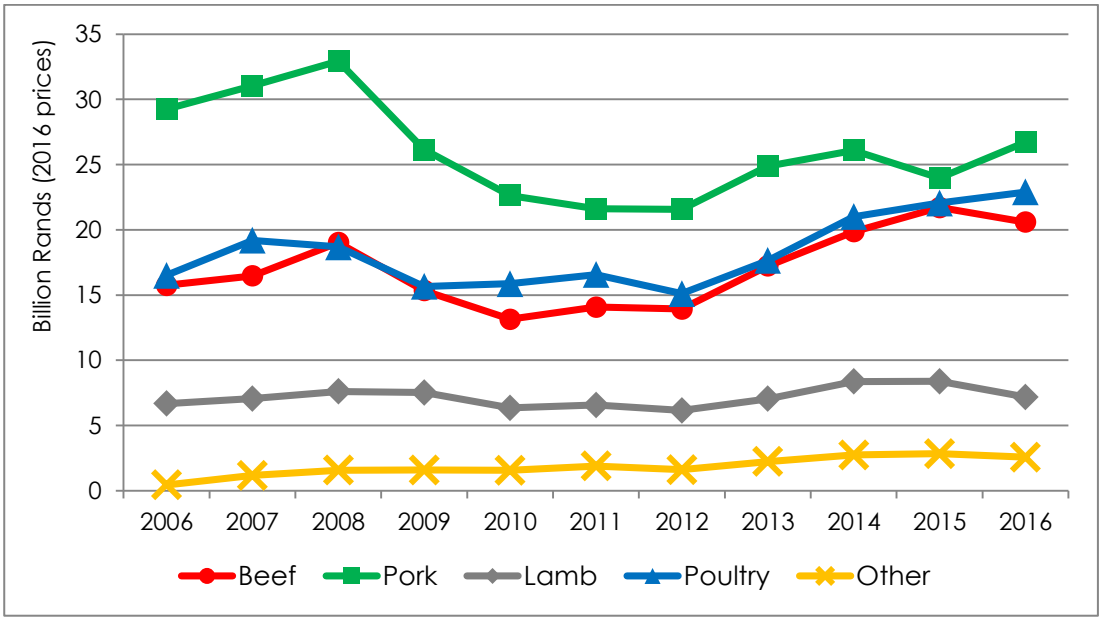


Figure 20: UK Real Meat Imports, 2006-2016
Source: Compiled using (ITC, 2017)

Pork has been the biggest import for the UK over this period, however imports has fallen in real terms whereas beef and poultry imports have grown, and in particular have risen sharply in the latter half of the decade under review. Between 2012 and 2016 the UK's beef imports grew in real terms from R14 billion to R21 billion (10% per annum), and poultry imports grew from R15 billion to R23 billion (11% per annum). This led to a convergence with pork exports which totalled R27 billion in 2016.

3.6. Conclusions

The trade analysis has highlighted the vastness of the UK market and also that it has become a vital export destination for certain goods. Overall South Africa's exports to the UK took a sharp fall from 2008 to 2009, since then exports have increased gradually in real terms, thus just keeping ahead of inflation.

South Africa's main export to the UK over the past five years has been of pearls, stones and precious metals. In total this made up almost half of the country's UK exports mainly due to platinum exports. However, over that period there has been strong growth from a strong base in the exports of fruits and nuts, the country's second biggest UK export. South Africa's biggest import from the UK is of mechanical equipment.

Agricultural exports from South Africa to the UK in particular have experience strong real growth over the past 5 years resulting in a growing positive trade balance developing. The main agricultural exports at the detailed product level are, in order of the size of exports: grapes; bottled wine; apples; bulk wine; soft citrus; oranges; plums and sloes; lemons and limes; avocados; and cranberries and bilberries. Agricultural imports from the UK are mainly made up of whiskies, although significant exports were also observed for poultry and certain processed products.

South Africa is also a very important supplier of agricultural produce for the UK, specifically with regards to fruit and wine. Whilst for 2016 Spain came out as the biggest supplier for most of the fruit products analysed in this study, South Africa had the next biggest overall presence. The complementarity between the two producing countries also needs to be considered, particularly for products like citrus and stone fruits which cannot be kept in cold storage all year round like apples and pears can. For this reason it is advantageous to have key suppliers in both the Northern and Southern hemispheres where the seasons contrast and can subsequently lead to having an all-year supply.

The UK meat market has been untapped by South African producers, mainly due to health and safety regulations restricting South African imports into the EU. However this represents a big and potentially very lucrative market for South African producers.

It is important that the South African government focuses efforts on ensuring that the post-Brexit agreements are ones which at least maintain South Africa's competitive advantage in the UK market for the main products analysed in this study. If other countries are able to disproportionately gain from the negotiations, South Africa could face significant losses in market share which, given the importance of the UK market, could be detrimental for certain key industries.

4. TARIFF ANALYSIS

Tariffs and quotas will be the main focus of post-Brexit negotiations with the UK as they have the most direct impact on the ability of South African producers to enter and be competitive in the UK market.

4.1. Data and Methodology

There are two types of tariffs of interest in the analysis, the current tariffs being faced and the tariffs products could face, as allowed by the World Trade Organisation (WTO).

Current tariffs are obtained from the International Trade Centre (ITC, 2017). Average tariff rates can be calculated and obtained at the HS6 level. The average rates are then applied to 2016 trade flows to obtain the total tariff paid on each product.

The Most-Favoured-Nation (MFN) principle is the first article of the WTO's General Agreement on Tariffs and Trade (GATT) which governs trade between WTO members. The principle specifies that outside of official trade agreements, WTO members may not discriminate against countries and hence tariffs applied on goods from one member country must be in turn be applied to everyone (WTO, 2015). If South Africa and the UK fail to come up with an agreement specifying the tariff allowed on a particular good, that good will be subject to MFN rates. MFN rates in this analysis are obtained at the HS6 level from the World Trade Organisation (WTO, 2017).

4.2. Tariffs on South African Imports into the UK

In 2016, the UK received R786 million in tariffs on imports from South Africa, where tariff rates were set by agreement with the EU as applicable to all EU countries. This only made up 0.5% of the total value of imports however the percentage was substantial for certain goods. Agricultural goods faced the majority of tariffs into the market. This is evident in Table 8 which shows the aggregated (HS2) tariffs paid on South African products into the UK in 2016. Despite being highlighted as one of the most promising UK exports for South Africa, fruits and nuts account for 84% of tariffs. Significant tariffs were also paid on another key agricultural export, wine, making up the bulk of the tariffs under beverages. Asides from aluminium products and albuminoidal substances, which together account for only 0.5% of total tariffs paid, all other tariffs are applied to agricultural products (including agri processing).

Table 8: Aggregated Tariffs on South African Imports into the UK, 2016

HS2	Product Group	Total Value of Tariffs (R '000)	Share of Tariffs (%)	Total Value of Imports (R '000)	Average Tariff Rate (%)
08	Fruits and Nuts	661 600	84.17%	8 318 918	7.95%
22	Beverages	60 675	7.72%	1 984 120	3.06%
20	Processed Foods	23 145	2.94%	333 298	6.94%
06	Trees and Plants	15 762	2.01%	210 132	7.50%
03	Seafood	4 415	0.56%	122 140	3.61%
76	Aluminium Products	3 736	0.48%	357 846	1.04%
21	Misc Food Preparations	3 477	0.44%	201 075	1.73%
11	Milled cereals	3 400	0.43%	18 305	18.58%
19	Bakery & Processed Cereals	3 351	0.43%	32 711	10.24%
07	Vegetables	2 747	0.35%	160 464	1.71%
16	Processed Meat	2 348	0.30%	45 462	5.17%
17	Sugar Products	1 143	0.15%	8 119	14.08%
35	Albuminoidal Substances	171	0.02%	26 014	0.66%
18	Cocoa Products	38	0.00%	3 972	0.94%

Source: Compiled using (ITC, 2017)

The highest tariff within fruits and nuts was for grapes where a 19% tariff was applied in 2016 making up a total cost of R403 million (51% of all tariffs). Other fruit and nut products facing a tariff in the UK market in 2016 (with corresponding applied tariff rates) were: apples (15%); pears (14%); lemons and limes (11%); peaches and nectarines (4%); and plums and sloes (2%).

At the more detailed tariff line, aside from the areas highlighted where the total value of tariffs were high, there were high tariff rates charged on smaller import flows for various fruit juices, in particular grape juice (27%) and apple juice (26% or 15% depending on brix value). This was also the case for citrus jams (18%) and fruit jams (16%); maize meal (24%) and corn flour (15%); and bakery products (15%).

4.3. Tariffs on UK Imports into South Africa

The amount of tariffs reported by South Africa on imports from the UK totalled R550 million in 2016, 1.7% of the total value of imports. Despite being less in value that that reported by the UK in relation to imports from South Africa, it is spread over a significantly larger and more diverse group of products. This is shown in Table 9. Three quarters of the tariffs paid were in relation to vehicles and accessories where the average tariff worked out to 9.6%. Most of the tariffs under vehicles related to the imports of light motor vehicles (carrying ten people or less). There was also a significant share of the tariffs attributable to mineral fuels and oils (9.15%).

Agricultural products made up a far smaller share of tariff payments for the UK's imports into South Africa than was observed when previously looking at imports into the UK from South Africa. Only 6% of the tariffs paid by the UK relate to agricultural products, adding up to a total value of just over R34 million. The largest agricultural tariff in terms of net value was for meat, totalling R12 million with an average tariff of 1.7%. The largest average tariff rate was attributable to seafood (14%), although there was only a very low amount of imports of this product.

Table 9: Aggregated Tariffs on UK Imports into South Africa, 2016

HS2	Products	Total Value of Tariffs (R '000)	Share of Tariffs (%)	Total Value of Imports (R '000)	Average Tariff Rate (%)
87	Vehicles & Accessories	413 077	75.09%	4 284 025	9.64%
27	Mineral Fuels and Oils	50 352	9.15%	2 913 110	1.73%
02	Meat	11 756	2.14%	677 543	1.74%
84	Mechanical Equipment	11 752	2.14%	5 361 593	0.22%
04	Dairy & Eggs	9 499	1.73%	179 795	5.28%
40	Rubber Products	7 940	1.44%	273 137	2.91%
17	Sugar Products	6 158	1.12%	48 056	12.81%
63	Other Made-up Textile Articles	5 898	1.07%	46 414	12.71%
62	Apparel, Not Knitted or Crocheted	5 104	0.93%	27 904	18.29%
61	Knitted or Crocheted Apparel	4 871	0.89%	26 028	18.72%
64	Footwear	3 239	0.59%	18 144	17.85%
70	Glass & Glassware	3 181	0.58%	137 191	2.32%
42	Leather Products	2 366	0.43%	12 252	19.31%
21	Misc Food Preparations	2 255	0.41%	383 728	0.59%
59	Coated Textile Fibres	2 060	0.37%	47 851	4.30%
19	Bakery & Processed Cereals	1 781	0.32%	126 155	1.41%
83	Misc Articles of Base Metals	1 581	0.29%	75 945	2.08%
57	Textile Floor Coverings	1 013	0.18%	6 917	14.64%
85	Electrical Machinery	909	0.17%	2 076 758	0.04%
11	Milled cereals	856	0.16%	81 852	1.05%
58	Special Woven fabrics	653	0.12%	6 492	10.05%
52	Cotton	621	0.11%	6 448	9.64%
54	Man-Made Filaments	516	0.09%	76 546	0.67%
94	Furniture	499	0.09%	193 176	0.26%
60	Knitted or Crocheted Fabrics	442	0.08%	8 046	5.49%
51	Wool	411	0.07%	38 354	1.07%
53	Vegetable Fibres	409	0.07%	4 792	8.53%
16	Processed Meat	355	0.06%	4 470	7.95%
03	Seafood	169	0.03%	1 172	14.38%
55	Man-Made Textile Fibres	158	0.03%	6 522	2.42%
68	Stone & Cement Products	100	0.02%	227 690	0.04%
29	Organic Chemicals	64	0.01%	342 927	0.02%
96	Misc Manufactured Products	58	0.01%	43 894	0.13%
56	Wadding, Felt & Nonwovens	5	0.00%	29 575	0.02%

Source: Compiled using (ITC, 2017)

It should be noted that thus far the analysis has been at quite a broad product level (HS2) in order to get an overarching view and allow for comparability. Whilst this has been accomplished, the

aggregation in the analysis hides significant differences in tariffs within these product groupings as tariffs are applied at a much more detailed product level. In some cases tariffs will be set at a standard rate for all or most of a product grouping but there are many cases where they differ substantially within groups.

4.4. Default MFN Tariffs

In the case of no trade agreement, South Africa and the UK would be subject to the standard MFN rates for each partner country. Were this to be the case, the increase in tariffs would be of a greater relative magnitude for the imports from the UK into South Africa than it would be for imports into the UK from South Africa. This can be seen in Figure 21 which compares the total tariffs on 2016 trade flows between South Africa and the UK under current applied tariff rates and the MFN rates which could be faced.

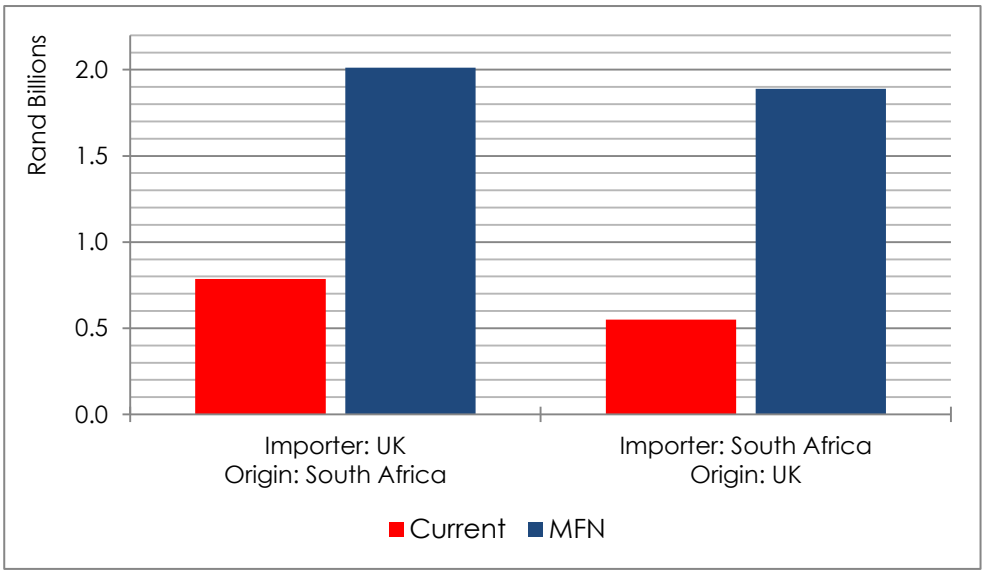


Figure 21: Total Tariffs under Current and MFN Rates between South Africa and the UK, 2016
Source: Compiled using (ITC, 2017) & (WTO, 2017)

As already observed, in 2016 there were a reported R786 million paid in tariffs on imports into the UK from South Africa. If tariff rates were to change to MFN rates, the 2016 trade flows would result in a total of R2.0 billion, an increase of 156%. Whilst this is a substantial increase it is significantly less that the percentage increase on tariffs paid by the UK on imports into South Africa which would increase by 243%, from R550 million to R1.9 billion.

In terms of agricultural products (HS01-24; 50-53), the comparison is more stark. This can be seen in Figure 22 which compares the tariffs on 2016 agricultural trade flows between South Africa and the UK under current applied tariff rates and the MFN rates which could be faced. For South Africa, most of the tariffs paid on goods going into the UK are on agricultural products and the total paid is

not far off from what would be paid under MFN rates. There would be a definite rise though as the total paid on tariffs of these products would increase by 42%, from R782 million to R1.1 billion. In contrast the current tariffs paid by the UK on agricultural goods are very small, equalling only R34 million in 2016. This would increase to R290 million under MFN rates, significantly smaller than that which would be faced by South Africa for goods going into the UK but still 747% higher than what is currently faced.

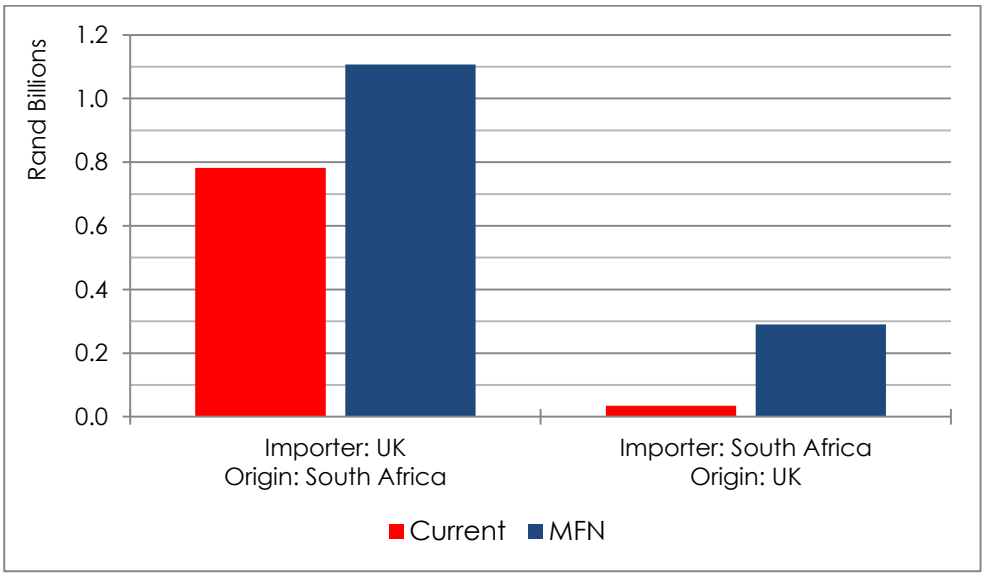


Figure 22: Agricultural Tariffs under Current and MFN Rates between South Africa and the UK, 2016
Source: Compiled using (ITC, 2017) & (WTO, 2017)

Table 10 shows the products where the largest net increase in agricultural tariffs would come from for South Africa, based on 2016 trade flows. Oranges is a particularly big concern where South Africa currently enters the UK market duty free, but an MFN tariff of 16% would mean needing to pay tariffs to the total of R104 million were exports to remain at 2016 levels. In general fresh fruit products appear the most vulnerable to higher tariffs, mainly due to the high volumes of trade which have been attained in relation to these products.

Table 10: Additional Tariff Faced on UK Imports from South Africa under MFN

Code	Product	Current Tariff Rate (%)	MFN Tariff Rate (%)	Net Change in Tariff Value (R'000)
080510	Oranges	0.0	16.0	103 518
080940	Plums & Sloes	2.0	12.0	35 141
080719	Melons (excl. watermelons)	0.0	8.8	18 855
081040	Cranberries & Bilberries	0.0	4.0	16 197
080440	Avocados	0.0	4.0	14 976
081020	Berries	0.0	9.2	12 165
200899	Misc Preserved Fruit	0.0	16.3	11 288
200840	Preserved Peaches	11.0	20.9	10 120
070993	Pumpkins	3.0	12.8	8 971
-	*Rest (aggregated)*	-	-	*94 186*

Source: Compiled using (ITC, 2017) & (WTO, 2017)

Looking specifically at South Africa's main agricultural exports to the UK, as identified in Section 3.4, an increase to MFN tariff rates could put concerning strain on some of these key industries. Figure 23 shows the tariff rates for the top ten agricultural exports under current (EU) tariff rates and MFN rates. Whilst all of the top four exports (grapes, bottled wine, apples and bulk wine) are already at their MFN rates, and soft citrus has a zero MFN rate, there are increases from the current rates for plums and sloes (2% to 12%) and lemons and limes (11% to 13%) were MFN rates to be adopted. Even more worrying, and as was already highlighted in Table 10, oranges currently experience no tariff but would face a 16% rate under MFN conditions. Similarly both avocado and cranberries and bilberries currently enter the EU duty free but would face a 4% tariff under MFN rates.

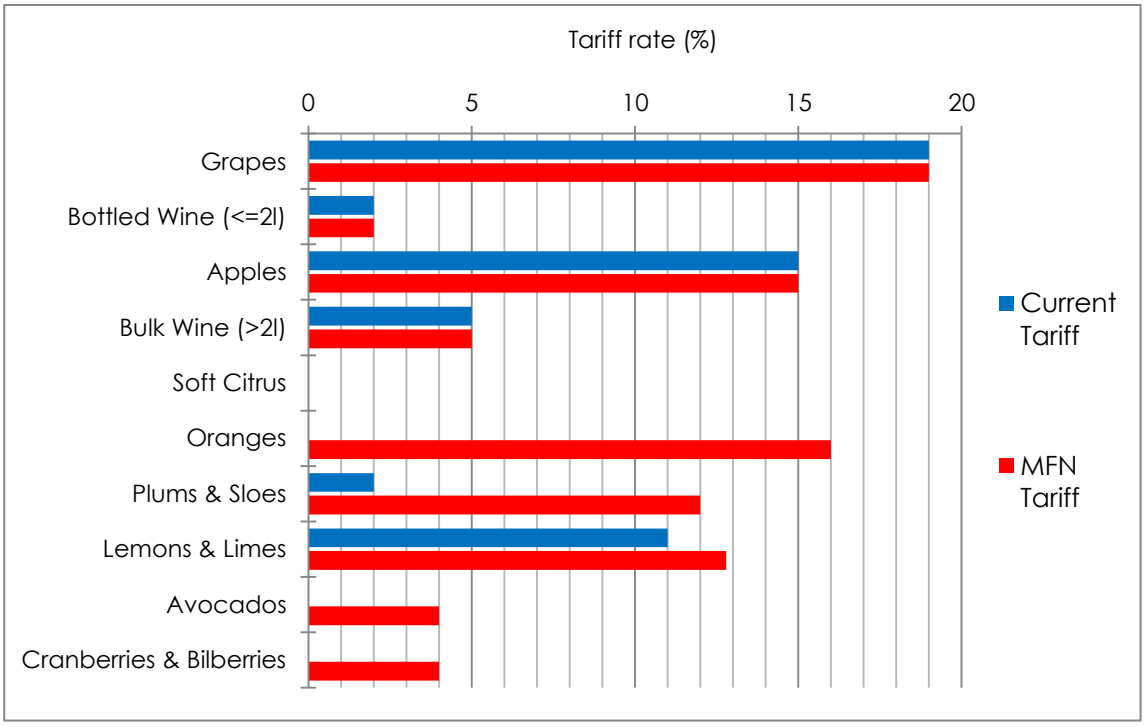


Figure 23: Current and MFN Tariff Rates for SA's Main Agricultural Exports to the UK
Source: Compiled using (ITC, 2017) & (WTO, 2017)

For the UK getting agricultural goods into the South African market, there are a number of products where the UK has benefited from zero tariffs and where there is a large amount of room to apply tariffs whilst still adhering to the MFN principle. This is evident from Table 11 which shows the biggest changes in tariffs paid on agricultural products if tariffs were to change from their current rates to MFN rates. Poultry in particular comes out as a potential area where no tariff protection is offered to South African producers but where there is a lot of room to apply tariffs within the MFN constraints. Asides from poultry, all the other products on the list are higher end processed products. This has particular implications for anti-dumping issues which have been a key concern around South Africa's poultry imports from Brazil, USA and the EU.

Table 11: Additional Tariff Faced on South African Imports from the UK under MFN

Code	Product	Current Tariff Rate (%)	MFN Tariff Rate (%)	Net Change in Tariff Value (R'000)
020714	Frozen Poultry Cuts	0.0	29.6	150 979
210690	Misc Food Preparations	0.0	5.8	14 461
020712	Frozen Poultry Whole Birds	0.0	37.7	11 195
190410	Breakfast Cereals	0.0	25.0	9 867
210111	Coffee Extracts & Concentrates	0.0	22.5	8 570
180690	Chocolate	0.0	17.0	8 269
190590	Bakery	0.0	19.0	6 154
210390	Condiments & Seasonings	0.0	12.5	4 829
190531	Sweet biscuits	0.0	21.0	4 629
-	*Rest (aggregated)*	-	-	*36 928*

Source: Compiled using (ITC, 2017) & (WTO, 2017)

It should be noted that although there is a bigger potential increase in tariffs for UK goods coming into South Africa, there is also more concentration in the top product. In Table 10 the top product, oranges, made up only 32% of the potential tariff increase. In contrast in Table 11 the top product, frozen poultry cuts, made up 59% of the total increase.

As a final note, currently the MFN rate on whiskies is zero so there is no room to increase tariffs there. However, this could change and if so it will have a huge influence on the potential tariff increases on UK agricultural imports into South Africa as it makes up such a huge share of these imports (see Section 3.4).

4.5. Conclusion

This section has shown that there is much negotiating needed with regards to tariffs in the post Brexit discussions. For South Africa, there could also be much to gain as many of the well performing products in term of exports to the UK also came up as facing significant tariffs in the UK market. However, this should not be a reason to relax on this issue as if tariffs are increased further it will become extremely difficult for South African producers to compete in these markets, especially if key competitors are able to negotiate more favourable trade deals.

On the other side, the UK has been able to benefit from minimal tariff barriers to importing agricultural products into South Africa. This gives South Africa room to manoeuvre where more protection for key industries such as poultry and various agri processing industries could potentially be negotiated.

5. BREXIT ECONOMIC IMPACT ASSESSMENT

This section tries to give an idea of some of the overall impacts which could occur in different Brexit scenarios. As already observed, South Africa and the UK trade in a number of different products and there are numerous different inter-connected areas where the two nations interact. For this reason it is difficult to confine potential impacts to a small number of scenarios. However, it is possible to look at some different directions which negotiations could go and assess how these directions will affect the economy.

5.1. Impact Model

The main model used to calculate changes to key variables is a static Computable General Equilibrium Model which is run using General Algebraic Modelling System (GAMS) software. The model was first developed at the International Food Policy Research Institute (IFPRI) by Lofgren, Robinson and Harris (2001). It has since been adapted and applied to South Africa's 2009 Social Accounting Matrix (SAM) developed by Davies and Thurlow (2011).

CGE models are very effective tools for assessing the overall impact of a particular shock as they pick up not only the direct impact of a shock but also the ripple effect as economic participants react in their own best interests to try to deal with the changes in prices and productivity of inputs and resources.

The SAM used in the model distinguishes 49 economic activities, or sectors in the economy. These 49 sectors produce 85 different commodity groups in such a way that one sector can produce more than one commodity and one commodity group can be produced by more than one sector. Factors of production are labour, divided into 4 different skill classes, and capital. Other accounts include households (broken down into income deciles), enterprises, government and the rest of the world (i.e. international trade).

In order to allow for the model closure, the following assumptions were necessary:

- The Consumer Price Index (CPI) was fixed, allowing for a flexible Domestic Producer Price Index (PPI). This was done under the assumption that in international markets the tariff cost burden will fall on those producers that export these products, with the tariff eroding their prices rather than being passed onto consumers.
- Investment is savings-driven (neo-classical). The economy's marginal propensity to save remains constant and investment adjusts to maintain equality between investment and savings.

- The exchange rate is flexible to allow for the impact on the exchange rate to be assessed. To allow this flexibility foreign savings are fixed.
- All other direct tax rates are held constant, and government savings is allowed to adjust.
- Capital was assumed to be fully employed and assigned to a specific activity.
- Highly skilled labour (workers with a tertiary education) was assumed to be fully employed and mobile. For all other labour it was assumed that there is unemployment and that labour is mobile between sectors. The labour assumptions stem from South Africa's high unemployment rate with regards to unskilled workers and shortage in the supply of highly skilled workers (DL, 2012).

The CGE model is used to calculate percentage changes in key variables. To get net changes in key variables, percentage changes are applied to macroeconomic projections obtained from the International Monetary Fund's World Economic Outlook (IMF, 2017c), as well as agricultural data from the South African Department of Agriculture's Abstract of Agricultural Statistics (DAFF, 2017) and employment totals from Statistics South Africa's Quarterly Labour Force Surveys (Stats SA, 2017).

5.2. Scenarios

Given the vast range of possible outcomes, it is difficult to accurately model the impacts of Brexit. Seven different scenarios were developed which will help to gage the impacts of different directions which the relationship with the UK could go. Each scenario thus focuses on one particular aspect of negotiations in order to isolate and assess the impacts associated with each one:

- **Scenario 1: MFN**
    - Negotiations with the UK are unproductive and tariffs on exports to the UK and on imports from the UK increase to the MFN rates for all products, as allowed by the WTO.

- **Scenario 2: FTA**
    - The UK and the South Africa agree on a Free Trade Agreement resulting in the elimination of tariffs on all South Africa's exports to the UK, as well as the elimination of tariffs on all imports from the UK.

- **Scenario 3: Free Exports**
    - Given the importance of the South African market to the UK, and South Africa's status as a developing country, the UK is very keen to maintain strong ties with South Africa and hence the two countries agree to maintain tariffs on UK imports into South Africa as is but South Africa is granted duty-free access on exports into the UK market.

- **Scenario 4: Fruit Push**
    - South Africa and the UK agree to maintain tariffs at their current rates, but the tariffs are removed on South Africa's exports of fruit and vegetables to the UK.

- **Scenario 5: Protection**
    - The UK agrees to maintain tariffs on South African good into the country as is. However, after increasing pressure from local industries such as the poultry industry, South Africa decides that domestic producers need more protection given the high level of government support for UK producers, the higher tariffs faced in the UK market and the high degree of room available to increase tariffs within MFN restrictions. This results in an outcome where South Africa's tariffs on exports to the UK stay as is but the tariffs on imports from the UK increase to MFN rates.

- **Scenario 6: Pound Slump**
    - The UK and South Africa agree to maintain tariffs at their current levels. However the overall impact of Brexit takes its toll on the UK economy and the pound ends up depreciating significantly. The end result is a 10% depreciation of the pound against the South African Rand.

- **Scenario 7: CAP Cut**
    - The UK and South Africa agree to maintain tariffs at their current levels. However the UK also agrees to eliminate funding to farmers, as had previously been done through the EU's Common Agricultural Policy (CAP). This scenario results in a decline of funding support to UK farmers, which had previously made up more than 50% of farmer's incomes (Daneshkhu, 2016).

In reality there will be aspects of each of these scenarios which may end up becoming reality. However, by isolating each factor individually allows for the identification of impacts specifically attributable to each factor without being misled by complex interactions between each one.

5.3. Results and Discussion

Looking at the overall economic performance, the ideal scenario for South Africa is as close to a free trade agreement as possible. In the scenarios developed the free trade agreement with the UK resulted in an increase of almost R 1 billion in real Gross Domestic Product (GDP). This increase in GDP can be seen in Figure 24 which shows the change in real GDP under each of the scenarios modelled.

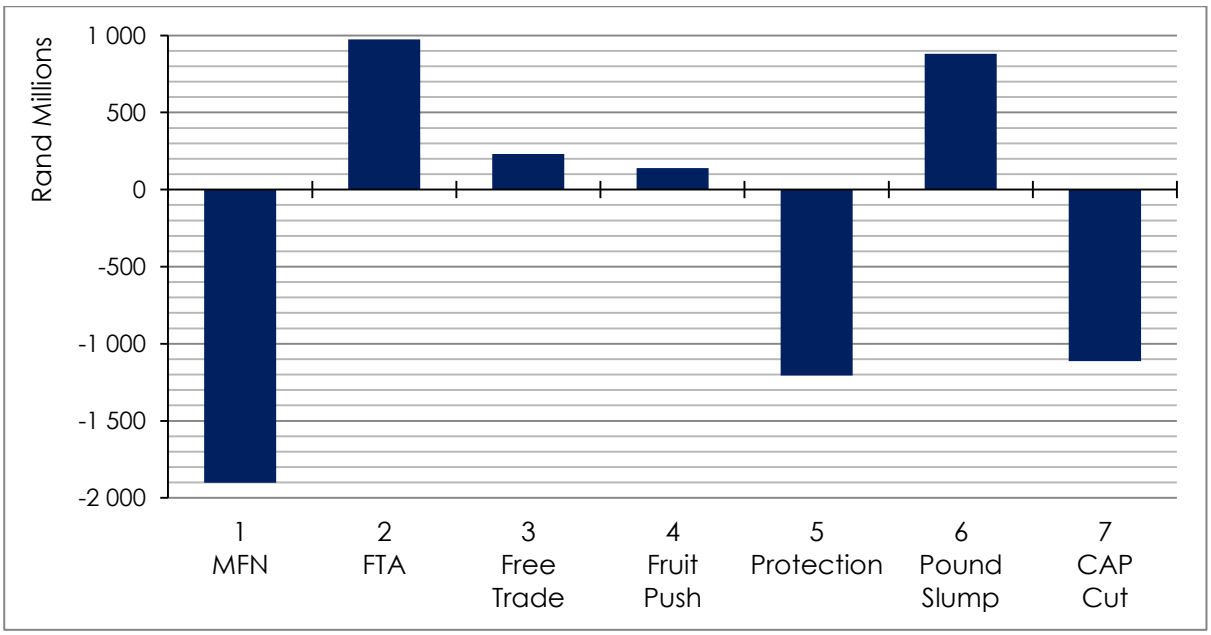


Figure 24: Change in Real GDP in Brexit Scenarios
Source: CGE Calculations & (IMF, 2017c)

Interestingly, the second best outcome in terms of GDP was for the "Pound Slump" scenario. In this scenario, export-oriented industries may suffer slightly as a result of exports becoming relatively more expensive compared to British consumers. However, it should be noted that this is not the same as a weak Rand in the sense that other countries competing in this market will face the same price shock. Additionally the price of imported inputs from the UK will become cheaper and as a country which imports a significant amount of goods from the UK this will enhance the competitiveness of South African producers.

Overall the protecting of domestic industries by imposing tariffs on UK imports yields negative results for the economy. This is evident from the decline in real GDP under the "Protection" scenario and occurs mainly due to the increased price of imports as a result of the higher tariffs. Some industries which are particularly trade exposed will tend to benefit from this scenario but on the whole it yields negative economic results. The negative impact of protectionism with regards to the UK can also be seen from the gap in gains between the "Free Trade Agreement" and the "Free Exports" scenarios, where GDP only increases by R0.2 billion in the latter compared with the R1.0 billion observed with free trade.

An important finding was that whilst the "Free Exports" scenario yielded positive gains in terms of GDP to the degree of R231 million, 60% of these gains (i.e. R139 million) was gained just by gaining free access in the exports of fruits and vegetables. This shows South Africa that securing freer access to the UK market for fruit should be the main focus of tariff negotiations with the UK as it can unlock most of the gains which can be made in terms of eliminating tariffs.

The situation being analysed here is slightly unusual in the sense that the base scenario, whilst representing the current state of affairs, is not a "do nothing" scenario as is usually the case when doing impact assessments. That is because there has been a big change and to get back to the current state will require effort. The real "do nothing" scenario is the "MFN", which also happens to be the worst case in terms of GDP, resulting in a total economic loss of almost R2 billion. This huge shock highlights the importance of the Brexit negotiations. Failing to come to agreements on the free trade of goods between South African and the UK good have devastating consequences for the South African economy.

It is also interesting to note that the "CAP Cut" scenario yields such a negative outcome. Although the outcome does indeed make South African exports more competitive in comparison to locally produced agriculture in the UK, it does so too for all competitors dampening the positive impact in this regard. The model also assumes that the cut in funding will translate into higher prices as UK producers deal with the withdrawal of financial support and this in turn will lead to an increase in the price of key production inputs imported from the UK which negatively impacts on production in South Africa.

Figure 25 shows the real GDP of South Africa's agricultural sector under each of the seven Brexit scenarios. The most notable difference from the overall GDP analysis is in the "CAP Cut" scenario where UK agricultural producers take strain as a result of the cut in CAP funding making them less able to compete with domestic producers in South Africa's market and also means that South African exporters are able to expand more effectively into the UK market. Under this scenario, real agricultural GDP increases by R218 million.

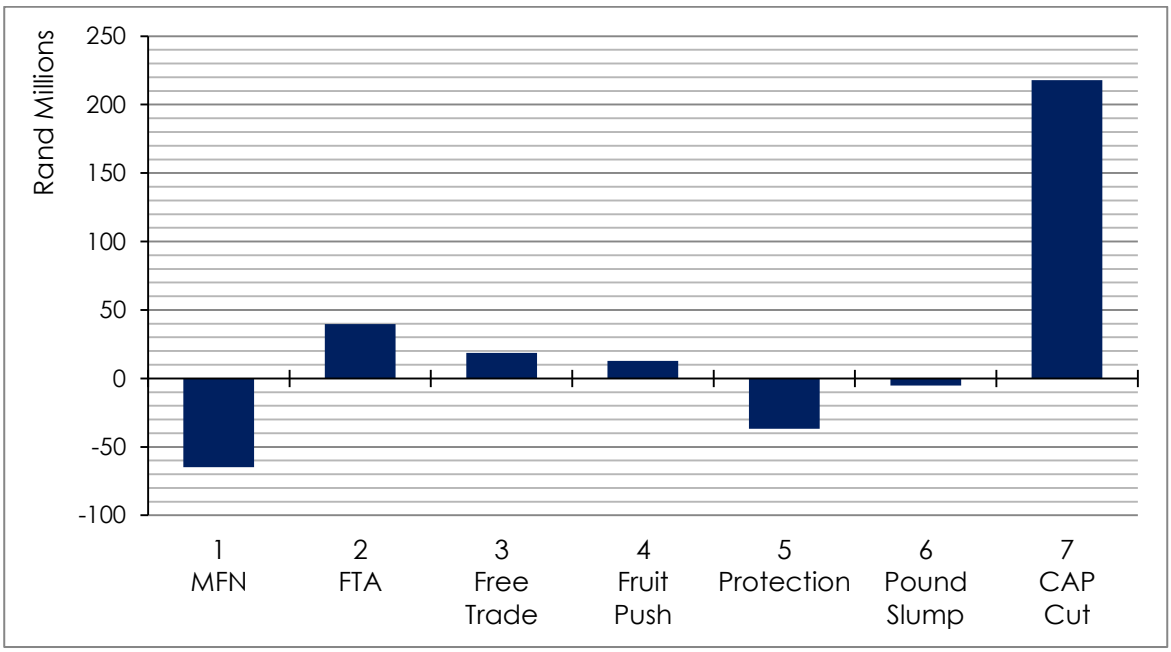


Figure 25: Change in Real Agricultural GDP in Brexit Scenarios
Source: CGE Calculations & (DAFF, 2017)

Gains are also realised in terms of agricultural GDP under a free trade agreement, free exports and a deal which ensures free entry into the UK fruit market. Due to the high dependence on the South African agricultural sector for exports to the UK, the "Pound Slump" scenario yields a negative net outcome for the sector as exports become more expensive and hence less attractive for UK consumers. Large net losses are again felt under the "MFN" and "Protection" scenarios.

The losses in the "Pound Slump" scenario are mainly felt by South Africa's fruit and vegetable producers. This can be seen in Table 12 which shows the changes in the value of output of some key agricultural products under each of the Brexit scenarios. Of the four products analysed, fruit and vegetables is the only product group which had a negative net impact for the "Pound Slump" scenario and also yielded a far bigger gains from the "CAP Cut" scenario than any of the others. A similar trend was observed with the other scenarios where the impact was always greater for fruit and vegetable production.

Table 12: Changes in Key Agricultural Outputs from Brexit Scenarios

	Base Value (R million)	Net Change (R million)						
		1 MFN	2 FTA	3 Free Exports	4 Fruit Push	5 Protect-ion	6 Pound Slump	7 CAP Cut
Cereals	34 739	-25	15	6	5	-16	7	11
Fruit & Veg	66 215	-130	264	247	243	-30	-193	1 217
Meat	81 062	-62	32	13	10	-42	26	1
Dairy	14 101	-10	7	3	2	-6	3	7

Source: CGE Calculations & (DAFF, 2017)

Whilst meat production yielded a higher value of production that fruit and vegetables, it is less dependent on the UK market and hence is more shielded from the potential impacts of Brexit as evident by the smaller changes in the table.

In terms of the social impact of Brexit, whilst the impact differs for different scenarios, in general the impact was greater in magnitude for middle income households, whether negatively or positively. Figure 26 shows the change in household income as a result of each Brexit scenario, broken down by household income decile where 1 is the poorest 10% of households and 10 the richest 10%.

The greatest gains in terms of household incomes are under the "FTA" scenario, although only slightly higher than that for "Pound Slump". Marginal gains were observed for the "Free Exports" and "Fruit Push" scenarios. The worst outcome in terms of household income was again the "MFN" scenario. Losses were also experienced under the "Protection" and "Cap Cut" scenarios as higher imported food prices eroded incomes.

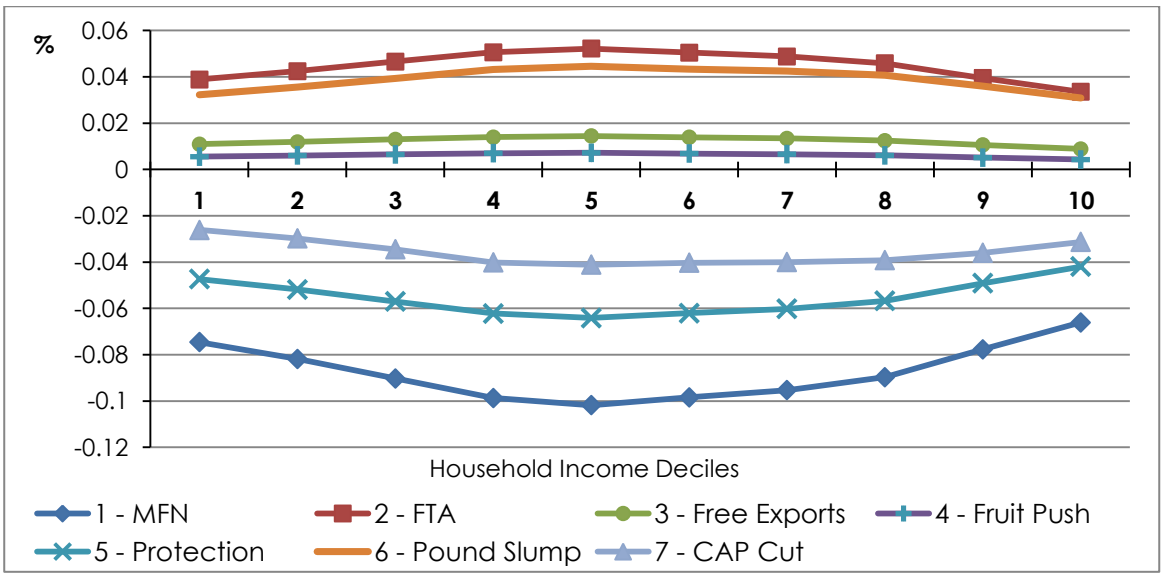
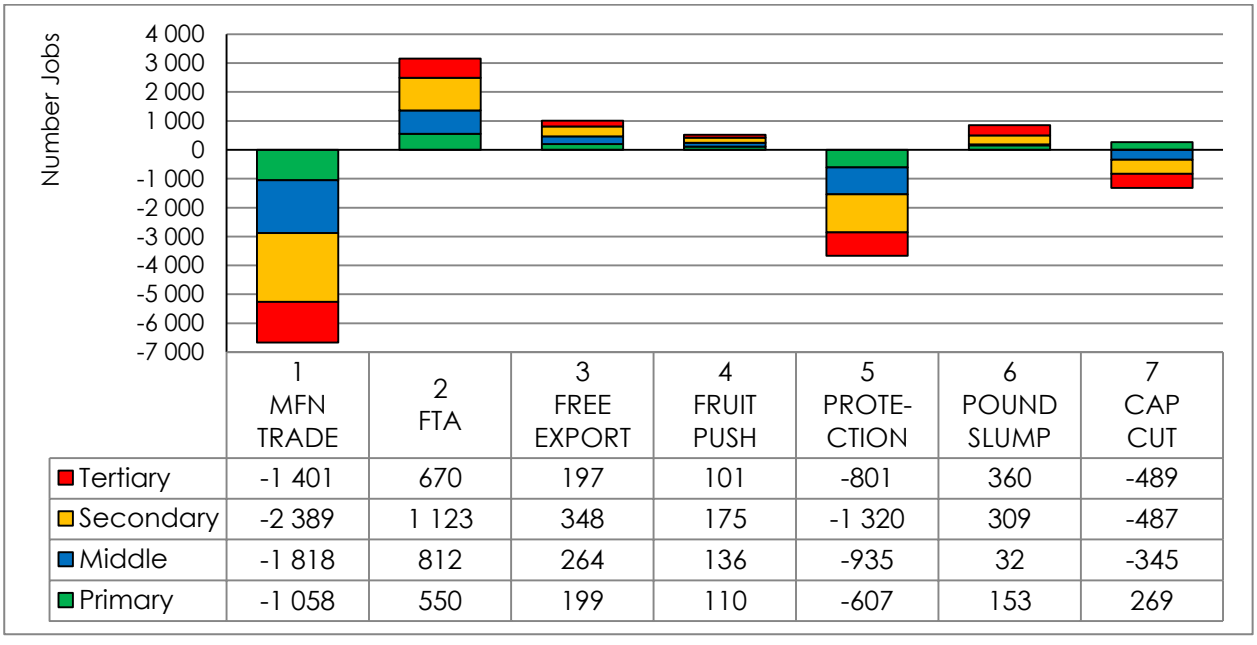


Figure 26: Percentage Changes in Household Incomes under Brexit Scenarios
Source: CGE Calculations

Job losses under the MFN scenario were calculated at 6 666. Net job losses of 3 664 were also felt under the "Protectionism" scenario, and of 1 052 for the "CAP Cut" scenario. A total of 3 155 new jobs were created under the "FTA" scenario, with job gains of 1 007, 521 and 853 realised in the "Free Export", "Fruit Push" and "Pound Slump" scenarios. Of the scenarios where job growth was experiences, the "Fruit Push" has the largest share of jobs being created for primary skill level workers. Under this scenario 21% of the new jobs are primary, compared with 17%, 20% and 18% for the "FTA", "Free Exports" and "Pound Slump" scenarios. The reason for this finding is the high portion of labour being made up of primary skilled workers in the fruit sectors and the confinement of the impact to this sector.



	1 MFN TRADE	2 FTA	3 FREE EXPORT	4 FRUIT PUSH	5 PROTE-CTION	6 POUND SLUMP	7 CAP CUT
Tertiary	-1 401	670	197	101	-801	360	-489
Secondary	-2 389	1 123	348	175	-1 320	309	-487
Middle	-1 818	812	264	136	-935	32	-345
Primary	-1 058	550	199	110	-607	153	269

Figure 27: Employment Changes under Brexit Scenarios, by Skill Level
Source: CGE Calculations

In the first six scenarios modelled the direction of employment remains consistent across skills groups. That is, they either all increase or they all decrease. This is not the case for the seventh "CAP Cut" scenario, where significant gains in agriculture already observed, means growth in a sector which intensively uses low skilled labour. This means that whilst overall employment falls, low-skilled employment actually grows.

5.4. Conclusion

The Impact Assessment has highlighted the danger of an outcome where South Africa and the UK resort to MFN tariff rates. The UK is too important a market and as such this outcome would have disastrous consequences for the South African economy. This is especially the case for the fruit and vegetable sector of South Africa which is heavily dependent on the UK market.

The analysis has also provided some pointers to help with negotiations with the UK. In particular it has shown that there is far more to gain for pursuing freer access into the UK market, than would be gained from resorting to protectionist measures and imposing tariffs on UK imports. Moreover it has shown that not only can the negative impacts of Brexit be avoided but South Africa is in a position where it could negotiate a future which will see significant net gains for South Africa's agricultural sector and for the economy and population as a whole.

6. POLICY RECOMMENDATIONS

The analysis has helped to give a thorough picture of the environment in which Brexit negotiations will take place. Going forward, the following key policy recommendations should be headed in line with the study findings:

- **Avoid doing nothing**
  The analysis showed the danger of n outcome which results in MFN tariffs between South Africa and the UK. Such an outcome would have severe negative impacts on the South African economy and be detrimental to certain industries

- **Free Trade is optimal**
  The optimal outcome in terms of overall economic performance was one of free trade. For this reason South Africa should look to come to an agreement with the UK which as closely resembles a free trade agreement as is possible

- **Fruits are key**
  If the UK can only be pushed to achieve tariff elimination in one area it should be on fruit exports. The impact assessment showed that eliminating fruit tariffs can make up most of the gains which can be made in the complete elimination of export tariffs to the UK. South African fruit exports have shown strong growth in the UK market in recent years despite facing significant tariffs, a more favourable market access agreement could help the industry grow even stronger. On the other hand, higher tariffs could make the market unprofitable for South African producers, particularly given the prospect of a relatively weaker pound moving forward.

- **Ensure integrity of sanitary and phyto sanitary environment**
  Given the importance of the UK market for South African fruit exports, it is critical that South Africa do everything possible to ensure that it's sanitary and phyto sanitary institutions are of a standard that is highly regarded and trusted. The UK market is very stringent in terms of health and safety issues with high regulation from government bodies as well as private standards imposed by retailers who dominate the UK market and who exert a strong level of control over the global agricultural value chains supplying the UK. If integrity can be maintained going forward it will allow growth in these markets to continue and prevent potential export bans which could seriously hinder progress.

- **Be wary of protectionism**
  Certain industries might be vulnerable to being out competed without protection, particularly where there are opportunities for dumping. This may be a direct need (e.g.

poultry) or a more indirect need where a domestically produced good competes with a different foreign import (e.g. the case of brandy and whisky). However, government must be aware that there could be negative spillover effects to applying higher tariffs on imports from the UK. Thus when looking to implement tariffs care must be taken to not do so on products which are not produced locally and which are important inputs into domestic production processes.

- **Farmer subsidies could be a useful bargaining tool**

  The removal of UK farmer subsidies could lead to significant positive gains for certain South African agricultural exports which are able to then capture more UK market share from domestic producers. This could result in a significant increase in South African Real Agricultural GDP. However it could also yield an overall negative economic impact for South Africa due to the rising cost of key imported production inputs. The fact remains that UK farmer subsidies are unfairly high but South Africa's ability to influence this is doubtful and the UK government has committed to maintaining them over the short term. This does not mean they should be ignored though as the fact that subsidies are so high could be a useful bargaining tool to justify concessions in other areas, such as tariff elimination on key products such as fruits and vegetables.

As a final general comment, the more research done on Brexit issues, the more complex the situation appears to be. Policy makers involved in negotiations are thus strongly advised to do thorough background research to ensure they are prepared for all the issues which need to be covered and considered.

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