

Entrepreneurship and small business sustainability

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ABSTRACT

South Africa is experiencing immense structural changes in its household income patterns and retail environment. Inhabitants of township areas have experienced substantial economic upliftment. Many township consumers have progressed to middle-income status, resulting in a significant increase in consumer spending. As a result, large national chains and franchisors are increasingly exploring these untapped markets. Township areas were, until the end of the last century, dominated by small (often informal) businesses which became subject to heightened levels of competition due to these mentioned developments. Findings from longitudinal surveys among a panel of 300 small businesses in Soweto between 2007 and 2009 were modelled through a categorical regression model with business survival as dependent variable. The level of significance of 18 independent variables suggest that entrepreneurial acumen and business management skills be classified as the strongest predictors of small business survival. The ability to adjust one's business model to adapt to changed economic circumstances is an important characteristic of entrepreneurial conduct that ultimately dictates survival in increasingly competitive economic environments.

Key words: entrepreneurship, small business development, business sustainability, competition

Introduction

Small (often informal) businesses dominate the economic life of most developing countries (Gollin 2008: 2). Until the mid-1990s, a similar phenomenon was also evident in the developing urban areas (townships) of South Africa. Small businesses

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served as convenience shops primarily for the lower income groups, attracting a sizeable portion of household expenditure in less developed urban areas (Ligthelm 2007: 12). Surveys in Soweto confirmed that almost half the retail expenditure of the least affluent income groups was expended at small businesses within Soweto itself in 2004 (City of Johannesburg 2005: 15).

South Africa has made significant strides in improving the living standards of previously disadvantaged communities, especially those living in township areas. Studies on economic class dynamics confirmed that the African middle class (township dwellers) experienced the most significant gains in respect of improvements in social class and household income during the period 1998 to 2008 (Ligthelm 2008a: 3). The rapid income growth of township inhabitants resulted in substantial changes, not only in the share of the African population in total household income and expenditure but also with regard to the structure of expenditure. The latter implies a much more diversified demand structure away from basic daily needs such as food and shelter to a full spectrum of household consumption items including semi-durable and durable goods.

This retail restructuring in terms of geographic location (towards townships) and social class (towards the African population group) has impacted, and will continue to impact, on expansion strategies of national retailers and franchisors, especially supermarket chains, to increasingly focus on market expansion strategies in township areas. The sustainability of these markets is also confirmed by the fact that more than 80% of residents of Soweto indicated that they plan to stay in Soweto for life (Tustin 2008: 50). As a result, large shopping malls have been developed in almost all township areas with sizeable population numbers during the past five years. This development has resulted in a substantial change in the shopping behaviour of township dwellers. Both outshopping (in other words, the extent of shopping outside one's own township) and purchases from small township businesses have been displaced in favour of shops located in newly established shopping malls. In Soweto, for example, the percentage of retail expenditure by Soweto residents increased from 25.0% in 2004 (City of Johannesburg 2005) to 81.2% in 2008 (Tustin 2008: 29).

Notwithstanding this heightened level of competition experienced by small businesses, a large percentage of small businesses outside shopping centres were still in operation more than a year after the opening of shopping malls. The majority of these small businesses were trading in the same sectors as those located in the newly established malls. This 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 foregoing presents the following two research questions, namely the ability of small informal businesses to survive amidst a heightened level of competition from large formal businesses and secondly, in the case of survival, what variables may be instrumental in ensuring sustainability.

Objective of the study

The primary aim of the study was to calculate the survival rate of small businesses within the rapidly changing trade environment. This is based on longitudinal empirical surveys. The data set also allowed for contrasting the business profiles of successful businesses with those closing their doors and for identifying principal reasons for small business sustainability in a more intensive competitive environment. Particular emphasis is placed on the role of entrepreneurship in small business survival.

Entrepreneurship in developing societies

The study of the concept of entrepreneurship is a developing science, investigated from a wide range of perspectives in most disciplines from economics and management sciences to psychology (Landström 2005: 31–37; Naude 2010: 1). In terms of theory, significant progress has been made in advancing the field of entrepreneurship and small business as an important field of scientific inquiry (Mullen, Budeva & Doney 2009: 287). Instead of discussing the gist of scientific insight into, and knowledge of, the entrepreneurial domain in the various disciplines, this section touches on the role of entrepreneurship in economic development with a specific focus on developing societies. The importance of such a perspective emanates from the fact that the study of entrepreneurship should take into account both the individual and the society within which it is embedded (Swanepoel & Strydom 2009: 2). This aligns with the argument of Aldrick (1992, in Stevenson 2004: 3) that in entrepreneurial research, the individual, the organisation and the development context need to be studied. Venkataraman (1997, in Li & Mitchell 2009: 370) also maintains that entrepreneurship and its context are inseparable. This contextual perspective is highly relevant in evaluating the empirical results of the study due to the prominent structural changes occurring in townships during the past decade.

There is little doubt amongst proponents of private sector development that entrepreneurship is the key to economic growth and development (Minniti 2008). This increasing interest in the role of entrepreneurship to generate growth has been stimulated by, inter alia, the successful growth performances in the economies of the so-called 'southern engines of growth' (Brazil, China, India and South Africa) and by the realisation of the need for private sector development in many fragile and failed states (Naude 2008: 1). However, the dynamics of entrepreneurship are not realised only in developing economies. Advanced economies are also characterised by a variety of support measures to stimulate entrepreneurial development. Understanding entrepreneurship in these diverse economic contexts is important in informing the design of appropriate policy measures.

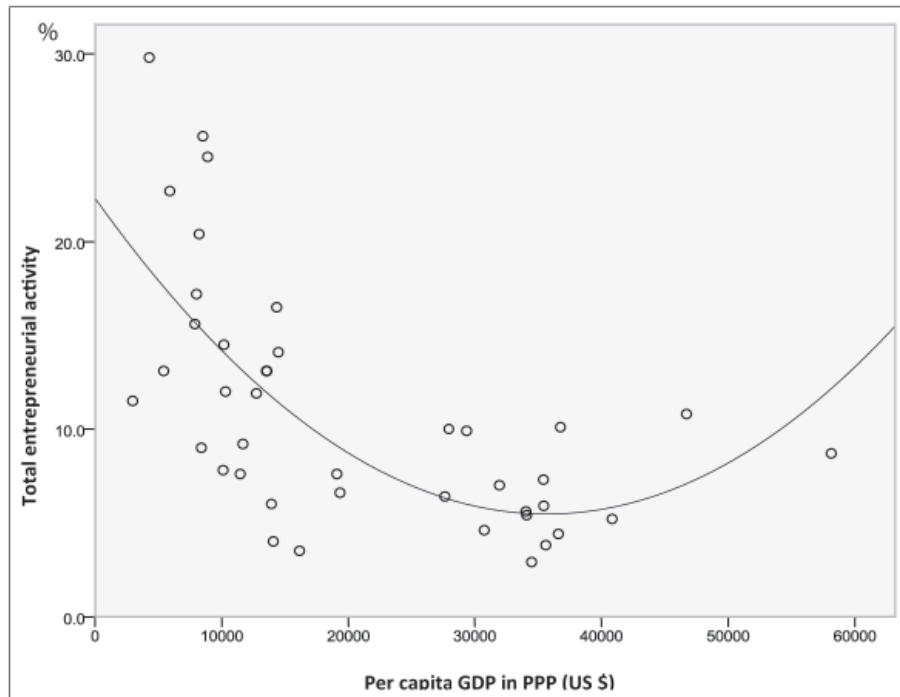
In South Africa, the less developed areas (townships and communal areas) operated largely as distinct economic entities until the mid-1990s. From a business and entrepreneurial perspective, they show strong characteristics of developing economies, contrasting prominently with the more developed and advanced economic areas of South Africa. As mentioned in the introduction, the business profile of townships used to be characterised predominantly by small unsophisticated informal businesses. Since the mid-1990s, this dualism has gradually faded towards integration with the modern economic system.

International literature suggests a differentiated role of entrepreneurship by level of development (Wennekers & Thurik 1999: 38; Herrington, Kew & Kew 2008: 15; Naude 2010: 26). Empirical studies suggest a U-shaped relationship between entrepreneurial activity (self-employment) and the level of development. This relationship is depicted in Figure 1 using GEM (Global Entrepreneurship Monitor) entrepreneurship and World Bank per capita income data. The GEM (Herrington et al. 2008: 15) data depict total entrepreneurial activity (TEA) in 42 countries. TEA is defined as early stage entrepreneurship measured as all new businesses in operation for less than 3.5 years. World Bank per capita income for 42 countries is transformed to PPP (Purchasing Power Parity) values (World Bank 2009).

The U-shaped fitted line in Figure 1 was obtained by regressing entrepreneurial activity on per capita GDP. The result was as follows: per capita GDP succeeded in explaining 45.4% of the variance, and the model variance obtained was 17.5 times more than the error variance, indicating a statistically significant relationship of the variables at a 0.000 level of significance. This result confirms a statistically significant non-linear (quadratic) relationship between level of entrepreneurship and level of economic development.

The U-shaped relationship between entrepreneurship (as proxied by TEA) and development (as proxied by GDP per capita) can be interpreted as follows. At relatively

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Sources: SAARF (2009); World Bank (2009)

Figure 1: Relationship between TEA and per capita GDP (2008)

low levels of per capita income, dependency is relatively high on self-employment due to a lack of sufficient wage employment. At low levels of economic activity, households are largely responsible for funding for themselves in the absence of larger businesses offering employment and/or governments supplying social security benefits. Naude (2008: 27) confirms that at low levels of economic activity, many individuals revert to self-employment, often with limited profitable opportunities. Higher levels of per capita GDP through economic growth and development often equate to growing urban agglomeration, growing markets and economies of scale. The latter result in the availability of increasing paid-employment opportunities. This increases the opportunity costs of self-employment, with a resulting decline in the ratio of self-employment to wage-employment and thus declining entrepreneurial activity.

According to Wennekers, Van Stel, Thurik & Reynolds (2005: 295), a turning point in the U-shaped graph is activated by structural changes in the economy. The manufacturing sector starts declining, with a concomitant growth in the service sectors with increasing levels of income per capita. The transition from a capital-

driven stage in economic growth to a knowledge-driven stage creates many more opportunities for business ownership. Growth in the service sector, together with the adoption of new technologies, which lessens the need for economies of scale, opens up many new opportunities that can be utilised by small businesses, and leads to a rise in self-employment and thus entrepreneurial activity.

Although the preceding empirical evidence is derived from cross-country analysis, the entrepreneurial dynamics relevant in national economies progressing from developing to advanced may also be relevant for township economies transforming from a relatively low level of development towards integrating into an advanced economy. In both cases, an economic transformation from less developed to more advanced is presumed that may impact (similarly) on the levels of self-employment (proxied for entrepreneurship). However, the time span in the case of township transformation is much more rapid than in normal national economic transformation.

Analysis specific to South Africa, relating personal income levels to self-employment, shows similar patterns with regard to entrepreneurial dynamics. Table 1 shows the percentage of the self-employed in relation to total employment (population 18 years and older). The self-employed (proxied for entrepreneurship) stood at 17.8% for those earning a monthly income of between R1 001 and R2 500 in 2008. This percentage dropped to 11.1% for the R2 501 to R5 000 income group and gradually increased to 60.5% for the most affluent group (R40 000 plus per month). With the exception of the least affluent income group (less than R1 000 per month), a U-shaped curve is also evident. People with relatively low incomes (primarily located in townships and communal areas) tend to be fairly active in informal, less productive businesses (see next section). This level of self-employment initially declines as income levels increase to the next category (R2 501 to R5 000), but shows a strong upward trend with further income increases.

Table 1 also shows the percentage of self-employed people with their educational qualifications by income group. The data clearly confirm a positive relationship between educational level and self-employment. The relatively low 5.9% of self-employed in the poorest income category (less than R1 000 per month) confirms their inability to pursue entrepreneurial activities requiring numeracy and literacy skills.

Variations in entrepreneurship

Entrepreneurship is inherently heterogeneous. Wennekers & Thurik (1999: 30) assigned at least 13 distinct roles to entrepreneurship, varying from being an innovator and assuming risks to being a decision-maker and industrial leader. Entrepreneurship

Table 1: Self-employment and educational level by personal income category (2008)

Income category per month	% of self-employed to total employment	% of self-employed with a maximum of primary school qualification (%)	Some high school and matric (%)	Post matric (%)	Total (%)
R1-R1 000	5.9	42.2	56.5	1.2	100.0
R1 001-R2 500	17.8	25.2	71.2	3.7	100.0
R2 501-R5 000	11.1	12.1	77.5	10.4	100.0
R5 001-R10 000	16.2	9.3	53.9	36.8	100.0
R10 001-R20 000	24.3	0.4	52.4	47.2	100.0
R20 001-R40 000	39.2	0.7	33.7	65.6	100.0
R40 000+	60.5	0.0	35.2	64.8	100.0

Source: SAARF (2009)

need not result in the creation of new businesses. Naude (2009: 3) confirms that the behavioural notion of entrepreneurship has been broadened to include the concepts of corporate entrepreneurship, intrapreneurship and various forms of non-market entrepreneurship (for example, public and social entrepreneurship). This section will not attempt the daunting task of delineating these concepts, especially as studied across many disciplines. The construction of the U-shaped curve in the previous section is only concerned with the role of entrepreneurs in creating new businesses. This section will briefly explore the different types of entrepreneurship in establishing new businesses included in constructing the curve.

According to Baumol (1990: 895), not all entrepreneurship is beneficial for economic growth and development. A distinction can be drawn between productive, unproductive and even destructive (for example, illegal) entrepreneurship. Productive entrepreneurship encompasses the exploitation of profitable business opportunities with inherent business growth prospects. Unproductive or informal entrepreneurship is essentially business formation aimed at survival or escaping from a situation of unemployment and poverty. Berner, Gomez & Knorringa (2008: 1) confirm that the motivation of informal entrepreneurs is not growth, but survival. The GEM report (Herrington et al. 2008) also distinguishes between two types of entrepreneurs corresponding with productive and unproductive entrepreneurship. Entrepreneurs who pursue a business opportunity are referred to as opportunity entrepreneurs, while those who are involved in an entrepreneurial endeavour because they have no other choice of work are referred to as necessity entrepreneurs.

In developing countries and societies, it is apparent that larger numbers of people are being compelled to enter into informal/survivalist/necessity self-employment, which constitutes unproductive entrepreneurship (for example, rent-seeking) (Naude 2008: 4). Gollin (2008: 219) confirms that, due to fewer formal employment opportunities, the economic life of most developing countries is dominated by small necessity entrepreneurs.

Although this phenomenon raises the level of self-employment (entrepreneurship) in the U-shaped curve, this type of entrepreneurship is very often nonproductive and frequently rent-seeking. Wennekers & Thurik (1999: 29) confirm that small and microbusinesses are not necessarily synonymous with entrepreneurship, because many of these businesses do not contribute to economic growth and development. As development progresses, the proportion of people in self-employment declines, as many informal/necessity entrepreneurs find more suitable wage employment. This perspective of entrepreneurial dynamics in a developing context will be considered in interpreting the decline in small informal businesses in the empirical section of the study.

Measuring entrepreneurship

The examination of the role of entrepreneurship in small business survival requires some measurement of the entrepreneurial magnitude embedded in a business. Measurement is often conducted statistically at an aggregate level using the occupational definition that describes entrepreneurs as the self-employed – based on the notion that a person can be unemployed, self-employed or in wage employment. This approach allows an aggregate count of the number of self-employed (static measurement) or the rate of business start-ups (dynamic measurement) (Wennekers & Thurik 1999; Herrington et al. 2008; Naude 2008).

The implication of measurement on the aggregate level is that the level of entrepreneurial acumen within an individual business, or the differences between types of entrepreneurship, are not captured. Since the middle of the last century, a considerable body of research by personality theorists has emerged to explain entrepreneurial behaviour and intentions in terms of personality traits (Cromie 2000; Müller & Gappisch 2005). However, they failed to present conclusive evidence on profiling an entrepreneur (Llewellyn & Wilson 2003: 343). This implies that measuring the level of entrepreneurship ex ante to business formation and growth through personality trait measurement is not a reliable instrument.

During the 1980s, entrepreneurship researchers started to focus more on what entrepreneurs do rather than what their character traits are. This activity-based

focus was strongly propagated by researchers in the economic and management sciences (Kruger 2004: 6). Timmons (1999: 21) also confirms that the science of entrepreneurship is moving beyond characteristics towards the behavioural phase, concentrating not on what personalities entrepreneurs have but on what it is that they do. In this regard, entrepreneurship is still a developing science, exploring tools for measuring entrepreneurship in business formation, sustainability and growth at an individual business level (not aggregate measurement).

Examining the level of entrepreneurial conduct exercised in the small business sample of this study required the identification of operational elements of entrepreneurship for inclusion in the questionnaire as statements. Respondents were requested to indicate the extent to which these entrepreneurial actions were applied in their business establishments and their operations. These entrepreneurial-related actions are discussed in a subsequent section (see Table 3). They relate closely to innovative and creative actions to ensure business sustainability in heightened competitive circumstances. This approach has been applied in longitudinal studies and clearly shows a predictive value of the relationship between individual business survival and entrepreneurial acumen (Ligthelm 2008b).

The study of entrepreneurial-related actions activates the question of the difference between entrepreneurship and management. No clear-cut categorisation is possible in this regard. Wennekers and Thurik (1999: 47) state that entrepreneurship is not an occupation and that entrepreneurs cannot be regarded as a separately defined occupation class. Even obvious entrepreneurs may exhibit their entrepreneurship only during a certain phase of their career and/or exercise it only during a part of their business-related activities. Hitt, Ireland, Camp and Sexton (2001) maintain that entrepreneurship can often be seen as part of the management function within businesses. This argument is especially relevant if entrepreneurial action does not result in the creation of new businesses (for example, intrapreneurship and corporate entrepreneurship). However, Naude (2009: 3–4) argues that there is now substantial agreement that there is a difference between the entrepreneur and the manager of a firm. Innovation is highlighted as the essential distinguishing characteristic or function of the entrepreneur as opposed to the manager. However, in-depth interviews with small business respondents later in the study confirm that the distinction between business management and entrepreneurial activities remains blurred and difficult to clearly demarcate and measure in scientific enquiry.

Longitudinal data set used in the analysis

In order to fully understand the survival prospects of small township businesses in a newly competitive environment, small township businesses located around a newly established shopping mall (Jabulani Mall) in Soweto were sampled and interviewed. Within Soweto, the study area was defined as a radius of 5 km around the Jabulani Mall, which was established in 2006. The absence of a sample universe precluded a random selection procedure in establishing the business panel for longitudinal survey purposes. The panel of small businesses included all types of businesses in all the economic sectors. As mentioned in the introduction, the entire small business population in Soweto consists predominantly of small businesses, including home-based businesses or businesses established in demarcated business areas. Only hawkers/street vendors were excluded from the sample population, since their mobility makes it almost impossible to trace and accommodate them in a longitudinal small business study. A differentiated sample selection approach was followed. A census was conducted among all the businesses operating from 'old' demarcated business areas. With regard to home-based businesses, 20 locations (street crossings) were randomly selected (four in each one kilometre concentric circle around the mall). All the home-based businesses in the four residential blocks cornering at the street crossings were included in the sample. All the businesses selected for inclusion in the survey expressed their willingness to participate. The survey was first conducted in July 2007 (one year after the opening of the Jabulani Mall) and repeated in July 2008 and July 2009. The results of the surveys were validated with previous surveys in the study area and proved to generate reliable and valid results.

The survival and attrition of the panel of businesses over the three-year period (2007 to 2009) is shown in Table 2. Of the total of 300 businesses selected in 2007, almost two in every five (38.3%) closed their doors during the July 2007 to July 2008 period. This percentage increased to almost half (47.6%) by July 2009. The table also shows that the attrition rate is substantially higher among home-based businesses compared to small businesses operated from old shopping centres. Although a relatively low average employment figure of 2.6 per business was recorded in 2007, the average employment size of home-based businesses (2.1) was smaller than that of businesses in 'old' shopping centres (3.3 employees). Employment usually involved the owner with family members and sometimes paid employees as well.

In addition to questions related to the effect of shopping mall development on respondent businesses, the research instrument also enquired on entrepreneurial and management actions performed in and prior to establishing the businesses. These questions were presented in the format of statements with a request to respondents to rate their level of agreement with the statements on a 5-point scale, ranging from

Table 2: Composition of small business panel (2007 to 2009)

Business type	2007 business panel Number)	Closed down				Still in operation			
		2008		2009		2008		2009	
		No.	%	No.	%	No.	%	No.	%
Home-based businesses	160	75	46.9	92	57.5	85	53.1	68	42.5
Businesses in shopping areas	140	40	28.6	51	36.4	100	71.4	89	63.6
Total	300	115	38.3	143	47.6	185	61.7	157	52.4

‘strongly disagree’ to ‘strongly agree’. The research instrument also contained several questions aimed at establishing the characteristics and dynamics of the small business sector in Soweto.

Methodology

The statistical analysis makes use of a categorical regression model to facilitate the investigation of causal relationships in the data. This model was preferred over other categorical association measures such as chi-square, Cromer’s V and Lamda, which would not allow the same level of analysis, especially with regard to causal relationships. An additional reason for using a categorical regression model derives from the usage of both ordinal and nominal data in the model as well as the fact that the dependent variable is dichotomous. The dependent variable is defined as small business survival with two categories, namely businesses that survived and those that closed their doors. In the statistical analysis, the following two data sets were used:

- (a) Businesses that survived for at least one year following the 2007 survey and those that had closed their doors within one year of the 2007 survey (namely, between July 2007 and June 2008), and
- (b) Businesses that survived for at least two years following the 2007 survey and those that had closed their doors within two years of the 2007 survey (namely, between July 2007 and June 2009).

The independent variables used as explanatory variables for small business survival in the first data set mentioned in (a) above are derived from entrepreneurial acumen embedded in the sample businesses. The independent variables selected for this purpose are shown in Table 3.

The independent variables used as explanatory variables for survival in the second data set mentioned in (b) above are classified according to the following categories,

Table 3: List and description of independent variables used to quantify business survival: first data set (2007/2008)

Entrepreneurial acumen	(i) Compiling a business plan
	(ii) Regular updating of the business plan
	(iii) Marketing strategy for the business
	(iv) Risk analysis prior to starting the business
	(v) Regular analysis of competitors
	(vi) Consideration of alternative business investments prior to starting the business
	(vii) Ease of venturing into a new business
	(viii) Not a problem to take calculated risks

namely competition from the newly established mall and competitive advantages explored by small businesses in their struggle for survival. These independent variables are shown in Table 4.

Table 4: List and description of independent variables used to quantify business survival: second data set (2007/2009)

(a) Competition from the mall	(i) Mall businesses sell similar products
	(ii) Mall businesses offer better customer services
	(iii) Mall businesses offer better product quality
	(iv) Mall businesses sell products cheaper
	(v) Mall businesses are more accessible
	(vi) Mall offers leisure shopping environment
(b) Competitive advantages of small businesses	(i) Providing credit would attract customers
	(ii) Longer and flexible hours would attract customers
	(iii) Product offerings in smaller quantities would attract customers
	(iv) More secure and safe environment

The reason for using two data sets in the analysis is dictated by the fact that the 2009 survey, although amongst the same business panel (sample units) as the previous surveys (2007 and 2008) (sample elements), shows some variation with regard to the respondents. This implies that the same businesses were interviewed in all three surveys, but the respondents between the 2007 and 2009 surveys show

substantial variation. This has a limited effect on business-specific questions such as the length (number of years) of business operation, but may have an effect on person-related statements such as the following: 'I am not scared to risk funds in a new business venture.' The entrepreneurial-related statements were phrased in the first person, while all the other statements were directly linked to the business rather than to the respondent. As a result, the independent variables related to entrepreneurial activities (Table 3) were analysed by using the 2007 and 2008 survey results, while the independent variables related to competition and competitive advantages (Table 4) were analysed according to the 2007 and 2009 survey results.

To assist in evaluating the explanatory potential of the independent variables as predictors of business survival, the following reasoning is presented with regard to entrepreneurial skills, competition from the mall and competitive advantages of small businesses.

The role of entrepreneurial activities as independent variables (Table 3) can be motivated as follows. The survival and success of small businesses has been the subject of a great deal of international analysis (Everett & Watson 1998; Lussier & 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: 766). Promoting entrepreneurial spirit increasingly emerges as the key to business success. It forms the energy behind the establishment and growth of business ventures. Measuring the level of entrepreneurship in businesses is of great research interest. As discussed earlier in this study, the focus of entrepreneurial research has shifted in the past two decades from personality theories aimed at profiling entrepreneurial personality traits to a more activity-based approach. The level of entrepreneurial skills applied in the business sample is therefore based on a number of operational elements of entrepreneurship such as compiling a business plan, analysis of competitors, venturing into a new business and willingness to take calculated risks. The Global Entrepreneurship Monitor (2007) states, for example, that an entrepreneur is an individual willing to take a calculated risk to explore a market need with an idea that is sound and economically viable. A business plan is key to demonstrating this. These practical actions were assumed as proxies, explaining the entrepreneurial skills of business owners. Respondents were asked to indicate the extent to which these entrepreneurial actions were applied in their businesses. The activities were formatted as statements in the questionnaire, and responses were recorded on a 5-point scale ranging from 'strongly disagree' to 'strongly agree'. In interpreting the results, it is important to note that just more than half the business panel reported unemployment as the reason

for starting their businesses. This confirms the evidence that informal/survivalist/unproductive businesses predominate in developing societies.

With regard to the first category in Table 4, namely competition exercised by businesses in the newly established shopping mall and hence their competitive threat to small businesses, the following elaborates on the change in the competitive environment in township areas and clearly represents contextual issues as discussed earlier in this study. Prior to the establishment of shopping malls, the business fraternity in the study area consisted exclusively of small (often informal) businesses supplying basic necessities to households. Rapid household income growth among township dwellers during the past decade, together with the expressed opinion of the majority of township dwellers not to relocate to more affluent suburbs, created lucrative retail opportunities for national chain and franchise businesses in these emerging markets. A 45 000 m² shopping mall with more than 100 stores anchored by a 4 000 m² supermarket and a fashion component of 18 000 m², was established in the study area (Jabulani Mall 2009). This elevated competition with existing small businesses to considerable heights.

The second category in Table 4 (competitive advantages of small businesses) identifies actions that small businesses may apply to counter the competition experienced from businesses in the mall. Competitive advantages occur when businesses develop an attribute that allows them to outperform or counter the offerings of their competitors. Porter (2008: 40–42) identifies, *inter alia*, the following as methods for creating sustainable competitive advantages: delivering the same service as competitors but at a lower cost, differentiation of services not available from competitors and/or exploring the offering of services for creating a local market niche. The latter two aspects in particular are explored in the data set for this study by eliciting small business respondents' reaction to aspects including offering services such as credit, breaking of bulk, and longer and flexible hours. These aspects also suggest a close relationship with entrepreneurial actions. Analysing market conditions and competitors, for example, is regarded in this study as typical entrepreneurial procedures that are often a prerequisite for designing sustainable counter strategies such as those mentioned (for example, credit, flexible hours and product offerings in smaller quantities). The extent of applying these actions would assist in differentiating between productive and nonproductive entrepreneurs.

The independent variables listed in Tables 3 and 4 do not exhaust all the potential factors that influence business sustainability. Notable factors excluded are those related to the external business environment such as the macroeconomic environment (for example, interest and exchange rates) and sectoral-specific issues such as demand and supply conditions prevailing in the various economic sectors of the economy.

Aspects such as government support programmes and their efficacy as well as the regulatory environment are also not discounted as independent variables.

Results and interpretation

The results from the analysis of variance are depicted in Table 5. These show that the model variances (1.592 and 3.073 for the two data sets respectively) are considerably higher than the error variances (0.816 and 0.436), indicating that the different predictors separately and conjointly succeeded in predicting business survival significantly at a 95% level of certainty.

Table 5: Analysis of variance of the two data sets

	Sum of squares	df	Mean square	F	Sig
2007-2008 data set					
Regression	106.684	67	1.592	1.952	.000
Residual	171.316	210	0.816		
Total	278.000	277			
2007-2009 data set					
Regression	190.532	62	3.073	7.053	.000
Residual	98.468	226	.436		
Total	289.000	288			

The regression coefficients obtained by estimating the full model are presented in Tables 6 and 7. Given that a total of 300 observations were used, the fairly large number of variables listed can be included in the regression to determine which ones are significant in determining small business survival.

The standardised coefficients with regard to entrepreneurial acumen in Table 6 were found to present strong predictors of small business survival. With regard to entrepreneurial acumen, the majority of variables fall below the 0.050 level of significance and can therefore be regarded as strong predictors of business survival. These include the following:

- Compilation of a business plan
- Regular updating of business plan
- Regular analysis of competitors
- Ease of venturing into a new business
- Not a problem to take calculated risks.

These factors relate strongly to entrepreneurial actions and orientation, and where present in a business, are regarded as prominent predictors of survival. Of particular importance is the strong predictive value of the last two variables, namely the 'ease of venturing into a new business' (0.016) and it is 'not a problem to take calculated risks' (0.000). These two variables strongly relate to entrepreneurial acumen, while the first three mentioned variables may also reflect an element of business management orientation together with its entrepreneurial flavour. Table 6 also shows some entrepreneurial actions between the 5% and 20% levels of significance. Statistically, these three aspects (namely, marketing strategy for the business, risk analysis prior to starting the business and considering alternative business investments) can therefore be considered as of marginal significance. However, the list of entrepreneurial actions contained in the research instrument as proxies for entrepreneurial skills is fairly extensive and not all need to be executed/applied to 'qualify' a business owner as engaging in entrepreneurial conduct. Furthermore, some of the actions can be inclusive of other actions, for example, the compilation and updating of a business plan might include a marketing strategy and/or risk analysis. (This will be tested further in subsequent entrepreneurial research projects. Particular emphasis will be placed on the entrepreneurship: management relationship in this regard.)

Table 6: Regression coefficients indicating the significance of entrepreneurial variables to small business survival

Variable	Standardised coefficients				
	Beta	Std error	df	F	Sig
Completion of a business plan	.269	.118	2	5.221	.006
Regular updating of business plan	-.202	.111	2	3.301	.039
Marketing strategy for the business	-.129	.089	3	2.104	.101
Risk analysis prior to starting the business	-.101	.077	2	1.715	.183
Regular analysis of competitors	.159	.079	3	4.037	.008
Consider alternative business investments prior to starting the business	.101	.069	1	2.100	.149
Ease of venturing into a new business	-.157	.076	2	4.236	.016
Not a problem to take calculated risks	.243	.092	4	7.017	.000

Table 7 shows the regression coefficients indicating the significance of variables relating to competition from the mall and competitive advantages in relation to small business survival.

With regard to competition from the mall, only two variables – namely ‘mall businesses are more accessible (0.734), and ‘mall offers leisure shopping environment’ (0.756) – did not affect business survival significantly. The significance levels of the other variables in the category fall well below the 0.050 level of significance. The following emerge as strong predictors of small business survival/attrition: selling of similar products, offering of better customer services, offering of better product quality and businesses in the mall, selling cheaper products than what is offered by/available from small businesses.

Considering the entrepreneurial acumen embedded in small businesses as well as the competitive threat of mall development, some strategic action is required to sustain existing small businesses. Section (b) of Table 7 shows the application of the following competitive advantages of small businesses as strong predictors of business survival at a 0.050 level of significance:

- Provision of credit
- Product offerings in small quantities
- More secure and safe environment.

A strategy of longer and flexible hours to attract customers to small businesses does not seem to be of any significance ($\text{sig} = 0.802$), the probable reason being that shopping mall owners expect tenants to adhere to fairly long operating hours on a daily basis, effectively limiting any potential competitive advantage of longer and flexible hours for small businesses.

These findings, depicting the magnitude of the competitive environment in the study area, clearly confirm the negative impact of mall development on the existing small business fraternity and the effect of the economic environment on business survival. This conclusion enlightens the first research question, namely the possible negative impact of the more intensive competitive environment on small businesses in townships. The variables relating to this phenomenon are strong predictors of small business survival. Despite this finding, the longitudinal survey over a three-year period (2007 to 2009), shows that more than half (see Table 2) the businesses survived amidst the heightened level of competition. The majority of these businesses that survived were similar to those that closed down with regard to economic sector, business type, ownership structure, employment size and distance from the mall (Ligthelm 2009: 9). The strong predictive value of entrepreneurial acumen and business management skills, as independent variables of small business sustainability, confirms the decisive role of the human element in small business survival.

In addition to testing the predictive value of the independent variables for business survival in this model, in-depth interviews were also conducted with a selection of

Table 7: Regression coefficients indicating the significance of factors relating to the effects of competition and competitive advantages on small business survival

Variable	Standardised coefficients				
	Beta	Std error	df	F	Sig
(a) Competition from the mall					
Mall businesses sell similar products	-.213	.086	3	6.130	.001
Mall businesses offer better customer services	-.204	.088	4	5.430	.000
Mall businesses offer better product quality	.175	.071	4	6.125	.000
Mall businesses sell products cheaper	.166	.085	2	3.832	.023
Mall businesses are more accessible	-.093	.131	4	.502	.734
Mall offers leisure shopping environment	-.062	.098	3	0.396	.756
(b) Competitive advantages of small businesses					
Providing credit would attract customers	-.245	.062	3	15.363	.000
Longer and flexible hours would attract customers	.054	.094	3	.332	.802
Product offerings in smaller quantities would attract customers	-.155	.065	3	5.655	.001
More secure and safe environment	.138	.066	3	4.371	.005

survivalist businesses to generate a more in-depth understanding of the reasons behind business sustainability. 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 embraces both the role of entrepreneurial initiative and the application of sound business management principles. At an operational level, the following strategic adjustments were, inter alia, 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; 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. This differentiation confirms the essential role of innovation in entrepreneurial action, as discussed earlier in the study.

In summary, the study shows that major structural changes are prevalent in township areas. Considerable income growth of inhabitants during the past decade

has created large untapped emerging markets effectively explored by property developers and ultimately the opening of national chains and franchise businesses in new malls. These new shopping mall developments have created heightened levels of competition for the small business fraternity that dominated the business scene before the erection of the new malls. Longitudinal trends show a gradual decline in the number of small businesses as a result of the increased competition. It was noted that small businesses of similar business type and within similar sectors reported severe negative impacts, while others recorded minimal or even positive effects from mall development. By modelling the business population into two subpopulations (namely, those still operating and those that closed down), it was possible to identify predictors for survival through a categorical regression model. Entrepreneurial action, linked to sound business management skills, was identified as a positive discriminatory factor for business survival. The ability to adjust one's business model to adapt to changed economic circumstances is an important characteristic of entrepreneurial conduct that ultimately dictates survival in increasingly competitive economic environments. The latter finding confirms the differentiation in entrepreneurial quality in developing societies, ranging from productive entrepreneurs, who are ingenious and creative in finding ways to add to their own and society's wealth, and necessity/unproductive entrepreneurs, forced into informal/survivalist self-employment (in other words, nonproductive) entrepreneurs, who lack survival abilities in increasingly competitive market conditions.

Conclusion

As already indicated, there is a growing realisation that small business sustainability has been associated with many factors, including the effect of policy measures directed at the small business sector, and macroeconomic, industry and firm-specific factors (Dockel & Ligthelm 2005). However, it must be acknowledged that economic theory has been of little help in explaining the reality of business formation, growth and decline (Wennekers & Thurik 1999). One must largely agree with the assessment that the internal dynamics of the growth of small businesses have remained something of a 'black box' (Freel 2000: 321).

A number of analyses of small business sustainability and growth are descriptive, while others are more quantitative. Most of the quantitative studies focus on identifying the characteristics of growth in businesses. Freel (2000) argues that research that only enumerates frequencies and is capable of asking only 'what' and 'how many' questions, while neglecting the 'why' and 'how' questions of small business sustainability and growth, offers less rich explanations of the process

driving small business survival and growth. After analysing the literature on business sustainability, Morrison, Breen and Shameen (2003: 418) synthesise the literature by proposing a framework for identifying small business sustainability and growth factors and their characteristics. They confirm the finding in the discussion earlier in the study that the human factor constitutes the overwhelming force that determines whether or not a business will survive and prosper. They propose that small business success is based on clear, positively motivated business intentions and actions on the part of the owner/manager to achieve the desired outcome. The picture emerging from the analysis in this study supports this finding and highlights entrepreneurial behaviour as the key predictor of small business sustainability. At the other end of the scale, a large number of business entrants in developing societies are not entrepreneurs by choice and are only rent-seekers awaiting employment opportunities in a growing economy with increasing numbers of wage employment. These businesses will remain survivalists or eventually close down.

This finding also informs strategies aimed at supporting small business development, especially in developing societies. Limited financial and other resources available at traditional small-business support institutions preclude the possibility of spreading policy initiatives broadly to include the entire small business sector. The focus should be on the small percentage of businesses with embedded entrepreneurial acumen and hence the inherent dynamics to perceive and create new economic opportunities such as new products, new production methods, new organisational methods and new product:market combinations (Wennekers & Thurik 1999: 46). Governments and international development agencies often wish to promote informal small entrepreneurs to grow and eventually 'graduate' to become formal, larger businesses (Naude 2009: 4). Schramm (2004) finds that most often these policies do not work due to the fact that the motivation of informal/necessity entrepreneurs is not growth, but survival (Berner et al. 2008: 1). The analysis in this study confirms that the human factor, and particularly, the business's entrepreneurial endowment and motivation, largely dictate its survival and growth potential. Small businesses exhibiting entrepreneurship should be the focus of small business support strategies. Entrepreneurship in its strongest and purest form is at the level of small and medium-sized enterprises, where individualism, self-reliance and risk-taking are particularly prominent (CDE 2004: 11).

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