



The influence of internationalisation of labour on the performance of small-scale rural-based agricultural firms: A South African perspective

CrossMark

Author:

Patient Rambe¹ ©

Affiliation:

¹Department of Business Support Studies, Faculty of Management Sciences, Central University of Technology, Bloemfontein, South Africa

Corresponding author:

Patient Rambe, prambe@cut.ac.za

Dates:

Received: 05 Jul. 2017 Accepted: 26 Mar. 2018 Published: 21 June 2018

How to cite this article:

Rambe, P., 2018, 'The influence of internationalisation of labour on the performance of small-scale rural-based agricultural firms: A South African perspective', *Acta Commercii* 18(1), a527. https://doi.org/10.4102/ac.v18i1.527

Copyright:

© 2018. The Authors. Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License.

Read online:



Scan this QR code with your smart phone or mobile device to read online.

Orientation: The main objective of this study is to determine the extent to which small-scale, rural-based agricultural firms in South Africa use foreign labour.

Research purpose: South African business owners or managers' perceived preference for labour from foreign nationals has heightened South African nationals' concerns that these owners or managers are prejudicing local citizens under the guise of reducing overhead costs.

Motivation for the study: There is a scarcity of studies on the influence of free movement of foreign labour on the performance of small-scale, rural-based agricultural firms in South Africa.

Research design, approach and method: A cross-sectional survey research was conducted among 151 small-scale agricultural businesses' (SSABs) owners or managers in Vryburg-Pokwani in North West and Northern Cape provinces of South Africa. Descriptive and inferential statistics were used to analyse the data. Furthermore, post hoc comparisons (Bonferroni) were conducted to establish the long-term performance expectations based on these firms' utilisation of foreign labour.

Main findings: The results showed that the majority (70.9%) of SSABs did not employ foreign labour. Moreover, despite the statistically significant differences in the performance of SSABs based on their usage of foreign labour, SSABs' orientation towards internationalisation of labour increased with increased deployment of foreign labour.

Practical and managerial implications: The study recommended the possibility of deploying highly skilled, value-adding and value-creating foreign labour, while rationalising the recruitment of semi-skilled and unskilled local labour.

Contribution or value addition: The results are of significance to SSABs that need to consider the economic benefits of recruiting foreign labour even if that may increase their overhead costs.

Introduction

Internationalisation of labour markets, which is facilitated by international migration, migrants' geographical proximity to receiving countries and their familiarity with the host country's environment (Kuptsch 2010; Lucas 2010), is one of the contributing factors to the absorption of foreign labour in small-scale agricultural firms in South Africa. Theron, Godfrey and Visser (2007) and Agbobli (2013) concur that the nation's transition to democracy coincided with its integration into the global economy, which could have reinforced the internationalisation of labour, which had started in the apartheid era. The abolition of inward-looking apartheid economic institutions and regulations in 1994 in favour of outward-looking internationalisation-driven institutions (Abgotame 2015; Greenberg 2004) is consistent with the continued employment of migrant labour in South Africa. Although South Africa has maintained stringent immigration and labour laws, literature suggests that these laws have not sufficiently deterred irregular migrants from neighbouring countries and the rest of the African continent from migrating to South Africa (Fauvelle-Aymar 2015; Kabwe-Segatti & Landau 2008). While the South African economy was built on the backbone of both internal and international migrant labour (Adepoju 2006; Siddique 2004), perhaps the progressive increase in unemployment during the post-apartheid era and the economic recession South Africa is currently experiencing have contributed to greater competition for the few available jobs.

Fauvelle-Aymar (2015) observes that South Africa has witnessed a regular, high net flow of immigration from neighbouring countries, and this has heightened South African citizens'

accusations about foreign immigrants unfairly benefiting from jobs intended for local citizens. These accusations have been rife especially in low-skill, labour-intensive occupations, where there are limited academic barriers to entry such as agro-processing, construction, domestic work and other menial jobs. To further compound these accusations, smallscale agricultural businesses' (SSABs) owners or managers are often blamed for recruiting temporary and casual foreign labourers whose wage labour is cheaper than that of locals. The use of foreign migrant labour is not necessarily based on unavailability of local labour but on the employer's positive perceptions of foreign migrant labour, which provides cheap and exploitable replacement for local labour (Agriculture, Forestry and Fisheries 2016; Department of Rural Development and Land Reform 2016). This is largely because although the agro-based sector is regulated under South Africa's minimum wage regulations and, therefore, any lower wages than regulated would be unlawful, irregular staff (i.e. casual workers, contract workers) are not entitled to additional benefits that regular workers often receive, which makes their appointment more desirable from an economic viewpoint.

Historically, circular migration in South Africa started in the pre-apartheid era, where South African contractual labour laws allowed non-South African migrants to work in the country's mines and agriculture for two years and return to their families to reduce the labour costs and welfare expenses in South Africa (Adepoju 2006; Thahane 1991). The reality that South Africa is one of the most economically advanced and resource-rich countries on the African continent (Siddique 2004), migrants' prospects of wage employment in mining, agriculture and domestic services (Adepoju 2006) including South African neighbours' (e.g. Zimbabwe, Mozambique and Lesotho) constrained job creating capacities have also contributed to a large influx of foreign migrants. These migrants often seek low-skill occupations in labourintensive industries such as agro-processing, construction and other menial jobs. The net flow of foreign migrants has considerable influence on public opinion and has led to significant xenophobic violence against black immigrants, especially those from Zimbabwe in 2008 (Fauvelle-Aymar & Segatti 2011), 2014, 2015 and in February 2017. The motivation for such xenophobic tendencies seems to contradict the fact that the Quarterly Labour Force Survey (QLFS) found that agricultural employment increased from 740 000 to 890 000 or by 150 000 - a 20% increase in a single quarter in 2015 (Makgetla 2016).

In view of the aforementioned controversies about the employment of foreign labour and the claim that internationalisation of labour markets has accentuated the loss of jobs in the SSABs (Agbotame 2015; Theron et al. 2007), the current study sought to fulfil the following research objectives:

 Explore the extent to which SSABs in Vryburg-Pokwani areas in North West and Northern Cape provinces of South Africa use foreign labour.

- Establish if there are any significant differences in these SSABs' performance based on the extent of their usage of foreign labour. If so, then determine the nature of these differences.
- Investigate the influence of internationalisation of labour (i.e. use of foreign labour) on the performance of SSABs in the aforementioned areas.

Problem statement

In view of the unsubstantiated narratives by some South Africans that foreign migrants are taking jobs intended for deserving South African nationals (Fauvelle-Aymar 2015) and the outbreaks of xenophobic attacks on foreign migrants in predominantly low and intermediate skill occupations such as agricultural sector and those in self-employment (Fauvelle-Aymar & Segatti 2011; Sika 2017), there is a need to explore the extent to which SSABs, including those in agroprocessing, employ foreign labour. To further compound this lacuna, the inadequacy of low agricultural wages to lift wage-dependent rural households permanently above a socially acceptable deprivation threshold (Department of Agriculture, Forestry and Fisheries 2010; Jacobs 2009) necessitates an investigation into the implications of employing foreign labour for the performance of these firms. The current study, therefore, seeks to explore the influence of such foreign labour on the performance of rural-based SSABs.

Problem background

The exact influence of the deployment of foreign labour on the performance of rural-based SSABs remains a grey area owing to inter alia agricultural policy inconsistency (i.e. concurrent implementation of deregulation and re-regulation), nature of agricultural labour and rising unemployment and poverty levels – issues which are elaborated on in subsequent sections of this study.

The controversial deregulation of the agro-processing sector

South Africa's Department of Agriculture, Fisheries and Forestry employs FAO's (1997) definition of agro-processing industry as a subset of manufacturing that processes raw materials and intermediate products derived from the agricultural sector. The agro-processing sector, which dominates the South African landscape, is conceived to have a controversial and mixed character. On the one hand, the post-independent agro-processing sector is conceived to have transitioned from being one of the most highly protected and regulated sectors in the South African economy to being totally liberalised in the wake of state deregulation in the post-apartheid period (Agbobli 2013; Agbotame 2015; Mather & Greenberg 2003). During the deregulation phase, it can be argued that agro-processors would have more leverage in terms of whom they employed and how much they are paid. The reality is that unskilled and semi-skilled migrants generally work for less pay than would bona fide South African citizens (Siddique 2004; South African Institute of International Affairs 1999).

However, Helliker (2013) observes that concurrent with acts of 'deregulation', the South African government has instituted labour legislation and social protectionist ('state regulation') measures since the attainment of independence, which contradict the liberalisation agenda in the agroprocessing sector. The protectionist tendencies manifest themselves through the imposition of the minimum wage on the agro-processing sector and the institution of support programmes to leverage upstream and downstream agroprocessing industries. In principle, the introduction of the minimum wage would mean that immigrant workers would be working under the same conditions and for the same pay as South Africans in the same employment (Siddique 2004). In reality, the supervision of the implementation of minimum wages is complicated by the size of the agro-processing sector and the weak bargaining power of such foreign workers as they may not be affiliated to labour unions for fear of being disadvantaged or victimised by their employers. Although these employees are not forbidden by labour law from unionisation, they may not be affiliated to labour unions owing to their own perceptions of vulnerability.

The seasonality and informal nature of agricultural labour

As a result of the seasonality of crop production and horticulture, SSABs including those in agro-processing are often compelled to shed excess labour during off-peak seasons and drought periods. The dependence of the agroprocessing industry on primary agricultural products means that labour supply should respond to seasonal cycles of production and harvest, allowing for the reduction of staff during off seasons. Helliker (2013) asserts that for agro-processing firms, control of labour and facilitating unhindered access to workers on an ad hoc basis is critical. More so, the flexibility of labour relations on agricultural farms may necessitate farmers to use 'family workers' with an almost unwritten rule that the wives of workers are expected to work part-time, or on a temporary basis, thereby saving on accommodation requirements (Helliker 2013; Kritzinger & Vorster 1996). The seasonality and informality of labour on agricultural farms implies that farmers often transition through a cycle of formal employment to unemployment depending on agricultural seasons. The difficulties in calculating unit cost of such seasonal labour, compounding for other internal and external factors, such as productivity, and factor intensity indicators, such as capitallabour ratio or land-labour ratio (OECD 2011), and how much of skilled labour can be employed make the exploration of the foreign labour-performance relationship more complicated.

Rising employment and poverty levels

The challenge of internationalisation of labour and the concomitant job competition it brings should be conceived in light of the rising statistics on national unemployment and poverty in the South African national economy. The agricultural sector has consistently lost a number of jobs.

In March 2001, the sector employed 969 000 people, but the number decreased by 319 000 (33%) to reach 650 000 in March 2010 (Department of Agriculture, Forestry and Fisheries 2010). In 2010, the employment of semi-skilled and unskilled workers contracted by 527 000, male employment declined by 550 000 (7.1%), while female employment decreased by 320 000 (5.2%) (National Treasury 2010). This continued loss of employment raises critical questions about the extent to which the deployment of foreign labour contributes to these unemployment statistics. Having said that, the employment figures have improved over the years. For instance, the primary agriculture sector accounted for approximately 7% of formal employment in 2013, of which a significant share was unskilled labour (DAFF 2013b). Elementary workers constituted 77% of the agricultural workforce and of those, 22% were considered unskilled (Agriculture Market Intelligence Report 2017).

Statistics South Africa (2015) highlights the unemployment crisis in South Africa - a rise from 4.4 million in 2009 to 5.3 million in 2015, which translated into an unemployment rate of 25.3%. Given the intricate connection between level of educational attainments and access to decent employment opportunities, it can be assumed that those citizens with low academic qualifications (especially matric and below) may be the hardest hit. National statistics demonstrate that the main drivers of poverty are unemployment and educational attainment, accounting for 52% and 11% in 2016, respectively (South African Multidimensional Poverty Index [SAMPI] Community Survey 2016; Statistics South Africa 2016). While unemployment retention rates increased from 66.9% in 2010 to 67.5% in 2015, unemployment rates were rife among youth aged 15-24 years (50.1% in 2015) (Statistics South Africa 2015).

Literature review

Definition of agro-processing small scale, micro and medium enterprises

Typical examples of agricultural businesses are agroprocessing firms. Agro-processing firms are business entities or industries that add value to agricultural raw materials, both food and non-food, through their processing into marketable, usable or edible products, while enhancing the income and profitability of the producers (UNESCAP 2003). It is clear from this definition that the agro-processing industry constitutes a subsector of the manufacturing that deals with the conversion of products from field crops, horticulture, fisheries and forestry industries from raw materials and inputs into semi-processed, processed and value-added goods and products. As such, the Food and Agriculture Organisation (1997) conceives the agroprocessing industry as a subset of manufacturing that processes raw materials and intermediate products derived from the agricultural sector. However, these definitions fail to distinguish between agro-processing and value addition. Thindisa (n.d.) contrasts agro-processing, which is the conversion of raw agricultural products into different physical states to satisfy market requirements, from value

addition, which is concerned with adding value to a product which results in a buyer being willing to pay a higher price for the product than the cost of inputs used in the process of its production. This means that value addition may happen without changing the physical form of the product (e.g. through cleaning, grading or labelling) (Thindisa n.d.), while agro-processing requires change in the form of the product or service. In the South African context, the agroprocessing industry comprises 11 divisions, namely food, beverages, paper and paper products, wood and wood products, textiles, wearing apparel, furniture, tobacco, rubber products, footwear and leather and leather products (Department of Agriculture, Forestry and Fisheries 2010). That said, it is important to understand that agro-processing initiatives are not always technology intensive as size of the firm, human capital and other resource endowments also influence the level of sophistication of agro-processing involved.

The extent of labour intensity of this industry varies across countries and the type of economic activity. In the South African context, labour intensity variations persist depending on the location of such firms, their industrial sector and nature of their business operations. For instance, there are important differences in the amount of labour required per hectare across different agricultural activities – in deciduous fruit production, plums require 20% more permanent labour than do apricots, yet apricots need seven times more labour inputs per hectare than does sugarcane (Cramer & Sender 2015).

Composition of agro-processing small scale, micro and medium enterprises

Agro-processing firms comprise agro-processors and agroinput manufacturers. In the year 2010, the agro-processing industry in South Africa comprised 11 divisions, namely food, beverages, paper and paper products, wood and wood products, textiles, wearing apparel, furniture, tobacco, rubber products, footwear and leather and leather products (Department of Agriculture, Forestry and Fisheries 2010). It can be inferred from this categorisation that the industry comprises raw material and input-based firms preoccupied with the conversion of raw materials and inputs into usable, semi-processed and final products. Such conversion (i.e. change in physical form) should be distinguished from value addition, which focuses on adding value to a product, which results in a buyer willing to pay a higher price for the product to compensate for the cost of the inputs used in its production (Thindisa 2014; Staatz 2010). Value addition can include activities such as washing or cleaning, sorting, packaging, branding and labelling of products (World Bank Report 2013) which do not change the form of the product.

That said, a distinction should be made between the agroprocessing industry and agro-processing firms. Agroprocessing industries relate to those activities that change the form of agricultural products into various states not only to improve handling but also to increase shelf life, thereby adding value to agricultural products (Mhazo et al. 2012; Thindisa 2014). The agro-processing firms or agro-processors comprise firms that produce, process and preserve food products and beverages such as: meat, fish, fruit, vegetables, oils and fats, dairy products, grain milling products, starches and starch products, bakery products, sugar, chocolate, beverages, textiles, clothing, leather and footwear, wood, wood products, paper, publishing and printing (Department of Agriculture Forestry and Fisheries 2014). The agro-processing industry, therefore, is the subset of manufacturing sector that uses agricultural products as inputs, and includes the manufacturing of food products (including preserving perishable foodstuffs) and goods, such as paper and natural or blended textiles (Gauteng Province Treasury 2016). It involves processing and manufacturing of the outputs of the agriculture, forestry and fishing subsector (Food and Agricultural Organisation 1997).

From a subsector composition perspective, agro-processing is conceived to cover three main areas such as field crop production, animal husbandry and horticulture and forestry (National Department of Agriculture (NDA) 2006). Agro-processing activities cover: fermenting, slaughtering, blending, moulding, cutting and milling and packaging, which result in various (meat, sugar, beverages, bakery, vegetables, fruits, grain, fish, etc.) products and inputs for biofuels and chemical products (Jara 2011). Acknowledging the complexity and lack of a sharp distinction between agriculture and agro-processing section, the Department of Agriculture, Forestry and Fisheries' (2015) Briefing Note on the Agro-processing Sector in South Africa employs the United Nations' International Standard Industrial Classification (SIC) to describe agro-processing, which is a component of a broader manufacturing complex. According to SIC, agro-processing comprises the following segments:

- manufacture of food, beverage and tobacco
- textile, wearing apparel and leather industries
- manufacture of wood, wood products and furniture
- manufacture of paper, paper products, printing and publishing
- manufacture of rubber products.

To the extent that the agro-processing sector is conceived to rely heavily on imports of crops (e.g. wheat) and livestock products (e.g. poultry) and imports of inputs (e.g. fertiliser, feed, mechanisation) (Department of Agriculture Forestry and Fisheries 2014), the absorption of foreign labour compounds the challenge. Supporting efforts aimed at strengthening South Africa's competitiveness by advocating localisation in areas where agro-processing firms have competitive advantage would improve sustainable production and create a better balance between large-scale and small-scale subsectors, thus broadening market participation of firms of all sizes (Department of Agriculture Forestry and Fisheries 2014).

Agro-processing firms' employment of foreign labour

The constitution of labour in terms of nationality cannot be divorced from the characterisation of labour by skills levels. In 2014, food, beverages and tobacco had a 20.5% share of total gross domestic product (GDP), and 251 000 people had been employed in these subsectors. Textiles, clothing and leather goods had a 3.2% share of total GDP, and employed 114 000 people. Petroleum products, chemicals and plastics had an 8.6% share, and employed 155 000 people (Department of Agriculture, Forestry and Fisheries briefing 2015). About 224 000 people employed in the agro-processing sector were semi- and low-skilled employees, 15 700 were skilled employees and 118 000 were informally employed in this sector (Gauteng Province Treasury 2016). The labour force in the agro-processing sector is largely semi-skilled and unskilled, and these two categories accounted for 40.1% of total formal employment in the sector in 2013 (Gauteng Province Treasury 2016). The evidence above demonstrates that agro-processing industry divisions are dominated by semi-skilled and unskilled labour. The varying demands for skills in the agro-processing sector mean that it may not be insulated from employing foreign labour.

Statistics on foreign labour involvement in agro-processing are unreliable, and this makes it difficult to estimate accurately trends over time, partly because of radical shifts in official surveys and sampling methods (Kerr & Wittenberg 2015). Although statistics on foreign immigrants in agro-processing firms are hard to document owing to the diversity of the sectors involved, the agro-processing sector employs a limited number of foreign labourers owing to the increasing contraction of the sector over the years. This is the case despite the commonly held belief that the abundance of foreign labour from neighbouring countries such as Lesotho, Zimbabwe and Mozambique increases the chances of its employment in the agro-processing sector in South Africa (Agbotame 2015; Trimikliniotis, Gordon & Zondo 2008).

Internationalisation of labour and firm performance

Studies that examine the nexus between internationalisation of labour (especially SSABs including those in agro-processing) and the performance of SSABs are hard to come by, hence the speculative nature of findings from mainstream literature on this subject matter. What is known, however, is that the unforeseen outcome of such internationalisation of agricultural labour has been employment of foreign migrant workers at lower than legislated minimum wages and under poor working conditions (Department of Rural Development and Land Reform 2016). However, what remains unclear is whether the employment of semi-skilled and unskilled foreign labour in the intensive agro-processing firms allows for the reallocation of resources towards the production and growth of high-value, agriculture-derived exports (Cramer & Sender 2015). Assuming these products are of high quality to meet global production and marketing standards, the international competitiveness of such firms would also be improved.

Increased market size and profits, a stronger market position, business growth and diminishing dependence on a single market are considered as some of the perceived benefits of internationalisation of labour (Messina 2015).

Theoretical framework

The study employs David Ricardo's Theory of Comparative Advantage as a theoretical lens for illuminating some SSABs including agro-processing firms' use of foreign labour. Costinot (2009) argues that Ricardian perspective on comparative advantage, whether driven by technology or factor endowments (e.g. land, labour or capital), is at the core of neoclassical trade theory. His 1817 book On the Principles of Political Economy and Taxation, founded on international division of labour (i.e. specialisation) and mutual exchange, explains why it would be more economical for one country to produce particular goods or products or services than import them, based on consideration of lower marginal and opportunity costs. For instance, some SSABs may find it economical to import some of their unskilled and semiskilled foreign labour in the production of their goods or services rather than rely on local labour.

Kiliç (2002) highlights that the theory of comparative advantage provides a basis for international trade between countries based on their relative efficiencies in production of products, goods and services, and demonstrates why trade is mutually beneficial to countries. By extension, the theory provides a basis for countries' accumulation of benefits from international trade even if one country were to produce all goods or products or services at relatively lower costs and with fewer resources than the other. That said, the theory of comparative advantage is founded on several assumptions, namely immovability of factors of production across countries (exceptions include possibility of migration between countries and the presence of multinational companies), absence of barriers to trade in goods, equality of exports to imports, and labour should be the only relevant factor of production (Kiliç 2002). If South African SSABs (including agro-processing firms) had comparatively higher capital resources, were labour intensive but had limited cheap labour compared to those of neighbouring countries (e.g. Zimbabwe), and Zimbabwe had a larger pool of labour but a limited capital base, then it would be relatively cheaper for South Africa to import such cheap labour than source it locally. Elaborating on Ricardian Theory, Heckscher-Ohlin theory further explains that countries would export those goods produced with the abundant factor of production (Du Toit, Fourie & Trew 2010). The comparative advantage theory, however, excludes conditions of absolute advantage (a situation where in a country is absolutely efficient at production of a product, good or service over another) and assumes the presence of negligible transportation costs.

Research approach and design

This study adopted a quantitative approach and a cross-sectional survey design. A quantitative approach is informed

by a positivist and scientific mode of inquiry about a research phenomenon. Consistent with research design as 'a set of decisions regarding what topic to be studied among what population with what research methods and for what purpose' (Babbie 2007), a survey design was adopted to illuminate understanding of the influence of internationalisation of labour on the performance of agro-based firms in Vryburg-Pokwani districts of the North West and Northern Cape provinces in South Africa. Vryburg is South Africa's largest beef-producing district, which is conceived as the agricultural and industrial hub of the North West region (Popik 2007). This cattle-farming area takes pride in hosting South Africa's third largest agricultural show annually. This rich agricultural background including the author's knowledge of the area contributed to the selection of this region as the ideal area of study.

A survey is considered ideal when the researcher seeks to assess and describe the current status (i.e. what is), opinions and attitudes of individuals using a questionnaire drawing on a known population (Cohen, Manion & Morrison 2001). The Departments of Agriculture, Forestry and Fisheries in these research areas estimated the target population of SSABs to be 899 firms. A Macorr Sample calculator was used to compute the sample size from the population at 95% confidence level and a total of 269 agro-based businesses were randomly selected.

Data collection and instrument credibility

Data on the influence of internationalisation of labour on SSABs' performance were collected using a self-constructed Likert scale–based questionnaire. In administering the questionnaire, the South African Department of Trade and Industry (DTI)'s (2009) definition of SSABs, namely those agro-based businesses that employ between 1 and 50 employees, was considered. With the help of two research assistants, the researcher administered the 269 questionnaires to the research respondents.

The questions captured the demographic characteristics of SSAB owners or managers, characteristics of their businesses, internationalisation of labour and lastly firm performance. The relational questions captured the relevance, influence and long-term performance implications of the internationalisation of labour. The individual item responses originally captured ranged from 1 to 5 (in the case of both 'importance and/or relevance' and 'long-term performance expectations') and 1 to 7 (in the case of 'influence').

The questionnaire was tested for internal consistency using Cronbach's alpha coefficient as shown in Table 1. According to the Cronbach's alpha coefficient analysis, a value of 0.70 is considered to be the appropriate cut-off for acceptable reliability or acceptable internal consistency. All three indexes ('importance and/or relevance', 'influence' and 'long-term performance expectations') demonstrate relative reliability as their respective coefficients are 0.921, 0.906 and 0.885. A second measure of internal consistency is the extent to

TABLE 1: Cronbach's alpha coefficients and item–total for each of the three indexes

Index	Item	Item-total correlation
Internationalisation of labour (Cronbach's alpha = 0.912)	In your opinion, how relevant is internationalisation of labour to the survival of your business?	0.70
	In your opinion, how relevant is internationalisation of labour to the profitability of your business?	0.72
	In your opinion, how relevant is internationalisation of labour to the growth of your business?	0.70
Internationalisation of labour and business performance	How has internationalisation of labour influenced the survival of your business?	0.57
(Cronbach's alpha = 0.906)	How has internationalisation of labour influenced the profitability of your business?	0.62
	How has internationalisation of labour influenced your business in terms of growth?	0.59
Long-term performance expectations under globalisation (Cronbach's alpha = 0.885)	How would you rate your business's long-term profitability under increased internationalisation of labour?	0.63
	How would you rate your business's long-term growth under increased internationalisation of labour?	0.64
	How would you rate your business's long-term survival under increased internationalisation of labour?	0.64

which each individual item correlates with its total score on the index. Correlation coefficients were computed as estimates of such item–total correlations. A coefficient of 0.50 indicates a strong correlation.

As shown in Table 1, the item–total correlations range between 0.57 and 0.78, and the average–item correlations (for each of the three indexes, 0.72, 0.69 and 0.65) are all markedly above 0.50.

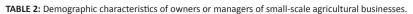
Data analysis

Data were entered into Excel and the data file was exported to Statistical Packages for the Social Sciences for detailed analysis. Data analysis comprised descriptive and inferential statistics. Based on the random selection of participants and normal distribution of data, an analysis of variance (ANOVA) was performed to quantitatively establish the differences (if any) 'in SSABs' performance based on the extent of their usage of foreign labour' and the nature of these differences. The variables used during the categorisation into indexes (i.e. importance, influence and long-term performance expectations) were either dichotomous or non-dichotomous. In the case of a non-dichotomous categorical variable (one-way ANOVA or F-test), a post hoc test such as Bonferonni was used to determine which levels of the categorical variable are significantly different from which in terms of the mean scores on the index.

Results

Response rate

Of the targeted sample of 269 respondents, 151 owners or managers of SSABs participated in this study, representing a response rate of 56.1% (see Table 2). The low response rate is consistent with other surveys on small scale, micro and medium



Variable	Characteristics	Number	Mean score (out of 30)	Standard deviation
What is your gender?	Male	120	17.8	6.5
	Female	31	17.6	4.5
What is your age group?	21–30 years	10	17.8	4.5
	31–40 years	18	16.9	5.0
	41–50 years	53	17.5	6.0
	51–60 years	40	21.0	6.1
	Above 60 years	30	14.4	5.4
What is your highest academic	None	21	13.6	4.6
qualification?	Primary	22	13.1	3.9
	National senior certificate and below	35	14.7	4.4
	Tertiary qualification	22	19.7	5.5
	Diploma/degree	38	22.3	4.8
	Postgraduate	13	23.7	4.0
At what highest level of	High school	21	16.5	5.6
education have you acquired pusiness management skills?	College	14	21.2	4.7
ousiness management skins:	Diploma/degree	37	22.7	4.1
	Postgraduate	7	23.1	5.0
	Short courses	27	16.5	4.8
	None	45	13.0	4.7
At what highest level of	High school	24	16.2	4.6
education have you acquired agricultural skills?	College	15	22.8	4.3
igricultural skiiis:	Diploma/degree	30	22.6	4.3
	Postgraduate	6	22.5	4.3
	Short courses	27	16.6	5.5
	None	49	14.0	5.4
At what highest level of	High school	15	17.1	5.6
education have you acquired	College	13	21.7	6.6
engineering skills?	Diploma/degree	16	23.3	3.4
	Postgraduate	4	20.8	5.9
	Short courses	28	20.3	5.2
	None	75	14.9	5.3
At what level of education	High school	9	14.0	4.1
nave you acquired	College	6	15.6	7.0
entrepreneurial skills?	Diploma/degree	25	22.5	4.2
	Postgraduate	10	24.3	4.5
	Short courses	42	19.4	4.8
	None	59	14.2	5.3

enterprises (SMMEs) (Agbobli 2013; Agbotame 2015) which generally attribute low response rates to SMME owners' or managers' fatigue from being continually sampled and interviewed in different successive studies, including researchers' lack of finance and lack of time to survey large samples.

Selected demographics

A majority (79.5%) of the owners or managers of SSABs were males. This perhaps indicates the financial barriers to entry prevalent in the SSABs, which constrain female ownership of such firms. Bantama (2016) highlights the persistence of skewed gender disparities in the way that key resources (e.g. access to land, inputs, assets, markets, information and knowledge, time, decision-making authority and income) essential for success in agriculture are distributed across Africa. The study by Ajadi et al. (2015) affirms such gender disparities by demonstrating how the interplay of gender, ownership and decision-making including culture exert a significant influence on women's access and control of productive resources among the Nupe and Yoruba women in Nigeria.

In terms of age, the 41–50 years age group constituted a sizable percentage (35.1%) of the sample, followed by the age group 51–60 (26.5%) and those above 60 years (19.9%). The dominance of mature age groups (40–60 years) could be indicative of the significance of professional farming experience, strong financial base accumulated through years of farm management and previous work respectively in promoting effective participation in agriculture. Agricultural activities such as agro-processing tend to involve huge capital outlays that tend to influence the margin of profits of the farmers.

A majority (63%) of the respondents had either a degree or diploma or lower qualifications and of this percentage, 25.2% had a degree or diploma. This implies that the lack of postgraduate qualifications has not deterred respondents from participating in small-scale agro-processing businesses. As such, postgraduate education is not a barrier to entry into and effective engagement in small-scale agribusiness activities.

TABLE 3: Characteristics of small-scale agricultural business.

Characteristics	Number	Mean score (out of 30)	Standard deviation						
How long has the company been operating?									
Up to 1 year	9	16.5	4.9						
2 to 5 years	24	16.0	4.7						
6 to 10 years	35	18.2	5.5						
11 to 20 years	48	20.8	5.7						
Over 20 years	35	14.6	6.5						
What type of business activity is t	he company ei	ngaged in?							
Agro-processing	28	21.9	5.1						
Livestock farming	61	14.4	4.5						
Crop farming	43	18.9	5.7						
Both livestock and crop farming	18	19.1	7.6						
What form of business ownership	do you practis	ie?							
Sole proprietorship	99	16.6	6.2						
Partnership	15	16.5	3.3						
Close corporation	16	21.6	4.3						
Private company	17	22.8	5.1						
Cooperative society	4	14.4	4.3						
Number of employees including o	wner or mana	ger							
1 to 5	73	14.9	5.1						
6 to 20	28	17.0	5.7						
21 to 30	22	21.9	4.3						
31 to 40	10	24.2	5.0						
41 to 50	18	21.9	5.4						
Is your company engaged in foreig	n business?								
Yes	57	23.2	4.0						
No	94	14.4	4.6						
Do you engage in importing?									
Yes	12	23.5	4.2						
No	139	17.2	6.0						
Do you engage in exporting?									
Yes	56	23.2	4.1						
No	95	14.5	4.6						
Percentage growth in pre-tax prof	it over the pas	t 5 years							
Declining (11% – 20%)	6	13.9	2.9						
Declining (1% – 10%)	21	16.1	4.3						
No change (0%)	26	14.4	4.8						
Growing (1% – 10%)	65	17.1	6.0						
Growing (11% – 20%)	33	23.4	5.0						
Percentage growth in size/employ	ment over the	past 5 years							
Declining (11% – 20%)	3	15.3	2.9						
Declining (1% – 10%)	14	17.9	5.4						
No change (0%)	70	15.9	5.4						
Growing (1% – 10%)	56	19.2	6.4						
Growing (11% – 20%)	8	23.6	5.6						

Business characteristics

About 23.2% of the businesses have been in operation for 6–10 years, 31.8% have been in operation between 11 and 20 years and 23.2% have been in operation for a duration of over 20 years (see Table 3). It can be inferred from these percentages that the majority of SSABs have survived 5 years of existence judging from their years in operation. This contradicts literature that emphasise the low survival and high failure rates of SMMEs in South Africa (FNB & Endeavour 2010; Herrington et al. 2011).

The majority of rural-based SSABs in the Vryburg-Pokwane areas were involved in livestock and crop farming. This affirms the reality that Vryburg is South Africa's largest

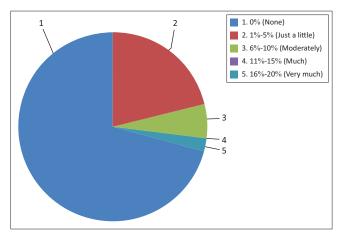


FIGURE 1: Extent of use of foreign labour in your business (N = 151).

cattle-farming area. This area is often nicknamed the 'Texas of South Africa' owing to its large cattle farms, game ranching and its landscape, which is similar to West Texas and the Panhandle area of Texas (Popik 2007). The Vryburg area, located in the North West province, is also considered the prime food basket of South Africa owing to the prominence of white maize and sunflower harvests in the area (South Africa.info 2016).

The business ownership structure was largely dominated by sole proprietorship. Agro-processing in reality is normally dominated by large corporations, particularly in the food sector. Hence, the dominance of sole proprietorship needed justification in the study.

Presentation and discussion of findings

The presentation and discussion comprises sections covering (1) the extent of SSABs in Vryburg-Pokwani's use of foreign labour, (2) whether there are some significant differences in these SSABs' performance based on their extent of usage of foreign labour and (3) the influence of use of foreign labour on the performance of these firms.

The extent of use of foreign labour

The study examined the extent to which SSABs use foreign labour to understand their orientation towards international labour markets. The study reveals that the majority (70.9%) of businesses do not employ foreign workers (see Figure 1).

Those small agricultural businesses that employ just a few foreigners (1% - 5%) constituted 21.2% of those surveyed, while those that employ a moderate number of foreigners (6% - 10%) and employ many foreigners (16% - 20%) represent 6% and 2%, respectively. The paucity of foreign workers could be attributed to South Africa's rigid immigration laws, which are deliberately designed to protect jobs from foreign competition and to reserve these for South African citizens (Trimikliniotis et al. 2008:1325).

Extent of the importance and/or relevance of foreign labour

The study also investigated SSABs owners' or managers' perceptions of the importance and/or relevance of foreign labour to internationalisation of their firms. In the analysis, the responses from surveyed firms were grouped (1% - 5% [Just a little] > 0% [None]; 6% - 10% [Moderately] > 0% [None]; 16% - 20% [Very much] > 0%) and analysed using post hoc comparisons (Bonferroni). The mean scores of businesses were compared and the result was found to be significant (at F = 32.249, p < 0.05) (see Table 4).

The analysis revealed that businesses with between 6% and 10% of foreign labour force had the highest mean score, followed by those with between 16% and 20% followed by those with no foreign labour force. The implication of this analysis is that small-scale, agro-based businesses with a certain proportion of foreign labour force had more chances of internationalisation as opposed to those without any foreign labour component at all. This finding resonates with the study by Osunsan and Nowak (2015) into the effect of small businesses' employment of foreign workers on their internationalisation process. Their findings revealed that there is a significant difference in internationalisation among businesses that employ foreign workers and those that do not. They also report that there is a significant positive relationship between employment of foreign workers and small businesses' level of internationalisation.

Extent of the influence of foreign labour on internationalisation

To understand the influence of foreign labour on internationalisation, the study analysed and compared the mean score on the 'impact of internationalisation' index drawing on foreign labour usage in business. Table 5 illustrates the comparison of mean scores on the 'influence of internationalisation' index, by the extent of use of foreign labour.

The analysis revealed that foreign labour had a significant influence on internationalisation of small-scale, agro-based

businesses (at F = 17.780, p < 0.05). The analysis involved grouping the responses from surveyed firms (1% – 5%; 6% – 10% and 16% - 20%) and the conduct of post hoc comparisons (Bonferroni). The mean scores of businesses were compared and the result shows that businesses with foreign labour of between 1% and 5% had the highest mean score followed by those with 6% - 10% and 11% - 20%, respectively. The findings demonstrate that the orientation towards internationalisation tended to decrease steadily with increase in business' recruitment of foreign labour. It is plausible that the employment of foreign labour could increase the internationalisation of these firms to a certain point beyond which further foreign recruitments would have a negative effect on internationalisation (the law of diminishing returns). Sweetman (2010) alludes to the complexity of the analysis of the influence of immigration on economic outcomes, arguing that outcomes depended on the way in which new immigrants alter the production possibility frontiers of firms and on whether new immigrants complement or substitute the preexisting labour force.

Influence of use of foreign labour on the performance of small-scale agricultural businesses in the Vryburg-Pokwani area

The study also addressed the influence of the use of foreign labour on the performance of SSABs in the Vryburg-Pokwani area. This question was addressed at four levels: the relevance of the internationalisation of labour, extent to which internationalisation of labour has positively or negatively influenced profitability, growth and the survival of SSABs and the overall perceived influence of internationalisation of labour on the performance of SSABs. These issues are discussed in subsequent sections.

Relevance of internationalisation of labour

Firstly, SSAB owners or managers were requested to score the relevance of internationalisation of labour to the profitability, growth and survival (i.e. performance components) of their business. About 63.6% of them conceived internationalisation of labour as not important to the profitability of their businesses, while 62.9% considered

TABLE 4: Comparison of mean scores on the 'importance and/or relevance of internationalisation of labour' index.

Extent of internationalisation	Variables	Number of respondents	Mean score (out of 30)	Standard deviation	Significance testing	Post hoc comparisons (Bonferroni)
To what extent have	0% (None)	107	15.3	4.7	F = 32.249,	(1% – 5% [Just a little] > 0%
you actually used foreign labour in your business?	1% – 5% (Just a little)	32	23.0	5.3	p < 0.05 (sig)	[None]) (6% – 10% [Moderately] > 0%
	6% – 10% (Moderately)	9	26.0	2.4		[None])
	11% - 15% (Much)	0	-	-		(16% – 20% [Very much] > 0% [None])
	16% – 20% (Very much)	3	23.1	7.0		

TABLE 5: Comparison of mean scores on the 'influence of internationalisation' index. by the extent of foreign labour usage.

Extent of globalisation	,	Number of responders	Mean score (out of 30)	Standard deviation	Significance testing	Post hoc comparisons (Bonferroni)
To what extent have	0% (None)	107	17.8	3.6	F = 17.780,	(1% – 5% [Just a little] > 0%
labour in your business?	1% – 5% (Just a little)	32	23.2	4.5	<i>p</i> < 0.05 (sig)	[None]) (6% – 10% [Moderately] > 0%
	6% – 10% (Moderately)	9	23.0	6.5		[None])
	11% – 15% (Much)	0	-	-		
	16% – 20% (Very much)	3	17.8	2.5		

TABLE 6: Analysis of the influence of internationalisation of labour on profitability, growth and survival of small-scale agricultural businesses (N = 151).

Aspect of internationalisation	Very unimportant (%)	Unimportant (%)	Don't know (%)	Important (%)	Very important (%)
Relevance of internationalisation of labour to business growth	14.6	48.3	9.3	25.2	2.6
Relevance of internationalisation of labour to business survival	14.6	47.0	11.3	24.5	2.6
Relevance of internationalisation of labour to business profitability	14.6	49.0	9.3	25.8	1.3

TABLE 7: Extent to which internationalisation of labour has positively or negatively influenced profitability, growth and the survival of business (N = 151).

Aspect of internationalisation	Moderate negative (%)	Low negative (%)	None (%)	Low positive (%)	Moderate positive (%)	Very positive (%)
How has internationalisation of labour influenced the growth of your business?	1.3	2.6	70.2	16.6	6.0	2.0
How has internationalisation of labour influenced your business's survival?	1.3	2.6	71.5	17.9	4.0	2.0
How has internationalisation of labour influenced your business's profitability?	2.6	2.0	70.2	15.9	7.3	1.3

internationalisation of labour as not important to the growth of their businesses. A total of 61.6% of owners or managers regarded the employment of foreign labour as unimportant to the survival of their businesses (see Table 6).

This perception of the inconsequence of internationalisation of labour is not surprising given that a majority of SSABs did not employ foreign labour. This finding somewhat contradicts the finding of Malchow-Møller, Munch and Skaksen (2011) that domestic firms that hire foreign employees tend to be more productive and increase exports of their goods and services than those that do not. This contradiction could be explained by the fact that while their study focused on foreign experts, the current study on SSABs targeted semi-skilled or unskilled employees, who may not be bringing value-adding or value-creating possibilities to these firms.

Influence of internationalisation of labour on the profitability, growth and survival of small-scale agricultural businesses

Secondly, the researcher examined the extent to which internationalisation of labour positively or negatively influences the profitability, growth and the survival of SSABs. The majority (70.2%) of SSABs claimed that internationalisation of labour has no effect on the profitability of their businesses. A majority (70.2%) of SSABs professed that the internationalisation of labour had not affected the growth of their businesses. Lastly, many (71.5%) of them also claimed that such internationalisation of labour had not affected the survival of their businesses (see Table 7).

Sweetman (2010) reports on the need for context-specific interpretation of empirical findings on the economic contribution of migration. In the South African context, the tighter border controls since 2002 have significantly reduced the number of low-skilled and semi-skilled migrants accessing employment in SSABs including agro-processing firms in the country. AgriSETA (2010) highlights two

conditions that could explain these aforementioned findings: Firstly that the agricultural sector has generally witnessed a decline in sector employment (including employment of foreign labour) largely linked to contraction of the sector. Secondly, the sector is characterised by the need for highly skilled and qualified farm managers that contribute to job creation and technical staff notwithstanding its requirements for large numbers of unskilled and semi-skilled workers. The 2016 National Budget also reinforced the importance of promoting skilled immigration in labour-intensive manufacturing and agro-processing to boost investor sentiment and reduce economic vulnerabilities in the country (Gordhan 2016).

Overall influence of internationalisation of labour on the performance of small-scale agricultural businesses

Thirdly, the study also investigated the overall influence of internationalisation of labour on the performance of SSABs in the study area, considering various options (from moderate negative to strong positive). Consistent with the findings in the two previous sections, SSABs conceived the internationalisation of labour to have no effect on profitability, growth and sustainability of firms (see Table 8).

Perhaps, the need for foreign immigrants to comply with strict and complex work permit requirements before SSABs recruit them complicates SSABs' hiring of unskilled or semi-skilled foreign labour force, making the contribution of such labour force almost invisible. This interpretation seems to cohere with the narrative that SSABs tend to resort to employing many undocumented migrants owing to the complexity of acquiring work permits. Literature suggests that SSABs owners or managers (including those in agro-processing) have positive perceptions of unskilled and semi-skilled foreign migrant labour (which is predominantly undocumented), which provides cheap and exploitable replacement for local labour (Agriculture, Forestry and Fisheries 2016; Department of Rural Development and Land Reform 2016).

TABLE 8: Perceived influence of internationalisation of labour on the performance of small-scale agricultural businesses.

Aspects of internationalisation	Negative influence			No influence	Positive influence			
	Moderate negative (%)	Low negative (%)	Total (%)	None (%)	Low positive (%)	Moderate positive (%)	Strong positive (%)	Total (%)
Internationalisation of labour on growth	1.3	2.6	3.9	70.2	16.6	6.0	1.0	25.6
Internationalisation of labour on survival	1.3	2.6	3.9	71.5	17.9	4.0	1.0	24.9
Internationalisation of labour on profitability	2.6	2.0	4.6	70.2	15.9	7.3	1.3	25.5
Internationalisation of labour average	4	.10		70.63		25.3	33	
Internationalisation average	5	.81		46.52		47.5	55	

Note: Internationalisation total average is 99.88%.

TABLE 9: Long-term expectations for business performance under increased internationalisation of labour (N = 151).

Variables	Very unpromising		Unpro	Unpromising		Do not know		Promising		Very promising	
	Count (n)	Row (%)	Count (n)	Row (%)	Count (n)	Row (%)	Count (n)	Row (%)	Count (n)	Row (%)	
How would you rate your business's long-term profitability under increased internationalisation of labour?	1	0.7	8	5.3	42	27.8	73	48.3	27	17.9	
How would you rate your business's long-term survival under increased internationalisation of labour?	2	1.3	10	6.6	38	25.2	75	49.7	26	17.2	
How would you rate your business's long-term growth under increased internationalisation of labour?	1	0.7	8	5.3	42	27.8	74	49.0	26	17.2	

TABLE 10: Comparison of mean scores on the 'long-term performance expectations' index by extent of internationalisation.

Extent of globalisation		Number of respondents	Mean score (out of 30)	Standard deviation	Significance testing	Post hoc comparisons (Bonferroni)
To what extent have	0% (None)	107	19.3	4.4	F = 18.406,	(1% – 5% [Just a little] > 0%
you actually used foreign labour in your business?	1% – 5% (Just a little)	32	25.0	4.8	p < 0.05 (sig)	[None]) (6% – 10% [Moderately] >
labour iii your busiiicss:	6% – 10% (Moderately)	9	25.9	3.3		0% [None])
	11% - 15% (Much)	0	-	-		
	16% – 20% (Very much)	3	18.9	2.4		

Alternatively, the inconsequence of foreign labour could be attributed to its lack of value-creating qualities compared to skilled labour, with implications for firm growth and profitability.

Long-term expectations for business performance

To better understand the influence of the internationalisation of labour, the researcher also investigated the long-term expectations for business performance under increased internationalisation of labour. The SSABs owners' or managers' expectations of profitability, growth and survival were split between promising to lack of knowledge ('I don't know') (see Table 9).

The negative expectations of owners or managers could be attributed to the increasing uncertainty brought out by the economic recession. The economic uncertainty could be attributed to South Africa's prospective slide into an economic recession, which dampens perceptions of positive growth prospects (Gordhan 2016). In contrast, the positive expectations of profitability, growth and survival due to internationalisation of labour could be attributed to the prospects of overhead cost reductions arising from the recruitment of unskilled and semi-skilled labour with implications for firm profitability and growth.

Are there significant differences in firms' performance based on their extent of usage of foreign labour?

Lastly, the study explored whether there are significant differences in SSABs' performance based on their extent of usage of foreign labour. The mean scores of the 'long-term performance expectations' index, drawing on internationalisation variable, namely the usage of foreign labour, were analysed using post hoc comparisons (see Table 10).

The researcher conducted an analysis of the long-term performance expectations based on foreign labour utilisation and the results were significant at F=18.406, p<0.05 (sig). This means there were significant differences in performance expectations among SSABs based on their employment of foreign labour (a component of internationalisation). This is an indication that SSABs that employ foreign labour have better chances of becoming internationalised as opposed to those that do not employ foreign labour.

Recommendations

Contrary to the main narrative peddled in literature about the South African employers' preference of foreign migrants to local citizens (Agriculture, Forestry and Fisheries 2016;

Department of Rural Development and Land Reform 2016), a majority (70.9%) of SSABs did not employ foreign workers. These findings contradict the reasons for SSABs owners or managers' preference of the employment of foreign labour to employing locals, namely the claims about the low cost of semi-skilled and unskilled foreign labour and foreign undocumented immigrants' limited recourse to South African Labour Law in the event of job loss or underpayment. Assuming the limited use of foreign labour is a consequence of stringent immigration and labour laws, there is scope for the South African government to relax its foreign labour laws and immigration permit requirements to accommodate semiskilled and unskilled foreign migrants and increase SSABs' absorption of such labour. As Bisseker (2016) acknowledges, the South African (agro-dependent) economy is too skill- and capital-intensive for a country in which 22.4 million adults lack a secondary qualification (i.e. matric).

The study established that small-scale, agro-based businesses with a certain proportion of foreign labour force (6% - 10% and 16% - 20%) had more chances of becoming internationalised as opposed to those without any foreign labour component at all. Therefore, the South Africa protectionist policy, which finds expression in the country's rigid immigration laws, which are deliberately designed to protect jobs from foreign competition and reserve jobs for local citizens, needs to be replaced by a more liberalised job market policy to ensure foreign migrants' access to the agricultural labour market.

The findings also revealed that as the SSABs' absorption of foreign labour increases, the orientation of these SSABs towards internationalisation increased relatively to a certain point beyond which an increase in foreign labour resulted in a decline in internationalisation. Since some SSABs could be paying for their skilled and semi-skilled employees' applications for work permits, it is plausible that these facilitative processes could be draining SSABs' revenue base, reducing their profit margins and undermining their internationalisation efforts. Therefore, SSABs may need to shift the burden of permit applications and payments to the individual migrant worker to increase their growth prospects.

The majority of SSABs claimed that internationalisation of labour has no effect on the profitability, growth and survival of their businesses. The findings were attributed to the few foreign migrants they employ who make an insignificant contribution to their profit margins. Acknowledging the job crisis that the South African economy experiences currently and the protectionist labour policies the government has implemented since 2002, the rationalisation of foreign labour through imposing quota systems in the agricultural sector would render foreign immigrants some access to the agricultural sector without compromising South African citizens' chances of securing jobs.

A majority of SSABs' owners or managers conceived internationalisation of labour to have no effect on the

profitability, growth and survival of their firms. The study attributed this to the small numbers of foreign labour in skilled categories which SSABs often employ. The study recommends SSABs' gradual employment of highly skilled, value-adding and value-creating foreign labour to increase foreign labour's contribution to firm performance. The South African government may need to provide financial incentives such as farming grants and subsidies to SSABs that employ skilled labour should the employment of such labour prove to be costly for these businesses.

Implications for future research

Future research should compare the influence of skilled, semiskilled and unskilled foreign labour on the internationalisation of small firms. This is critical to determining the value-creating and value-enhancing effect of different skills categories of labour and their implications for internationalisation of SSABs.

The findings revealed a sharp contradiction: on the one hand, it was discovered that small-scale, agro-based businesses that employ a certain proportion of foreign labour force (6% – 10% and 16% – 20%) had more chances of internationalising as opposed to those without any foreign labour component at all. On the other hand, the exploration of the influence of foreign labour on internationalisation using post hoc comparisons revealed that SSABs' orientation towards internationalisation declined as the businesses recruited more foreign labour. Future studies should reconcile this contradiction and provide possible explanations.

Future research should examine the relationship between the relaxation of national labour laws and the agricultural sector's absorption of foreign labour. The liberalisation of labour laws is often regarded as having the potential to increase foreign immigrants' uptake of occupations in various sectors although such uptake could vary across sectors and locations.

Conclusion

The study investigated SSABs' extent of utilisation of foreign labour in their business operations. It also sought to determine if there are statistically significant differences in SSABs' performance based on their employment of foreign labour. There was sufficient evidence to conclude that most businesses did not utilise foreign labour in their operations and most businesses conceived the recruitment of foreign labour to have no effect on their profitability, growth and survival. Despite these perceptions, there were some statistically significant differences in SSABs' performance based on their utilisation of foreign labour. Other contradictions were also reported: for instance, SSABs with certain amount of foreign labour had high chances of internationalisation on the one hand. The SSABs' orientation towards internationalisation, however, declined with sustained increases in the employment of foreign labour on the other hand.

Acknowledgements

The author extends his gratitude to Dr Livingstone Agbotame for the data collection and to Dr Bosch for his assistance with statistical analysis. The author is also grateful to the anonymous reviewers for their invaluable comments, which improved the quality of the paper.

Competing interests

The author declares that he has no financial or personal relationships that may have inappropriately influenced him in writing this article.

References

- Adepoju, A., 2006, 'International and international migration within Africa', in P. Kok, D. Gelderblom, J. Oucho & J. Van Zyl (eds.), Migration in South and Southern Africa: Dynamics and determinants, pp. 26–45, Human Sciences Research Council, Cape Town.
- Agbotame, L., 2015, 'The impact of selected aspects of globalisation on the performance of small-scale agro-based businesses in rural South Africa', Unpublished PhD thesis, Central University of Technology, Free State.
- Agbobli, E., 2013, 'The influence of entrepreneurial and market orientations on small scale agricultural enterprises in the Vryburg region', Unpublished PhD thesis, Central University of Technology, Free State.
- Agricultural Policy Reform in South Africa, 2006, OECD Observer.
- Agriculture Market Intelligence Report, 2017, Green Cape, Cape Town, South Africa, viewed 17 February 2018, from https://www.greencape.co.za/assets/Uploads/GreenCape-Agri-MIR-2017-electronic-FINAL-v1.pdf
- Agri SETA, 2010, Sector analysis agriculture, Prepared for submission to the Department of Higher Education and Training, Pretoria.
- Ajadi, A., Oladele, O., Ikegami, K. & Tsuruta, T., 2015, 'Rural women's farmers access to productive resources: The moderating effect of culture among Nupe and Yoruba in Nigeria', Agriculture & Food Security 4(26), 2–9. https://doi.org/10.1186/ s40066-015-0048-y
- Agriculture, Land Reform and Rural Development, Transforming the Agricultural Sector towards an Inclusive Rural Economy, Concept Document, Department of Rural Development in collaboration with Land Reform and Department of Agriculture, Forestry and Fisheries.
- Babbie, E., 2007, *The practice of social research*, 11th edn., Thomson Wadsworth, Belmont, TN.
- Bantama, M., 2016, *The crucial role of women in African agriculture*, IQ Logistica Investments, viewed 12 September 2016, from http://www.farmersweekly.co.za/opinion/by-invitation/the-crucial-role-of-women-in-african-agriculture/
- Bisseker, C., 2016, 'The key to job creation', *Business Live*, viewed 28 April 2016, from https://www.businesslive.co.za/fm/fm-fox/2016-04-28-the-key-to-job-creation/
- Cramer, C. & John Sender, J., 2015, Agro-processing, wage employment and export revenue: Opportunities for strategic intervention, Working Paper for the Department of Trade and Industry, Trade & Industrial Policy Strategies (TIPS), Pretoria https://agbiz.co.za/uploads/AgbizNews16/160414_TIPS.pdf
- Cohen, L., Manion, L. & Morrison, K., 2001, Research methods in education, 5th edn., Routledge Falmer, London.
- Costinot, A., 2009, 'An elementary theory of comparative advantage', *Econometrica* 77(4), 1165–1192. https://doi.org/10.3982/ECTA7636
- Department of Agriculture, Forestry and Fisheries, 2010, Estimate of the contribution of the agriculture sector to employment in the South African Economy, Directorate of Economic Services, Department of Agriculture, Forestry and Fisheries.
- Department of Agriculture, Forestry and Fisheries (DAFF), 2013b, Economic Review of South African Agriculture, viewed 14 September 2017, from http://www2.senwes.co.za/Files/main_productsservices/agriservices/2014/Economic_Review_2013.pdf
- Department of Agriculture Forestry and Fisheries, 2014, Agricultural Policy Action Plan (APAP), viewed 17 October 2017, from https://www.agrisa.co.za/wp-content/uploads/2014/10/011-APAP-AgriSA.pdf
- Department of Agriculture, Forestry and Fisheries, 2015, *Briefing note on the agro-processing sector*, Department of agriculture Forestry and Fisheries, Pretoria.
- Department of Agriculture, Forestry and Fisheries, 2015, Agro-processing, NCOP Land and Mineral Resources, viewed 27 October 2015, from https://pmg.org.za/committee-meeting/21697/
- Department of Trade and Industry (DTI), 2009, The state of small business administration in South Africa, Ntsika Enterprises Promotion Agency, Pretoria.
- Department of Rural Development and Land Reform, 2016, Operation Phakisa: Transforming the Agricultural Sector towards an inclusive rural economy. Concept document, Agriculture, Land Reform and Rural Development, Department of Rural Development in collaboration with Land Reform and Department of Agriculture, Forestry and Fisheries.

- Du Toit, L., Fourie, J. & Trew, D., 2010, *The sources of comparative advantage in tourism*, A Working Paper of the Department of Economics and The Bureau for Economic Research, The University of Stellenbosch, Cape Town.
- Fauvelle-Aymar, C., 2015, *Immigration and the South African labour market*, MiWORC Working Paper No. 2, African Centre for Migration & Society, University of the Witwatersrand, Johannesburg.
- Fauvelle-Aymar, C. & Segatti, A., 2011, 'People, space and politics: An exploration of factors explaining the 2008 anti-foreigner violence in South Africa', in L. Landau (ed.), Exorcising the Demons within xenophobia, violence and statecraft in contemporary South Africa, pp. 56–88, Wits Press, Johannesburg.
- First National Bank (FNB) and Endeavour South Africa, 2010, *The entrepreneurial dialogues: State of entrepreneurship in South Africa*, First National Bank, Endeavour South Africa in association with the Gordon Institute of Business Science, Pretoria.
- Food and Agriculture Organisation of the United Nations, 1997, *The state of food and agriculture*, FAO, Rome, Italy.
- Gauteng Province Treasury, 2016, Socio-economic review and outlook, Gauteng Province Treasury, Republic of South Africa, viewed 15 November 2017, from http://www.treasury.gov.za/documents/provincial%20budget/2016/3.%20 Provincial%20Appropriation%20Acts/5.%20Guide%20to%20the%20Budget/GT/Gauteng%20-%20Social-Economic%20Review%20and%20Outlook.pdf
- Gordhan, P., 2016, Budget Speech, National Treasury, Pretoria, 24 February 2016.
- Greenberg, S., 2004, The landless people's movement and the failure of post-apartheid land reform: A case study for the UKZN project entitled: Globalisation, Marginalisation and New Social Movements in post-Apartheid South Africa, University of KwaZulu Natal, Durban.
- Helliker, K., 2013, 'Reproducing White Commercial Agriculture in South Africa', Seminar paper presented at Critical Studies Seminar Series, Rhodes University, Grahamstown, 22 February.
- Herrington, M., Kew, J., Simrie, M. & Turton, N., 2011, *The Global Entrepreneurship Monitor South Africa Report*, The UCT Centre for Innovation and Entrepreneurship, University of Cape Town.
- Jacobs, P., 2009, Agricultural market reforms and the rural poor in South Africa, Research paper, PLAAS Poverty Workshop 2009, Cape Town
- Jara, M., 2011, 'Ownership in land and agriculture in SA: Questions for policy', Paper presented at the EDD-FES-SPIII Ownership and Inequality Conference, Cape Town, 01–02 August.
- Kabwe-Segatti, A. & Landau, L.B., 2008, Migration in post-apartheid South Africa: Challenges and questions to policy-makers, Agence française de développement, Paris
- Kerr, A. & Wittenberg, M., 2015, 'Sampling methodology and fieldwork changes in the October Household Surveys and Labour Force Surveys', *Development Southern Africa* 32(5), 603–612. https://doi.org/10.1080/0376835X.2015.1044079
- Kılıç, R., 2002, Absolute and comparative advantage: Ricardian Model, Department of Economics, Michigan State University, MI.
- Kritzinger, A. & Vorster, J., 1996, 'Women farm workers on South African deciduous fruit farms: Gender relations and the structuring of work', *Journal of Rural Studies* 12(4), 339–351. https://doi.org/10.1016/S0743-0167(96)00048-4
- Kuptsch, C., (ed.), 2010, The internationalization of labour markets: The social dimension of globalization, International Institute for Labour Studies, Geneva, Switzerland.
- Lucas, R., 2010, 'Migrant sending countries, the internationalization of labour markets and development', in C. Kuptsch (ed.), The internationalization of labour markets: The social dimension of globalization, pp. 63–87, International Institute for Labour Studies, Geneva, Switzerland.
- Makgetla, N., 2016, The jobs bloodbath that wasn't: What happened to employment in the first quarter of 2016? Policy Brief: 6/2016, Trade & Industrial Policy Strategies (TIPS), Policy Brief, Pretoria.
- Malchow-Møller, N., Munch, J. & Skaksen, J., 2011, *Do foreign experts increase the productivity of domestic firms?*, Norface Migration Discussion Paper No. 2011–14, CEBR, Denmark.
- Mather, C. & Greenberg, S., 2003, 'Market liberalisation in post-apartheid South Africa: The restructuring of citrus exports after de-regulation', *Journal of Southern African Studies* 29(2), 393–412. https://doi.org/10.1080/03057070306210
- Messina, L., 2015, *Drivers and barriers to SME Foreign Expansion. InterTradeIreland ALL-Island Innovation Programme*, Community of Researcher, InterTradeIreland, Belfast.
- Mhazo, N., Mvumi, B., Nyakudya, E. & Nazare, M., 2012, 'The status of the agroprocessing industry in Zimbabwe with particular reference to small- and mediumscale enterprises', *African Journal of Agricultural Research* 7(11), 1607–1622.
- National Department of Agriculture (NDA), 2006, Abstract of Agricultural Statistics, National Department of Agriculture, Pretoria.
- National Treasury, National Budget 2010 National Budget Review 2010, Republic of South Africa, National Treasury, Pretoria.
- Organisation for Economic Co-operation and Development (OECD), 2011, Fostering productivity and competitiveness in agriculture, OECD Publishing, viewed 07 November 2017, from http://www.oecd.org/publications/fostering-productivity-and-competitiveness-in-agriculture-9789264166820-en.htm
- Osunsan, O. & Nowak, J., 2015, 'Foreign connection: Foreign workers and internationalization among small business enterprises in Kampala, Uganda', American International Journal of Research in Humanities, Arts and Social Sciences 10(2), 114–118.
- Popik, B., 2007, Texas of South Africa (Vryburg, North West province nickname), viewed 17 December 2017, from http://www.barrypopik.com/index.php/texas/entry/texas_of_south_africa_vryburg_

- Siddique, M.A.B., 2004, South African migration policy: A critical review, University of Western Australia, Business School, Crawley.
- Sika, H., 2017, 'What's behind attacks on foreigners in South Africa?', Al Jazeera News, viewed 15 November 2017, from http://www.aljazeera.com/programmes/insidestory/2017/02/attacks-foreigners-south-africa-170225190 133994.html
- South Africa.info, 2016, Geography and climate: North West province, South Africa, viewed 05 December 2017, from http://www.southafrica.info/about/geography/north-west.htm#.WCLOaWp96Hs
- South African Institute of International Affairs, 1999, Intelligence Report 17: Migrant labour, brain drain and brain gain in SA, South African Institute of International Affairs, Johannesburg.
- South African Multidimensional Poverty Index (SAMPI), Community Survey 2016: Provinces at a glance, Statistics South Africa, viewed 12 September 2017, from http://cs2016.statssa.gov.za/wp-content/uploads/2016/06/CS-2016-Provinces-at-a-glance.pdf
- Staatz, J., 2010, 'Enhancing agricultural productivity', in K.K. Yumkella, P.M. Kormawa, T.M. Roepstorff & A.M. Hawkins, (eds.), *Agribusiness for Africa's Prosperity*, pp. 58–86, UNIDO, North West Province.
- Statistics South Africa, 2015, Labour market dynamics in South Africa, 2015, Statistics South Africa, Pretoria.
- Statistics South Africa, 2016, Community Survey 2016 Technical Report, Statistics South Africa, Pretoria.

- Sweetman, A., 2010, 'Spotlight on the economic effects of immigration A North American perspective', in C. Kuptsch (ed.), The internationalisation of labour markets: The social dimension of globalisation, pp. 15–40, International Institute for Labour Studies, Paris.
- Thahane, T.T., 1991, 'International labour migration in Southern Africa', in D.G. Papademetriou & P.L. Martin (eds.), *The unsettled relationship: Labour migration and economic development*, Greenwood Press, New York.
- Theron, J., Godfrey, S. & Visser, M., 2007, Globalization, the impact of trade liberalization, and labour law: The case of South Africa, Discussion Paper Series, International Labour Organization, International Institute for Labour Studies, Geneva.
- Thindisa, M., n.d., Provincial Agro-processing Support, Agribusiness Support, Gauteng Department of Agriculture and Rural Development, Johannesburg.
- Thindisa, M.V., 2014, 'Participation by smallholder farming entrepreneurs in agroprocessing activities in South Africa', Unpublished master's thesis, University of the Witwatersrand, Johannesburg.
- Trimikliniotis, N., Gordons, S. & Zondo, B., 2008, 'Globalisation and migrant labour in a 'Rainbow Nation': A fortress South Africa?' *Third World Quarterly Impact* 29(7), 1323–1339. https://doi.org/10.1080/01436590802386476
- UNESCAP, 2003, 'Foreign direct investment in Central Asian and Caucasian economies: Policies and issues', Papers and proceedings presented at the Regional Round Table on Foreign Direct Investment for Central Asia, Dushanbe, New York, United Nations, 03–04 April.
- World Bank Report, 2013, Growing Africa: Unlocking the potential of agribusiness, viewed 21 December 2013, from http://siteresources.worldbank.org