TARGETING SUPPORT TO GROWTH BUSINESSES IN A RESOURCE CONSTRAINED ENVIRONMENT: EVIDENCE FAVOUR THE USE OF A MIXED APPROACH

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Abstract

The objective of this study, conducted in Sri Lanka, was to determine the predictor characteristics to classify post start-up small businesses as growth and non-growth to target support to growth businesses. Results are based on a questionnaire survey. Chi-Square test and Discriminant analysis were used to find the predictor characteristics that best classify small businesses into the two groups, "growth" and "non-growth". The results suggest the possibility of identifying a large majority of growth businesses through the use of above quantitative techniques. However, these techniques incorrectly identified a significant number of non-growth businesses as growth businesses. Based on the findings of this study the use of mixed methods, that combine qualitative and quantitative techniques, are recommended to select businesses for targeted support.
Key words: Small business, developing countries, targeting support

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Introduction

In developing countries many small businesses fail in their first five years often due to the inability to effectively identify and resolve the obstacles to their growth (Mata, 2005). The collapse of a high percentage of small businesses suggests the need to provide support to these businesses in order to arrest the high failure rates. There is considerable variation in the views expressed in the literature concerning the extent to which there should be government intervention in supporting the small business sector. In view of the scarce resources, the central issue in providing support is that of determining to whom the support should be given. To target support to high growth businesses this study explores the possibility of identifying their characteristics using a mixed methods research design. This research design is developed by using a combination of quantitative and qualitative approaches (Johnson & Onwuegbuzie, 2004). These methods used in one study provided complementary information from different perspectives on the issues investigated. This facilitated the identification of emerging SMEs with growth potential, the factors influencing their growth, and the owner-managers capable and committed to grow their businesses, to provide targeted support.

Literature Review

Why support small businesses? A good reason is that these businesses help to generate new employment. If all small businesses in a country added one person to their role it would make a significant contribution to alleviate the unemployment problems due to their large representation in the business sector (Birely, 1986). Many governments therefore show strong policy interest in small business. This has particular relevance to Sri Lanka where small businesses represent 92.4% of the total number of business establishments (Department of Census and Statistics, 2006). Governments, therefore, have a responsibility to create an environment that safeguards the underlying resilience and survival capabilities of the small businesses and facilitate their development.

Supporting the resource poor, labour intensive small businesses is a prudent approach to alleviation of poverty in a developing country. World Bank and UNDP are two international organisations that have provided considerable support to SME development. Many governments too show strong policy interest in small business. Success of Small businesses due to government support interventions has been observed in Vietnam and other South East Asian countries (Hansen, Rand & Tarp, 2004; Nguyen et al., 2009; Tambunan, 2008). On the other hand lack of support has been found to be a hindrance to SME development (Swierczek & Ha, 2003). Even worse is the real possibility of demise of small but potential "born globals" due to lack of support. However, Storey (1983) questioned the usefulness of the interventionist approach to supporting small businesses.

Sims, Breen & Ali, (2002) stated that dynamic environments provide opportunities to all entrepreneurial businesses. Therefore, the support agencies can contribute to the growth of

SMEs by understanding the impediments to growth and designing support programmes to overcome them. Smallbone and Welter (2003) asserted that the strategic government initiatives to encourage the development of appropriate market institutions such as banks, financial institutions, and training institutions are a boon to small business development. However, there is debate in the literature about where to direct support. Some favour the proactive approach of picking winners and supporting them, as they account for most of the job growth in the small business sector (Buss, 2002; Friar & Meyer, 2003). Those who oppose this view prefer a much broader support regime to all the small businesses.

Storey (1994) found that over a ten year period, the fastest growing 4% of the small businesses accounted for 50% of the new jobs created. Autio, Kronlund and Kovalainen (2007) suggest that providing "little help" to everyone may not be effective in achieving small business growth. The authors further emphasise the importance of "resource focus" rather than "resource spread" to meet the high demand of fewer fast growth firms. Past studies that investigated the influence of numerous internal characteristics on small business growth have found it difficult to determine the criteria to pick the winners. Therefore this study investigated the existence of any linkages between small business growth and a number of company, owner-manager and strategic characteristics. To this end the following three hypotheses were proposed. They are: **H1**: For post start-up stage small businesses there are significant differences in employment growth between businesses with different company (age, geography, location, industry, ownership) characteristics. **H2**: For post start-up stage small businesses there are significant differences in employment growth between businesses with different owner-manager (age, gender, education, past experience, reason to start) characteristics. **H3**: For post start-up stage small businesses there are significant differences in employment growth between businesses with different strategic (business objectives, performance and planning) characteristics.

Method and Results of the Study

The sampling frame of 9789 businesses was provided by the Department of Census and Statistics. It included small businesses from 16 industries. A sample of 950 small businesses was selected using a proportional stratified sampling technique. The number businesses selected from each stratum using simple random sampling technique was representative of its population. 323 businesses responded to the survey. The overall response rate was 34%. Two other SME studies conducted in Sri Lanka had response rates of 30.1% (ADB/Sri Lanka, 2003) and 26.2% (Wijewardena, De Zoysa, Fonseka, and Perera, 2004). These figures suggest that non- response bias is not issues in this study. A higher percentage of the businesses were located in urban areas (56%). The majority of businesses were sole proprietorships (57%). Employment growth was examined according to the change in employment numbers between year one after start-up and the time of survey. Only a minority of businesses recorded employment growth (18%). A majority declined or remained static (82%). This is consistent with past findings that only a few small businesses have the potential and propensity to grow and prosper (Hall, 1995). The majority of owner-managers surveyed were male (85%). For the vast majority of owner-managers their current business was the first business they had owned (72%). A larger proportion was previously unemployed (31%). A majority of the businesses surveyed were engaged in business planning of some form (57%).

Analysis of Hypotheses: Determining the Predictors of High Growth Businesses

Pearson's Chi-Square tests were used to determine characteristics associated with observed levels of growth in employment. Table one reveals that differences in employment growth between businesses based on company characteristics were significant in three instances: company age, urban/rural location and company ownership. Hypothesis one was supported in relation to these characteristics. No difference was seen for "province" of the business, or the "business sector" (Table two). In these two instances hypothesis one was not supported.

Table 1 - Characteristics that distinguished "growth" and "non-growth" businesses

Characteristic	Variable	Pearson's Chi-Square	P-Value
Company	Company age	17.19	p<.05
Company	Urban/Rural (location)	4.86	p<.05
Company	Ownership	25.52	p<.05
Owner-manager	Educational qualifications	44.06	p<.05
Owner-manager	First business (past experience)	16.60	p<.05
Owner-manager	Motivations to start	22.12	p<.05
Strategic	Financial objectives	65.14	p<.05
Strategic	Employment growth ambitions	38.25	P<.05
Strategic	Financial performance	25.06	P<.05
Strategic	Undertake some form of planning	35.71	P<.05
Strategic	Formality (written/unwritten)	56.61	P<.05
Strategic	Planning period	27.71	P<.05

P<.05 = significant

Table 2 - Characteristics not distinguishing "growth" and "non-growth" businesses

Characteristic	Variable	Pearson's Chi-Square	P-Value
Company	Name of province (geography)	0.42	n.s.
Company	Business sector (industry)	2.01	n.s.
Owner-manager	Owner-manager age	4.41	n.s.
Owner-manager	Owner-manager gender	3.56	n.s.

n.s = not significant (p>.05)

Significant differences in growth were found across owner-managers' education levels, whether they were in their first business and by their motivations for starting a business. Hypothesis two was supported in these three instances (Table one). However, no differences were seen across the owner-managers' age and gender. Thus hypothesis two could not be supported in these two instances (Table two). Significant differences in employment growth were observed in relation to all six variables associated with strategic characteristics (Table one). Thus, hypothesis three was supported in all six instances.

Targeting Support to High Growth Businesses

It is hard to identify in advance the small businesses that will experience high growth (Stam *et al.* 2007). However the the Chi-Square tests (Tables one) found growth to be associated with 12 of the 16 variables examined. This suggests the possibility of using a discriminant model to predict which firms are the best candidates for employment growth. Therefore, to select the best predictor variables of "growth" and "non-growth" businesses (dependent variable) based

on minimisation of Wilks' Lambda (Norušis, 2003), stepwise discriminant analysis was conducted. Stepwise process identifies a reduced set of variables that provide a statistically significant discrimination across groups. It eliminates the variables that are not useful in discriminating between the groups. Hair *et al.* (2006) emphasised that the reduced set of variables identified by the stepwise process is almost as good, and sometimes is even better than the complete set of variables. This analytical process resulted in a model with only two variables (ie. "undertakes some form of planning," and "first business") in the analysis. The average value for the discriminant function for "growing" companies was 0.836 as compared to - 0.183 for "non-growth" companies (Functions at group centroids). It is a significant difference in means possible for a linear combination of two variables. This suggests the discriminant function successfully distinguishes between the two groups.

Classification Results

The results summarised in Table three show that out of the original 56 growth businesses, 52 were correctly classified as "growth" businesses and four were incorrectly classified as "non-growth" businesses. Of the 256 declining/static businesses, 130 were correctly classified and 126 were incorrectly classified. As a percentage, 92.9% of the growing businesses were correctly classified and 7.1% were incorrectly classified. Of the "non-growth" firms 50.8% were correctly classified. Overall, 58.3% of the sampled businesses were correctly classified.

Table 3 - Discriminant analysis - Employment growth classification results based on company, owner-manager, and strategic characteristics

		Increase in Number of Employees	Predicted membership		
			Growth	Non-growth	Total
Original	Count	Growth	52	4	56
		Non-growth	126	130	256
	%	Growth	92.9	7.1	100.0
		Non-growth	49.2	50.8	100.0
Cross-validated	Count	Growth	52	4	56
		Non-growth	126	130	256
	%	Growth	92.9	7.1	100.0
		Non-growth	49.2	50.8	100.0

58.3% of original grouped cases correctly classified.

Discussion

The stepwise discriminant analysis demonstrated independent variables "undertake some form of planning," and "first business" to show an association with employment growth. The above procedure correctly predicted the group membership of 92.9% "growing" businesses. This high predictive accuracy of suggests that using the above two variables there is a very good chance (92.9%) of correctly identifying the businesses that eventually make a contribution to employment growth. It suggests a possibility of targeting support to high growth post start-up small businesses, on the basis of the two characteristics ("first businesses" and "planning") identified by the stepwise discriminant analysis. However, the classification results also indicate that there is a 49.2% chance of incorrectly classifying "non-growth" businesses as "growing" businesses if selection is made using the above two

variables (Table three). What these indicate is that the discriminant function is able to correctly classify a higher proportion of growth businesses that were similar in terms of the two characteristics "undertakes some form of planning" and "having had a previous business." Thus these two characteristics appear to be necessary conditions for achieving growth. Similarly, the discriminant function might have easily identified those businesses that did not plan and where the owner-manager did not previously owned another business as "non-growth" businesses. But, the classification success of only 58.3% suggests that the above two characteristics are not sufficient conditions for the identification of "non-growth" businesses. This is reflected in the low values for the Canonical correlation (.365) and Eigenvalue (.154) which indicates that the discriminant function is not strongly related to the two groups of small businesses. Overall results suggest that even though it may be possible for the discriminant function to distinguish between "growth" and "non-growth" businesses that were similar in terms of planning and owner-manager's prior business ownership, discriminating between firms with different permutations of these characteristics into two groups is difficult. For example: those that planned but had an inexperienced owner-manager. It is also possible there are still other unidentified factors that distinguish between these two groups of businesses. These probably explain the incorrect classification of 49.2% non-growth businesses. It suggests that even though there are significant difference between "growth" and "non-growth" businesses in terms of the above two characteristics these may not be sufficient to make a successful prediction. Therefore to select growth businesses equitably for targeted support further investigation is recommended using a qualitative approach. The specific characteristics recommended for investigation are the growth ambitions, educational qualifications and the formality of planning. Chi-square tests conducted initially found these characteristics to distinguish between the two groups. Of these Owner-managers' education and attributes of planning undertaken can be easily verified independently. It is possible, but less easy, to establish the true ambitions to grow a business.

Conclusions

To establish a support policy targeted at firms that eventually grow, requires not only the ability to pick winners but also to avoid losers. Even though the stepwise discriminant analysis was highly successful in picking high growth businesses, it incorrectly classified a large percentage of "non-growth" businesses. This result suggests that the quantitative techniques used in this study to pick small businesses with high growth potential were only partially successful. Past researchers who experienced similar difficulties in making accurate distinction between small businesses with different growth potentials proposed that support should be focused on older, more developed businesses that have demonstrated growth in the past. The disadvantage of this option is that young small businesses with potential for growth such as the "born global" would be deprived of the required support. This leaves one possible solution, that of supporting all post start-up businesses without any targeting. A limitation of this is its high prohibitive costs. Given the resource constraint environment that is prevalent in developing countries providing support to all businesses is not a prudent solution. Therefore it is recommended the use of a mixed approach that combines qualitative and quantitative techniques to pick the potential winners for targeting support.

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