TRADE & INDUSTRIAL POLICY STRATEGIES

MANUFACTURING SUBSECTORS

Food processing

March 2021

Industrial policy interventions aim to promote structural transformation and structural change in pursuit of economic growth. The effectiveness of these depends to a crucial extent on the ability of policymakers to tailor interventions to the specific needs of individual manufacturing subsectors.

To support evidence-based policymaking, TIPS has completed a series of notes on the various manufacturing subsectors in South Africa. The aim is to provide synthesised data on the dynamics of the South African manufacturing subsectors, specifically in their contribution to GDP, employment, earnings, investments, productivity, markup, profitability and assets, market structure and dominant producers, major inputs and international trade. The main data sources are Statistics South Africa, Quantec, Who Owns Whom, and the International Trade Centre.

This note provides an overview of the food processing subsector as of December 2020.

Contact: thobile@tips.org.za or neva@tips.org.za

Executive summary

The food processing sector is significant in its contribution to (gross domestic product (GDP), employment and international trade. In the period under analysis, food processing has increased its contribution to GDP, with the relative significance of the subsector increasing in the more recent period. Moreover, employment in the subsector has demonstrated an upward trajectory and has increasingly become feminised. Estimates from Stats SA's Labour Market Dynamics indicate that the share of women employed in food processing has increased steadily from 2015, with women representing 51% of the total labour force in food processing by 2020.

The feminisation of the South African food processing subsector is not the only significant development – merchandise trade data from South African Revenue Services (SARS) point to the increasing significance of the food processing sector for international trade. In 2020, processed food exports amounted to R30 billion (constant 2020 rand) or around 3% of total exports. Moreover, between 2002 and 2020, processed food exports have grown relatively faster than total commodity exports. Importantly, however, the data indicate that it is regional countries such a Namibia and Botswana that have accounted for the bulk of South African processed food exports in the period under analysis.

Food processing encompasses certain problematic characteristics that warrant immediate policy intervention. First, there are an estimated 1 800 food processing companies in South Africa. However the subsector is characterised by a mix of small informal players and large vertically integrated companies with a significant stake in the various aspects of the food processing chain. Data from Who Own Whom indicate that by 2019, the top 10 largest food processors accounted for more than 80% of total subsector revenue. In the same year, the income share of the top five food manufacturers was more than 50% in the majority of food processing industries. Similarly, food processors owned 90% of total silos in the subsector in 2019. This would not be problematic in any subsector if linked to larger-scale efficiency gains, however, silos and other storage facilities are an extremely significant component of the food processing value chain. This implies that small-scale and informal sector players have to be reliant on large players at crucial links in the value chain, which therefore limits both their participation and competitiveness. Moreover, estimates from Quantec point to the relatively higher mark-up in food processing compared to other manufacturing. Mark-up has long been considered a measure of market concentration and market power in the literature and often used to gauge the ability of players to price above competitiveness as a result of market concentration. The relatively higher mark-up in food processing imposes significant efficiency and welfare constraints on both consumer and producers.

Notwithstanding the relatively higher mark-up and levels of concentration, the distribution of value add in food processing is skewed towards the gross operation surplus than the compensation of employees. In 2019, surplus in food processing accounted for more than 50% of value added. On the face of it, these figures are not problematic, however the share of gross operating surplus in food processing is relatively higher than other manufacturing and has increased from 2007. Similarly, data from Stats SA's Labour Market Dynamics points to lower real median earnings in food processing compared to other manufacturing. Moreover, real median earnings in food processing are disproportionally lower for black people and in particular black women, with the earnings of black women estimated to be 200% lower than those of white women in 2019. Moreover, education levels are lower in food processing relative to other manufacturing.

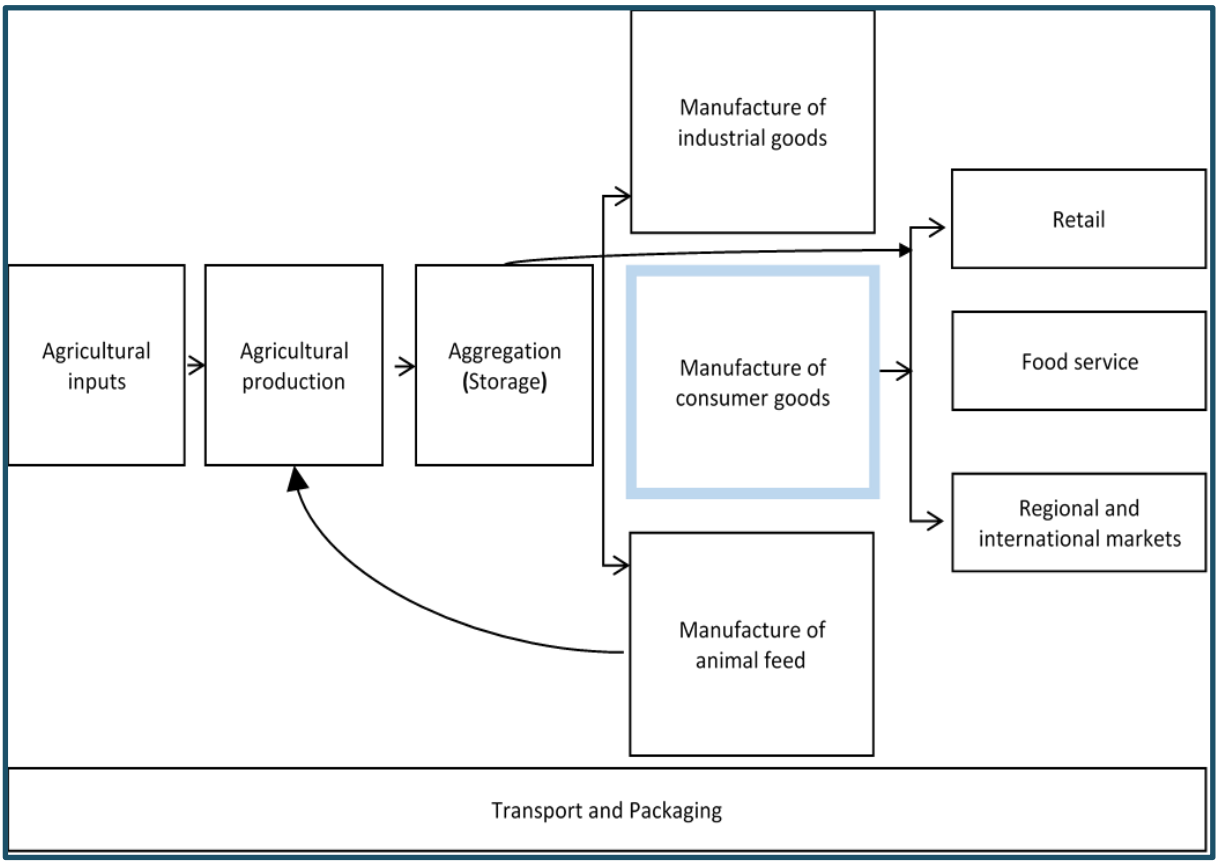
Food processing has historically been a crucial component of open economy industrialisation and has historically contributed to structural change and transformation for most countries. Its links to food

security, coupled with its ability to attract less-skilled employees and women makes it a crucial subsector for any inclusive industrialisation strategy of a developing country. However, the distribution of value added in the South African food processing subsector is highly skewed and leaves the majority of historically disadvantaged people outside of economic participation.

These features are largely structural in the sense that food processing as a subsector thrives on large-scale efficient production. However, the increased presence of informal sector players coupled with the rising share of female informal sector employment introduces significant scope for both competition and industrial policy interventions. These interventions should be in the form of measures to deal with the high levels of concentration in the sector that would enable the increased participation of small-scale and informal sector players.

Food processing value-chain

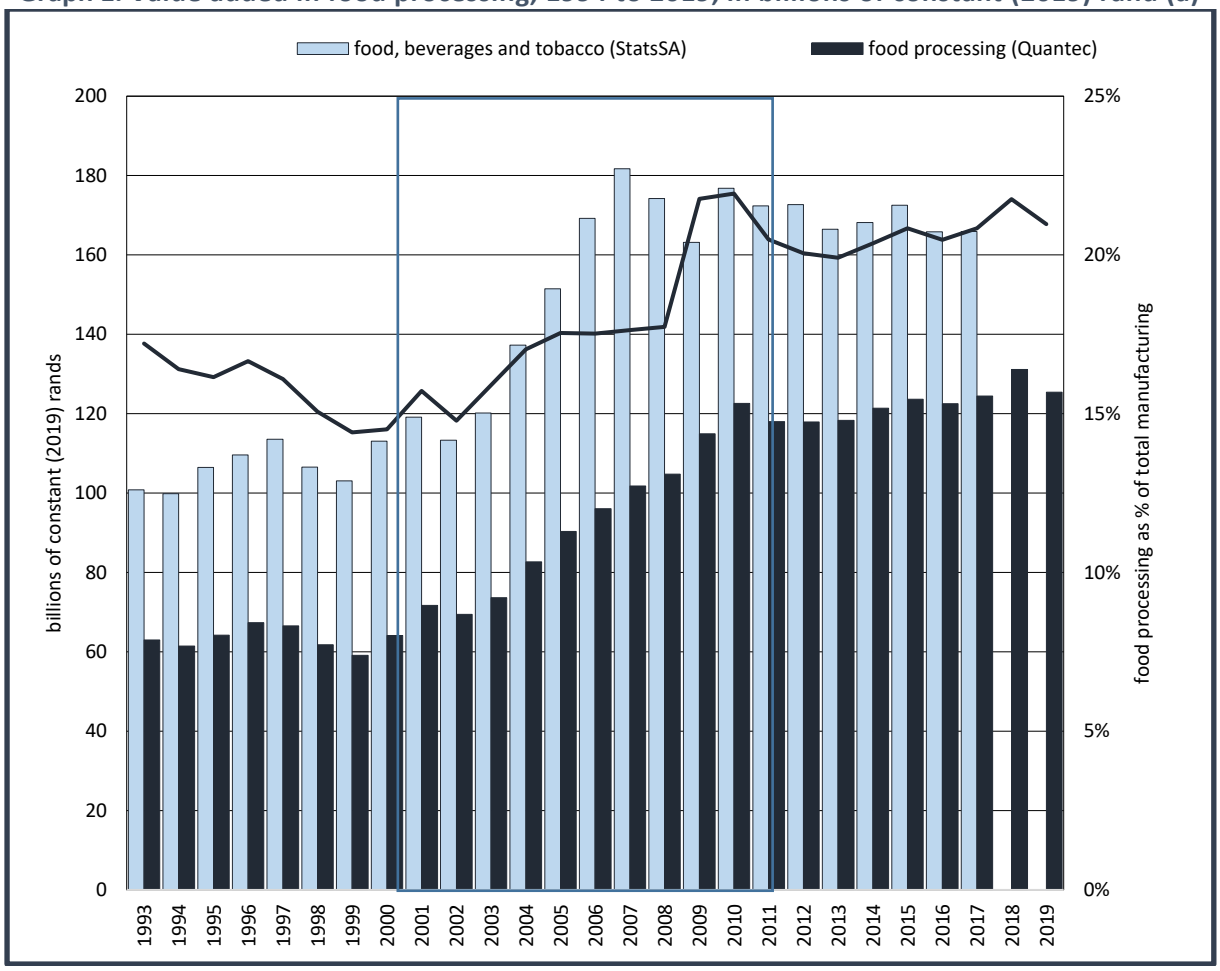
The food processing subsector comprises of the production of final food products based mainly, although not exclusively, on agricultural inputs. The line between agriculture and food processing is not always clear, however, the formal definition of food processing excludes food processing that takes place in the farm. The industry is highly diverse, with significantly different processes used in major subsectors for instance maize milling, bakeries, meat and poultry processing and horticulture.



1. Contribution to GDP

Data for the contribution of manufacturing sub-sectors to GDP (the value added by sub-sector) is obtained from two sources: the GDP data published by Statistics South Africa (StatsSA) and Quantec, which develops estimates based on the StatsSA figures for sales, production and employment by sector and sub-sector. The figures are not identical, although they typically show the same trends. Quantec provides estimates based on Stats SA data and extrapolates through 2019, while the latest date for the Stats SA data is 2017. This note provides both.

Graph 1. Value added in food processing, 1994 to 2019, in billions of constant (2019) rand (a)



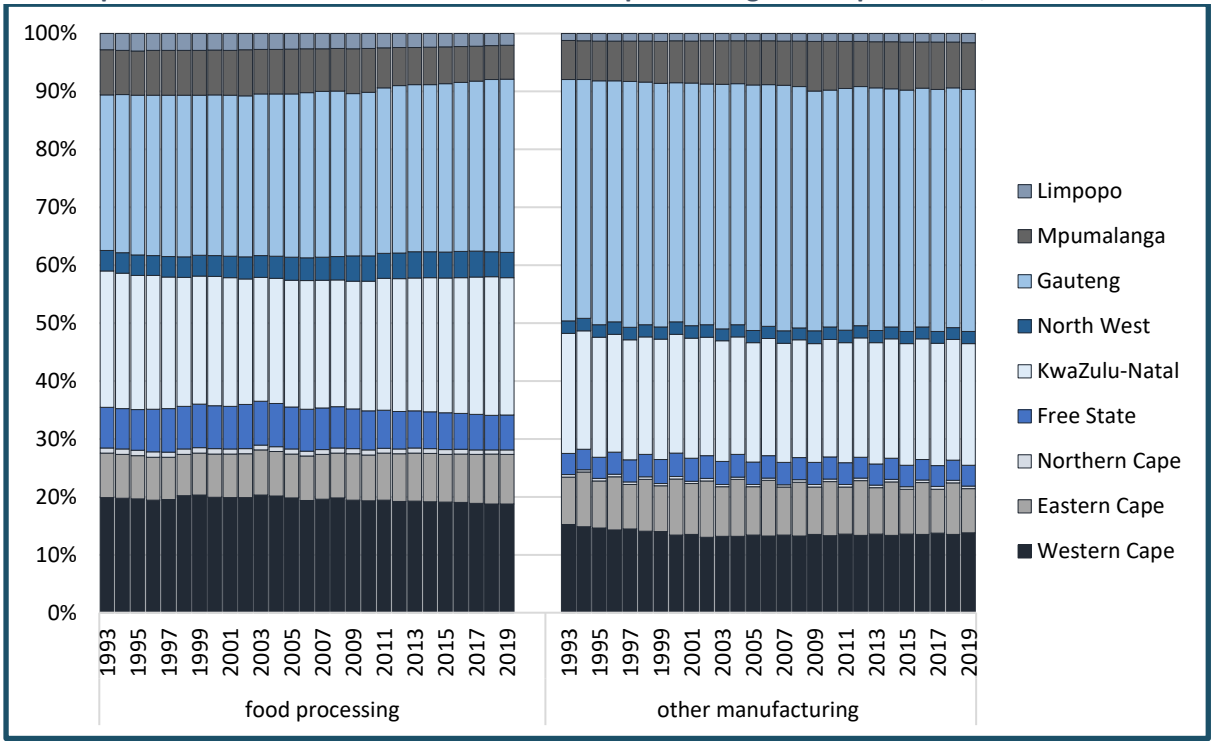
Note: (a) Deflated by calculating the deflator used in the sources from figures in current and constant rand, and then rebasing to 2019. Source: Statistics South Africa, GDP P0441. Annual quarter and regional revisions. Q3 2020. Excel spreadsheet. Series on manufacturing subsectors in current and constant rand. Downloaded from www.statssa.gov.za in January 2021; and Quantec EasyData. Standardised regional data. Database in electronic format. Series on value added in current and constant rand. Downloaded from https://www.quantec.co.za/easydata/ in January 2021.

From the commodity boom period (shaded in area in Graph 1) to 2019, food processing led the rest of manufacturing and grew at 4% per annum. The comparable figure was 2% for other manufacturing. Accordingly, the share of food processing to total manufacturing increased steadily from 15% in 2000 to 21% in 2019. Even after the commodity boom period, food processing has consistently surpassed other manufacturing, growing 4.5% faster than other manufacturing during the recovery period of 2014 to 2019.

Gauteng province captures a disproportionately higher share of value added in both food processing and other manufacturing than the other South African provinces (see Graph 2). This share has

increased from 1994 to 2018. Food processing being concentrated in Gauteng goes back in part to Apartheid, where the marketing system charged a national price, so there was little advantage to locating to rural areas. The concentration of food processing in Gauteng is less when benchmarked against other manufacturing. This is different to Kwa-Zulu Natal, Free State and the Western Cape where food processing is more dominant.

Graph 2. Distribution of value added in food processing across provinces, 1993 to 2019

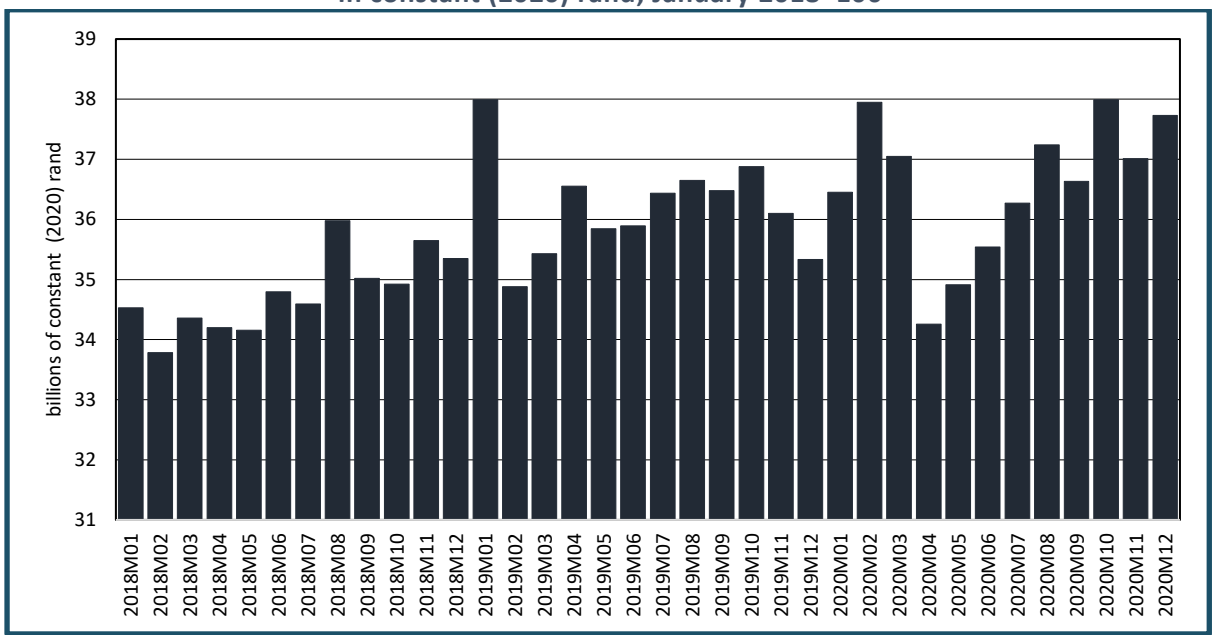


Note: (a) Deflated by calculating the deflator used in the sources from figures in current and constant rand, and then rebasing to 2019. Quantec EasyData. Standardised regional data. Database in electronic format. Series on value added in current and constant rand. Downloaded from https://www.quantec.co.za/easydata/ in January 2021.

Food processing sales contracted dramatically in April 2020, despite it being classified an essential service (see Graph 3). According to Stats SA monthly production and sales data, in April 2020, food processing sales contracted by 8% (month-on-month), less than other manufacturing, which contracted by 55% (month-on-month). The effect of the pandemic and subsequent lockdown regulations was less severe in food processing than other manufacturing due to a range of factors. First, the classification of the operations of food processors as "essential" during full lockdown, implies that both output and aggregate demand were not as severely affected as other manufacturing. On the supply side, food processing sales benefitted from high agricultural crop yields. South Africa recorded the second highest agricultural crop yields in the March 2020 harvesting period. Finally, food processing sales benefitted from a range of demand side factors, including but not limited to the rise in South African exports coupled with weakened exchange rates (TIPS, 2020[1]).

[1] TIPS (2020). TIPS Export Tracker, Second Quarter of 2020.

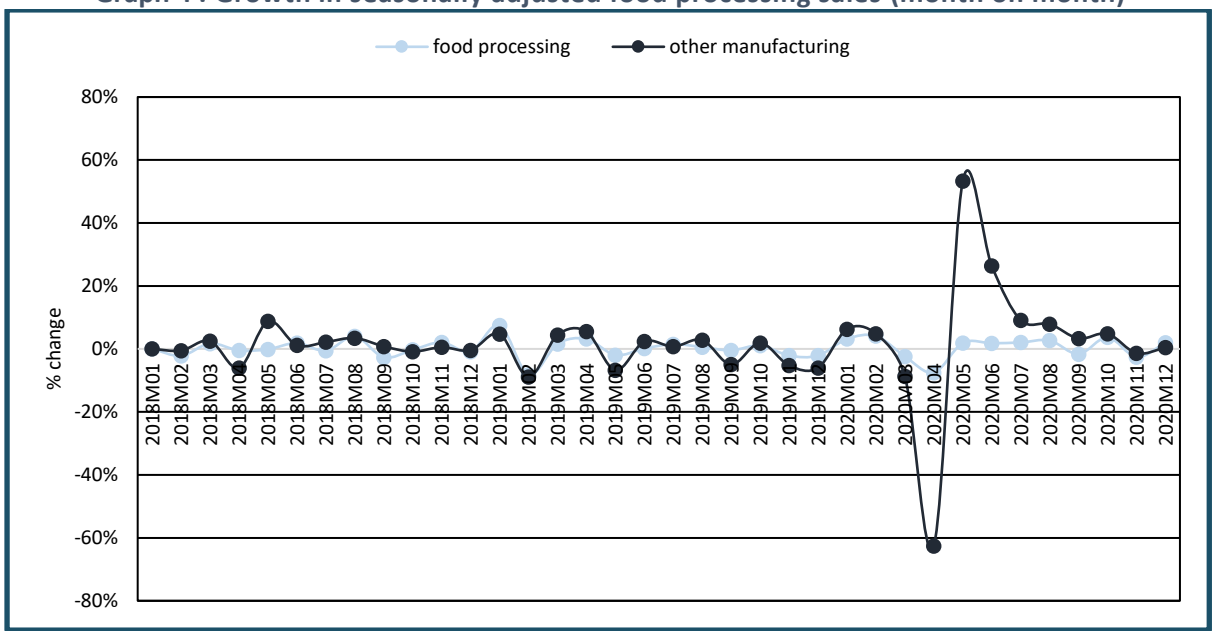
Graph 3. Seasonally adjusted food processing sales (value) in constant (2020) rand, January 2018=100



Source: Statistics South Africa, P3041.2. Excel spreadsheet. Downloaded from www.statssa.gov.za in January 2021 P30412December2020.pdf (statssa.gov.za).

From May 2020 food processing sales steadily recovered and surpassed the pre COVID-19 levels in August 2020. In December 2020, food processing sales increased by 1.94% (month-on-month), and by 8.27% (year-on-year) (see Graph 4).

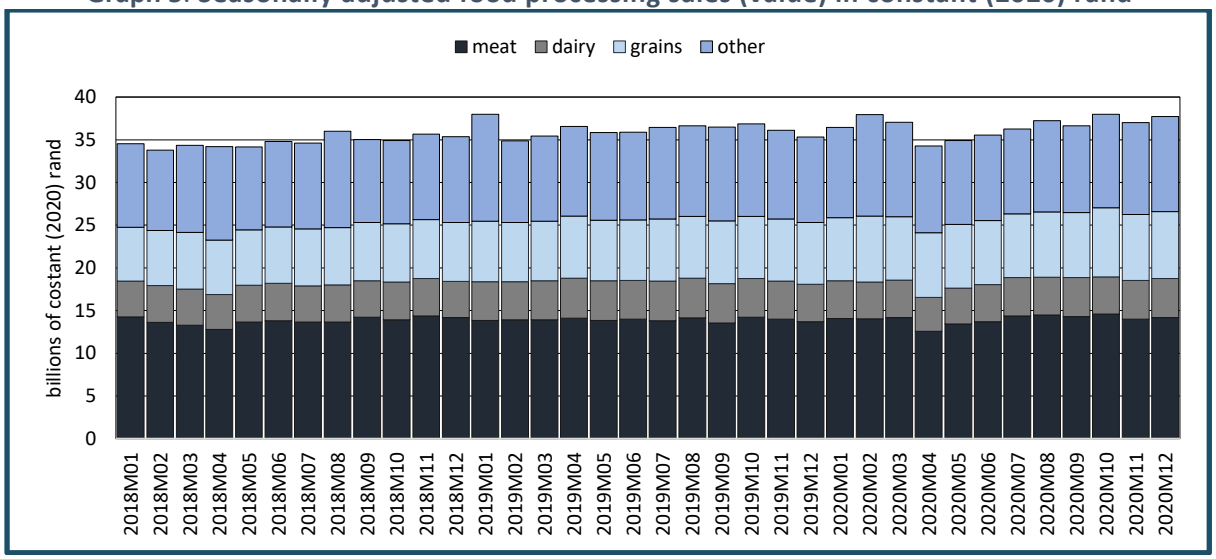
Graph 4 . Growth in seasonally adjusted food processing sales (month on month)



Source: Statistics South Africa, P3041.2. Excel spreadsheet. Downloaded from www.statssa.gov.za in January 2021 P30412December2020.pdf (statssa.gov.za).

In April 2020, two of the four food processing categories recorded negative growth rates. The largest contractions were recorded in meat and dairy products which were down 11% and 10% respectively, on a month-on-month basis (see Graph 5). Grain products on the other hand went up by 2% (month-on-month) in April 2020.

Graph 5. Seasonally adjusted food processing sales (value) in constant (2020) rand



Source: Statistics South Africa, P3041.2. Excel spreadsheet. Downloaded from www.statssa.gov.za in January 2021 P30412December2020.pdf (statssa.gov.za).

2. Employment

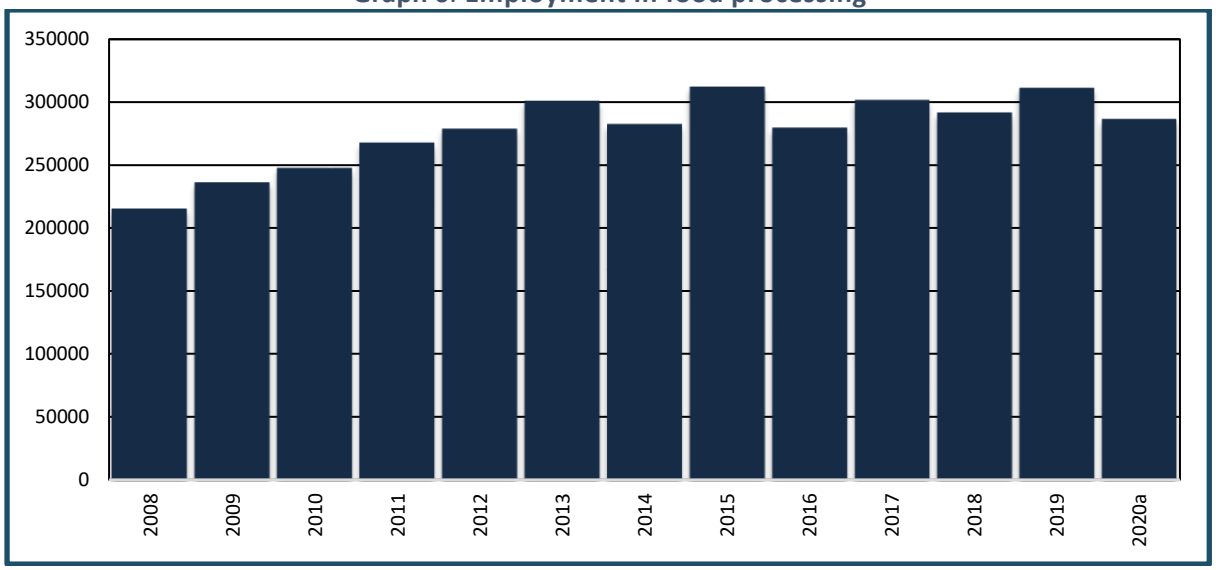
This section conducts an analysis of the employment dynamics in the South African food processing subsector, benchmarked against other manufacturing from 2008 to the final quarter of 2020. The analysis is based on data from Statistics South Africa's Quarterly Labour Force Survey (QLFS), a household-based survey on the dynamics of the South African labour market, introduced in 2008. The QLFS is based on a sample of just over 60 000 people, which is redrawn periodically to ensure a representative sample. Its annual figures, in the labour market dynamics, are averages of the quarterly findings. It is important to note that the quarterly data are not seasonally adjusted or annualised. This limits the extent to which the data fully captures the employment dynamics of subsectors such as food processing, in which employment varies substantially by season. Moreover, the food processing value chain is generally labour intensive, with some exceptions (e.g. beverages) which means that:

a) It provides a disproportionately higher share of employment in food processing than other manufacturing/GDP;
b) There are more small businesses; and
c) The industry typically has lower skills and pay, and more women employees.

Employment in food processing climbed by 7% a year from 2008 to 2013, then levelled out and averaged 300 000 from 2014 to 2019. Employment in food processing contracted in the first three quarters of 2020 and averaged 286 000, which was 25 000 lower than in the same period of 2019.

For the third quarter of 2020, employment in food processing grew by 9.24 % quarter-on-quarter and contracted by 5.71% year-on-year. The second quarter growth of employment in food processing was driven in part the easing of COVID-19 regulations and in part by seasonal factors, coupled with fact that the operations of food processors continued during the lockdown period. Moreover employment in food processing benefited largely from the high agricultural output coupled with a weak exchange rates and growth in exports. While employment in food processing contracted year-on-year, this contraction was marginally lower than other manufacturing, which declined by 20% (year-on-year) in the third quarter of 2020.

Graph 6. Employment in food processing

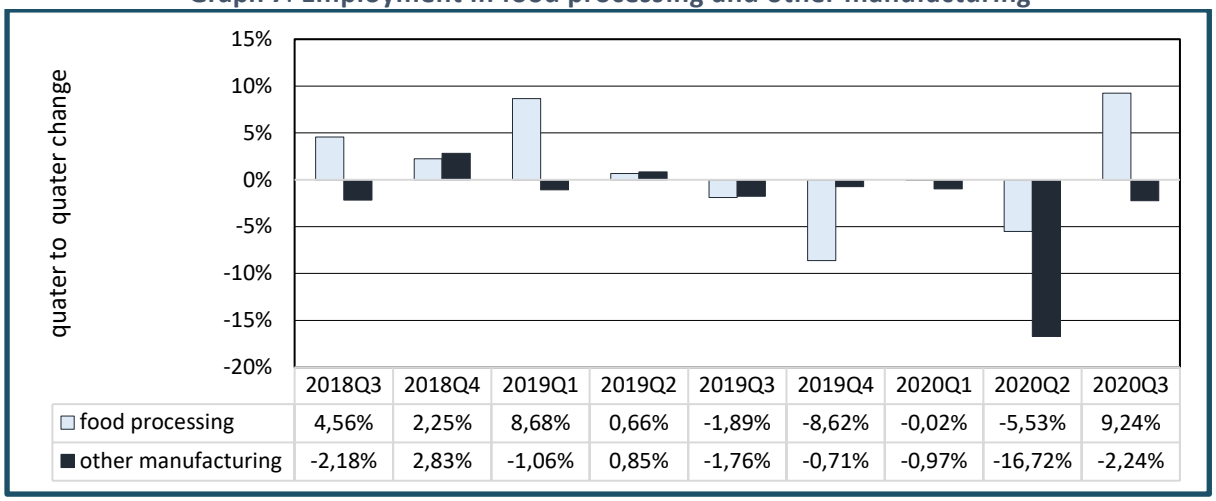


Note: (a) Calendar years except for 2020, which is the year to the first three quarters of 2020. Source: Calculated from Statistics South Africa. Labour Market Dynamics. 2008 to 2019. Series on employment by industry. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021; and Quarterly Labour Force Survey. Q1 2020 to Q3 2020. Series on employment by industry. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

The pandemic effect was less severe for employment in food processing compared to other manufacturing. The QLFS data indicates that, on a quarter-to quarter-basis, employment in food processing was down 5.53% in the second quarter of 2020. This was 11 percentage points lower than other manufacturing, which was down 16.72% (quarter-on-quarter). The pandemic effect was less severe in food processing as the sector was mainly operational during the full lockdown period. However the contraction in food processing employment may be due in part to social distancing measures applied in production facilities during the lockdown period. The closing of restaurants and hospitality trade as a lockdown measure led to permanent deadweight loss and caused major disruptions in the food processing value chain. According to research commissioned by the BMI Research, when approximately 10% of processed food enters through the food services chain including restaurants, a reduction in the demand for processed food may have a significant effect on employment in food processing manufacturing.

Employment in food processing increased steadily through the second and third quarters of 2020. For the third quarter of 2020, employment in food processing grew by 9.24 % quarter-on-quarter and contracted by 5.71% year-on-year. The third quarter growth of employment in food processing was driven in part by the easing of COVID-19 regulations, and subsequent movements to lower levels of regulations that resulted in the relaxation of social distancing measures applied in production facilities. While employment in food processing contracted year-on-year, this contraction was marginally lower than other manufacturing, which declined by 20% (year-on-year) in the third quarter of 2020.

Graph 7. Employment in food processing and other manufacturing



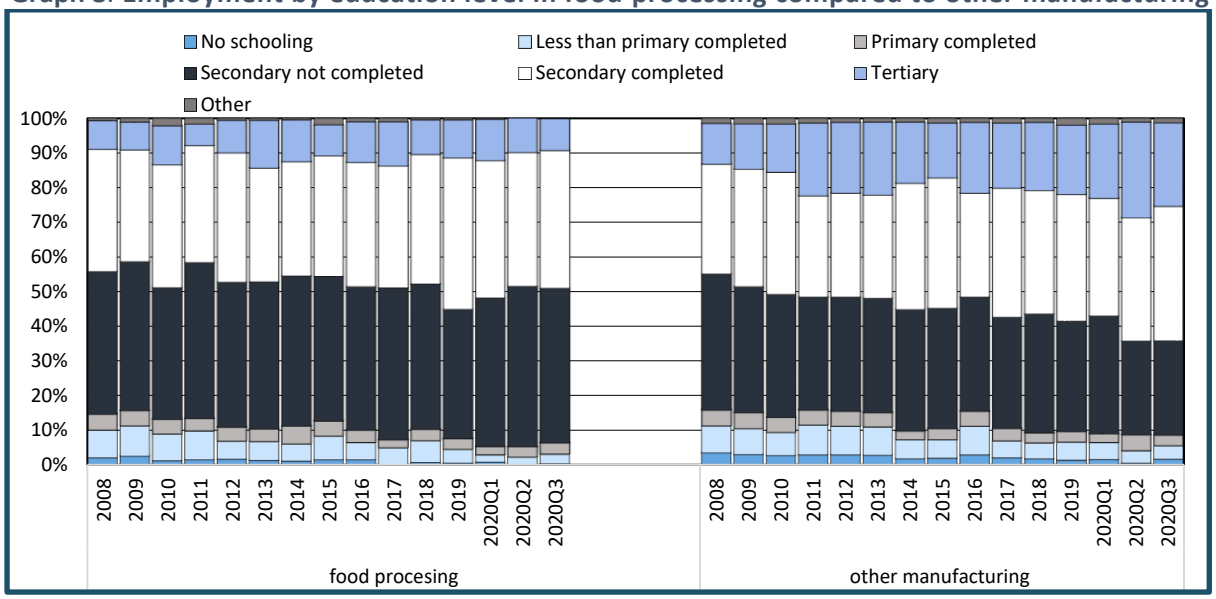
	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3
food processing	4,56%	2,25%	8,68%	0,66%	-1,89%	-8,62%	-0,02%	-5,53%	9,24%
other manufacturing	-2,18%	2,83%	-1,06%	0,85%	-1,76%	-0,71%	-0,97%	-16,72%	-2,24%

Source: Calculated from Statistics South Africa. Quarterly Labour Force Survey. Q2 2018 to Q3 2020. Series on employment by industry. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Graph 8 shows on employment by education level in food processing compared to other manufacturing from 2008 to the third quarter of 2020. The graph indicates that an employee in food processing is more likely than other manufacturing workers to have a secondary education but less likely to have a tertiary education. In 2019, 89% of employees in food processing had attained at least an upper secondary education, compared to 78% in other manufacturing. But only 11% of employees in food processing had attained a tertiary education, compared to 20% in other manufacturing.

The graph further points to education-differentiated effects of the pandemic on employment in food processing. For example, the shares of employees with a tertiary education and primary education declined in the first three quarters of 2020. However, the decline was higher for employees with a primary education or less. Moreover, the decline was higher in food processing compared to other manufacturing.

Graph 8. Employment by education level in food processing compared to other manufacturing

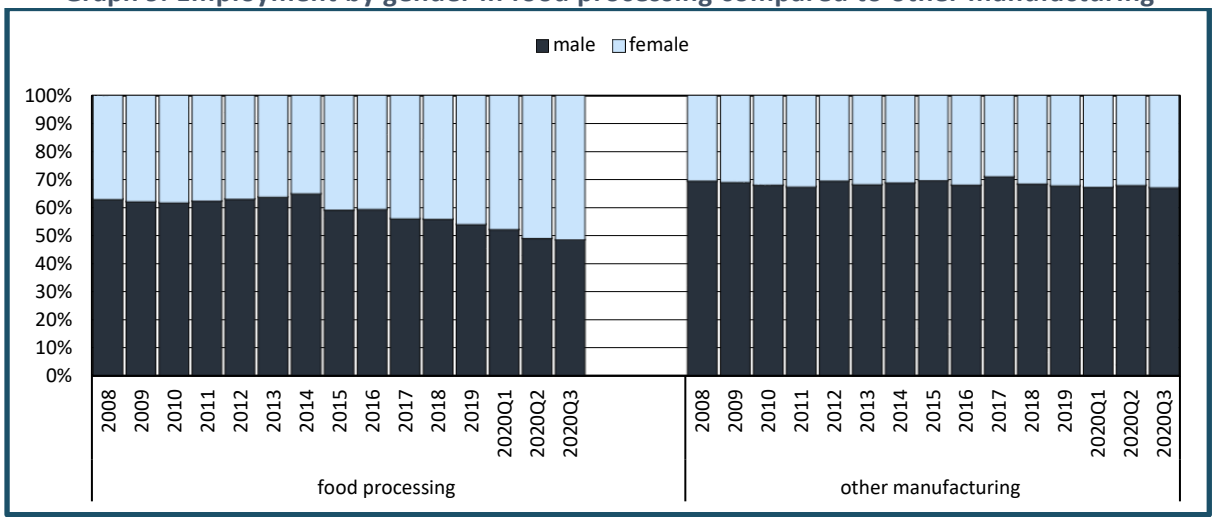


Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and education. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Graph 9 reports on employment by gender in food processing compared to other manufacturing. The graph shows that from 2015, the share of women has been rising steadily, compared to other

manufacturing. By the third quarter of 2020, women constituted more than 50% of the workforce in food processing, compared to just over 32% in other manufacturing. While formal sector employment represents at least two-thirds of the female labour force in food processing, Graph 10 indicates that the rise in the share of women employed in food processing was in large part due to the increase in informal sector employment. Moreover, the proportion of women employed in the informal sector exceeds that in informal employment in other manufacturing (see Graphs 10 and 11).

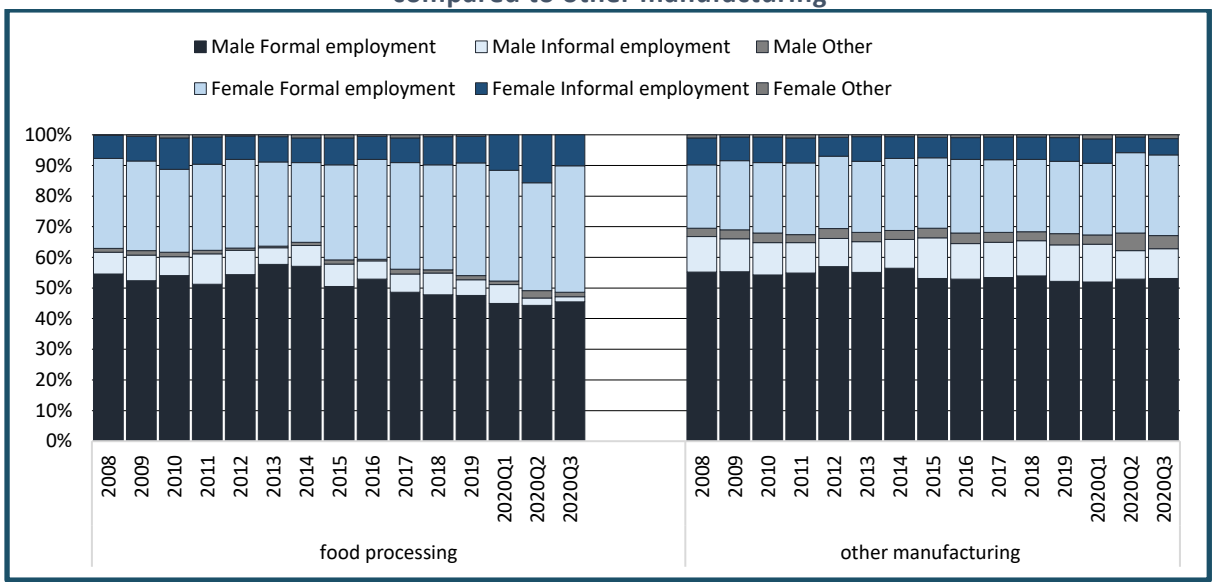
Graph 9. Employment by gender in food processing compared to other manufacturing



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and education. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Levels of informality within the formal sector were significantly higher for women manufacturing workers in the food processing sector than other manufacturing. In 2019, 10% of women manufacturing workers in food processing were in the informal sector. The comparable figure was 8% in other manufacturing. In contrast, levels of informality were significantly less for men manufacturing workers in food processing compared to other manufacturing. In 2019, less than 5% of men manufacturing workers in food processing were employed in the informal sector. The comparable figure was 10% for men manufacturing workers employed in other manufacturing.

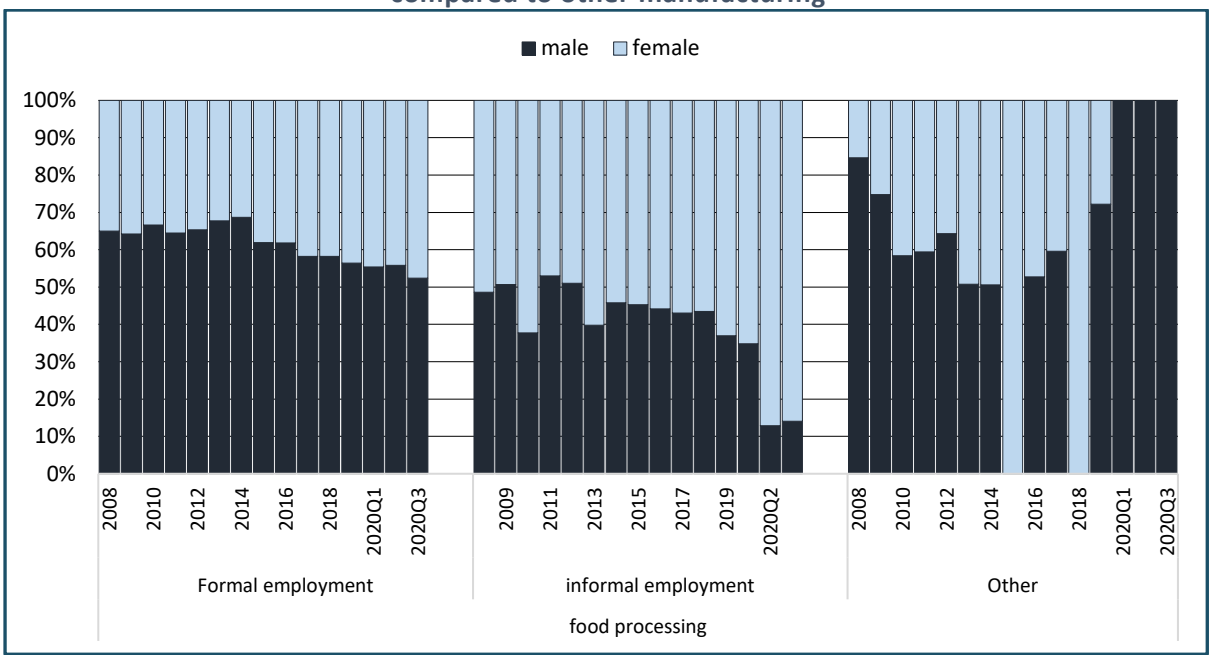
Graph 10. Employment by gender and informality in food processing compared to other manufacturing



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and education. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

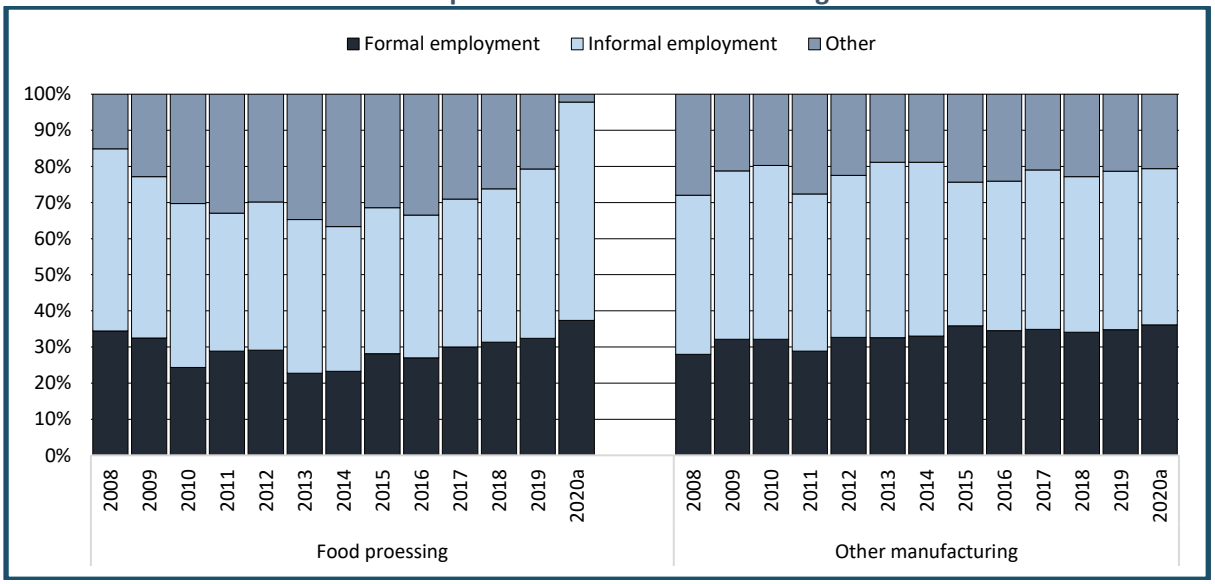
Levels of informality were significantly higher for women workers employed in food processing compared to men. In 2019, women accounted for two thirds of informal sector employees in food processing while men accounted for the rest. In the same year, men accounted for over half of formal sector employment in food processing.

Graph 11. Employment by gender and informality in food processing compared to other manufacturing



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and informality. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Graph 12. Female employment by informality in food processing compared to other manufacturing

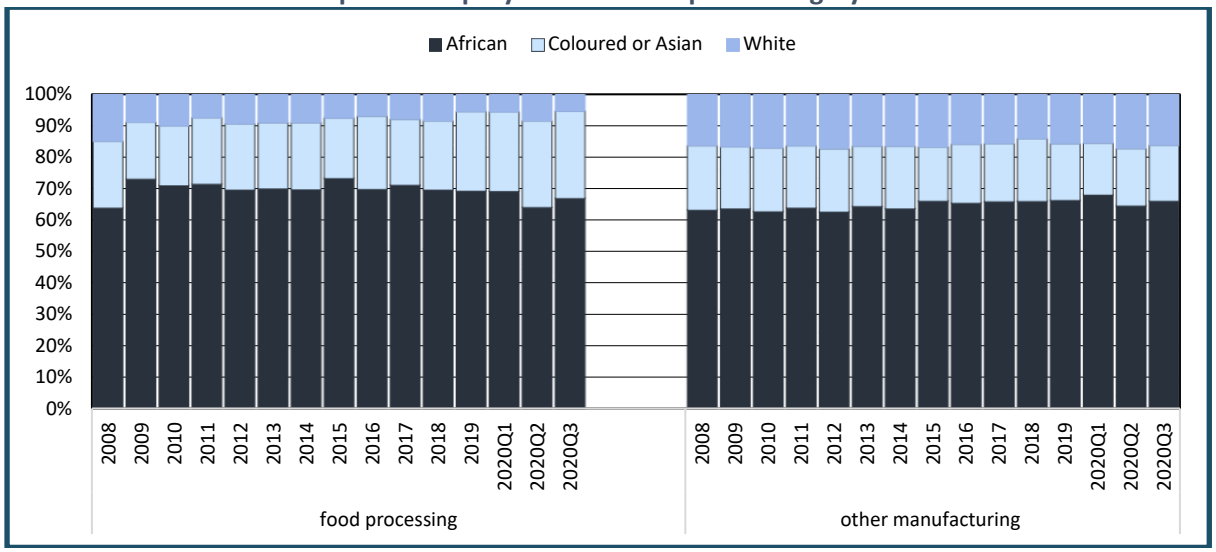


Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and informality. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

The racial profile of an employee in food processing is, on average, 70% likely to be African, compared to 65% in other manufacturing. Coloureds and Asians, constituted only 21% of total employees in food processing, compared to 19% in other manufacturing. The proportion of Coloureds/Asians increased steadily from 2008 but declined in other manufacturing, possibly due to the concentration of food processing activities in Coloured/Asian dominated areas such as the Western Cape. Africans,

Coloureds and Asians, combined, constitute a disproportionate share in both food processing and other manufacturing, however, this proportion is seven percentage points higher in food processing than other manufacturing. For example, in 2020, Africans, Coloureds and Asians constituted 93% of employment in food processing, compared to 83% in other manufacturing (see Graph 13).

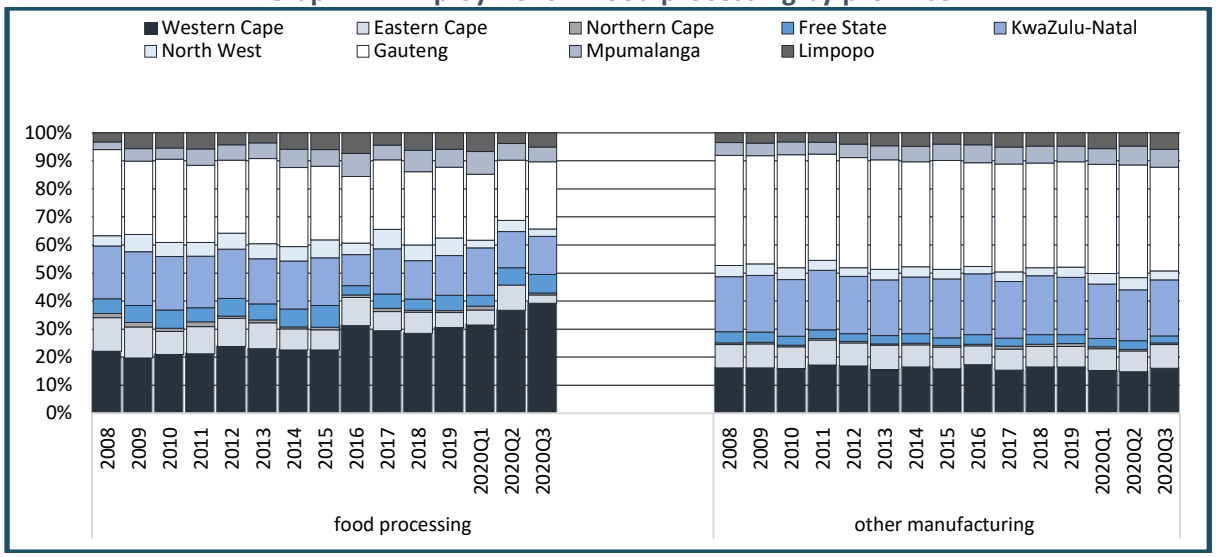
Graph 13. Employment in food processing by race



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and population group. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Between 2008 and the third quarter of 2020, the Western Cape Province was the largest employer in food processing. The QLFS data indicate that employment in food processing was 10% higher in the Western Cape than other manufacturing. This may be due in part to more than favourable geographic and climatic conditions coupled with sophisticated production facilities that enable the production of diversified food products. Moreover the Western Cape has a highly sophisticated port infrastructure that enables the efficient export of differentiated products. The Western Cape was, however, less dominant in other manufacturing, which was largely dominated by Gauteng Province. The pandemic effect was less severe in the Western Cape, which increased its share in food processing in the first three quarters of 2020.

Graph 14. Employment in food processing by province



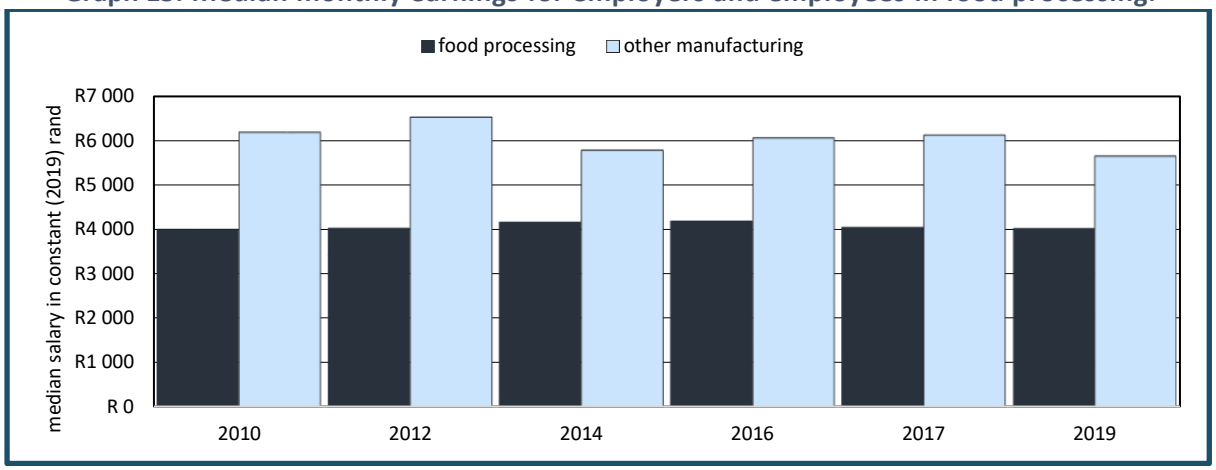
Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and population group. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

3. Earnings

Between 2010 and 2019, median earnings in food processing were lower than other manufacturing. In the same period, median earnings were around R4 000 in food processing, compared to around R6 000 for other manufacturing. The structure of real earnings has remained constant in food processing. However, real median earnings in other manufacturing declined from 2012.

Statistics South Africa's annual Labour Market Dynamics reports on the monthly earnings of the South African labour force across a range of characteristics including gender, race and location. This data are available for both broad sectors such as manufacturing, the various manufacturing subsectors such as food, tobacco and beverages and subdivisions such as food. Monthly earnings are reported in current rand, converted into constant 2019 rand (see Graph 15).

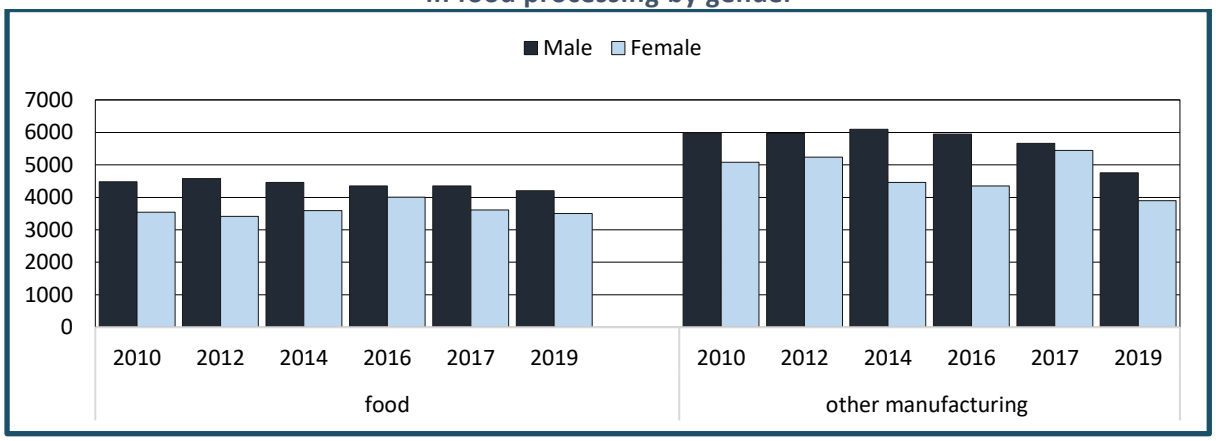
Graph 15. Median monthly earnings for employers and employees in food processing.



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and population group. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Graph 16 shows on the median monthly earnings for men and women in food processing, benchmarked against other manufacturing for 2010 to 2019. According to the graph, median earnings were higher for men than women in both food processing and other manufacturing. The median gender pay gap, which compares the value of monthly earnings located at the middle of the earnings distribution for women and men narrowed in both food processing and other manufacturing. However, this was due in large part to the decline in real median earnings for men. The distribution of earnings (in terms of shares) in other manufacturing mirrors on average that of food processing. However, median earnings are likely to be higher for both men and women in other manufacturing.

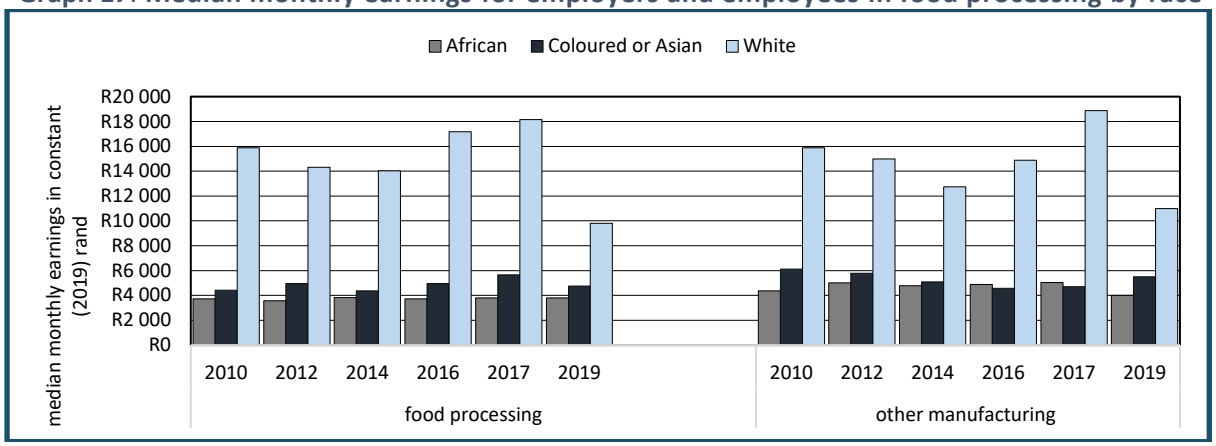
Graph 16. Median monthly earnings for employers and employees in food processing by gender



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and population group. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Racial earnings gaps were quite substantial in food processing and other manufacturing. According to the Stats SA data, median monthly earnings for white people in food processing were 400% times the median earnings for Africans. Median monthly earnings increased for all Africans and Coloureds/Asian between 2014 and 2019 (see Graph 17). Median monthly earning, however, declined for Whites. There might be a glitch in the data, as there is no visible economic explanation as to why the real median earnings would decline for white people or any visible changes in sectors outside of the manufacturing sector. A possible explanation for the decline in the real median earnings for white people could be the decline in the Quarterly Labour Force Survey response rate for White people between 2017 and 2019.

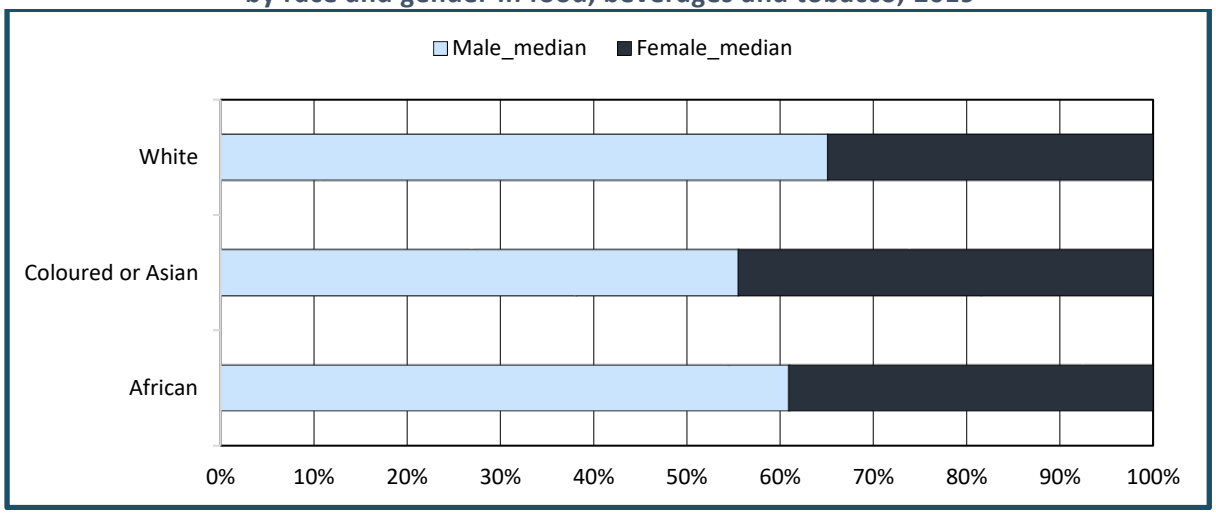
Graph 17. Median monthly earnings for employers and employees in food processing by race



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and population group. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Graph 18 shows median earnings in food, beverages and tobacco by race and gender in 2019. The data demonstrate a somewhat skewed distribution with real median earnings disproportionately higher for men across all three racial groups. Moreover, the data demonstrate further inequalities in median earnings for women. In 2019, median earnings were 26% higher for white women than black women. This data highlight the intersectionality of race and gender and how these factors determine the earning potential of an employee in the South African food processing subsector. The median earnings of a black woman were likely to be lower than that of other women (both Coloured/Asian and White) and women across all racial groups.

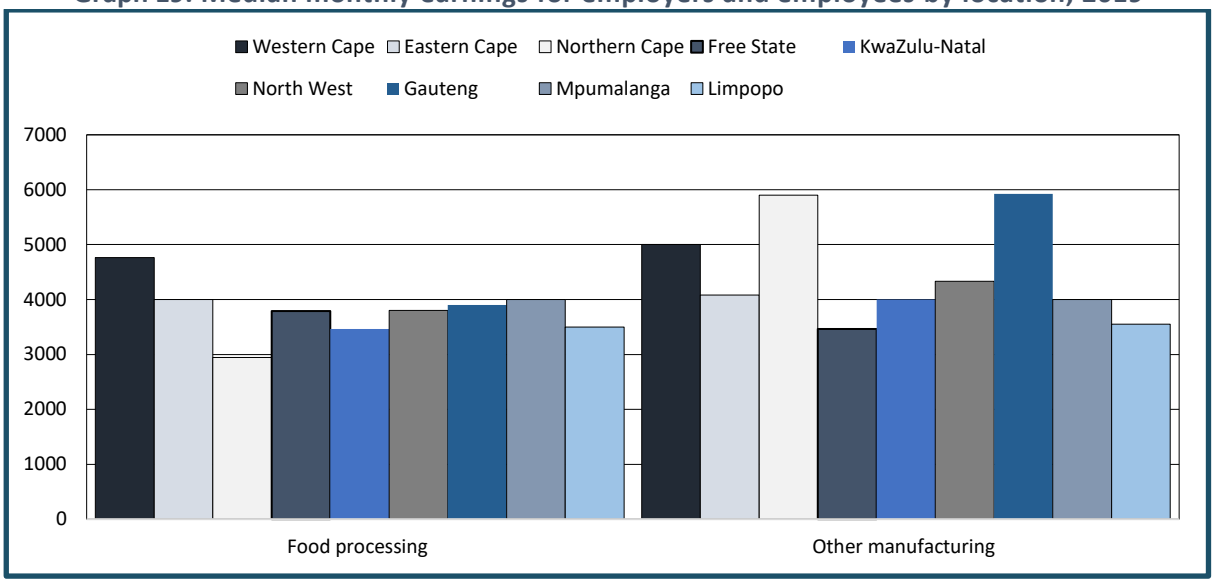
Graph 18. Median monthly earnings for employers and employees by race and gender in food, beverages and tobacco, 2019



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on employment by industry and population group. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Median monthly earnings were lower in food processing than other manufacturing across all provinces. The exception was Limpopo province where median monthly earnings were 33% higher than other manufacturing.

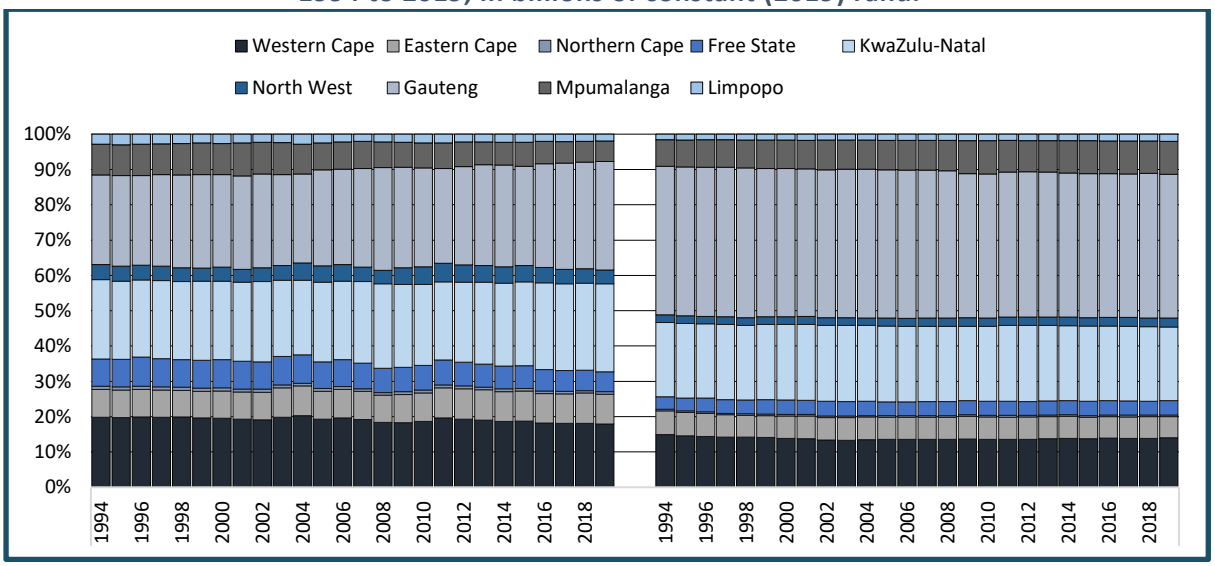
Graph 19. Median monthly earnings for employers and employees by location, 2019



Source: Statistics South Africa. Labour Market Dynamics. Relevant years. Series on monthly earnings for employers and employees by provinces. Electronic databases. Downloaded from www.statssa.gov.za Nesstar facility in January 2021.

Graph 20 shows median earnings in food, beverages and tobacco by race and gender in 2019. The data demonstrate a somewhat skewed distribution with real median earnings disproportionately higher for men across all three racial groups. Moreover, the data demonstrate further inequalities in median earnings for women. In 2019, median earnings were 26% higher for white women than black women. This data highlight the intersectionality of race and gender and how these factors determine the earning potential of an employee in the South African food processing subsector. The median earnings of a black woman were likely to be lower than that of other women (both Coloured/Asian and White) and women across all racial groups.

Graph 20. Gross Fixed Capital Formation in food processing, 1994 to 2019, in billions of constant (2019) rand.

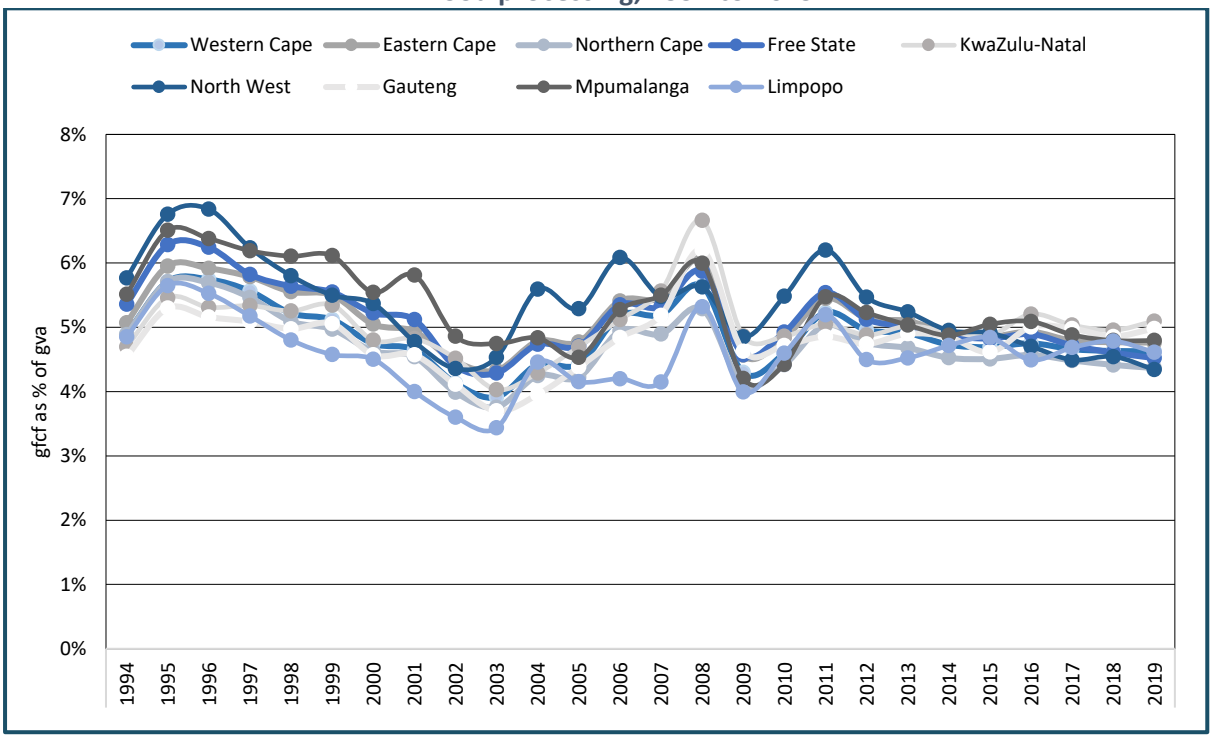


Source: *Quantec EasyData. Standardised industry data. Database in electronic format. Series on Gross Fixed Capital Formation. Downloaded from https://www.quantec.co.za/easydata/ in January 2021.*

As a percentage of Gross Value Added (GVA) in 2019, GFCF in food processing was the highest in KwaZulu-Natal and represented 5% of GVA. Compared to other provinces, the North West and Northern Cape have the lowest relative levels of GFCF as a percentage of GVA.

All provinces experienced a fall in GFCF in food processing that was relatively much larger in Limpopo, Gauteng and Northern Cape, over the 1994 to 2003 period. However from 2004 to 2011 the ratios for all provinces increased and levelled out to around 5% over 2012 to 2019.

Graph 21. Gross Fixed Capital Formation as a % of Gross Value Added in food processing, 1994 to 2019



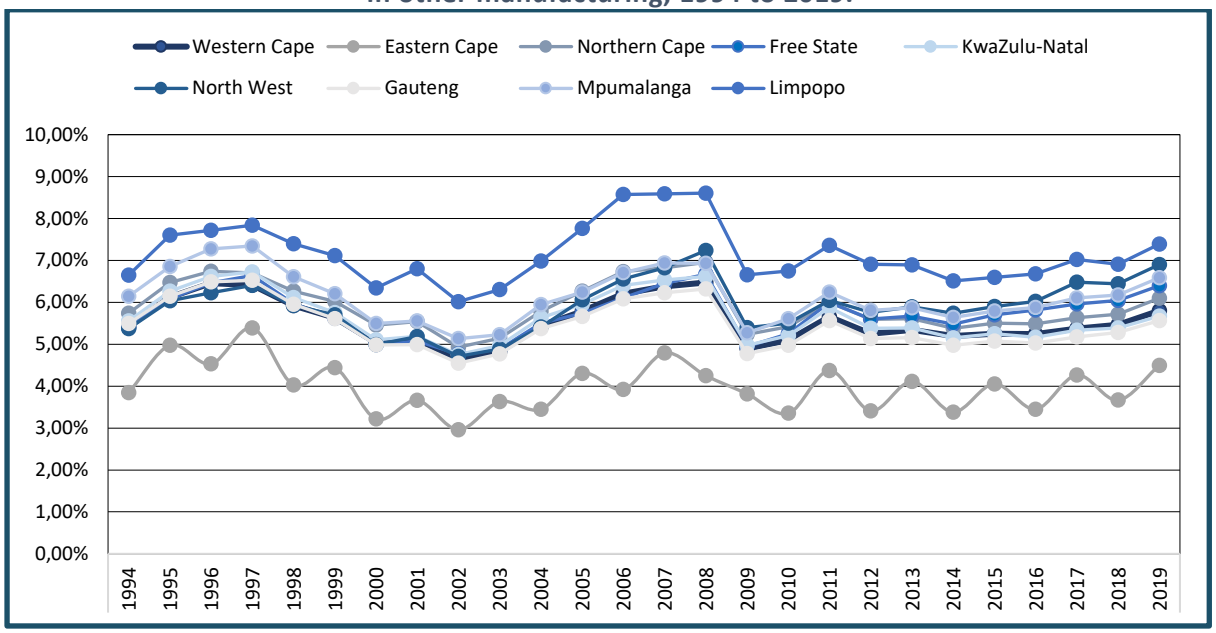
Source: *Quantec EasyData. Standardised industry data. Database in electronic format. Series on Gross Fixed Capital Formation. Downloaded from https://www.quantec.co.za/easydata/ in January 2021.*

The ratios demonstrate similar patterns in other manufacturing over the course of analysis. However, the ratio of GFCF to GVA in other manufacturing is the highest in Limpopo and the lowest in the Eastern Cape Province (see Graph 21).

4. Investment

Gauteng had the highest Gross Fixed Capital Formation (GFCF) in both food processing and other manufacturing. Between 1994 and 2019, GFCF in food processing increased in both KwaZulu-Natal and Gauteng.

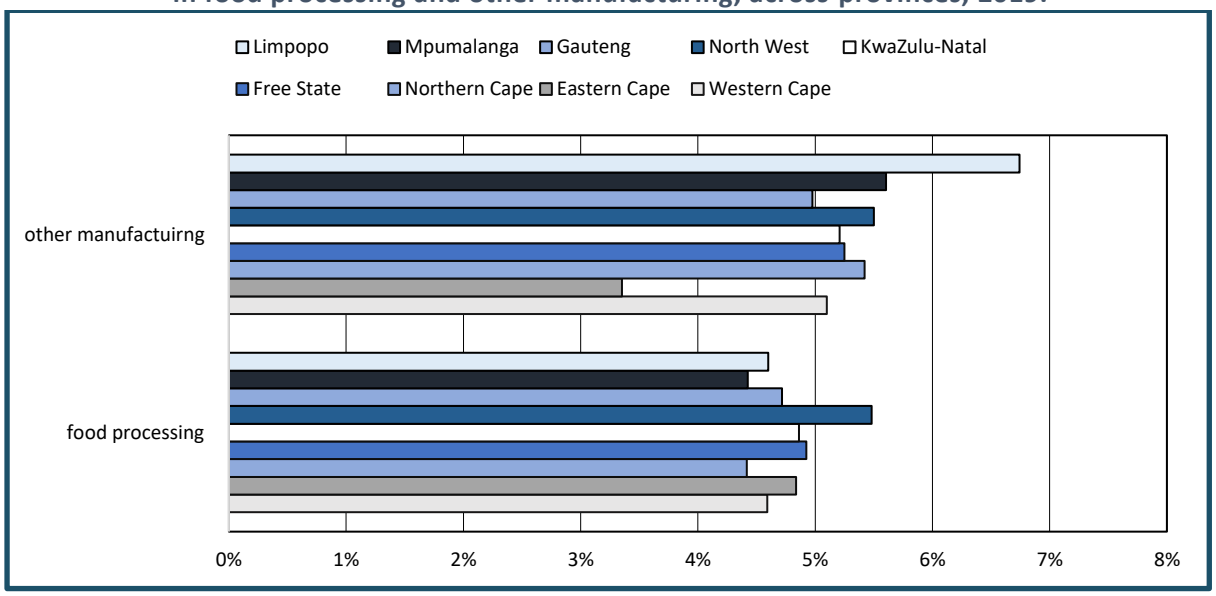
Graph 22. Gross Fixed Capital Formation as a % of Gross Value Added in other manufacturing, 1994 to 2019.



Source: *Quantec EasyData. Standardised industry data. Database in electronic format. Series on Gross Fixed Capital Formation. Downloaded from https://www.quantec.co.za/easydata/ in January 2021.*

In 2019, the ratio for GFCF to GVA was the highest in KwaZulu-Natal, Gauteng, Mpumalanga and the Eastern Cape. The plausible economic explanation for these trends is the surge in investment levels for manufacturing infrastructure, specifically the infrastructural drive towards special economic zones. In other manufacturing, the ratio for GFCF to GVA was the highest in Limpopo and the Mpumalanga province. These provinces have made significant investments in manufacturing capacity over the past couple of years in the form of export processing zones, with the recent one being in Nkomazi in Mpumalanga province.

Graph 23. Gross Fixed Capital Formation as a % of Gross Value Added in food processing and other manufacturing, across provinces, 2019.

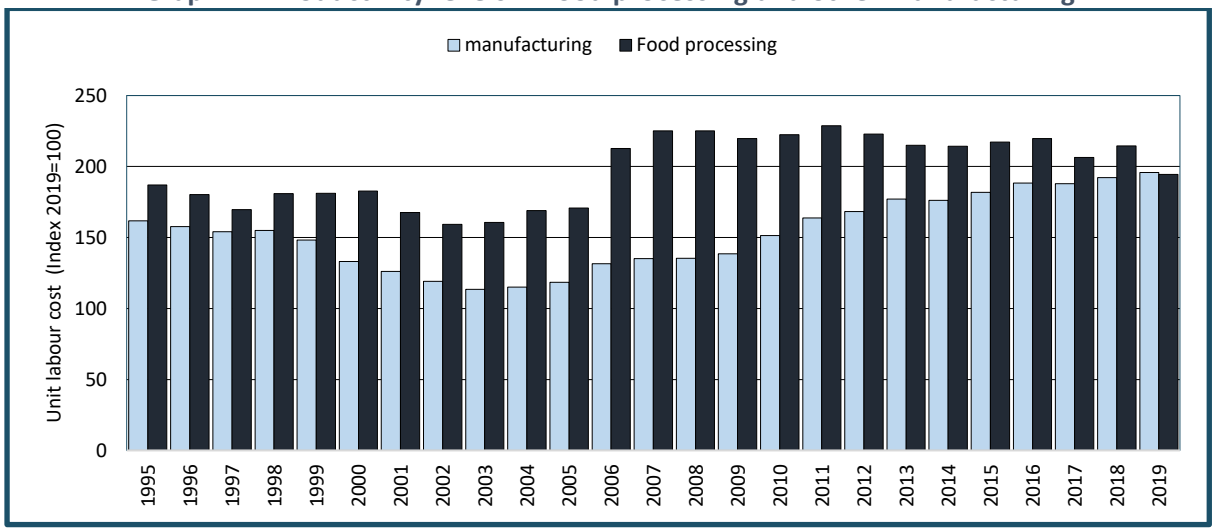


Source: *Quantec EasyData. Standardised industry data. Database in electronic format. Series on Gross Fixed Capital Formation. Downloaded from https://www.quantec.co.za/easydata/ in January 2021.*

5. Productivity

Estimates, based on Quantic data indicate that unit labor costs, defined as the average cost of labour per unit of output produced, were higher in food processing compared to other manufacturing despite lower wages (see Graph 24). However, the gap in unit labour costs between food processing and other manufacturing has increasingly narrowed from 2002, mainly due to an increase in the unit labor costs in other manufacturing, which surpassed that of food processing in 2019.

Graph 24. Productivity levels in food processing and other manufacturing

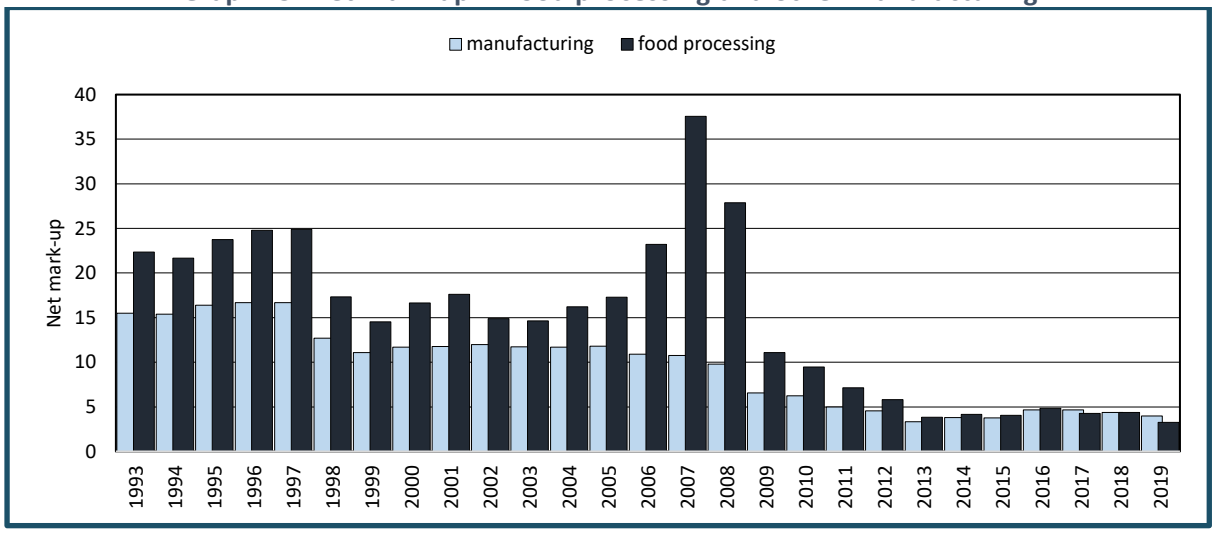


Source: Quantec EasyData. Standardised industry data. Database in electronic format. Series on unit labor costs. Downloaded from https://www.quantec.co.za/easydata/ in January 2021.

Net operating surplus

From 1995 to 2011, the net mark-up, calculated as net operating surplus as a ratio of total inputs were higher in food processing than other manufacturing. There was a dramatic increase in net mark-up in food processing between 2003 and 2007. However, the difference in net mark-up costs between food processing and other manufacturing has increasingly narrowed over the more recent period.

Graph 25. Net mark-up in food processing and other manufacturing

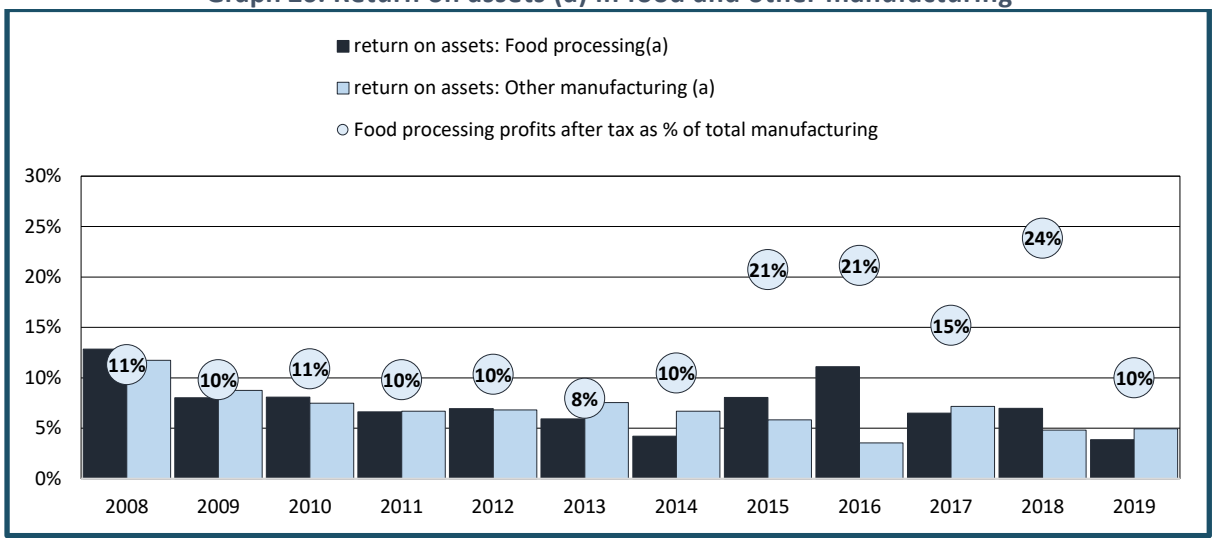


Source: Quantec EasyData. Standardised industry data. Database in electronic format. Series on net markup. Downloaded from https://www.quantec.co.za/easydata/ in January 2021.

6. Profitability and assets

Since 2008, the food processing industry's after-tax return on assets has averaged 7% each year. This was a higher rate than the rest of manufacturing, which averaged 6% annual returns. This was due possibly to a relatively higher mark-up in food processing than the rest of manufacturing. Food processing generated around 10% of total industrial profits in 2019.

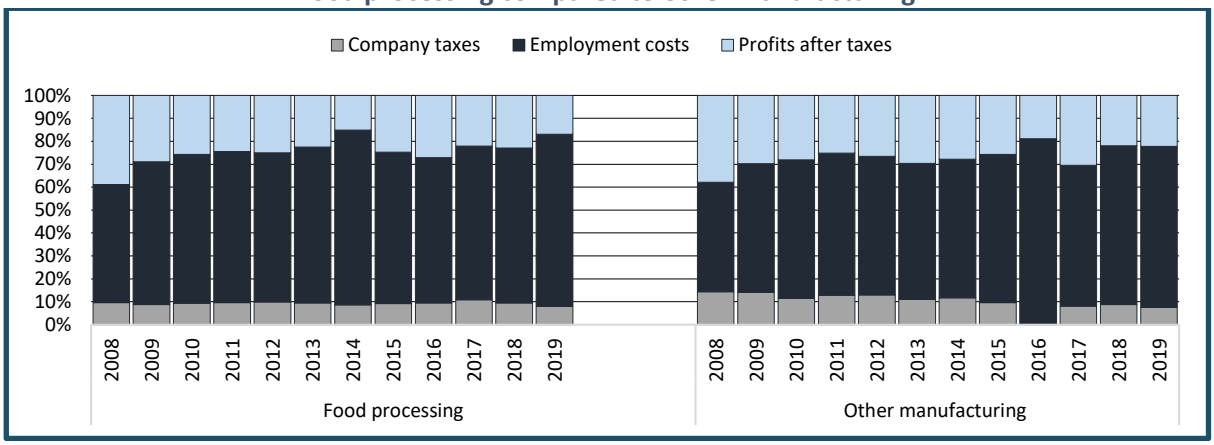
Graph 26. Return on assets (a) in food and other manufacturing



Note: (a) Profits before taxes and dividends less company tax as percentage of total assets. Source: Calculated from Statistics South Africa. Annual Financial Statistics. Disaggregated Industry Statistics for relevant year. Excel spreadsheet. Downloaded from www.statssa.gov.za in January 2021.

Between 2009 and 2019, company taxes accounted for an average of 10% of income from food processing, compared to 11% for the rest of manufacturing. After-tax profits in both food processing and the rest of manufacturing came to 26%. Employment costs averaged 68% of income in food processing, compared to 70% in the rest of manufacturing.

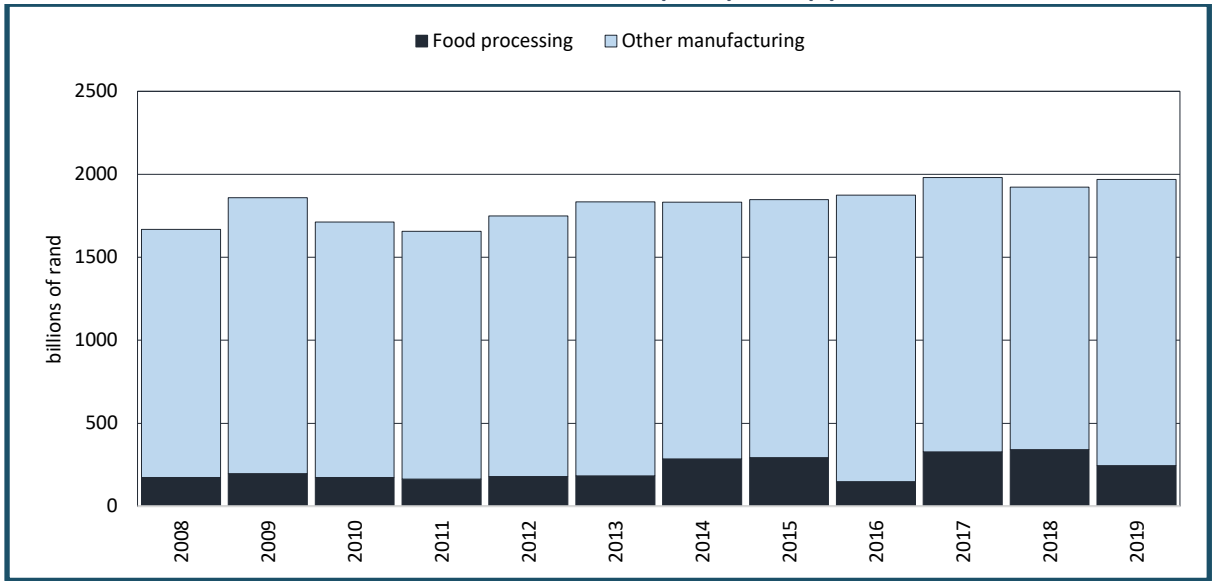
Graph 27. Share of remuneration, after tax profits and company taxes in income from food processing compared to other manufacturing



Source: Calculated from Statistics South Africa. Annual Financial Statistics. Disaggregated Industry Statistics for relevant year. Excel spreadsheet. Downloaded from www.statssa.gov.za in January 2021.

The value of food-processing assets climbed by 23% from 2009 to 2019, while the assets in the rest of manufacturing rose 3%. As a result, the share of food processing total manufacturing assets grew from 10% to 12% over this period.

Graph 28. Value of total assets in food processing and other manufacturing in billions of constant (2019) rand (a)

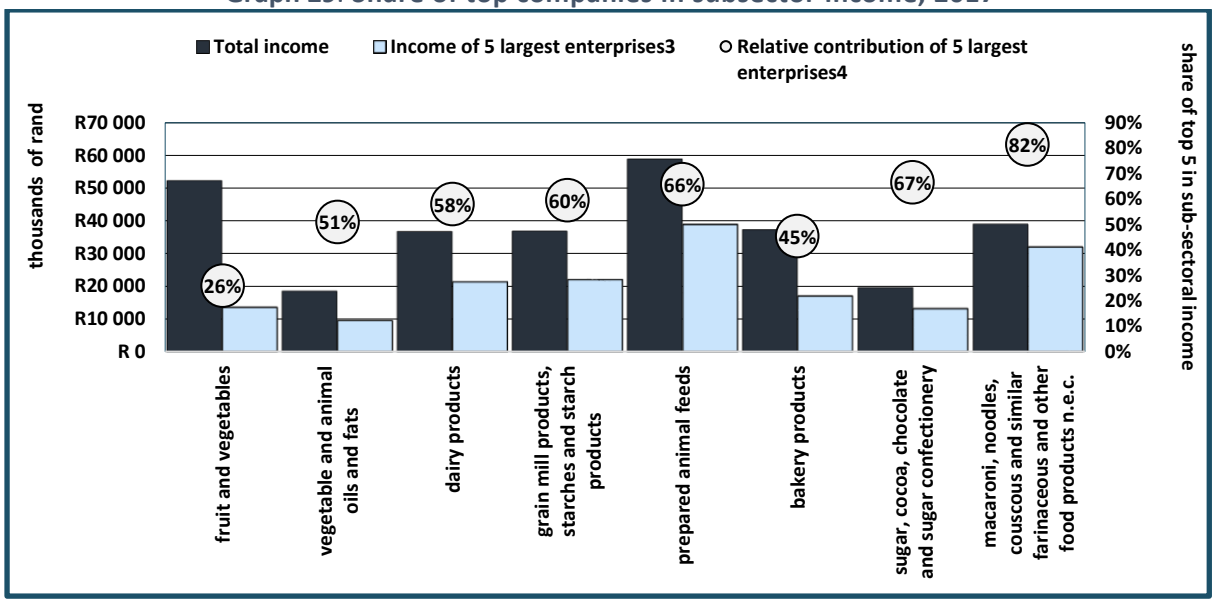


Notes: (a) Deflated with CPI. Source: Calculated from Statistics South Africa. Disaggregated Industry Statistics for relevant year. Excel spreadsheet. Downloaded from www.statssa.gov.za in March 2021.

7. Market structure and major companies

According to Statistics South Africa's Manufacturing Financial Statistics, in 2017 the share in total income of the largest five companies in food processing was 29%. That was lower than any other subsector but clothing. Within subsectors, however, concentration was much higher, at between 60% and 82% in grain milling products, prepared animal feeds, sugar, cocoa, confectionary and macaroni, noodles, couscous and other food products.

Graph 29. Share of top companies in subsector income, 2017



Source: Statistics South Africa. 2019. Manufacturing Industry: Financial, 2019. Pretoria. Table 9, p 33, ff

Grain milling and wheat

The four largest maize milling companies, Premier, Tiger, Pioneer and Pride, account for about 75% of total maize-meal sales, with around 300 smaller millers also functioning. The dominant wheat millers are Pioneer, Premier and Tiger.

Table 1. Market structure for grain milling products: maize and wheat

Company	Employees	Operations
RCL Foods Ltd	20 823 (Group)	Milling of wheat and maize.
Pioneer Voedsel (Pty) Ltd	10 181	Operates as a manufacturer of wheat and maize products. The company also manages bakery operations.
Premier FMCG (Pty) Ltd	9 000	Produces and supplies wheat and maize to its bakeries. Production of specialist wheat flour for industrial use, maize bran and maize germ.
Tiger Brands Ltd	1 178 (Group)	Involved in the milling of maize and wheat.
Ingrain SA (Pty) Ltd	1 042	Manufactures wet maize milling starch and glucose.
Blinkwater Meule (Pty) Ltd	700	Involved in the milling of maize and manufacturing maize meal.
Carolina Roller Meule (Pty) Ltd	600	Involved in the milling, marketing and distribution of maize products.
Pride Milling Company (Pty) Ltd	500	Involved in the milling, packaging and distribution of maize meal.
Bakhresa SA (Pty) Ltd	100	Manufacturer of wheat flour, such as white and brown bread flour, cake flour and biscuit flour.
Vaal Milling Company (Pty) Ltd	50	Maize miller, buying mielies from farmers and selling the processed maize meal.

Source: Who Owns Whom. Report generator. Companies in Food processing. Downloaded in January 2021.

Dairy

According to Stats SA, in 2017, the 10 largest dairy producers accounted for 72% of total revenue. Market shares: Clover 26%, Parmalat 18%, Unilever 7%, Danone 6%, and Cape Oil and Margarine 6%.

Table 2. Market structure for dairy products

Company	Employees	Operations
Clover SA (Pty) Ltd	8 500	Involved in the processing, marketing, retail and distribution of various food products which include dairy, dairy-related and other food products such as olive oils, extra virgin olive oils, balsamic vinegar and related products. The oil products are both manufactured and imported.
Libstar Operations (Pty) Ltd through Lancewood division	7 592 (Group)	Operates through its divisions and subsidiaries with interests in enterprises that manufacture and distribute Fast Moving Consumer Goods in the food and average, household and personal care segments of the market
Rhodes Food Group (Pty) Ltd	6 242 (Group)	Manufactures and markets convenience foods, offering meal solutions in fresh, frozen and long life formats. The group's product range includes fresh and frozen ready-made meals, pastry-based products, jams, canned fruit, canned vegetables, canned meat, fruit purees, juice and juice products as well as dairy products.
Nestle (South Africa) (Pty) Ltd	3 200	Manufactures, imports, exports and markets consumer products, foodstuffs and milk products

Lactalis South Africa (Pty) Ltd	3 127	Processes and distributes milk and dairy products, as well as fruit-based beverages for the dairy industry. Products offered include ultra-high temperature (UHT) (long life) milk, cream, cheeses, cream cheese portions, butter, yoghurt, maas, ice cream, custard and one-cup milk pods. The company has seven factories and 11 distribution centres.
Woodlands Dairy (Pty) Ltd	1 300	Operates dairy and UHT plant which is involved in producing dairy products such as UHT milk, custard, cream, butter, cheese, amasi, flavoured milks and extended shelf life fresh milk.
Orange Grove Dairy (Pty) Ltd	823	Involved in the processing, production and distribution of UHT and dairy products such as milk, maas, yoghurt, amahewu, fruit juice, nectars and dairy blends.
Fair Cape Dairies (Pty) Ltd	910	Manufactures and distributes skim milk, full cream milk, long life UHT milk, flavoured milk, fruit juices, dessert and yoghurts. The company has three factories that produce milk, yoghurt and dessert. School tours are also offered.
Dewfresh (Pty) Ltd	500	Involved in the processing and packaging of fruit juices, yoghurt, drinking yoghurt, cream, buttermilk, amasi, barista milk, soy milk, long life milk and fresh milk. The company also exports products to a variety of countries including Africa, Asia, North America and Europe.
Danone Southern Africa (PTY) Ltd	500	Involved in the manufacture and distribution of yoghurt, inkomazi and custard under the brand name of Danone.
Darling Romery (Pty) Ltd t/a Darling Creamery	400	Operates as a dairy, producing milk and milk-related products such as cream, yoghurt, frozen yoghurt, amasi, buttermilk and feta cheese, as well as juice blends, supplying to supermarkets, wholesalers and the catering market.
Fairfield Dairy (Pty) Ltd	341	Operates as a dairy product processing plant, producing and distributing fresh milk, flavoured milk, cream, butter, cottage cheese, mozzarella cheese, yoghurt, drinking yoghurt, dips, cream, maas and fruit juices, under the brand name Fairfield.
Denmar Estates (Pty) Ltd	300	Operates as a processor and supplier of milk, under contract. Milk is supplied by farmers, which is processed by the company's factory and distributed to shops in the surrounding areas. Also manufactures water-based fruit juice blends.
Douglasdale Dairy (Pty) Ltd	214	Involved in the production of milk, buttermilk, butter, skim milk powder, amasi and cream, which is packaged and distributed to wholesalers and retailers from the company's factory.
Gattis Ice Cream (Pty) Ltd t/a Gatti Ice Cream	120	Manufactures and distributes ice cream, ice cream desserts, sorbets, cones, milk lollies and ice lollies, supplying to Gatti distributors, retailers and restaurants.

Source: Who Owns Whom. Report generator. Companies in food processing. Downloaded in January 2021.

Processed fruit and vegetables

There are an estimated 1 800 food processing companies in South Africa. The top 10 largest companies account for more than 80% of the industries revenue. Rhodes Food Group dominates the fruit and vegetable processing sector with a 49% share of the jam market, 49% of the canned fruit market, 20% of the canned vegetables sector and 24% of the long-life fruit juices sector.

Table 3. Market structure for fruit and vegetables

Name of business	Employees	Operations
Tiger Consumer Brands Ltd	10 543 (Group)	Manufactures, distributes, and markets homecare, personal care products, food, and beverages.
Clover SA (Pty) Ltd	8 500	Involved in the processing, marketing, retail and distribution of various food products which include dairy, dairy-related and other food products such as olive oils, extra virgin olive oils, balsamic vinegar and related products. The oil products are both manufactured and imported.
Libstar Operations (Pty) Ltd	7 592 (Group)	Operates through its divisions and subsidiaries with interests in enterprises that manufacture and distribute Fast Moving Consumer Goods in the food and beverage, household and personal care market segments. The group concentrates on supplying the needs of the foods service industry, private label segments of larger retailers and the manufacturing of products for brand owners as well as its own branded products. The group consists of 27 business units that operate nationally across 31 sites located in Gauteng, Mpumalanga, KwaZulu-Natal, Western Cape and Eastern Cape provinces.
In 2 Food Group (Pty) Ltd	7 500	Involved in the manufacture and wholesale of fresh, prepared produce and foods, snacks and shelf-stable groceries, leaf salads, soup, pressed fruit and vegetable juice and beverages, prepared fish, as well as operating a bakery undertaking the manufacture of biscuits, rusks and cakes. There are 16 production facilities in total.
Rhodes Food Group (Pty) Ltd	6 242 (Group)	Food producer, manufacturing and marketing convenience foods, offering meal solutions in fresh, frozen and long life formats. The group's product range includes fresh and frozen ready-made meals, pastry-based products, jams, canned fruit, canned vegetables, canned meat, fruit purees, juice and juice products as well as dairy products.
Pioneer Foods Groceries (Pty) Ltd	2 800	Food producer, manufacturer and marketer of food, convenience foods, cereal accomplishments, making manufacturers and beverages.
McCain Foods (South Africa) (Pty) Ltd	1 000	Involved in the manufacturing, processing and retailing of frozen vegetables, potato products, prepared meals and oven-ready entrees. The company has two production facilities situated in Springs and Delmas and exports to more than 130 countries.
Ceres Fruit Processors (Pty) Ltd	359	Involved in the processing of fruit into fruit puree and fruit concentrates, supplying to manufacturers of fruit juices and cider. There are two production plants.
Eastern Trading Co (Pty) Ltd t/a Darsot Food Corporation	350	Involved in the manufacture of tomato paste, smooth and crunchy peanut butter, mayonnaise and a wide range of canned food products including mushrooms, pickles, canned asparagus and various types of beans, as well as operating as a third party manufacturer for house brands. There are two factories.
Giants Canning CC	300	Manufactures, packs and distributes tin food. The company specialises in canned vegetables, soups, jams, beetroot, tomato paste and purees and are also co-packers. It manufactures on behalf of Metcash, Shoprite, Makro, Spar and Pick 'n Pay. There is one production plant at City Deep.
Magaliesberg Sitrus Maatskappy (Pty) Ltd t/a Magalies Citrus	250	Involved in the manufacture of fruit juice concentrates. There is one factory.

Source: Who Owns Whom. Report generator. Companies in food processing. Downloaded in January 2021.

Sugar milling and confectionary

Sugar milling companies in South Africa are dominated by Illovo and Tongaat Hulett, which control over half of production of refined and raw sugar.

Table 4. Market structure for sugar milling and confectionary industry

Company	Employees (estimate)	Operations
Tongaat Hulett Ltd	33 567 (Group) (4 480 – South Africa)	Involved in cane growing and the production, marketing and distribution of refined raw sugar, sweetener and specialty sugar as well as animal feed. The company operates three sugar mills, with the Malelane and Pongola mills each having a refinery and a packaging plant and sugar estates.
Illovo Sugar Africa (Pty) Ltd	12 800 (Group) (2 228 – South Africa)	Manufactures refined sugar which is supplied to Illovo Sugar Africa (Pty) Ltd, as well as industrial customers. The company has one sugar refinery.
UCL Company (Pty) Ltd	855	Involved in various operations including the production of sugar, wattle bark extract, farming of trees and sugar cane and sawn lumber products. Sugar is manufactured from early March through to December of each year. The company has one sugar mill, one sawmill and one wattle bark extract mill.
Gledhow Sugar Company (Pty) Ltd	398	Manufactures refined sugar which is supplied to Illovo Sugar Africa (Pty) Ltd, as well as industrial customers. The company has one sugar refinery.
Umfolozi Sugar Mill (Pty) Ltd	280	Involved in the milling of sugar cane. The distribution of the sugar is overseen by the South African Sugar Association.
Confectionary		
Company	**Employees**	**Operations**
Tiger Brands Ltd	11 978 (Group)	Has a subsidiary that manufactures sugar confectionery, chocolate, concentrates, sports drinks and ready-to-drink beverages.
Premier FMCG (Pty) Ltd	9 000 (estimate) Group	Involved in the production of sweets such as marshmallows, gums and jellies as well as having a blending and packaging facility for fine powders such as baking powder, icing sugar and castor sugar. There is an on-site raw materials and finished products warehouse.
Nestle (South Africa) (Pty) Ltd	3 200 (estimate)	Manufactures, imports, exports and markets consumer products, foodstuffs and milk products.
Mondelez South Africa (Pty) Ltd	2 200	Involved in the manufacture and import of chocolate, candy and gum, biscuits, belVita breakfast biscuits and grocery products.
Kees Beyers Chocolate CC	253	Manufactures chocolates and chocolate-related products made to customer specifications and requirements, including liqueurs, pralines, truffles, fondants, slabs, nougat and biscuits. The company only uses UTZ certified cocoa from UTZ certified suppliers in Europe and imports cocoa liquor, cocoa butter and cocoa blocks. The company produces products under private label for Woolworths and under the D'licious label for Clicks.

Source: Who Owns Whom. Report generator. Companies in food processing. Downloaded in January 2021.

Red meat processing

According to Stats SA, in 2017, the five largest meat producers accounted for 26% of total income in the manufacturing industry.

Table 5. Market structure for meat processing industry

Company	Employees	Operations
Tiger Consumer Brands Ltd (Value Added Meat Products Division)	10 543 (Group)	Manufactures, distributes, and markets homecare, personal care products, food, and beverage brands.
Rhodes Food Group (Pty) Ltd	6 242 (Group)	Food producer, manufacturing and marketing convenience foods, offering meal solutions in fresh, frozen and long life formats. The group's product range includes fresh and frozen ready-made meals, pastry-based products, jams, canned fruit, canned vegetables, canned meat, fruit purees, juice and juice products as well as dairy products.
Famous Brands Ltd (Manufacturing Division)	4 465 (Group) 2 276 (South Africa)	Quick service and casual dining restaurant franchisor with a vertically integrated business model comprising a portfolio of approximately 28 brands represented by a franchise network of 2 441 restaurants across South Africa, 322 restaurants across the rest of Africa and the Middle East, 135 restaurants in the United Kingdom and other countries, totalling 2 898 restaurants. The group also has 10 logistics sites and 12 manufacturing operational plants in South Africa.
Irvin and Johnson Ltd t/a I&J	2 098	Involved in the procurement, processing and marketing of frozen seafoods, chicken, and beef products, as well as abalone and fresh fish to the South African market. The company operates through its various business units which are located in the Eastern and Western Cape. The I&J Danger Point Abalone Farm is located along the coast of South Africa about 200 kilometres southeast of Cape Town. Fish species caught include Cape hake, monk, kingklip, ribbonfish; John Dory, angelfish, Jacopever; squid and lobster. The company's hake catch allowance quota for 2019 was 39 616 tons.
Frey's Food Brands (Pty) Ltd t/a Frey's Quality Meat	1 300	Meat manufactures, markets and retails processed meats made primarily of pork. The company supplies meat products to the food service industry, such as guest-houses, hotels, national restaurant chains and fast food franchises, as well as supermarkets, under supermarket brands.
New Style Pork (Pty) Ltd t/a Lynca Meats	1 200	Manufacturer and wholesaler of pork products as well as operating a deboning and processing plant. The abattoir facility is able to produce a range of products from a variety of carcass weights, primal cuts specification and deboning contracts to suit customer requests, while the processing plant offers bacon, ham, sausages, pickled and smoked products. The abattoir is based in Meyerton.
Sparta Foods (Pty) Ltd	860	Suppliers of beef and beef products nationwide.
Cavalier Abattoir (Pty) Ltd	800	Operates as an abattoir, involved in the slaughtering of cattle, sheep and lambs which are procured from farmers across South Africa. The company also undertakes the processing of the meat. Products, including edible offal, are distributed to supermarkets and private butcheries in the Gauteng area.
Eskort (Pty) Ltd	700	Operates as an abattoir involved in the slaughtering of pigs and also operates as a meat processor. The company supplies to wholesalers and retail stores and also produces a range of products endorsed by Weigh-Less.
Sernick Group (Pty) Ltd (Abattoir	600 (Group)	Operates as a holding company for its subsidiaries, involved in farming, animal feed production, and operating a feedlot, an abattoir and a deboning and meat processing plant.

operations through Sernick Abbatoir)		
Beefmaster Kimberley (Pty) Ltd	476	Operates as a cattle abattoir, based in Kimberley. The company also operates a factory shop with boning facilities and a retail shop, also undertaking packaging for the wholesale and retail industry. There is also a retail shop in Olifantsfontein.
QK Meats SA (Pty) Ltd	321	Involved in the processing of meat products, 90% of which is supplied to Woolworths and 10% is supplied to various other retail outlets.
Overberg Food Distributors (Pty) Ltd	310	Involved in the wholesale and processing of frozen seafoods, poultry, ostrich meat and venison. Processed products include bacon, cold meats and sausage. The company supplies to restaurants, hotels and caterers.
Winelands Pork (Labelle Street) (Pty) Ltd t/a Winelands Pork	300	Operates as an export approved abattoir specialising in the slaughtering of pigs and is involved in the wholesale of fresh pork, supplying wholesalers and butcheries.
Beefcor (Pty) Ltd	277	Operates a feedlot and undertakes meat processing and meat wholesaling. Animals are slaughtered, utilising the Chamdor abattoir on a contract basis.
Roelcor Malmesbury (Pty) Ltd	258	Operates abattoirs, slaughtering cattle, sheep, ostrich and pigs. It has a deboning and processing facility and produces and packages a variety of customised products. Offal products are also sold.
Morgan Abattoir (Pty) Ltd	250	Operates as a cattle and sheep abattoir, based in Springs. The company also operates a butchery involved in the wholesale of meat, has a deboning plant and an offal distributor, as well as exporting to international clients.
BMS Foods (Pty) Ltd t/a Bluff Meat Supply BMS Select Foods and Mndeni Meats	230	Operates as a butchery, undertaking the wholesale and retail of fresh meat and poultry to butcheries and the public. The retail of allied products is also undertaken as well as the manufacture of processed products, such as polonies, viennas and burger patties.
Vereeniging Abattoir (Pty) Ltd t/a Vereeniging Meat Packers	230	Operates as an abattoir. The company's products include beef, lamb, mutton and pork prime cuts, swinging carcasses, blood meal, bone meal and carcass meal.
KYTO Operations (Pty) Ltd	210	Purchases sheep from local farmers, which are then slaughtered and sold to wholesalers. The company is also the supplier of the Certified Natural Lamb brand, which is distributed to all Checkers stores nationwide. It operates one abattoir and deboning plant in De Aar and one abattoir, butchery and feedlot in Groblershoop, as well undertaking the processing of value added products.
Bloemfontein Abattoir (Pty) Ltd	131	Operates as a butchery, undertaking the wholesale and retail of fresh meat and poultry to butcheries and the public. The retail of allied products is also undertaken as well as the manufacture of processed products, such as polonies, viennas and burger patties.
Braviz Fine Foods (Pty) Ltd	89	Meat processing company, specialising in the manufacture and wholesale of ribs and rib cuts to Spur and various meat distributors. The company operates a 6 000 square metre meat processing plant.

Source: Who Owns Whom. Report generator. Companies in food processing. Downloaded in January 2021.

Poultry

Table 6. Market structure for poultry production

Company	Employees	Operations
RCL Foods Ltd	20 581 (Group)	Holding company for its food producing subsidiaries operating across South Africa, Eswatini, Namibia, Botswana, Uganda and Zambia. The group manufactures a wide range of branded and private label food products which are distributed through the group's route-to-market logistics division.
Astral Operations Ltd	11 543 (Group)	Manufactures animal feeds, including animal feed pre-mixes, broiler genetics, production and sale of day-old chicks and hatching eggs, abattoirs and the sale and distribution of various key poultry brands, operating through its two divisions.
Country Bird Holdings (Pty) Ltd	4 000	Holding company with subsidiary operations involved in poultry breeding, broiler and stock feed operations in the Southern African region. Chickens are also obtained from contract farmers.
Crown Chickens (Pty) Ltd t/a Sovereign Foods	3 000 (Group)	Operates within the broiler industry, which covers breeding activities, broiler farming, fast moving consumer goods, animal feed milling and value-added poultry processing and trading. The manufacture of animal feeds is for the company's animal consumption only and not for the public. The manure production is a by-product, which is sold to the farms in the area. The company also undertakes the slaughter of poultry.
Afgri Poultry (Pty) Ltd t/a Daybreak Farms	2 300	Involved in the raising, slaughter and processing of chickens and the selling thereof as portions or whole chickens in frozen form.
Klein Karoo International (Pty) Ltd	1 100	Operates as a holding company for its subsidiaries operating abattoirs and involved in the processing of ostrich products.
Mosstrich (Pty) Ltd	250	Operates as a holding company for its subsidiary, involved in the processing of ostrich meat and other products.

Source: Who Owns Whom. Report generator. Companies in food processing. Downloaded in January 2021.

8. International trade

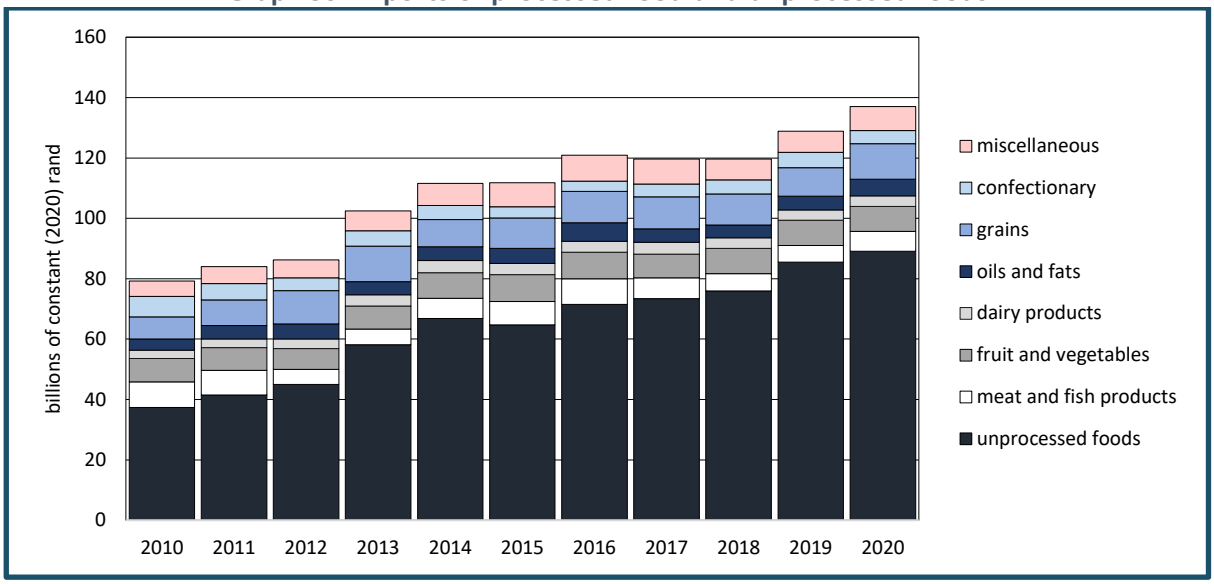
South African merchandise trade data for food (processed and unprocessed) is obtained from two sources, namely the International Trade Centre (ITC) and Quantec. ITC provides South African merchandise trade data for food (processed and unprocessed) at various classifications of the world customs organisation's harmonised commodity description system. Quantec also reports on South African merchandise trade data at both national and regional levels. The data are reported at the various international product classifications, including the Standard Industrial Classifications and Broad Economic Categories, which separates processed food from unprocessed food. Both the ITC and Quantec source their data from the 8-digit merchandise trade statistics.

According to the ITC, South Africa recorded a trade surplus in food (processed and unprocessed) between 1995 and 2005, which was later reversed during the global financial crisis in 2008 and later recovered in 2014. There was a significant rise in the trade (imports and exports) of processed foods between 2009 and 2019. Processed food exports accounted for 3% of total exports in 2020, which remained unchanged from 2019. From 2009 to 2020, processed foods exports grew significantly more rapidly than total exports in constant rand. Processed food exports increased by 6% a year, while total exports grew by 2% a year.

Processed food exports (excluding beverages) accounted for 3% of South Africa's total exports in 2020. In contrast , unprocessed food accounted for approximately 6% of South Africa's total exports in the same year. From 2009 to 2020, unprocessed food exports grew significantly more rapidly than

processed and total exports in constant rand. Unprocessed food exports climbed some 9% a year in this period, while processed foods and total exports rose 4% and 5% a year, respectively.

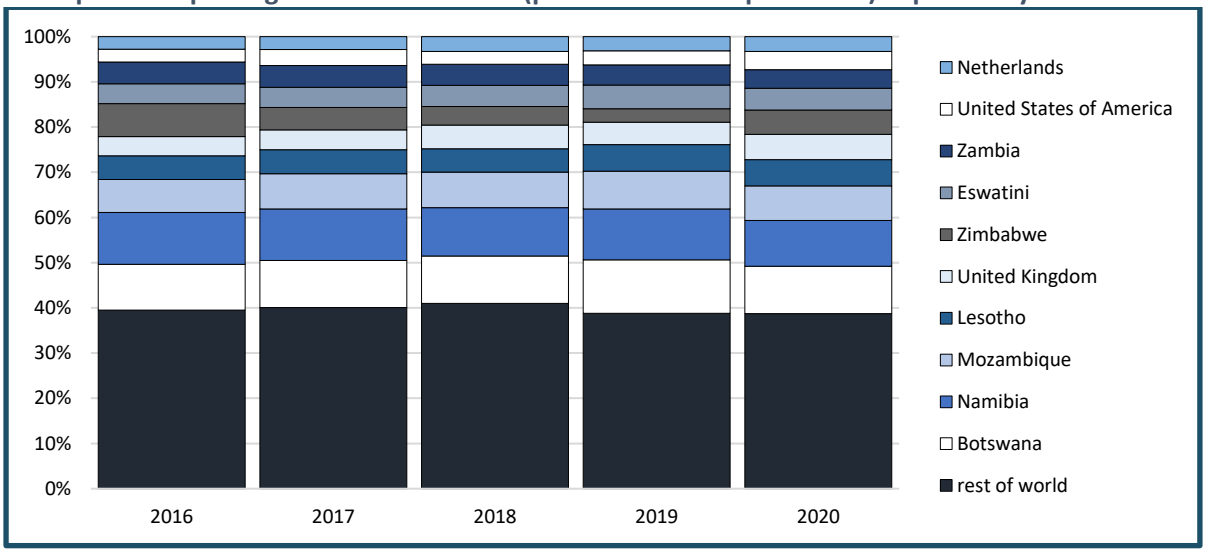
Graph 30. Exports of processed food and unprocessed foods



Source: Quantec EasyData. International trade data. Database in electronic format. Series on exports in current rand. Downloaded from https://www.quantec.co.za/easydata/ in January 2021. Notes: (a) Deflated using CPI. Source: RSA Trade HS 6-digit | EasyData.

In size, processed food exports are dwarfed by grains meat and fish products and fruit and vegetables.

Graph 31. Importing countries for foods (processed and unprocessed) exported by South Africa

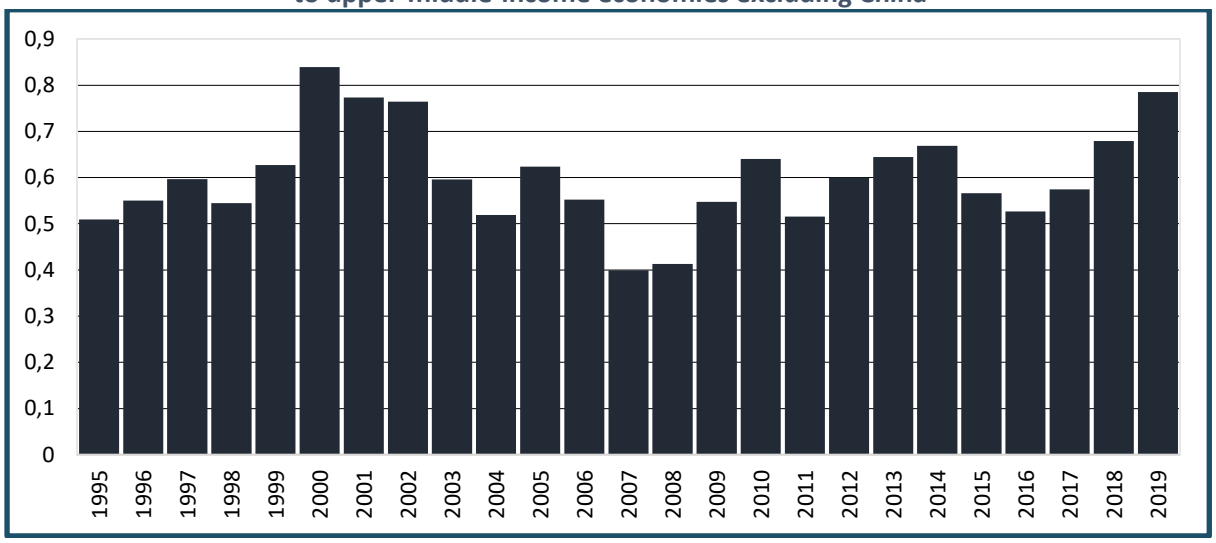


Source: Quantec EasyData. International trade data. Database in electronic format. Series on exports in current rand. Downloaded from https://www.quantec.co.za/easydata/ in January 2021. Notes: (a) Deflated using CPI. Source: RSA Trade HS 6-digit | EasyData.

Africa, in particular Botswana, Namibia and Mozambique were the biggest markets for both processed unprocessed food exports in from 2016 to 2020.

Graph 32 demonstrates South Africa's revealed comparative advantage in the export of processed foods, benchmarked against other upper-middle-income economies excluding China. South Africa has always lagged behind other upper-middle-income-economies in the export of processed foods, with the ratio of processed food exports to total exports higher in other upper-middle-income economies than in South Africa.

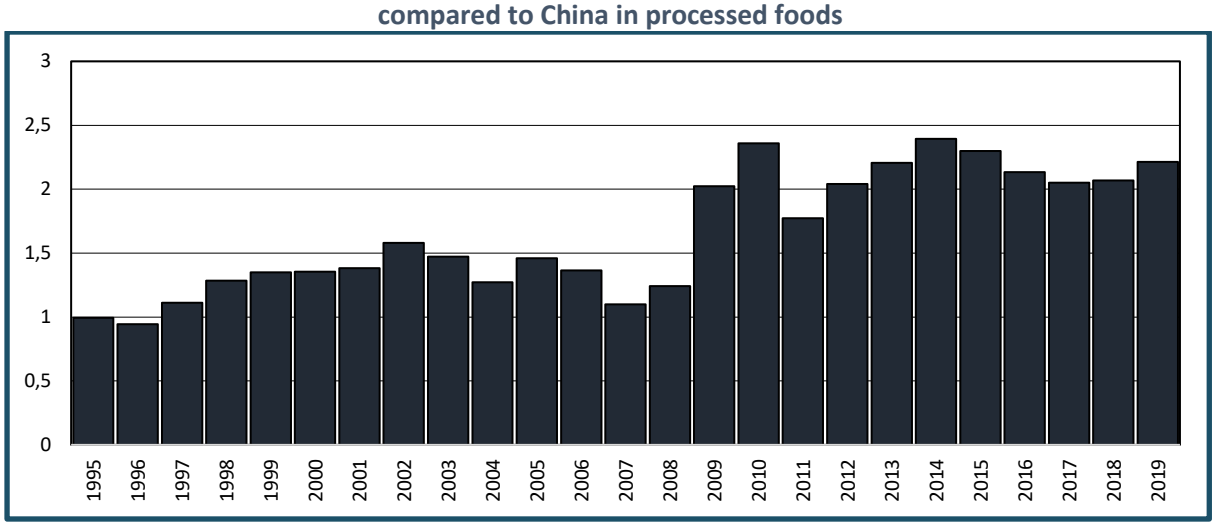
Graph 32. Revealed comparative advantage (a) for South Africa compared to upper-middle-income economies excluding China



Notes: (a) Defined as the share in South African exports of a product as a ratio to the share of the same product in total exports by the benchmark economies. The charts here rely on UNCTAD data, which do not fully report South Africa's gold exports before 2010. As a result, they somewhat overstate South Africa's revealed comparative advantage for manufactures compared to raw materials. Source: Calculated from UNCTAD. Merchandise trade matrix - product groups, exports in thousands of dollars, annual, 1995-2019. Electronic database. Series on relevant export groups and groups of country by World Bank income level. Downloaded from www.unctad.org in January 2021.Note: Where a ratio in the graphs is above one, the share of the product in South Africa's exports is higher than in the benchmark economies. Where the ratio is below one, the share of the product in South Africa's exports is lower than in the benchmark economies.

However, as Graph 33 shows, from 1997, South Africa outperformed China in its exports for processed foods, when the share of processed food exports to total exports was higher in South Africa compared to China.

Graph 33. Revealed comparative advantage (a) for South Africa compared to China in processed foods

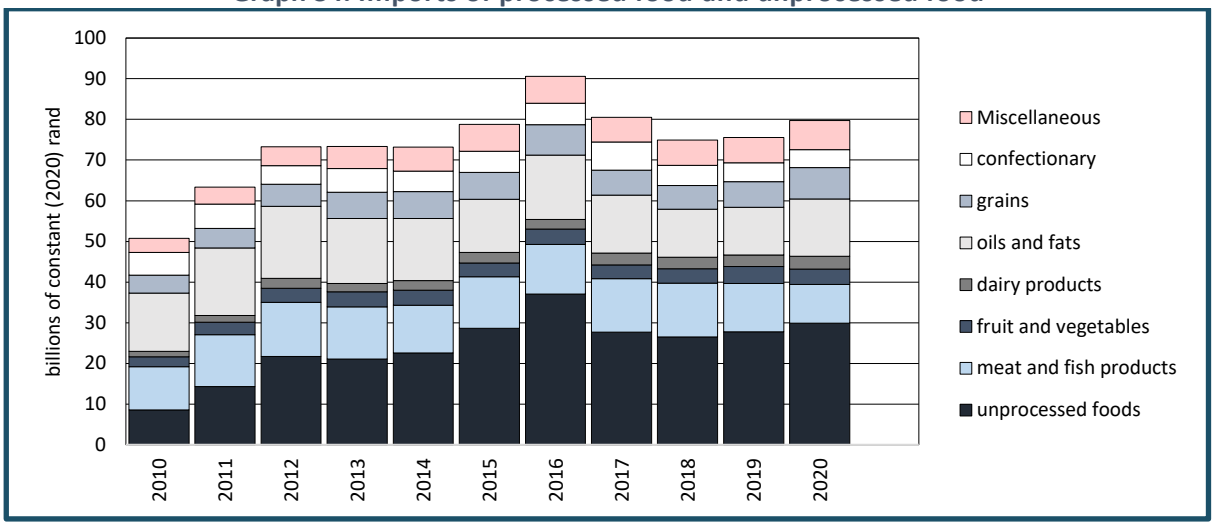


Notes: (a) Defined as the share in South African exports of a product as a ratio to the share of the same product in total exports by the benchmark economies. The charts here rely on UNCTAD data, which do not fully report South Africa's gold exports before 2010. As a result, they somewhat overstate South Africa's revealed comparative advantage for manufactures compared to raw materials. Source: Calculated from UNCTAD. Merchandise trade matrix - product groups, exports in thousands of dollars, annual, 1995-2019. Electronic database. Series on relevant export groups and groups of country by World Bank income level. Downloaded from www.unctad.org in January 2021.Note: Where a ratio in the graphs is above one, the share of the product in South Africa's exports is higher than in the benchmark economies. Where the ratio is below one, the share of the product in South Africa's exports is lower than in the benchmark economies.

Imports

The bulk of South African imports were processed foods - mainly meat and fish products, oils and fats and grains. From 2010 to 2020, in constant rand total imports remained virtually unchanged, but imports of processed foods rose by 2% a year in constant rand. Imports of grains, dairy products and confectionary expanded particularly rapidly in this period.

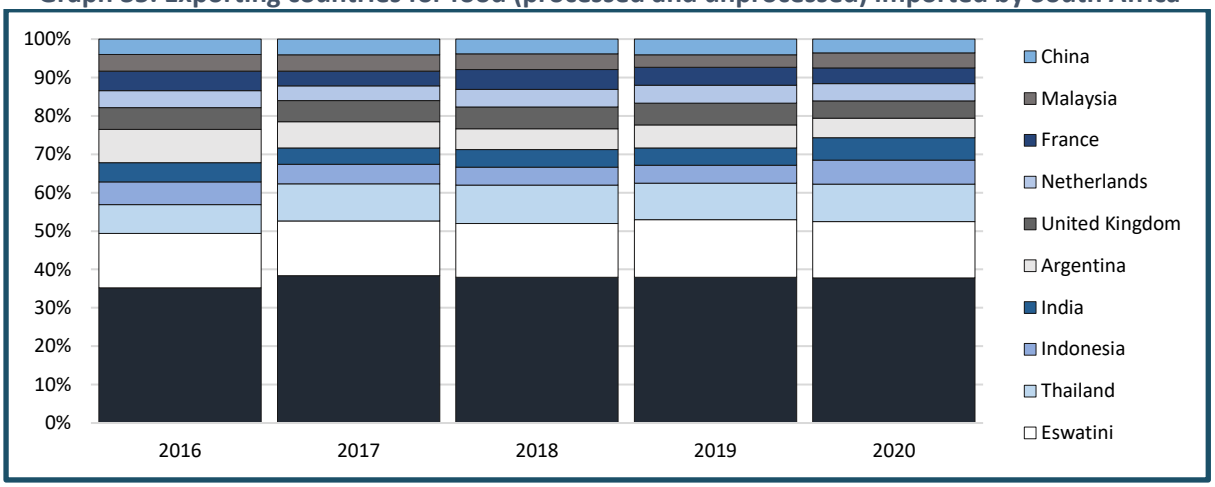
Graph 34. Imports of processed food and unprocessed food



Source: Quantec EasyData. International trade data. Database in electronic format. Series on exports in current rand. Downloaded from https://www.quantec.co.za/easydata/ in January 2021. Notes: (a) Deflated using CPI. Source: RSA Trade HS 6-digit | EasyData,

From 2016 to 2020, South Africa imported the biggest bulk of processed foods from Swaziland and Thailand.

Graph 35. Exporting countries for food (processed and unprocessed) imported by South Africa



Source: Quantec EasyData. International trade data. Database in electronic format. Series on exports in current rand. Downloaded from https://www.quantec.co.za/easydata/ in January 2021. Notes: (a) Deflated using CPI. Source: RSA Trade HS 6-digit | EasyData.