

# THE CONTRIBUTION OF ENTREPRENEURSHIP TO EMPLOYMENT GENERATION IN LOCALLY-OWNED SMALL MEDIUM AND MICRO ENTERPRISES IN RUSTENBURG, SOUTH AFRICA.

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## Abstract

This study aims to investigate the role of entrepreneurship on the economic development of Rustenburg in South Africa, using employment generation as a measure. The study was motivated by theoretical findings that SMMEs are the cornerstone of economic development; yet the level of unemployment was still escalating in Rustenburg, South Africa. The data was collected from SMME owners registered with Rustenburg Local Municipality by using self-administered questionnaire as data collection instrument. Frequency analysis, analysis of variance (ANOVA), Pearson's correlation test, and Tukey's studentised range test were the statistical analysis techniques used in this study. The study found out that entrepreneurship plays a significant role in employment generation in Rustenburg with SMMEs in the mining sector being the major contributors.

**Keywords:** Entrepreneurship, employment generation, locally owned SMMEs

## 1. Introduction

According to Small Enterprise Development Agency SEDA (2016:6), and Ramukumba (2014:19), about 60% of employment in the private sector is created by SMMEs owing to their efficiency and effectiveness. In the United States, SMMEs contribute 75% of new job opportunities (Ilegbinosa & Jumbo, 2015:203) and in the United Kingdom, SMMEs create 59.3% employment (UK SME Landscape and Standardisation Research report, 2014:7). In China, 80% of the jobs are generated by SMMEs. In developing countries, 50% employment is contributed by SMMEs (Muriithi, 2017:37). In Nigeria, job opportunities created by SMMEs amount to 45 % (Taiwo, Falohun & Agwu, 2016:37), while in South Africa, 90% of registered businesses are SMMEs and they provide about 61% of employment (Labuschagne, 2015:1).

Although SMMEs contribute to employment generation, the level of unemployment in South Africa keeps rising every year despite the effort that the government exerts in supporting SMMEs (Maloka, 2013:1; Lekhanya, 2015:413). Contrary to global trends where SMMEs constitute the largest employers in the world, SMMEs in

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South Africa are showing stagnation in employment creation (Business Environment Specialist Report, 2015:1). According to Oluwajobu, Blaauw, Greyling & Kleynhans (2015:3), and eThekweni Municipality (2013:13), the contributory factors in South Africa are lack of skills, low levels of entrepreneurship and slow growth of SMMEs.

Rustenburg Local Municipality, which is one of the five municipalities in the Bojanala District Municipality in the province of Northwest, is also experiencing similar challenges. Out of a population of 581 000 people, 52 200 of that population is unemployed. The number of unemployed people in the Rustenburg Local Municipality represents an unemployment rate of 20.9% of the people who are actively looking for employment in this area (Rustenburg Development Plan Review, 2016:2). The unemployment rate of Bojanala District is estimated to be 24.5% and the total number of unemployed people in Rustenburg constitutes 37.32% of the total number of unemployed people in Bojanala District Municipality. Rustenburg Municipality is responsible for 50% of all direct jobs, through its platinum mining industry but the number of unemployed people is increasing by an average 2.80% annual rate. This figure is higher than that of the Bojanala District Municipality, which has an average annual increase in unemployment of 0.94% (Rustenburg Development Plan Review, 2016:54). It is on the backdrop of these statistics that a study was conducted to determine the extent to which SMMEs contribute to the economic development of Rustenburg, using employment generation as perceived by local owners as a measure.

Studies have been conducted to find out the contribution of SMMEs on the economic development of South Africa, but none has been done to investigate the role of entrepreneurship in generating employment as perceived by local owners. Hlahane (2013:73) conducted a study on SMMEs in Rustenburg but it only focused on the factors that sustain SMMEs. Lekhanya (2015: 417) also conducted a study on the public outlook of SMMEs as a strategic tool for economic growth and job creation in South Africa but it was limited to four provinces of South Africa. It was even suggested by the study that province specific studies should be conducted to assess the contribution by SMMEs. Although this particular study focuses on Rustenburg Municipality only; in terms of size of the area of focus, the size is larger than of those studies that did not yield the intended results, Rustenburg Local Municipality accounts for a total population of 37.0% of the total population of Bojanala District, ranked as the most populous local municipality.

Studies on the role of entrepreneurship to economic development generally have been conducted. However, none of the studies on the role of SMMEs on employment generation specifically in Rustenburg as perceived by local owners was identified. This study fills that gap by creating an awareness of the contribution of locally owned SMME owners to employment generation of their own province. Government institutions could use the results of this study to review and improve policies that govern the SMME sector. These insights can help policy makers craft appropriate strategies to enhance the operations of SMMEs in Rustenburg

specifically as each province has its peculiar challenges. Therefore, the objective of the study was to determine the extent to which entrepreneurship has contributed to employment generation in the Rustenburg Local Municipality.

## **2. Literature Review**

### **The nature of unemployment**

According to Mncayi (2016:25), unemployment is a global phenomenon. In 2013, more than 202 million people were unemployed globally and this number was expected to increase by more than 215 million in 2018. It was also estimated that during that period, about 40 million new jobs would be created. Though there is consensus that SMEs contribute to economic development by reducing unemployment, there is no conclusive agreement about what constitutes unemployment (Mncayi, 2016:11). Unemployment is explained differently in different countries. It therefore becomes paramount to explain the concept in order to put the study in its correct perspective.

Unemployment takes place when a person who is actively looking for employment is unable to find work. The definition of unemployment is based on three criteria, namely 'without work', 'presently available for work' and 'looking for work'. To be 'without work' means that an individual is not in any form of employment where he or she can be remunerated. The criterion of 'presently available for work' means that an individual must avail himself for a job during the reference duration. If the individual is 'looking for work', it means he or she must take an active step of looking for employment (Mncayi, 2016:12; Posel, Casale & Vermaak, 2014:28). These criteria have been accepted globally and they are used as guidelines for defining unemployment in different countries (Lloyd & Leibbrandt, 2013:87).

In South Africa, SMMEs are regarded as better job creators than big firms. Job-seekers without matric certificates are more likely to be employed by SMMEs than those holding higher qualifications (Business Environment Specialists Report, 2015:5). SMMEs provide full-time (permanent), part-time and casual employment. According to Mathekgwa (2009:4), a person in permanent employment works directly for the employer and is paid directly by the employer for an indefinite period of time. Part-time employment means that a person is permanently employed, but works fewer days a week or fewer hours a day. Buhlungu and Webster (2005:253) describe a casual employee as a worker employed for a short period and who works for parts of the week.

Although trends indicate an improvement in employment generation by SMMEs, there are still many people without employment in South Africa. The unemployment rate stood at 25.5% in 2015 and rose to 27.1% in 2016 (Stats SA, 2016:8). The problem of unemployment is both an economic and a social problem as it creates increased levels of poverty, violence and inequality. Unemployment can also lead to bad debtors thus making it impossible for individuals to access further loans (Mohr,

2014: 21). Malakwane (2012:9) concurs that unemployment has cost implications, namely economic and non-economic costs. Economic costs include the decline in the levels of a country's GDP, an increase in government expenditure owing to government's transfer of payment such as the Unemployment Insurance Funds (UIF) and a decline in the productivity due to unproductive employees.

Unemployment can be further placed into three categories, namely, frictional, cyclical and structural. Frictional unemployment occurs when an individual takes time to find a job or to move from one job to another. Although there may be vacancies, some individuals who are searching for employment, do not get employment immediately. Others who are at work may decide to leave and look for better employment elsewhere. This type of unemployment is unavoidable, more especially in countries where people are free to move from one job to another, and it is not regarded as a serious problem (Mohr, 2014: 401).

Cyclical unemployment is short-term unemployment caused by economic downturns within the business cycle. When the economic output declines as measured by the GDP, the business cycle becomes low which results in an increase in cyclical unemployment. When there is a recession in the country, sales drop and some individuals lose their jobs owing to insufficient demand for the goods and products produced in the country. However, if there is upward movement along the business cycle, economic activity increases, which subsequently results in a decrease in unemployment (Mncayi, 2016:17).

The third type of unemployment is called structural unemployment. Structural unemployment arises when there is a mismatch between the skills individuals possess and the available jobs. It is involuntary as it takes place because of structural changes in the economy (Malakwane, 2012:11; Mncayi, 2016:18). Structural unemployment can also be caused by foreign competition. For example, the growth of textile industries in Asian countries has destroyed many jobs in the South African textile industry. An increase in trade liberalisation and globalisation has also resulted in many South Africans being unemployed. Structural decline in certain industries and discrimination can also lead to structural unemployment. One example of discriminatory unemployment is when individuals lost their jobs during the apartheid era when specific jobs were reserved for the white minority groups. Qualified individuals from other groups were not given opportunities to secure those jobs resulting in high unemployment in the country (Mohr, 2014:500).

Unemployment rates are higher in developing countries, such as sub-Saharan Africa, than their counterparts in developed countries such as the United States and the United Kingdom. This is caused by inadequate support for SMMEs in sub-Saharan Africa. Countries with improved economies in which SMMEs are well developed are recognised as having the lowest unemployment rates (Ayandibu & Houghton, 2017:135). Research has revealed that the unemployment rates exceeding 15% are mostly found in developing countries (Page & Shimeles, 2015:18). In most developing countries, such as South Africa, self-employment and informal employment in the SMME sector attract the overwhelming majority of the labour

force in both rural and urban areas (Abdullahi, Aliyu, Umar, Sabiu & Abubakar, 2015; Page & Shimeles, 2015:18).

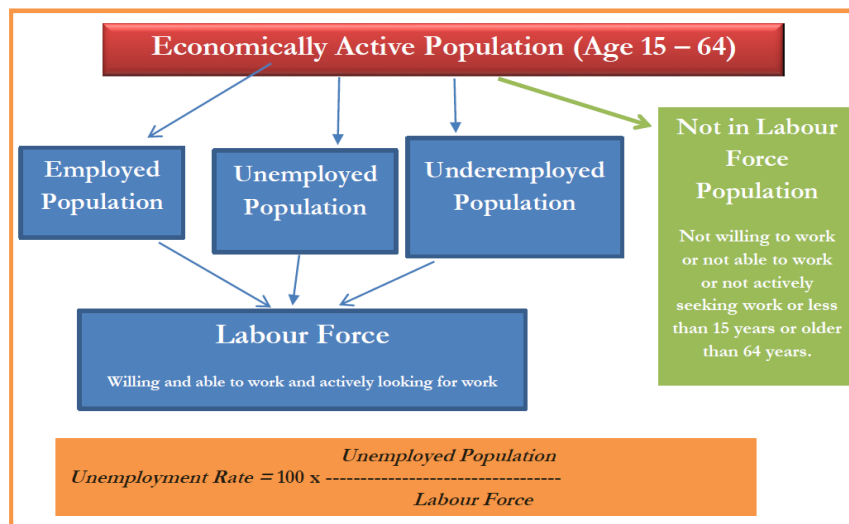
### Measures of unemployment

In order to measure unemployment, one has to distinguish between the economically active and the non-economically active population from the entire population of the country (Mncayi, 2016:21). According to Mohr (2014:66), the unemployment rate is calculated by expressing the number of unemployed persons as a percentage of the total number of people willing and able to work (the so-called ‘labour force’). This is shown in the equation below.

$$Ur = \frac{\text{Number of unemployed persons}}{\text{Total labour force}} \times 100$$

This equation reflects unemployed individuals divided by the total labour force. Figure 1 shows the model that was used to determine the economically active population and the non-economically active population from the entire population of the country, and how unemployment rate is calculated:

### Model used to determine the economically active population and the non-economically active population



**Figure 1: Calculation of unemployment**

*Source: Adopted from National Bureau of Statistics (2016:2)*

Although the equation provided in the model has been used to calculate unemployment in many countries, the equation has been criticised for not reflecting the true nature of the unemployment for a specific region (Mncayi, 2016:21). As a result, the census, registration and survey methods were devised.

The first method is the census method which involves counting or directly estimating the number of those who are unemployed and those who are employed. However, this method undervalues the real unemployment rate owing to the fact that these censuses are only conducted every five years. During the period of five years, many changes occur in terms of the unemployment status of the citizens (Mohr, 2014:498).

The second method is the registration method which involves individuals who are unemployed registering their employment status with the Department of Labour. In most cases, these people register their unemployment status with the intention of securing unemployment benefits or obtaining assistance by the Department for Employment Placement. The registration method has a weakness in that it is difficult to compare the unemployment information collected in one country with that of another country due to differences in national legislations. In addition, not all unemployed individuals register at the Department of Labour owing to discouragement that they would not be placed in employment (Mncayi, 2016:22). Mohr (2014:498) adds that in South Africa, the unemployment information obtained through the registration method is insignificant as few unemployed people qualify for unemployment benefits. This results in a large number of unemployed people not registered with the Department of Labour.

The third method is the survey method where members of the households are asked to disclose their economic status, the size of the labour force and the number of unemployed individuals per household. Thereafter, the unemployment rate is estimated. Weaknesses of the survey method might be inaccuracies in respect of responses, sampling processes, as well as seasonal adjustments. The sample is sometimes very small that it is not representative of the larger population (Mncayi, 2016:23). In contrast, Wozniak and Adamczyk (2014: 3) argue that the survey method is less protective and self-reporting. As a result, the information provided is more accurate than the information from other methods.

Due to its advantages, the survey method was used in this study when determining whether SMMEs contribute to the reduction of unemployment in Rustenburg or not.

### **3. Methodology**

This study utilised a descriptive research design. Bless and Higson-Smith (2013:130) and Kumar (2014:13) assert that a descriptive research design allows the researcher to dwell on the actual characteristics under consideration. It was upon this basis that this research design was chosen; the need to find out the contribution of entrepreneurship to employment generation in Rustenburg.

This study employed the quantitative approach to determine the contribution by SMMEs to employment generation in Rustenburg. According to De Vos (2011:216), a quantitative approach seeks to determine the extent of a problem. It was in this regard that a quantitative approach was the preferred approach so as to determine the extent to which SMMEs contributed to employment generation in Rustenburg.

A population is a universe of units from which a sample is to be selected (Bryman, 2012:714). According to Biekpe (2006:5), there are more than 2.5 million SMMEs in South Africa but this study only focused on Rustenburg, in the North West, which has 223 registered SMMEs (Rustenburg Local Municipality Database, 2014–2016). A census approach was adopted where all the 223 registered SMMEs participated, with 10 of them being part of the pilot study. According to Saunders, Lewis & Thornhill, (2009:210), a census approach involves the collection of data from every possible member of the population.

Table 1 indicates the types of SMMEs that were used in the study as the target population and sample.

**Table 1: Categories and size of target population/sample**

<b>Types of enterprises</b>	<b>Total population/Sample</b>	<b>Percentage of the total population</b>
Construction	32	$(32/213*100)$ = <b>15%</b>
Manufacturing	43	$(43/213*100)$ = <b>20%</b>
Mining	11	$(11/213*100)$ = <b>5%</b>
Services	53	$(53/213*100)$ = <b>25%</b>
Agriculture	21	$(21/213*100)$ = <b>10%</b>
Wholesale and retail	53	$(53/213*100)$ = <b>25%</b>
<b>TOTAL</b>	<b>213</b>	<b>100%</b>

**Source:** *Compilation from Rustenburg Local Municipality Database, 2014–2016.*

Respondents were made aware of ethical issues governing the study such as voluntary consent, protection from harm, confidentiality and withdrawal without any penalty. A semi-structured questionnaire was the data collecting instrument. A questionnaire was chosen as the data collecting instrument because a properly constructed questionnaire yields a high measurement of reliability and validity (Mouton, 2005:123). One of the advantages of a questionnaire is that it can be used to solicit data from many respondents at a relatively low cost (Creswell, 2013:85 & Gray, 2013:352). The questionnaire comprised five-point Likert-type scale questions (Cooper & Schindler 2009:378; Tustin, Ligthelm, Martins & Van Wyk 2005:408).

Each response was given a numerical score reflecting its degree of attitudinal favourableness where 5 was the highest (Strongly Agree) and 1 being the lowest (Strongly Disagree). Respondents indicated the scores that represented their level of agreement or disagreement on the contribution of entrepreneurship to employment generation in Rustenburg. The data collection exercise started off with a pilot study, followed by actual data collection which took a month. Two hundred and thirteen (213) copies of self-administered questionnaires were distributed and one hundred and eighty-two (182) completed questionnaires were returned (85% response rate).

Quantitative data was analysed using the Statistical Analysis Software (SAS). Descriptive and inferential statistics were the data analysis techniques where information was condensed and used for making decisions (Bless and Higson-Smith, 2013:264). Validity, which shows that the study measures what it should measure and reliability, an indication of the consistency of the results between two variables (Gray, 2013:375) were the main concerns of the study. The supervisor critiqued the questionnaire to ensure validity and reliability was tested through the computation of the Cronbach's alpha value which measured 0.883 for employment generation. This showed the suitability of the questionnaire to be used as a data collecting instrument.

#### 4. Results and Discussion

The objective of this paper was to present the respondents' perceptions of the role of entrepreneurship to employment generation. The findings that follow relate to the objective aimed at determining the extent to which SMMEs contribute to employment generation in Rustenburg. Table 3 presents employment trends of SMMEs operating in Rustenburg for the three years of, 2015, 2016, and 2017.

**Table 2: Employment trends of SMMEs in 2015, 2016 and 2017, N = 182**

How many people have been employed in your business in 2015, 2016 and 2017?						
Parameter	2015		2016		2017	
	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
<b>0</b>	20	10.99	32	17.58	49	26.92
<b>1-5</b>	73	40.11	82	45.05	74	40.66
<b>6-50</b>	63	34.62	49	26.92	44	24.18
<b>51-100</b>	17	9.34	11	6.04	9	4.95
<b>101-200</b>	6	3.30	6	3.30	4	2.20
<b>200 +</b>	3	1.65	2	1.10	2	1.10
<b>Total</b>	<b>182</b>	<b>100</b>	<b>182</b>	<b>100</b>	<b>182</b>	<b>100</b>

Source: Primary data



According to the data shown for 2015, 2016 and 2017, most SMMEs in Rustenburg employed between one and five employees, followed by those SMMEs that employed between six to 50 employees. Very few SMMEs employed more than 200 employees in each year. This constitutes 1.65% in 2015, and 1.10% in both 2016 and 2017.

Table 3 shows the perceptions of local SMME owners in employment generation in Rustenburg.

**Table 3. Percentages and descriptive analysis of respondents' perceptions of the role of SMMEs in employment generation in Rustenburg, N = 182**

	1-2	3	4-5		
<b>The role of SMMEs in employment generation in Rustenburg</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Mean</b>	<b>Std. Dev</b>
Contributes to employment creation	7.7%	2.7%	89.6%	4.09	0.915
Employ full-time employees	13.7%	7.7%	78.6%	3.75	1.002
Employ part-time workers	21.4%	11.0%	67.6%	3.53	1.101
Employ unskilled people	17.0%	11.5%	71.4%	3.58	1.026
Employ qualified people	11.5%	4.9%	83.5%	3.83	0.945
Employ casual workers	26.9%	13.2%	59.9%	3.33	1.108
Has not retrenched employees since 2014	44.0%	7.1%	48.9%	3.10	1.240
Provide employment to family member/s	47.3%	12.01%	40.7%	2.92	1.207

**Source:** *Primary data*

As shown in Table 3, most SMMEs contribute to employment generation in Rustenburg (89.6%) and most of these SMMEs provide full-time employment (78.6%). They also employ part-time (67.6%), unskilled (71.4%) and qualified workers (83.5%). Only 59.9% of these businesses employ casual workers. Almost half of these businesses (48.9%) had not retrenched employees since 2014.

Most of the statements have a mean value of more than 3, indicating that most of the respondents agreed with the statements provided. The standard deviations of the statements of “contributes to employment creation” and “employ qualified people” are less than 1 per statement. This is considered to be low, meaning that the respondents differed less on the statements provided. This implies that most SMMEs contribute to employment generation in Rustenburg by creating jobs for full-time, part-time, qualified, unskilled as well as casual workers.

#### **Validity of the measuring instrument**

The validity of the items that measure employment generation was constructed in the form of factor analysis.

### Factor analysis results

Factor analysis is a technique that is used to decrease a large number of variables into a smaller number of factors (Sekaran & Bougie, 2012:161). The purpose of factor analysis is to establish the underlying structure of variables of the study.

Employment generation was a factor extracted by using the principal axis factoring method. On processing data using the Statistical Analysis Software (SAS) version 9.4 programme, the variables were initially decreased from 12 through removing the non-loadings defined as items with loadings of  $< 0.30$ . Variables on employment generation are presented in Table 4.

**Table 4: Factor analysis results**

<b>Questions:</b>	<b>Factor loadings</b>
<b>EMPLOYMENT GENERATION</b>	
V12. Contributes to employment creation	<b>0.466</b>
V13. Employs unqualified workers on a full-time basis	<b>0.487</b>
V14. Employs unqualified part-time workers	<b>0.979</b>
V15. Employs unskilled people	<b>0.863</b>
V16. Employs qualified people	<b>0.671</b>
V17. Employs casual workers	<b>0.860</b>
V18. Has not retrenched employees since 2014	<b>0.523</b>
<b>Cronbach's alpha</b>	<b>0.883</b>

*Source: Primary data*

Table 4 indicates the Cronbach alpha value of 0.8, which served as evidence that the questionnaire used to collect data was reliable and valid. Table 4 further shows that the items loaded has a loading of  $\geq 0.30$  for each factor component, which is an indication that the questions measure what they were supposed to measure.

### Reliability of the measuring instrument

#### Cronbach's alpha test for reliability

Cronbach's alpha indicates the proportion of variance that is consistent in a set of test scores. It ranges from 0.00 to 1.00. The value of 0.00 implies that no variance is consistent and 1.00 implies that all variance is consistent. A Cronbach alpha's value of 0.90 implies that 90% of the data is reliable. In social sciences, the generally accepted Cronbach's alpha value is 0.70 and above (Nunnally & Bernstein, 1994).

As indicated in Table 4, the Cronbach's alpha value for employment generation is 0.883. This means all the data is considered reliable.

Based on the factor loadings, employment generation had the following variables indicated on Table 5:

**Table 5: Variables of employment generation**

V12. Contributes to employment creation
V13. Employs unqualified workers on a full-time basis
V14. Employs unqualified part- time workers
V15. Employs unskilled people
V16. Employs qualified people.
V17. Employs casual workers
V18. Has not retrenched employees since 2014

**Source:** *Primary data*

Table 5 also indicates that the components of employment generation were loaded as one factor. These components are highly correlated, such that they adequately measure employment generation. It is evident from Table 5 that variables such as employing unqualified part-time workers, unskilled workers and casual workers are highly loaded when compared to the other components. This shows that their influence on employment generation is high. It is also evident from Table 5 that each factor component loaded has a loading of  $\geq 0.30$ . This means that all the components of employment generation are significant.

**Goodness of fit**

Table 6 presents the KMO and Bartlett's test of the study.

**Table 6: KMO and Bartlett's test**

Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy		0.889
Bartlett's test of sphericity	Approx. chi-square	3011.668
	Df	351
	Sig.	0.000

**Source:** *Primary data*

Kaiser–Meyer–Olkin (KMO) test is a measure to test the suitability of the research data to factor analysis. The test measures sampling adequacy for each variable in the model and for the whole model. The lowest proportion indicates how suitable data is for factor analysis. KMO returns values between 0 and 1 and values of less than 0.6 show the inadequacy of the sampling method which requires that remedial action should be taken. KMO values between 0.6 and 1 are a reflection of adequate

sampling, whereas values close to zero mean that there are large partial correlations compared to the sum of correlations. This shows that the widespread correlations will create problems for factor analysis. However, the KMO value of 0.889 for this study, showed that sampling was adequate.

Goodness of fit test was done in this study by using Bartlett's test in order to find out whether the sample data represented the data the research expected to find in the actual population. As indicated in Table 6, the data gathered yielded a chi-squared distribution ( $\chi^2 = 3011.668$ ) with p-value = 0.000. In this research, the chi-squared distribution was ( $\chi^2 > 0$ ) and a p-value was 0.000 for an  $\alpha = 0.05$  level of significance. This highly significant difference indicates that the sample data represented the data the research expected to find in the actual population.

### **Inferential Statistics**

#### **ANOVA on SMME sectors and employment generation**

Analysis of Variance (ANOVA) of SMME sectors and employment generation were computed using the Generalised Linear Model (GLM). The intention was to find out which of the SMME sectors generates more employment compared to other SMME sectors. GLM was also used to compute R-squared values, which were used to find out the strength of the variance among SMME sectors in terms of their contribution to employment generation.

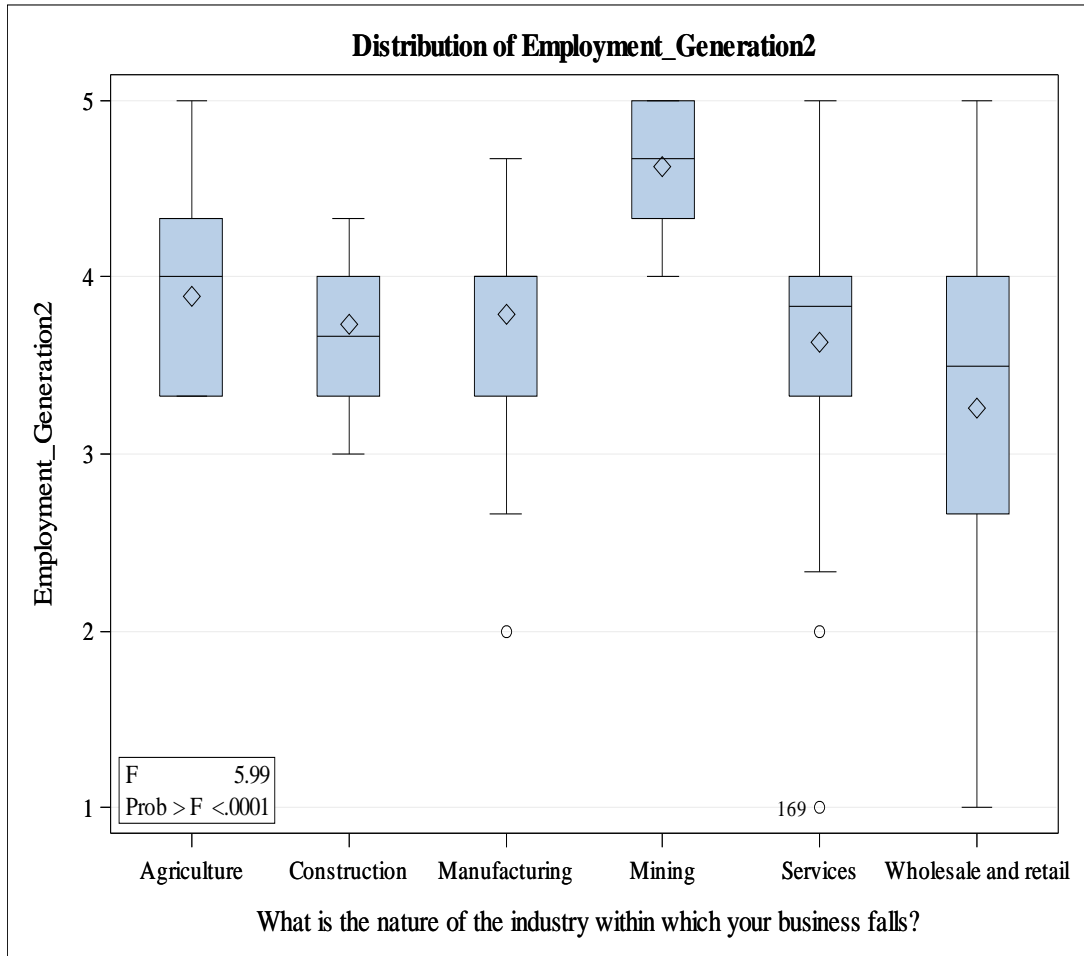
Table 7 shows the ANOVA on SMME sectors and employment generation.

**Table 7: Analysis of Variance (ANOVA) on SMME sectors and employment generation**

Source	R-square	F value	Pr > F
Model	0.145505	5.99	<0.0001

**Source:** *Primary data*

The p-value indicated in Table 7 is less than the significant value of 0.05. This means that there are differences in SMME sectors with regard to their contribution to employment generation. The R-square value of 0.145 infers that the extent of the variances is 15%. These results are complimented by the multiple comparison tests shown in Figure 2.



**Figure 2: Distribution of employment generation in SMME sectors**

**Source:** *Primary data*

Figure 2 presents multiple comparison test results, which compare the mean values between the SMME sectors. Results in Figure 2 show that the mining sector has the highest mean on employment generation followed by the agriculture sector. The services sector has the lowest mean score, which means that the contribution of this sector to employment generation in Rustenburg is very small. These findings reveal that SMMEs in the mining sector contribute more to employment generation than the SMMEs in other sectors. Findings also reveal that SMMEs explain 15% of the variance of employment generation and 85% can be attributed to the factors that were beyond the scope of this study.

**The Tukey's studentised range test on SMMEs contribution to employment generation**

Table 8 compares the mean scores of each SMME sector in terms of their contribution to employment generation. The significant differences are shown by the three asterisks for the means of the listed groups.

**Table 8 The Tukey's studentised range test on SMMEs contribution to employment generation**

<b>Comparisons significant at the 0.05 level are indicated by ***.</b>				
<b>Q2_2 Comparison</b>	<b>Difference between means</b>	<b>Simultaneous 95% confidence limits</b>		
<b>Mining – Agriculture</b>	0.7322	-0.2338	1.6982	
<b>Mining – Manufacturing</b>	0.8392	0.0066	1.6717	***
<b>Mining – Construction</b>	0.8905	0.0146	1.7664	***
<b>Mining – Services</b>	0.9950	0.1907	1.7993	***
<b>Mining – Wholesale and retail</b>	1.3696	0.5630	2.1763	***
<b>Agriculture – Mining</b>	-0.7322	-1.6982	0.2338	
<b>Agriculture – Manufacturing</b>	0.1070	-0.6166	0.8305	
<b>Agriculture – Construction</b>	0.1583	-0.6147	0.9313	
<b>Agriculture – Services</b>	0.2628	-0.4280	0.9536	
<b>Agriculture – Wholesale and retail</b>	0.6374	-0.0561	1.3310	
<b>Manufacturing – Mining</b>	-0.8392	-1.6717	-0.0066	***
<b>Manufacturing – Agriculture</b>	-0.1070	-0.8305	0.6166	
<b>Manufacturing – Construction</b>	0.0513	-0.5466	0.6493	
<b>Manufacturing – Services</b>	0.1559	-0.3312	0.6429	
<b>Manufacturing – Wholesale and retail</b>	0.5305	0.0395	1.0214	***
<b>Construction – Mining</b>	-0.8905	-1.7664	-0.0146	***
<b>Construction – Agriculture</b>	-0.1583	-0.9313	0.6147	
<b>Construction – Manufacturing</b>	-0.0513	-0.6493	0.5466	
<b>Construction – Services</b>	0.1045	-0.4533	0.6624	
<b>Construction – Wholesale and retail</b>	0.4791	-0.0821	1.0404	
<b>Services – Mining</b>	-0.9950	-1.7993	-0.1907	***

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 Comparison	Difference between means	Simultaneous 95% confidence limits		
Services – Agriculture	-0.2628	-0.9536	0.4280	
Services – Manufacturing	-0.1559	-0.6429	0.3312	
Services – Construction	-0.1045	-0.6624	0.4533	
Services – Wholesale and retail	0.3746	-0.0666	0.8159	
Wholesale and retail – Mining	-1.3696	-2.1763	-0.5630	***
Wholesale and retail – Agriculture	-0.6374	-1.3310	0.0561	
Wholesale and retail – Manufacturing	-0.5305	-1.0214	-0.0395	***
Wholesale and retail – Construction	-0.4791	-1.0404	0.0821	
Wholesale and retail – Services	-0.3746	-0.8159	0.0666	

**Source:** *Primary data*

Table 8 indicates a difference in the mean score of SMMEs in mining with the mean scores of SMMEs in the sectors of manufacturing (0.8392), construction (0.8905), services (0.9950), and wholesale and retail (1.3696). There is no significant difference between the mean score of mining SMMEs and the mean score of agriculture SMMEs. Table 8 further shows a significant difference between the mean score of manufacturing SMMEs (0.5305) and the mean score of SMMEs in wholesale and retail sector (0.3746).

Results in Table 8 show that the mean score of SMMEs in mining differs significantly from the mean scores of most listed SMME sectors. Therefore, there are significant differences in the contribution of SMME sectors to employment generation with the mining sector being the highest, followed by wholesale and retail sectors. As a result, these findings imply that the effect of SMMEs in mining in terms of their contribution to employment generation is significantly greater than the effect of the other listed SMME sectors.

## 5. Conclusion and Policy Recommendations

Based on the findings, the study concluded that entrepreneurship plays a crucial role in employment generation in Rustenburg. SMMEs in the mining sector were perceived by the owners to be making the most significant contribution. The following recommendations were made by the study.

There is need for increased Government support for SMMEs in other sectors in order to boost the level of self-employment in South Africa. The environment in which SMMEs operate in, is highly regulated. In order to increase the level of entrepreneurial activities of SMMEs in Rustenburg, the regulatory framework that

governs the SMME sector needs to be reviewed. This study has limitations such as the exclusion of survivalists and foreign-owned SMMEs, and that SMMEs only explained 18% of the variance of economic development and the remaining 82% was attributed to the factors that were beyond the scope of this study. Therefore, research conducted on survivalists and foreign-owned SMMEs, are needed in order to determine the extent to which these businesses contribute to economic development. Further research is also needed to explore the other factors that affect economic development from the SMMEs' perspectives.

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