

*Full Length Research Paper*

# The viability of informal micro businesses in South Africa: A longitudinal analysis (2007 to 2011)

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**A five year longitudinal study (2007 to 2011) was conducted among a panel of informal micro businesses in the informal sector of South Africa. The study was aimed at examining micro business survival and attrition. A life-cycle analysis confirmed the survival of only 43.2% of these businesses in an increasing competitive environment over a period of five years. By contrasting the profiles of surviving businesses with those that closed their doors, a second objective was also attained, namely the identification of principle reasons for micro business survival. According to a categorical regression model with business survival as dependent variable, the human factor and, especially the entrepreneurial endowment and small business management skills materialised as the strongest predictors of micro business sustainability. Micro business support strategies, especially in developing societies with limited resources, should be focused on businesses with embedded entrepreneurial acumen. Hence the inherent dynamics to create and exploit new innovative business opportunities.**

**Key words:** Entrepreneurship, micro businesses, informal sector, sustainability, South Africa.

## INTRODUCTION

High unemployment is often highlighted as the single most significant impediment to poverty reduction in developing societies, including South Africa (Minford and Mahabane, 2005). One of the main reasons for unemployment in South Africa is the disproportional dependence of labour market entrants on formal sector jobs. Even with Sub-Saharan Africa's most modern and industrialised economy, South Africa's formal business sector is unable to accommodate the rising number of work seekers (Woodward et al., 2011).

A consequence of the formal sector's inability to create sufficient jobs is the establishment of large numbers of small (informal) businesses. While some informal businesses represent an erratic, transitory means of survival among the poorest citizens, other entrepreneurs may actively pursue viable business opportunities to generate a sustainable livelihood. Whether opportunity- or necessity-driven, hundreds of thousands of South Africans generate primary income through micro businesses (Woodward et al., 2011).

The extensive microenterprise sector in South Africa offers a diverse and vibrant setting for analysing business sustainability and growth. Of specific importance in this

regard is the role of entrepreneurship in business growth and development. The 2010 Global Entrepreneurship Monitor (GEM) report confirmed that although several factors are constraining business development, a lack of human capacity is typified as one of the key obstacles to increasing entrepreneurial activity in South Africa (Herrington et al., 2010). Evidence also confirmed that small business growth is derived from a relatively small number of enterprises (Döckel and Ligthelm, 2005). Policy makers and researchers are becoming aware of the economic and social limitations of policy initiatives that rely too heavily on support measures for entrepreneurial and business actions as a whole. These initiatives should instead be aimed at small businesses with inherent growth potential. To target such businesses, the factors that are likely to influence business viability and growth need to be identified.

It is important to note that entrepreneurship is inherently heterogeneous and does not necessarily result in the creation of new businesses (for example, corporate and non-market entrepreneurship). This study explores only the role of entrepreneurship in establishing new micro businesses and/or ensuring the viability of existing

micro businesses. It is, furthermore, important to note that the focus on small businesses in this study is largely limited to the informal sector. This sector is defined as the production and sale of goods and services by businesses that are unregistered by or hidden from the state for tax purposes but which are legal in all other aspects (European Commission, 1998). However, informal businesses analysed in this study often operate on such a small scale, involving such simple business activities that official registration is not required.

The data used in this study to analyse micro business viability are sourced from longitudinal surveys conducted in a less developed urban area of South Africa – termed a township area in the rest of this paper. A small business panel was selected in 2007 and revisited in the ensuing four years in Soweto – a large township area with approximately 1.5 million inhabitants located close to Johannesburg. These businesses are unregistered and therefore function in the informal economy.

The goal of the study is to identify the key factors that significantly contribute towards the viability of informal micro businesses in a heightened competitive environment. The foregoing presents the following two research questions. What is the extent of small business survival among an informal micro business panel over a period of five years, and secondly, what factors best explain the reasons for survival of a portion of these micro businesses.

The next area provides background to the informal microenterprise sector, highlighting the characteristics of informal micro businesses and the importance of small business development for increased economic growth and development.

## **VIABILITY OF INFORMAL MICRO BUSINESSES**

Motivated by both economic necessity and business opportunity, informal micro businesses are a prominent feature of township areas (Woodward et al., 2011). Prior to 2006, township areas were dominated by informal businesses offering only basic household necessities to millions of South Africans (City of Johannesburg, 2005). More affluent township households sourced the majority of their household necessities in shops outside township areas. However, the inhabitants of these areas have experienced significant income growth in the last decade (Ligthelm, 2008). As a result, the predominantly small business fraternity of these areas have experienced a heightened level of competition from newly established national chain stores and franchises in the townships. The expansion strategies of these national chains into township areas commenced in 2006, resulting in substantial household expenditure displacement away from small informal microenterprises to newly-established national chains (Tustin, 2008).

Notwithstanding this heightened level of competition

experienced by micro businesses, a percentage of these businesses outside new shopping centres were still in operation more than five years after the opening of shopping malls. The majority of these micro businesses were trading in the same sectors as those located in the newly established malls. The increased level of competition holds several advantages for township consumers. Porter (2008) argues that competition is one of society's most powerful forces for improving conditions in many fields of human endeavour. He states that competition is pervasive, whether it involves companies contesting markets, countries coping with globalisation or even governments responding to service delivery needs. Every organisation needs a strategy to ensure the delivery of superior value to customers, especially in highly competitive environments.

The survival and success of small businesses has been the subject of a great deal of national and international analysis (Everett and Watson, 1998; Lussier and Pfeifer, 2001; Cressy, 2006). In South Africa, detailed studies have been undertaken to analyse growth and development of the small business sector, often with particular focus on informal businesses (Rogerson, 2004). Survival and growth have been associated with many factors, including the effect of policy measures directed at the small business sector, macroeconomic factors, industry factors and firm specific factors (Döckel and Ligthelm, 2005). However, it has to be admitted that economic theory has been of limited help in providing a basis for the linkage between the theory of the firm and the reality of business formation, growth and decline (Wennekers and Thurik, 1999). This resulted in a general agreement with the assessment that the internal dynamics of the growth and survival of the business have remained something of a 'black box' (Freel, 2000).

Analyses of small business viability and growth are often of a descriptive nature, while others are more quantitative in nature. Quantitative studies are usually based on cross-sectional data and not time-series data investigating the lifecycle of a panel of businesses over a longer time period. Most quantitative studies also relate to the identification of characteristics responsible for growth and survival of small businesses that can, in turn, be used to predict survival and growth. Rather than analysing this extensive body of literature, the synthesis provided by Morrison et al. (2003) are relevant. On the basis of their analysis, the human factor is considered to be the overwhelming force that determines whether or not a business prospers. Entrepreneurship and business management ability are particularly important in this regard.

Recent studies in diverse economic contexts confirm the decisive role played by entrepreneurial and management actions in successful economies (Naude, 2008). The increasing interest in the role of especially entrepreneurship to generate growth has been stimulated by, *inter alia*, the successful growth performances in

economies of the so-called 'southern engines of growth' (Brazil, China, India and South Africa). On the other hand, the realisation of the need for private sector development in many fragile and failed states also contributed to this realisation (Naude, 2008).

A wealth of research on entrepreneurship and business formation is available (Strom, 2011). Although entrepreneurs are regarded as the prime movers of economic development, this phenomenon remains elusive (Zachary and Mishra, 2011). In creating a greater understanding of this phenomenon, which forms the key to economic growth and development, Minniti (2008), Strom (2011) and Zachary and Mishra (2011) raise a variety of important research issues relating to entrepreneurial and business success. These issues include the application of entrepreneurial acumen, business formation and the entrepreneurial process, the impact of entrepreneurship, and many more. An understanding of the viability of micro business and entrepreneurship also requires the integration of these phenomena into mainstream standard theoretical models (Baumol, 2010, 2011). However, this area will not attempt the daunting task of uncovering this wealth of knowledge on entrepreneurship research. Rather, emphasis is briefly placed in the rest of this area on entrepreneurial variation in an attempt to guide future focused support programmes towards viable small business and entrepreneurial activity.

Private sector development comprises the creation and growth of businesses through entrepreneurial activities. Naude (2009) states that not all types of entrepreneurship may be beneficial for private sector development and economic growth. Baumol (1990) confirms this view and distinguishes the following entrepreneurial categories: *productive*, *unproductive* and even *destructive* (illegal activities). Productive entrepreneurship encompasses the exploitation of profitable opportunities with inherent growth prospects. Unproductive entrepreneurship is essentially business formation aimed at survival from a situation of unemployment and poverty. Unproductive entrepreneurship is specifically prominent in the informal economy. Berner et al. (2008) reiterate that the motivation of unproductive entrepreneurs is not growth but survival. Survivalist businesses therefore primarily serve as a buffer against descending deeper into poverty. Berner et al. (2008) further argue that policies aimed at stimulating unproductive entrepreneurs are ineffective. Schramm (2004) confirms that policies aimed at promoting unproductive entrepreneurs through programmes such as the reduction in start-up costs and subsidies on formal credit facilities most often do not work. Naude (2009) concludes that the policy response towards informal survivalist entrepreneurs should be to reduce poverty, which is most effectively achieved and sustained through the creation of quality jobs.

In surveys instigated by the Global Entrepreneurship Monitor (GEM) (Herrington et al., 2010) in the 1990s, covering almost 60 countries worldwide, it has become

increasingly common to distinguish between the following two types of entrepreneurs, namely those pursuing business opportunities (*opportunity entrepreneurs*) and those that are involved in entrepreneurial endeavours because they have no other choice of work (*necessity entrepreneurs*). This distinction is derived from the motives for establishing a business. Naude (2009) integrates these concepts as follows:

...Larger numbers of people in developing countries are being pushed into informal and survivalist self-employment; that is, non-productive entrepreneurship. These people are not entrepreneurs by choice and are, in the terminology of the GEM, necessity entrepreneurs... Opportunity-motivated entrepreneurs can be seen as productive entrepreneurs.

Williams (2007) argues that the necessity-push and opportunity-pull dichotomy is now evident in many surveys in different parts of the world and is therefore not only relevant to the developing world.

The world economic recession of 2008 necessitated immense macroeconomic stimulus measures. There is an increasing realisation that as the effects of these measures begins to wane, the only solution is to promote new firm formation and growth as the only sustainable way for the world economy to recover (Strom, 2011). This reality creates the need for identifying and stimulating high-growth and innovative entrepreneurship as a core component of economic growth. Baumol (2011) classified productive/opportunity entrepreneurs into two categories, namely replicative entrepreneurs that react to opportunities and create more new businesses like those around them and innovative entrepreneurs that create new products and services and change the very nature of the market place.

As mentioned earlier, entrepreneurship ranges from productive to destructive or from marginal wealth creation to innovative endeavours that may imply market and consumer demand changes, but without entrepreneurship, most of the world would come to a halt (Zachary and Mishra, 2011). It is a complex and heterogeneous phenomenon requiring intensive investigation to inform policymakers of the importance of entrepreneurship to economic growth and the drivers and barriers to this phenomenon.

## DATA USED IN THE ANALYSIS

To facilitate the analysis of survival prospects of informal microenterprises in an increasingly competitive environment, survey data were sourced from longitudinal surveys conducted among a panel of 300 micro businesses selected in 2007. The businesses that were still in operation were revisited in the subsequent four years (2008 to 2011), providing longitudinal lifespan data for a five-year period. The businesses were located in a five

**Table 1.** Demographic characteristics of the business panel in 2007 and surviving businesses in 2011.

<b>Variable</b>	<b>2007 (300 businesses)</b>	<b>2011 (130 businesses)</b>
<b>Gender of owner (%)</b>		
Male	58.0	58.5
Female	42.0	41.5
<b>Educational level (%)</b>		
No schooling	5.7	1.5
Primary education	27.2	6.9
Secondary education	57.6	85.4
Tertiary education	9.5	6.2
<b>Employment</b>		
Average employment	3.0	2.9
<b>Owner involvement (%)</b>		
Full time	95.7	98.5
Part time	4.3	1.6
<b>Sectoral structure (%)</b>		
Retail: groceries	50.3	55.4
Retail: other	21.4	23.6
Personal services	22.3	17.0
Manufacturing	6.0	4.6

kilometre radius around a new shopping mall established in 2006. The absence of a sample universe precluded a random selection of businesses. A judgemental selection procedure was followed that ensured the selection of respondents by business type (home-based and those established in business-zoned areas), economic sector and size (measured by number of workers).

In addition to questions related to business characteristics and the effect of shopping mall development on respondent businesses, the research instrument also enquired on entrepreneurial actions performed in as well as prior to establishing the business. These questions were presented in the format of statements requesting respondents to rate their level of agreement with the statements on a 5-point scale. Similar questionnaires were completed at the surviving businesses each year and were completed through personal interviews with the owners/managers of the businesses.

The demographic characteristics of the initial business panel of 300 selected in 2007 as well as the demographic characteristics of the 130 surviving businesses in 2011 are shown in Table 1.

The table confirms that the proportional structure of the 2011 businesses largely resembles the 2007 business panel with regard to the following: gender of owners (male 58.0% in 2007 and 58.5% in 2011), average employment (owner included) (3.0 in 2007 and 2.9 in 2011, owner involvement (full time 95.7% in 2007 and 98.5% in 2011) and the sectoral business structure (retail

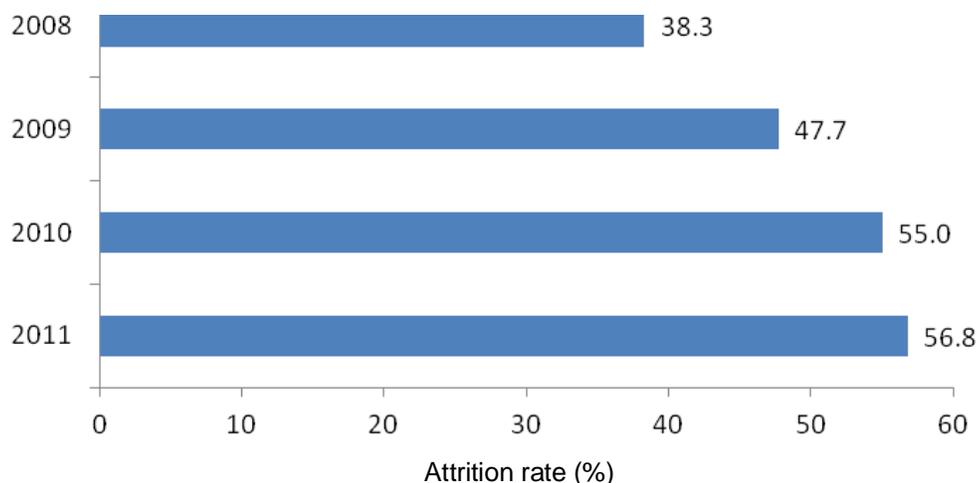
groceries 50.3% in 2007 and 55.4% in 2011). However, what is prominent is the disproportional closure of micro businesses by owners with relatively low educational qualifications. Those with secondary qualifications increased from 57.6% in 2007 to 85.4% in 2011 confirming the importance of educational qualifications in business survival.

#### LIFESPAN DATA

The examination of business survival rates in many developing countries over time illustrates that the average lifespan of small businesses follows a fairly predictable path with only a small percentage that survive longer than five years (Barclays Bank, 2009).

Figure 1 shows the attrition rate of micro businesses in Soweto during the five-year period 2007 to 2011. Of the total of 300 businesses selected in 2007, almost three in every five (56.8%) closed their doors during the 2007 to 2011 period. The attrition rate was particularly high (38.3%) in 2008 (immediately after the opening of the new shopping malls) and showed a declining annual trend. The percentage of businesses closed annually shows the following pattern:

1. 2008: 38.3%
2. 2009: 9.4 %
3. 2010: 7.3%



**Figure 1.** Attrition rate of micro businesses in Soweto, 2007 to 2011.

**Table 2.** Motivation for business formation of Soweto microbusiness panel, 2007 and 2011.

Motivation	2007		2011	
	n	%	n	%
Unemployment	191	63.5	58	44.6
Seizure of business opportunity	54	17.9	40	30.8
Other <sup>1)</sup>	55	18.6	32	24.6
Total	300	100.0	130	100.0

A portion of this category especially those motivated by supplementing their income, may also be classified as opportunity-driven entrepreneurs.

#### 4. 2011: 1.8%

The underlying motivation for business formation is of particular importance in evaluating the lifespan data of micro businesses. The Soweto survey enquired on the motive for entering the business world. The following three broad motives were recorded for micro business establishment:

- a) Unemployment/poverty
- b) Seizure of a business opportunity
- c) Other (for example, taking over of family business and supplementing existing income)

Table 2 shows these data for the initial 2007 business panel as well as for those still in operation in 2011. Almost two thirds (63.5%) of the businesses selected in 2007 for inclusion in the panel indicated unemployment or poverty as motivation for business formation (necessity driven) and only 17.9% could be classified as opportunity-driven entrepreneurs. These percentages stood at 44.6 and 30.8% respectively in 2011. This implies that 70.0% of necessity-driven entrepreneurs closed their businesses during the five-year period 2007

to 2011. In contrast, only 35.0% of opportunity-driven entrepreneurs ceased their business activities during the same period.

Naude (2009) argues that larger numbers of people in developing societies (such as Soweto) are being pushed into informal and survivalist self-employment; that is, non-productive entrepreneurship. These people are not entrepreneurs by choice and are, in the terminology of the GEM, necessity entrepreneurs.

#### METHODOLOGY

For the purpose of this study an econometric modelling technique, using categorical regression was used. The methodology employed consisted of the following five steps:

1. Determining the level of stationarity in the data in order to separate endogenous and exogenous variables. Endogenous variables are defined as those variables over which the business owner can exercise some control while exogenous variables are environmental issues such as interest rate changes, labour regulations and the erection of shopping malls that fall outside the field of control of small business owners.
2. Determining the level of stationarity in the data in order to

separate endogenous and exogenous variables.

3. The endogenous and exogenous variables were separately regressed on business survival as dependent variable.

4. Based on the results of the regression analysis, the F-test was used as an indicator detecting variables causing higher levels of error in the model (decision criterion  $F \geq 1$ ). This step was aimed at minimising error in the model in order to achieve econometric identification of the dependent variable (that is, business survival).

5. Final endogenous and exogenous models were selected after the elimination of variables causing error in the models. This was followed by a variety of colinearity and cointegration tests to verify the integrity of the model.

6. Final reduced-form endogenous and exogenous models describing business survival dynamics were delineated.

7. It is important to note that categorical regression methods were applied to facilitate the investigation of causal relationships in the data. The dependent variable (namely business survival) was delineated into two categories, namely those that survived for at least five years (to 2011) following the 2007 survey and those that closed their doors during the 2007 to 2011 period.

To assist in evaluating the explanatory potential of all the independent variables as predictors of business survival, Table 3 depicts the endogenous variables and Table 4 the exogenous variables used in the model.

Measuring the level of entrepreneurship in businesses is of great research interest. In this study, the level of entrepreneurial acumen embedded in a business is based on a number of entrepreneurial actions associated with entrepreneurship, such as compiling a business plan, analysis of competitors, venturing into a new business, investigation of alternative business investments, motivation for starting a business and setting a future vision for the business (Table 3). The Global Entrepreneurship Monitor (Herrington et al., 2010) states, for example, that an entrepreneur is an individual willing to take a calculated risk to explore a market need with an idea which is sound and economically viable. A business plan is key to demonstrating this. The actions listed in Table 3 were assumed as proxies, indicating the entrepreneurial acumen of business owners. Respondents were asked to indicate to what extent these entrepreneurial-oriented activities were applied in their businesses. As mentioned earlier, the activities were formatted as statements in the questionnaire and responses recorded on a 5-point scale ranging from 'strongly disagree' to 'strongly agree'.

The other endogenous variables considered in Table 3 are also within the spheres of influence of the business owner and captured elements such as business intentions, ability of the business to grow and exploring business opportunities. Morrison et al. (2003) confirm that the success of small businesses is guided by the integration of the intentions of the owner/manager assisted by factors associated with the ability of the specific business to grow and its opportunity for growth. Intention factors relate to the personality/characteristics of the owner. Factors that may fall into this category are full- or part-time involvement, educational level and age of the owner. The ability variables are captured in the entrepreneurial acumen of the owner/manager, discussed in the previous paragraph. The legal status of the business, business location, age and size variables of the business, are additional ability factors that could be quantified. Opportunity factors are the ones on which policy makers usually focus (Dockel and Ligthelm, 2005). These factors include market conditions, access to finance, public sector regulation and labour market conditions. Growth performance of the business (turnover) is considered a proxy for market conditions, but cannot capture all the market factors such as the macroeconomic environment and the degree of competitiveness in a specific sector. The majority of these opportunity factors such as the macroeconomic environment and regulatory factors can be classified as exogenous and therefore fall outside the

control of the business owner.

The variables contained in Table 4 depict the effect of the external environment impacting on the sustainability of informal micro businesses. The exogenous variables encompass only those related to the heightened level of competition resulting from the establishment of national chain stores/franchises in the township areas. Exogenous variables related to the macroeconomic and institutional environment such as government regulations and access to commercial finance are not contained in the dataset. The omission is not considered to be critical, reasons being that micro businesses seem to be relatively less concerned about access to and cost of commercial credit and finance (World Bank, 2007), labour regulation plays a minor role (mostly employ family members), and business operations are on such a small scale that only simple business activities are applied.

The quantitative analysis was supplemented with in-depth interviews with a selection of business owners to generate a more in-depth understanding of the reasons behind business sustainability. The interviews were also aimed at establishing the strategic and adaptive behaviour of micro business owners to counter the heightened level of competition.

## RESULTS AND INTERPRETATION

The regression coefficients obtained by estimating the full model are presented in this area. The two groups of variables (endogenous and exogenous) are discussed separately.

### Endogenous predictors

Table 5 shows the regression coefficients calculated for the endogenous variables. The variables included explain 60.4% of the variation in the independent variable.

According to the results in Table 5, 10 variables are extremely prominent in predicting micro business survival at a 1% level of significance. These variables reflect a strong representation of entrepreneurial-related actions (roles) such as the regular investigation of alternative business investments, ease of venturing into new businesses, setting of a future vision for the business and the motivation for starting the business (opportunity-driven rather than necessity-driven). Other endogenous variables on the 1% level of significance are the following: age of the business, business location, maintenance of financial records, business turnover and the educational level and age of the owner. The following factors are prominent at a 5% level of significance and can therefore also be regarded as strong predictors of business sustainability: construction of a business plan, regular analysis of competitors, status of the business owner (full-time rather than part-time involvement), and the legal status of the business (incorporated rather than sole ownership).

Of marginal importance at a 10% level of significance is the size of the business measured in terms of number of employees. The table also shows that the business sector (retail, personal services or manufacturing) does not affect business sustainability significantly.

**Table 3.** List and description of endogenous independent variables used to quantify the sustainability of businesses.

Variable	Description
Entrepreneurial acumen	Completion of a business plan prior to starting the business
	Regular analysis of competitors
	Regular investigation of alternative business investments
	Ease of venturing into a new business
	Motivation for starting the business (necessity and opportunity entrepreneurs)
	Future vision of business
Other endogenous variables	
Business sector	Three sectors were identified, namely retail, personal services and manufacturing
Age of business	Years in existence
Legal status	Two categories, namely sole proprietorship and multiple ownership (partnerships, close corporations and companies) were distinguished
Business location	Businesses in demarcated business areas or in-home businesses in residential areas
Size of business	Number of employees
Financial bookkeeping	Maintaining financial records or not
Educational level	Four categories, namely no schooling, primary education, secondary education and post-matric qualifications
Age of owner	Age of business owner
Turnover of business	Three monthly turnover categories were identified, namely less than R5 000 (US\$660), R5 000-R10 000 (US\$660-US\$1 320) and more than R10 000 (US\$1 320).

**Table 4.** List and description of the independent entrepreneurial variables used to quantify the sustainability of businesses.

Variable	Description
Competitors	The sources of competition are: business located in the mall, business located in 'old' shopping centres and in-home business
Competition from the mall (Formulated as statements in the questionnaire)	Similar businesses in the mall selling same products as microbusinesses
	Similar businesses in the mall offer better customer services than microbusinesses
	Soweto inhabitants prefer leisure shopping environment in malls
	Reduction in employment after opening of the mall

**Entrepreneurial predictors**

As shown in Table 3, several entrepreneurial actions associated with entrepreneurship are identified. These range from the construction of a business plan to the motivation of starting a

business to setting up a future vision of the business.

A comparison of the F ratios of the 2010 and 2011 regression results, in combination with the descriptive statistics, shows substantial increases in the following F ratios confirming their stronger

predictive value in micro business survival: motivation for starting a business (seizure of business opportunity rather than necessity-driven business formation), age of the business (the propensity of panel businesses to survive increased annually among surviving businesses), its

**Table 5.** Regression coefficients indicating which endogenous factors are significant contributors to business sustainability.

Variable	Beta	Std error	df	F	Sig <sup>1)</sup>
<b>(a) Entrepreneurial activities</b>					
Construction of a business plan	-0.101	0.084	4	1.1444	0.022 <sup>xx</sup>
Regular analysis of competitors	-0.101	0.066	1	2.314	0.013 <sup>xx</sup>
Regular investigation of alternative business investments	0.238	0.120	3	3.899	0.010 <sup>xxx</sup>
Ease of venturing into a new business	-0.194	0.067	3	8.469	0.000 <sup>xxx</sup>
Future vision of business	0.110	0.045	6	5.938	0.000 <sup>xxx</sup>
Motivation for starting a business	0.191	0.058	5	16.126	0.000 <sup>xxx</sup>
<b>(b) Other endogenous variables</b>					
Business sector	0.049	0.035	2	1.981	0.140
Age of business	0.187	0.047	7	16.126	0.000 <sup>xxx</sup>
Status of business owner	0.102	0.044	1	5.383	0.021 <sup>xx</sup>
Legal status	0.078	0.045	3	2.930	0.034 <sup>xx</sup>
Business location	0.185	0.061	3	9.282	0.000 <sup>xxx</sup>
Employment	0.095	0.051	1	3.433	0.065 <sup>x</sup>
Financial bookkeeping	0.104	0.044	2	5.649	0.004 <sup>xxx</sup>
Educational level	0.155	0.038	6	16.851	0.000 <sup>xxx</sup>
Age of the owner	-0.087	0.043	4	4.083	0.003 <sup>xxx</sup>
Turnover	-0.258	0.065	6	15.525	0.000 <sup>xxx</sup>

R square 0.693; adjusted R square 0.604; F ratio 7.815; significance of R ratio 0.000 where; <sup>xxx</sup>, <sup>xx</sup> and <sup>x</sup> denote 1, 5 and 10% levels of significance respectively.

turnover (business survival correlates positively with business turnover) as well as the educational level of the owner (positive correlation between educational level and business survival).

### Exogenous predictors

Table 6 presents the predictive potential of exogenous variables on business survival. These variables explain 17.9% of the variation in the independent variables.

According to the level of significance, strong exogenous predictors of business survival include the competition experienced from both businesses in the new shopping malls as well as from other small businesses and specifically the fact that small businesses offer better customer services than micro businesses. Table 6 also confirms that the leisure activity associated with mall shopping and the fact that similar products are also available in small businesses, did not preclude shopping at micro businesses.

The aforementioned confirms that the small businesses in the study area operate in a highly competitive environment, not only with regard to businesses located in the shopping mall itself but also from small businesses in the direct vicinity of the respondent businesses. The calculations also confirm that the reduction of employment by micro businesses counter the effect of competition by

businesses in the shopping mall.

### In-depth interviews

As indicated in the methodology area, the predictive value of the independent variables for business survival in the aforementioned model, were supplemented with in-depth interviews with a selection of the surviving businesses. The results of these interviews clearly confirm the results of the regression model, namely the pivotal role of the human element in business survival. The latter specifically embraces the role of entrepreneurial orientation and the application of sound business management principles. On an operational level, the following strategic adjustments, among others, were recorded during the interviews: realignment of product lines by focusing on new and fast-moving products and eliminating unprofitable ones, reducing product lines and stock levels, adjustment of pricing strategy to ensure competitiveness and introducing convenience premiums, human development strategies aimed at higher productivity and lower labour costs, and a strong focus on customer service. A strong emphasis was also reported on the realignment of the small business with its changing customer profile and demand structures as well as a continuous monitoring of competitors, both in the shopping malls as well as other micro businesses. This

**Table 6.** Regression coefficients indicating which exogenous factors are significant contributors to business sustainability.

Variable	Beta	Std error	df	F	Sig <sup>1)</sup>
Competitors	0.227	0.051	6	20.095	0.000 <sup>xxx</sup>
Similar businesses in the mall selling same products	-0.154	0.098	2	2.471	0.086 <sup>x</sup>
Similar businesses in the mall offer better customer services	-0.360	0.060	2	35.769	0.000 <sup>xxx</sup>
Soweto inhabitants prefer leisure shopping in mall	0.216	0.171	2	1.594	0.205
Reduction in employment due to mall development	0.323	0.053	3	36.940	0.000 <sup>xxx</sup>

R square .212; adjusted R square 0.179; significance of F ratio 6.448; standard error of estimate 0.000; Where <sup>xxx</sup> and <sup>x</sup> denote 1 and 10 % levels of significance respectively.

differentiation confirms the essential role of innovation in entrepreneurial action as discussed earlier in the study.

## SUMMARY

Embedded entrepreneurial acumen in informal micro businesses emerged as a significant positive factor in business survival. Of particular importance are entrepreneurial actions/orientations illustrated by, inter alia, the regular investigation of alternative business investments, setting a future vision for the business, ease of venturing into a new business opportunity and particularly the motivation for business formation (seizure of business opportunities). Practical actions such as constructing a business plan prior to business establishment and the regular analysis of competitors also testify towards a typical entrepreneurial mindset. Other endogenous predictors for business survival include the following:

1. The age of the business, this reflects market experience, business maturity and the ability of the owner to manage the business through ups and downs of the business cycle.
2. Location of the business. Businesses in demarcated business areas (outside shopping malls) show substantially higher survival potential than in-home businesses.
3. Financial bookkeeping. Businesses maintaining financial records such as budgets, cash flow statements and procurement records show substantially higher survival rates.
4. Businesses with higher turnover levels show higher levels of sustainability. The majority of these businesses are opportunity-driven businesses.
5. Businesses belonging to owners with higher educational attainments (especially secondary school qualifications) show higher levels of sustainability.
6. Businesses of older owners show higher levels of sustainability than those of younger owners.

With regard to exogenous variables, the results of the analysis confirmed that the heightened level of competition experienced by informal micro businesses from especially businesses in shopping malls exercised a

major negative influence on business survival. On the other hand, it would seem that the additional consumer spending within the township area due to a decline in out shopping expenditure and the rapid increase in the income of Soweto inhabitants, created additional growth opportunities for some businesses. However, the endogenous and especially the entrepreneurial variables identified earlier suggest a prerequisite for a business owner to actively explore such potential growth prospects. This view is supported by the fact that some of the micro businesses operating within identical sectors as those newly established in shopping malls, managed to survive and even expand while others closed their doors. The aforementioned findings clearly confirm the negative effect of the heightened competitive environment on small business survival. This conclusion enlightened the first research question, namely the effect of the more intensive competitive environment on small business survival. Despite this finding, the longitudinal survey over a five-year period (2007 to 2011) shows that just more than two in every five businesses managed to survive despite the heightened level of competition. The strong predictive value of the human element in business survival informed the second research question through confirming the decisive role of especially entrepreneurship in small business survival. The ability to adapt one's business model to changed economic circumstances is an important characteristic of entrepreneurial conduct that ultimately dictates viability. The findings are indicative of the variation in entrepreneurial acumen in developing societies, ranging from necessity entrepreneurs forced into informal self-employment (that is, unproductive entrepreneurship), who lack inherent skills to adapt to changed economic circumstances, to productive entrepreneurs who are ingenious and creative in finding ways to add to their own and society's wealth. These latter entrepreneurs in the informal economy are largely small replicative entrepreneurs often operating in a highly competitive environment.

## IMPLICATIONS OF THE STUDY

Entrepreneurship and small business policies embrace long-term environmental issues such as the promotion of

entrepreneurial initiative, more favourable attitudes towards entrepreneurship as well as the integration of entrepreneurship education at schools and all levels of post-secondary education. However, policies also embrace elements with potential short-term effects such as proactive measures to facilitate the entry to the market for enterprises (reduction of barriers to entry), provision of seed financing, start-up support such as mentoring and incubators and tailored efforts to increase participation in business ownership from specific under-represented groups (Smallborne, 2005). As indicated in the introduction, there is a growing realisation that policy measures (especially operational measures with short-term effects) should be more specific and targeted towards small businesses with growth potential. The study makes a contribution in the sense that it quantifies some of the important factors responsible for growth in micro businesses. Apart from demand factors, which are important, it has been found that several factors relating to the human element in businesses, especially entrepreneurial skills, emerge as the key predictors of small business sustainability. At the other end of the scale, a large number of informal micro businesses in developing societies are only survivalists and owners enter the business world not by choice but to escape poverty and unemployment. These businesses are unproductive and will remain mere survivalists with limited growth potential.

The necessity/unproductive versus opportunity/productive business or entrepreneurship dichotomy creates a useful distinction to inform government policy choices. Small business support strategies, especially in developing societies with limited resources, should be focused on businesses with embedded entrepreneurial acumen and hence the inherent dynamics to create and exploit new innovative economic opportunities. This focused strategy should exclude the bulk of necessity-oriented businesses that will (in the overwhelming majority of cases) remain unproductive and survivalists. As mentioned earlier, the target for business support should be opportunity entrepreneurs/businesses while the response towards necessity entrepreneurs should be the creation of formal sector jobs. This approach will be more effective in alleviating poverty.

Indeed, improved policy outcomes depend on additional entrepreneurial-oriented research that will inform policymakers of the importance of entrepreneurship to economic growth and of the drivers of and the barriers to this phenomenon (Strom, 2011).

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