

**Financial Economics****Occupational Fraud Risk, Internal Control Initiatives and the Sustainability of Small, Medium and Micro Enterprises in a Developing Country: a Literature Review****Ashwin Petersen<sup>1</sup>, Juan-Pierré Bruwer<sup>2</sup>, Suzaan Le Roux<sup>3</sup>**

**Abstract:** Prior research supports the view that South African Small, Medium and Micro Enterprises (SMMEs) add significant socio-economic value to the national economy. Unfortunately, these business entities' sustainability leaves much to be desired as they are reported to be among the worst in the world - an estimated 80% of South African SMMEs fail after being in existence for only three years. Although the sustainability of these business entities is believed to be adversely affected by an array of risks which realise (stemming from a harsh economic environment), it is imperative that South African SMMEs make use of sound internal control initiatives to mitigate such risks. According to scholarly literature, it appears that South African SMMEs make use of customised internal control initiatives which are often viewed as inadequate and/or ineffective which, in turn, do not properly mitigate risks. This may result in the sustainability of these business entities to be adversely affected. In order to shed light on the preceding phenomenon, for this study, a literature review was conducted to investigate the theoretical relationship that exists among internal control initiatives, occupational fraud risk, and SMME sustainability, in a South African context.

**Keywords:** Occupational fraud risk; internal control initiatives; sustainability; SMMEs; South Africa

**JEL Classification:** G32; M41; M42

**1. Introduction**

Prior to the formal recognition of Small Medium and Micro Enterprises (SMMEs) in the wake of 1996, a substantial proportion of these business entities were in operation in South Africa. (Visagie, 1997) Through the publication of the National Small Business Act No. 102 of 1996 not only were South African SMMEs formally recognised as business entities, but they were also formally defined as separate and distinct business entities, together with their branches and/or subsidiaries, which are

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managed and/or owned by at least one owner(s), which conduct their respective business in any sector and/or sub-sector of the economy of South Africa. In addition, in the same Act, SMMEs were classified in relation to their respective sizes, per industry, for three classification criteria<sup>1</sup>. (South Africa, 1996)

To date, South African SMMEs have been actively promoted by the national government as they are regarded as major role players in relation to the attainment of core socio-economic objectives. These objectives include the creation of employment opportunities, the alleviation of poverty and the contribution towards national growth and development. (Joubert et al., 1999; Bruwer, 2010; Amra et al., 2013; Agwa-Ejon & Mbohwa, 2015) Taking into account the socio-economic importance of SMMEs to the national economy, it is of no surprise that the number of operational South African SMMEs has exponentially increased<sup>2</sup> over the years. (Mouloungui, 2012) Research suggests that these business entities employ approximately 60% of the national workforce, while simultaneously contributing up to 42% toward the national Gross Domestic Product (GDP). (Rankhumise, 2010; Swart, 2010; Booyens, 2011; Rankhumise & Tshabalala, 2011)

Notwithstanding the socio-economic value added by South African SMMEs, previous studies (Fatoki & Odeyemi, 2010; Bruwer, 2012; Bruwer & Coetzee, 2016) found that South African SMMEs are not attaining their legally imposed socio-economic objectives. Statistics support this view that approximately 80% of South African SMMEs fail after being in operation for only three years – one of the worst SMME failure rates in the world. (Cant & Ligthelm, 2002; Van Eeden et al., 2003; Olawale & Garwe, 2010; SEDA, 2010)

The large failure rate of South African SMMEs is often pinned on the impact of various economic factors. (Mabesele, 2009; Radas & Božić, 2009; Bruwer, 2010; Cant & Wiid, 2013; Siwangaza, 2013) Studies (Wessels, 2000; Bruwer et al., 2013) share the view that both macro-economic factors and micro-economic factors are predominantly attributable to the weak sustainability rate of South African SMMEs and are generally left unmanaged by SMME management. Examples of these economic factors include high interest rates, negligence of management and the presence of inadequate and/or ineffective internal control. (Ahmad & Seet, 2009; Valdiserri & Wilson, 2010)

According to the work of Van Eeden et al. (2003) and Radas and Božić (2009), the influence of economic factors on natural persons and non-natural persons of a country are spurred on by the economic environment (see Section 3) of that country. As such, while taking into account the sustainability rate of South African SMMEs,

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<sup>1</sup>The classification criteria of South African SMMEs include: 1) the number of full-time employees employed, 2) the total annual turnover, and 3) the total gross asset value.

<sup>2</sup> The number of South African SMMEs increased from an estimated 2 432 000 in 2007 to approximately 5 979 510 in 2010 (UCS, 2011; Odendaal, 2017).

it is not surprising that these business entities have to operate in a non-conducive economic environment (Lazzeretti & Petrillo, 2006; Herrington & Kew, 2013; Vawda et al., 2013; Bruwer, 2016) which is characterised by an array of risks that are not properly mitigated. This ultimately has an adverse influence on the attainment of relevant business objectives in the foreseeable future. (Jiang & Li, 2010; Blackman, 2014; Luís et al., 2015; Ridha & Alnaji, 2015) One of the most pertinent risks which are evident in the South African economy is that of occupational fraud risk.

Occupational fraud risk pertains to the phenomenon where employees purposefully abuse a business entity's resources for self-enrichment purposes and include irregularities performed such as asset misappropriation, corruption and financial statement fraud. (Steckel, 2011; Milyutina, 2013) According to previous studies (Musarurwa, 2012; Hosken, 2014), South Africa is deemed as one of the countries with the highest levels of occupational fraud risk when compared to other countries around the globe. This sentiment is supported by Kassem (2014) who found that illegal tax avoidance, bribery, corruption, procurement fraud, and asset misappropriation are among the most pervasive in South African SMMEs. A probable explanation behind the frequent encounter of occupational fraud risk in South African SMMEs is because of these business entities' implementation of inadequate and/or ineffective internal control initiatives. (Bruwer, 2016) In essence, sound internal control initiatives are implemented by management with the main intent to mitigate risks optimally. Unfortunately, it appears that South African SMMEs make use of customised internal control initiatives which are regarded as inadequate and/or ineffective in their mitigation of occupational fraud risk. (Siwangaza et al., 2014; Bruwer et al., 2018)

Using the above as a basis, this study places emphasis on investigating whether a theoretical relationship exists between occupational fraud risk, South African SMME sustainability and internal control initiatives used by South African SMMEs. For the remainder of this paper, discussion takes place under the following headings: 1) research design, 2) economic environment of South Africa, 3) general risks and occupational fraud risk in South African SMMEs, 4) internal control initiatives evident in South African SMMEs, 5) conclusion, and 6) avenues for further research.

## **2. Research Design**

For this research study, a non-empirical approach was followed. A theoretical investigation, taking the form of a literature review, was conducted to ascertain whether a theoretical relationship exists among occupational fraud risk, the sustainability of South African SMMEs and the internal control initiatives deployed by South African SMMEs. To attain the aforementioned, literature was reviewed on

South African SMME sustainability, general risks and occupational fraud risk evident in South African SMMEs, and internal control initiatives used by South African SMMEs to mitigate occupational fraud risk. This study also fell solely within the phenomenological research paradigm as it constituted qualitative research.

A total of 100 sources were reviewed from which only 86 were cited, as summarised in Table 1. Notwithstanding the fact that 86 sources were used in this research study, it should be noted that no previous studies have been conducted on the theoretical relationship which exists among the sustainability of SMMEs, internal control activities and occupational fraud risk evident in a South African dispensation. Therefore, this study was also exploratory in nature

**Table 1. Cited sources for this research study**

Type of source	Number of cited sources
Journal articles	39
Books	3
Reports	1
Professional websites	17
Conference papers	5
Theses/dissertations	20
Legal documents	1
TOTAL	86

*Source: Authors, 2018*

### 3. Economic Environment of South Africa

The term “economic environment” refers to the overall economic condition of a country’s economy. (Guilhoto et al., 2002) In order to evaluate the economic environment of any country, an array of economic indicators can be used. For this study, to evaluate the economic environment of South Africa, six<sup>1</sup> key economic indicators were used and are elaborated on below: (Schmitt-Grohé & Uribe, 2001; Fite et al., 2002; Cuijpers, 2009; Farris, 2010; Akiba et al., 2012; Elrefaei, 2012)

**GDP (nominal):** It is the total monetary value of all finished goods and/or services produced in a country, within a timeframe ordinarily equivalent to 12 months.

**GDP per capita (nominal):** It is the total monetary value of all finished goods and services which are produced in a country, within a timeframe usually equivalent to

<sup>1</sup> The six key economic indicators were used as it serves as the primary economic indicators to assess the foundational economic environment of any country in a reasonable manner (Furdell & Wolman, 2006).

12 months which, in turn, is divided by the population size of that country.

**Gini index:** It measures how equally the money is divided among citizens of a country. The statistics range on a scale from zero (indicating absolute equal monetary distribution) to one (indicating absolute unequal monetary distribution). Otherwise stated, it identifies the size of the gap between the rich and poor in a country.

**Inflation rate:** It is the percentage increase of all goods and/or services within aspecified period (typically 12 months) in a country and serves as an indication of the cost of living in the country.

**Population size:** It is the estimated number of people who are regarded as legitimate citizens of a country.

**Unemployment rate:** It is the number of citizens in a country (in percentage format) who are unemployed and who are effectively searching for employment opportunities.

Table 2 shows relevant statistics pertaining to the six key economic indicators of the South African economy for 2014 to 2016.

**Table 2. Economic indicators of the South African economy from 2014 to 2016**

<b>Economic indicator</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
GDP (nominal)	US\$ 349.8 billion	US\$ 312.9 billion	US\$ 266.2 billion
GDP per capita (nominal)	US\$ 6 223	US\$ 5 902	US\$ 6 003
Gini index	0.68	0.69	N/A
Inflation rate	6.2%	5.2%	6.3%
Population size	54.0 million	54.9 million	55.1 million
Unemployment rate (narrow)	25.5%	24.5%	26.5%

*Sources: Economics, 2015; Indxmundi, 2015; StatisticsTimes, 2016*

From the statistics in Table 2, the following observations are made:

**GDP (nominal):** The GDP (nominal) of South Africa showed a net decrease of 23.90% ( $\pm$ US\$ 83.60 billion) from 2014 to 2016. The latter was spurred on by a decrease in the GDP (nominal) of 10.55% between 2014 and 2015, and a 14.92% decrease between 2015 and 2016. Stemming from the statistics above, the decrease in the GDP (nominal) between 2014 and 2016 may have been caused by inter alia: 1) an increase in the unemployment rate of South Africa and/or 2) a decrease in the overall productivity of the citizens of South Africa.

**GDP per capita (nominal):** The GDP per capita (nominal) of South Africa experienced a decrease of 3.54% between 2014 and 2016. The latter view consists of a decrease of 5.15% between 2014 and 2015 and an increase of 1.71% between

2015 and 2016. Essentially, there was a decrease in the productivity of South Africa between 2014 and 2016 – confirming the second inference made above.

**Gini index:** The South African Gini index ranged between 0.63 and 0.69 for the period 2014 to 2016. It is, therefore, evident that money was unequally dispensed among South African citizens. Hence, the inference can be made that South Africa experienced steep poverty levels. The latter holds truth since popular literature (Statistics South Africa, 2015) suggests that a considerable proportion of South African citizens are living below the poverty line as approximately 27 million people try to survive on a wage of US\$ 57.57 or less per individual every month to make ends meet.

**Inflation:** The average South African annual inflation rate amounted to 5.9% between 2014 and 2016. The inflation rate has a direct influence on among other things, interest rate, supply and demand, import, exports and consumer confidence (Aubrey, 2015). For the sake of clarity and to fully comprehend the influence of the inflation rate on a product, the following scenario is provided: if a product cost US\$ 10.00 in 2013, its cost at the end of 2014 would be US\$ 10.62, US\$ 11.17 at the end of 2015 and US\$ 11.87 at the end of 2016.

**Population size and unemployment rate:** The population size of South Africa showed an increase of 2.03% between 2014 and 2016. The latter view consists of an increase of 1.67% between 2014 and 2015, and a 0.36% increase between 2015 and 2016. When the focus is shifted to the unemployment rate of South Africa, it becomes apparent that although the unemployment rate increased between 2014 and 2016, the estimated number of unemployed South African citizens decreased by 200 000 people between 2014 and 2015 and between 2015 and 2016 the number of unemployed South African citizens increased by 1 100 000. Thus, there was a net increase of approximately 900 000 unemployed South African citizens – confirming the first inference made above. Based on the observations, it is evident that the economic environment of South Africa can be described as being harsh. This sentiment is supported by previous research (Radas & Božić, 2009; Herrington & Kew, 2013; Bruwer, 2016) which found that the South African economic environment is not conducive for SMMEs to operate in. Additionally, such an economic environment can be viewed as a type of breeding ground for risks to cultivate in.

#### **4. General Risks and Occupational Fraud Risk in South African SMMEs**

A “risk” can be viewed as an uncertain event which may have an adverse influence on the overall attainment of business objectives. (Smit, 2012) Based on previous research studies (Tchankova, 2002; Bruwer et al., 2013; Bruwer et al., 2018), risks, in general, can be demarcated into four categories namely: 1) strategic risks, 2)

compliance risks, 3) operational risks, and 4) reporting risks. These risks can have a significant influence on the overall sustainability of any business entity. These four categories of risks are briefly explained below: (Nguyen, 2007; Chandiramani, 2009; Smit, 2012; Oblakovic, 2013; Sin & Ng, 2013; Deloitte, 2015; Fei, 2015; Bruwer et al., 2018)

**Strategic risks:** These risks have a negative influence on the capacity of a business entity to attain its strategic objectives – i.e., its vision and mission.

**Compliance risks:** These risks have a negative influence on a business entity's ability to comply with applicable laws, rules, policies, and procedures.

**Operational risks:** These risks have a negative influence on a business entity's performance of day-to-day operations and, evidently the attainment of applicable operational objectives. In core, they may adversely affect the economy, efficiency, and effectiveness of relevant operations.

**Reporting risks:** These risks have a negative influence on a business entity's ability to place reliance on financial and/or non-financial information on making sound business decisions.

Even though risks are inevitable, it can be assumed that they will have a negative influence on the overall sustainability of any business entity in the foreseeable future if not properly mitigated. (Luís et al., 2015; Prinsloo et al., 2015; Bruwer, 2016) Moreover, such risks can have a destructive impact on a business entity's profitability, liquidity, solvency, efficiency, and overall existence. (Ferkolj, 2010; Deloitte, 2011; Blackman, 2014; Ridha & Alnaji, 2015) One of the most common risks which are faced by South African SMMEs is that of occupational fraud risk. (Geessink, 2012)

The term "occupational fraud risk" is defined as a phenomenon where employees intentionally misappropriate the resources of a business entity to benefit themselves, abusing their respective positions and/or authority for self-advancement, self-empowerment and/or self-enrichment purposes. (Steckel, 2011; Milyutina, 2013). Occupational fraud risk encompasses three classes, namely: 1) asset misappropriation, 2) corruption and 3) financial statement fraud (Dunne, 2014). The three classes of occupational fraud risk are briefly elaborated on below: (Wijayanto, 2007; Saksena, 2010; Harrison et al., 2011; ACFE, 2012; Gupta & Gill, 2012; ACFE, 2014; Kassem, 2014; Carroll, 2015)

**Asset misappropriation:** When employees who are entrusted to manage assets (resources), steal from the business entity for personal gain.

**Corruption:** Dishonest or fraudulent conduct by those who are empowered with authority to make business decisions and exploiting it for personal gain.

**Financial statement fraud:** When employees intentionally distort financial statement

information to delude stakeholders and/or for personal gain.

These three classes of risks are supported by previous studies (Naidoo, 2012; Quinot, 2013; Dunne, 2014; Shao, 2016) where it was found that South African SMMEs are susceptible to irregularities which include among other things tax evasion, bribery, defilement, and procurement fraud. Since South African SMMEs are exposed to an array of occupational fraud risk, it may be the case that occupational fraud risk unknowingly adversely influences these business entities' sustainability. Otherwise stated, South African SMMEs may be unaware that their sustainability is adversely affected by occupational fraud risk (potential and/or realised). In order to mitigate occupational fraud risk (among other risks), it is strongly recommended that sound internal control initiatives are used.

### **Internal Control Initiatives Evident in South African SMMEs**

Internal control initiatives are those internal control interventions put in place by management, as supported by policies and procedures, to prevent and detect risks, with the main intent to provide reasonable assurance regarding the attainment of relevant business objectives in the foreseeable future. (Christ et al., 2010; COSO, 2013; Mwachiro, 2013; Ejoh & Ejom, 2014) Despite the fact that internal control initiatives can be preventive and/or detective in nature, they are generally demarcated into five categories namely: 1) segregation of duties (the person that authorises transactions is different to the one that executes transactions is different to the one that records transactions), 2) proper authorisation initiatives (process of proper authorisation consisting of recording, approving and reconciling transactions), 3) adequate document usage and design (evidence exists to confirm the occurrence of relevant transactions), 4) safeguarding of assets (protecting the assets of a business entity), and 5) independent checks (performing random checks to ensure the reliability of information and the economy, effectiveness and efficiency of operations) (COSO, 2013).

In a South African dispensation, previous studies (Jackson et al., 2010; Price Water House Coopers, 2011; Isrealstam, 2016; Shao, 2016) found that SMMEs are not making use of sound internal control initiatives to mitigate occupational fraud risk. Moreover, when the focus is placed on the work of Bruwer (2016), South African SMMEs are believed to make use of customised internal control initiatives which are not adding substantial value to these business entities' attainment of relevant business objectives. This sentiment is supported by other local research studies (Siwangaza, 2013; Siwangaza et al., 2014) which point out that the customised internal control initiatives evident in South African SMMEs were deemed as inadequate and/or ineffective. Hence, using the above as a basis, the inference can be made that the inadequate and/or ineffective internal control initiatives evident in

South African SMMEs adversely affects the overall sustainability of these business entities as they do not properly mitigate risks emanating from economic factors; cultivated by the non-conducive economic environment.

## 5. Conclusion

Stemming from the literature review conducted, South African SMMEs can be viewed as the driving forces for national economic growth. Albeit the aforesaid, these business entities have one of the worst failure rates in the world as up to 80% of these business entities fail after being in operation for only three years. Scholarly literature supports the notion that the latter dispensation is spurred on by a harsh South African economic environment in which SMMEs operate in, often serving as a breeding ground for risks to realise – including that of occupational fraud risk.

Often, risks have a negative influence on the sustainability of South African SMMEs, and it is no different with occupational fraud risk when employees intentionally misappropriate business resources for self-enrichment. Previous research suggests that the sustainability of South African SMMEs is adversely influenced by the frequent realisation of occupational fraud risk. Despite the type of risks which South African SMMEs face, they should be optimally mitigated through means of sound internal control initiatives. According to literature, it appears that South African SMMEs make use of inadequate and/or ineffective internal control initiatives which do not properly mitigate risks. Hence, the inference can be made that the executed customised internal control initiatives evident in South African SMMEs may not provide reasonable assurance with respect to the overall attainment of business objectives. This is quite disconcerting since it may (in most cases) have an adverse influence on the sustainability of South African SMMEs in the foreseeable future. Thus, considering the research conducted, there appears to be a theoretical relationship between the internal control initiatives in South African SMMEs, occupational fraud risks affecting SMMEs, and South African SMME sustainability. Whether or not this relationship is empirically feasible is an avenue for further research.

## 6. Avenues for Further Research

The following avenues for expanding this research study are suggested:

The empirical relationship between South African SMME sustainability and their implemented internal control initiatives, and any expansions to it.

The empirical relationship between South African SMME sustainability and occupational fraud risk faced by these business entities, and any expansions to it.

The empirical relationship between the occupational fraud risk faced by South African SMMEs and their implemented internal control activities, and any expansions to it.

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