

Entrepreneurship success factors: an empirical investigation in Sri Lanka

Introduction

Governments worldwide have recognized Small and Medium-size Enterprises (SMEs) for their contribution to the economy stability and growth, employment and new job creation, and social cohesion and development (Morrison *et al.* 2003; Santarelli and Vivarelli, 2007). Moreover, during the economic recession of the last several years and the debt crisis in the euro zone, SMEs have retained their position as the backbone of the European economy accounting for more than 98 percent of all enterprises, for 67 per cent of total employment and 58 percent of gross value added (EU, 2012). In the United States, small businesses make up 99.7 percent of U.S. employer firms, 48.5 percent of private-sector employment, 63 percent of net new private-sector jobs, and 33 percent of exporting value. About half of all new establishments survive five years or more and about one-third survive 10 years or more (SBA, 2014). In Sri Lanka, SMEs make up more than 80 percent employer firms, contribution to the GDP and generation of employment is more than 70 percent. The business failure rate in Sri Lanka is 45 percent. Thus, creation and existence of SMEs is crucial for the stability of the economy, size and quality of employment, and socio-political structure of a nation (Nooteboom, 1988).

Because SMEs are so important to the economy and society (Nooteboom, 1988), public policy makers and other stakeholders have put efforts in helping to boost creation of new small businesses and reduce the incidents of failure and bankruptcy (Carter and Van Auken, 2006). Therefore, predicting SMEs fate in terms of success and failure has become an important area of research (Davidsson and Klofsten, 2003; Marom and Lussier, 2014; Pompe and Bilderbeek, 2005). Such research on the prediction of success versus failure would benefit current and would be entrepreneurs, as well as variety of other stakeholders including parties who assist and advise them, investors and institutions who provide them with capital, communities and society by and large (Dennis and Fernald, 2001). However, finding out which factors lead to small business success and failure is still an ongoing and unfulfilled effort that research continue to pursue (Rogoff *et al.*, 2004). Important research questions include:

- Which resources are most important to entrepreneurial development (West *et al.*, 2008)?
- Why do some businesses succeed and others end up bankrupt (Carter and Van Auken, 2006)?
- Which variables explain and predict success versus failure (Halabi and Lussier, 2014)?
- Is there a robust global success versus failure prediction model (Marom and Lussier, 2014)?

With so many unanswered research questions, public policy cannot easily determine which firms to provide support to, what type of support is most needed, and how to provide support (Halabi and Lussier, 2014).

Literature Review and the Selected Model

There is great discrepancy in the literature as to which variables do in fact lead to success, thus, there currently is no theory (Lussier and Halabi, 2010). Also, as stated by Bono and McNamar (2011), there is a need to test models in multiple countries to assess the robustness of the findings. To move the field in that direction, the goal of this research was to

help answer these research questions by testing the Lussier (1995) success vs failure model in Sri Lanka where there are no prior success versus failure (S/F) research studies that could be found, which can further qualify the model robustness for wide use as a global prediction model. Sri Lanka represents not only a different location on the globe, but also differs from others by size, age, economy, geo-political situation and highly diverse society and culture.

Multiple success versus failure (S/F) models have been offered in the past (Cooper *et al.*, 1991; Dennis and Fernald, 2001; Pompe and Bilderbeek, 2005; Reynolds and Miller, 1989). However, the Lussier (1995) S/F model is among the most extensive because it is based on 15 variables that have been identified previously by numerous studies to be influential factors on success and failure of small businesses (Lussier 1995, 1996a, 1996b; Lussier and Corman 1996; Lussier and Pfeifer 2000). To date, the Lussier S/F model has been validated in different parts of the world including the U.S.A. (North America), Croatia (Central and Eastern European), Chile (South America), and Israel (Middle East).

The Lussier (1995) model was based on an extensive review of the literature to better understand why some businesses succeeded and others failed. Various variables that may influence success or failure of small businesses have been discussed in numerous articles including entrepreneurs' previous business experience (Saffu *et al.*, 2008), managerial knowledge and experience (Mu *et al.*, 2007; Lewrick *et al.*, 2011), marketing knowledge and orientation (Akroush and Al-Mohammad, 2010; Lewrick *et al.*, 2011), age and education (Zamberi, 2012; Zamberi and Xavier, 2012; Ndedi, 2013), and financial factors (Sriram and Mersha, 2010; Zamberi, 2012; Klonowski, 2012; Zamberi and Xavier, 2012). To be included in the Lussier (1995) S/F model, a variable had to have been included in a study that had at least three variables identified as contributing factors to success and failure. Fifteen variables were identified in the literature and for each of the variables a hypotheses was developed to explain the relationship between the independent variable and the dependent variable performance—success vs. failure. Because a “model” was developed and tested, the 15 variable hypotheses are not tested and reported separately. Although, prior researchers concluded that success factors vary in different countries (Benzing *et al.*, 2009), the S/F model was significant in four very different countries and parts of the world. Thus, the primary research hypothesis was that the model would also predict S/F in Sri Lanka.

Sri Lanka's Business environment and Entrepreneurial Attributes

Geopolitical Situation

Sri Lanka is an island of the Indian Ocean. It was formally called Ceylon. It has a total area of 65,610 km², with 64,740 km² of land and 870 km² of water. Its coastline is 1,340 km long. The local kingdom system of government of the country remained for more than 2500 years and later Portugal and Netherland colonized the country before the island ceded to British in 1815. The city of Colombo was established as the administrative centre, and the British established modern schools, colleges, roads and churches that brought Western-style education and culture to the native people. In 1948, Sri Lanka regained its political freedom.

Sri Lanka has a very long business history of more than a thousand years. The country had always been a habitual important place for merchants of the ancient business world. Many ships from various parts of the world (Middle East, Persia, Burma, Thailand, Malaysia, Indonesia and other parts of Southeast Asia) came to Sri Lanka to conduct business. Therefore, Sri Lanka had always been an important port and trading hub in the ancient world. Europeans brought a series of tea, cinnamon, rubber, sugar, coffee and indigo plantations to the country. Nowadays those products such as tea, rubber and coconut have become traditional products. However, Sri Lankans experienced the bitterness of civil war for more

than three decades. Civil war was ended in 2009. Therefore, Sri Lankan economic development has been progressing since 2009. Economic growth in terms of GDP is now more than 6 percent. Today tourism is the main attraction. Natural beauty is a heritage of Sri Lanka. World leading UK Magazine "Conde Nast Traveller" ranked Sri Lanka as the 3rd hottest new holiday destination to travel in 2012, and Lonely Planet ranked Sri Lanka as the number one destination in the world to visit in 2013.

Entrepreneurship motivation

Sri Lankan entrepreneurs are culturally different from entrepreneurs of a West. Gamage *et al.* (2003) revealed that the entrepreneurship models in existence in Sri Lanka are often based on the assumptions of Individual Achievement and personality trait theory. They further describe that empirical research into entrepreneurial motivations in Sri Lanka is rooted not in a need for individual achievement, but in the conscious or unconscious need to satisfy a sense of social intimacy. The study found that social power, social relations and collectivism create a setting for entrepreneurial motivation in Sri Lanka, which is almost directly counter to Western ideologies of entrepreneurial motivation. They recognize very important socio-cultural institutions that have an impact on entrepreneurs. Those are family, caste, education and religion which have distinct structures and relationships to individuals. Further, Gamage, *et al.* (2003) identified seven main socio-cultural patterns: dependence, lack of self-confidence, accepting the status quo, work for livelihood, resistance to change, kinship and respect for authority. They tend to highlight that the Sri Lankan society always expects social responsibility and sharing attitudes, rather than favoring quick achievement of higher expectations by individuals. Education of the country encourages individual dependency and generates a lack of self-confidence for engaging in self-employment.

Methodology

Survey instrument

The primary methodology of this study was using the previously validated Lussier (1995) research study questionnaire in Sri Lanka. However, the Lussier 15 variable model was reduced to 10 variables by dropping the variables considered less relevant in Sri Lanka: use of professional advice, economic timing, age of owners, parents owned a business, and minority ownership. Sri Lankans speak English, so no translation of the questionnaire was needed. However, the Lussier (1995) questionnaire was pilot tested in Sri Lanka for content validity with a sample of 25 entrepreneurs. Based on the pilot test, minor word changes were made to ensure local context understanding of the questions.

Measurement

The dependent variable for testing the model was success or failure. A business that met any one of the following three criteria was considered to be a failure. (1) The business is suffering continuing losses for more than three years, (2) the business is suffering liquidity problems—problems paying salaries and to its creditors, or (3) the business went bankrupt or liquidated/closed. If a business did not meet any of these criteria, it was labeled a successful business. See Table 1 for a list of the 10 independent variables with their measurement levels.

Data collection

Three sources were used to distribute the questionnaires to respondents. These three sources are (1) meeting entrepreneurs directly (source: accounting firm of the researcher), (2) account

executives (source: weekend educational institute for accounting studies), and (3) accounting firms.

In total 760 questionnaires were distributed in Colombo and its suburbs, and 529 were returned. However, 79 were not used due to errors or missing data, resulting in a response rate of 70 percent. Thus, 450 respondents' data was used for the statistical analysis, including 200 failed and 250 successful businesses.

In some cases the questionnaires were completed through interviews, rather than mail/email data collection due to its inherent advantageous of a higher percentage of responses and the ability to provide the owner with further explanations about the questions. In addition, this approach enabled to increase the number of questionnaires returned from failed businesses, balancing it with those returned from successful businesses.

Statistical analysis

Three levels of statistical analysis were completed. The process began with descriptive statistics. Second, chi-square tests were run to compare differences between the 10 independent variables. Last, the model was tested using logistic regression, using success for failure as the dependent variable with the 10 independent variables.

Results and Discussion

Table 1 contains the descriptive statistics frequencies and percentages of respondents among the 10 independent variables in the regression equation for the 450 Sri Lanka businesses, and chi-square test of differences between the successful and failed firms. The results of the logistic regression analysis appear in Table 2.

Test of differences

As shown in Table 1, the successful firms had significantly higher levels of measures on all 10 variables in the model. Thus, if small businesses have adequate capital, maintain good record keeping and financial control, have more business and management experience, have a business plan, more education, have an easier time staffing, have better product stage timing, and have marketing knowledge they will increase their chances of success.

insert about here **Table 1: Descriptive Statistics and Ch-Square Test of Differences**

Test of the model

The -2 log likelihood (LL) for the model is 451.008. The large -2 LL statistic indicates that the model does not differ significantly from the "perfect" model. The logistic regression results testing the model Chi-square was 167.257 with the model significance level less than .01 ($p = .000$). Thus, the model has empirical validity as 99% of the time it will be more accurate than random guessing of which businesses are successful and failed. Results support the model's ability to predict success and failure in Sri Lanka. Thus, if small businesses have adequate capital, maintain good record keeping and financial control, have more business and management experience, have specific plans, more education, have an easier time staffing, have better product stage timing, and have marketing knowledge they will increase their chances of success..

The ability of the model to predict a specific business as successful or failed accurately overall was 78.4 percent of the businesses. The model had different prediction level of business failure (74%) and success (82%). The predictive results are more accurate than the Lussier (1995) United States study (70%), and the Lussier and Pfeifer (2001) Croatian study accuracy (72%), and Lussier and Halabi (2010) Chile study accuracy (63%).

Many published regression model studies using large sample sizes are supported with significant p-values, but are not supported by having low R-square values. The validity of the Lussier (1995) model is also supported by the high Nagelkerke R-square value (.416), indicating that 58 percent of the variance in success versus failure is explained by other variable not in the model. Thus, based on the model, small business owners in the U.S.A. and Sri Lanka need to focus on the variables in order to improve their chances of success and decrease their chances of failure.

Individual variables in the model and test of differences

The parameter estimated beta coefficients appear in Table 2. Of the 10 variables in the model, the parameter estimates for the logistic regression model found five of the 10 variables (50%) to be significant. This indicates that businesses started with (2) good record keeping and financial control ($p = .000$), (5) develop plans ($p = .000$), have an ease time staffing ($p = .011$), have good product timing ($p = .047$), and have marketing knowledge ($p = .002$) have a significantly greater chance of success from failure in Sri Lanka.

The most likely reason for the lack of significance for the other individual independent variables is because the model has near multicollinearity. Near multicollinearity, also called faced or just multicollinearity, exist when one independent variable is linearly dependent to one or more other independent variables; without the variable(s) the estimators would not exist. For example, the number of years of business experience, the number of years of management experience, and the age of the owner are exceedingly likely to be correlated. Returning to Table 1, the results of 10 out of the 10 chi-square test of differences between the successful and failed resources, and Table 2 significance of the model supports the Lussier (1995) model validity for use in Sri Lanka.

insert about here **Table 2: Logistic Regression Model Test Results**

Previous research

The model test results ($p = .000$) do support Lussier (1995) because the model did predict success and failure in Sri Lanka. A direct comparison of variables between the U.S.A. and Sri Lanka is not completely reliable because the Sri Lanka model only used 10 of the 15 Lussier model variables and changed the levels of measure. However, the model has predictive validity support because it is also significant in the Middle East Israel and South American Chile, as well as the U.S.A., or the model fits the data. In other words, the model will reliably predict a group of businesses as failed or successful more accurately than random guessing in all countries more than 99 percent of the time.

Use of the model, limitations and further research

Although this study has used rigorous methodology and an extensive model with 10 variables to explore success versus failure, it has certain limitations. First, this research was based on data that has been collected at a single point in time; rather than a longitudinal study. This could mean that if the same research would be conducted at different times; such as during recession or prosperous years, results might be different. A second limitation arises out of the fact that the model includes subjective measures. The fact is that half of the variables are based on self-reporting data. Thus, the model should be used as a technique to improve decision making, but not as a sole predictor for success versus failure of a business. Furthermore, there is a cross-cultural study limitation because of the many differences between the countries where the model has been tested. Those differences include legal systems, economies, attitudes towards business, and other factors.

Future research should seek to improve on the limitations of the study. Researchers may make data collection less subjective by measuring more objectively some of the existing subjective variables, and use other methods of obtaining data. Future research can take a longitudinal methodology rather than cross-sectional. Additionally, future researchers may test the model in other countries, as well as develop cultural control variables and explore how regulatory environments, economics and culture affect business success and failure.

Implications and recommendations

Early recognition and understanding of risks of business failure is important for establishing, sustaining, and growing a business. The success vs. failure prediction model developed for and tested in Sri Lanka is supported by statistical testing. Entrepreneurs need to understand the risks of failure and acquire the variable resources indentified in this study to improve their probability of success. Thus, the findings of this study are important because they help potential, novice and existing entrepreneurs and other business leaders, policy makers and regulators, credit agencies (money lending institutes), business consultants and investors better understand how a business in Sri Lanka can succeed and avoid failure.

As stated, SMEs are important to economic development in Sri Lanka. On the positive side, when Sri Lanka is compared to countries such as Malaysia and Singapore it has less government regulations. To help SMEs succeed, regularity measures were established with more than 20 institutes for SME development in Sri Lanka. Some of these institutes are involved in (a) policy formulation, (b) regulatory functions, (c) support services, and (d) coordination.

Public policy makers should consider providing more professional help to small business, such as offering services similar to that of the U.S. Small Business Administration. Such services could include entrepreneurial development including education, information, technical assistance and training; providing an array of financing solutions, and promote solutions to reduce regulatory burden on small businesses. In that context, policy makers should systematically establish entrepreneurial culture in Sri Lanka. Entrepreneurial culture shall enrich the entrepreneurial spirit among the potential entrepreneurs and hence importance of survival and sustainability of businesses shall be established. Having understood that the business failure in Sri Lanka was not appropriately addressed by the responsible authorities even though there are more than twenty institutes established, it is advisable centralizing all SME related functions as (a) policy formulation, (b) regulatory functions, (c) support services, and (d) co-ordination, into a single organization. The first key task would be to set up a single line ministry for SMEs. Thus, it will result a clear and focused agenda for SME development.

A promising finding of this study is that although there is great discrepancy in the literature, and great differences between countries, the Lussier (1995) model is significant in four different countries from varying parts of the world. Maybe business success vs. failure variables in different countries are more similar than people realize, or maybe it is the effect of globalization. The exploratory global success vs. failure prediction model may be a significant predictor in other countries as well. Although there is much discrepancy in the literature, and no unifying theory, this study helps to move us in that direction. With the trend toward increasing globalization, international global business success versus failure prediction models become more valuable.

Conclusions

This research found a 45 percent business failure rate in Sri Lanka. With the importance of economic growth coming from SME, understanding business success vs. failure is a critical issue in Sri Lanka.

This research has identified the three most powerful determinants for success or failure of small businesses in Sri-Lanka. First, having a good business plan prepared at the initial stage of forming the business. Second, conducting professional financial control with regard to the business and its activities. Third, having good knowledge in marketing as well as practical experience.

As the sector of small businesses has great importance for the national economy, the above determinants for success should not be left to be dealt solely by entrepreneurs. The proper authorities in Sri-Lanka, responsible to promoting the small business sector, should take a lead role in creating the infrastructure that can support increase of the success determinants. Specifically, such activities may include the setting up of advisory program to support the writing qualitative business plans, educational programs on marketing and guidance for financial control.

The results of this study can help these institutes to do a better job of understanding why some business succeed and others fail, and teaching this to new business. More importantly, these institutes can help SMEs get the proper training and resources they need to succeed and avoid failure. Thus, this study can be used to help formulate strategies to increase business success and economic development in Sri Lanka.

Biographical Details

Robert N. Lussier is Professor of Management at Springfield College, USA. He is the author of more than 425 publications. Articles: *Academy of Entrepreneurship Journal*, *Entrepreneurship Theory and Practice*, *Family Business Review*, *Journal of Management Education*, *Journal of Small Business and Enterprise Development*, *Journal of Small Business Management*, *Journal of Small Business Strategy* and others. Textbooks: *Human Relations* (Irwin/McGraw-Hill); *Management and Human Resource Management* (Sage); *Leadership and Small Business* (South-Western/Cengage); *Entrepreneurship and Business, Society and Government* (Routledge) and *Research Methods and Statistics* (Waveland); plus *Publish Don't Perish: 100 Tips that Improve Your Ability to Get Published* (Information Age Publishing).

Dr. Chamara Bandara is a senior Chartered Accountant possessing more than 10 years' experience and expertise in business management. He is the CEO of SCB Corporate (Chartered Accountants) and Corporate Doctors (Pvt.) Ltd (Corporate Consultants) and a well-recognized consultant for Small and Medium Sized enterprises. He is a council member for both Rajarata University of Sri Lanka and AAT Sri Lanka. In his other engagements, he was the founder president of Young Chartered Accountants Forum of Sri Lanka and the Chairman of panel of judges of Federation of Chamber of Commerce and Industry in Sri Lanka for Sri Lanka entrepreneurs.

Dr. Shaike Marom is an expert on entrepreneurship, innovation management, and business strategy. He currently leads the small and medium size concentration within management studies, at the school of management, Western Galilee College. Having extensive experience in corporate management and international business, he is called upon regularly to serve as consultant for the private sector, with particular emphasize on technology and start-up endeavors.

References

- Akroush, M.N. and Al-Mohammad, S.M. (2010), "The Effect of Marketing Knowledge Management on Organizational Performance: An Empirical Investigation of the Telecommunications Organizations in Jordan", *International Journal of Emerging Markets*, Vol. 5 No. 1, pp. 38-77.
- Benzing, C., Chu, H.M., and Kara, O. (2009), "Entrepreneurs in Turkey: A Factor Analysis of Motivations, Success Factors, and Problems", *Journal of Small Business Management*, Vol. 47 No. 1, pp. 58-91.
- Bono, J.E. and McNamar, G. (2011), "From the Editors", *Academy of Management Journal*, Vol. 54 No. 4, pp. 657-660.
- Carter, R. and Van Auken, H. (2006), "Small Firm Bankruptcy", *Journal of Small Business Management*, Vol. 44 No. 4, pp. 493-512.
- Cooper, A., Gascon, J. and Woo, C. (1991), "A Resource-Based Prediction of New Venture Survival and Growth", *Academy of Management Proceedings*, August, pp. 113-119.
- Davidsson, P. and Kolsfsten, M. (2003), "The Business Platform: Developing and Instrument to Gauge and to Assist the Development of Young Firms", *Journal of Small Business Management*, Vol. 41 No. 1, pp. 1-26.
- Dennis, W. and Fernald, L. (2001), "The Chances of Financial Success (and Loss) From Small Business Ownership", *Entrepreneurship Theory and Practice*, Vol. 26 No. 1, pp. 75-83.
- EU (2012). "EU SMEs in 2012: At the Crossroads", Annual Report on Small and Medium-Sized Enterprises in the EU, 2011/12.
- Gamage, H.R., Cameron, D. and Woods, E. (2003), "Are Sri Lankan Entrepreneurs Motivated by the Need for Achievement?", in Proceedings of the 9th International Conference on Sri Lanka Studies, available at: <http://www.slageconr.net/slsnet/9thicsls/fullpapers/fullp099.pdf>, Accessed July 12, 2013
- Halabi, C.E. and Lussier, R.N. (2014), "A Model For Predicting Small Firm Performance", *Journal of Small Business and Enterprise Development*, Vol. 21 No. 1, pp. 4-25.
- Klonowski, D. (2012), "Liquidity Gaps in Financing the SME Sector in an Emerging Market: Evidence From Poland", *International Journal of Emerging Markets*, Vol. 7 No. 3, pp. 335-355.
- Lewrick, M., Omar, M., Raeside, R., and Sailer, K. (2011), "Education for entrepreneurship and innovation: Management capabilities for sustainable growth and success". *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 6 No. 1/2, pp. 1-18.
- Lussier, R.N. (1995). "A Nonfinancial Business Success Versus Failure Prediction Model for Young Firms", *Journal of Small Business Management*, Vol. 33 No. 1, pp. 8-20.

- Lussier, R.N. (1996a), "A Business Success Versus Failure Prediction Model for Service Industries", *Journal of Business and Entrepreneurship*, Vol. 8 No. 2, pp. 23-37.
- Lussier, R.N. (1996b), "A Startup Business Success Versus Failure Prediction Model for the Retail Industry", *Mid-Atlantic Journal of Business*, Vol. 32 No. 2, pp. 79-92.
- Lussier, R.N. and Corman, J. (1996), "A Business Success Versus Failure Prediction Model for Entrepreneurs with 0-10 Employees", *Journal of Small Business Strategy*, Vol. 7 No. 1, pp. 21-35.
- Lussier, R.N. and Halabi, C.E. (2010), "A Three-Country Comparison of the Business Success Versus Failure Prediction Model", *Journal of Small Business Management*, Vol. 48 No. 3, pp. 360-377.
- Lussier, R.N. and Pfeifer, S. (2000), "A Comparison of Business Success versus Failure Variables between U.S. and Central Eastern Europe Croatian Entrepreneurs", *Entrepreneurship Theory and Practice*, Vol. 24 No. 4, pp. 59-67.
- Lussier, R.N. and Pfeifer, S. (2001), "A Crossnational Prediction Model for Business Success", *Journal of Small Business Management*, Vol. 39 No. 3, pp. 228-239.
- Ndedi, A. A. (2013), "Challenges and perspectives facing the development of entrepreneurship education and training in South Africa". *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 9 No. 2/3, pp. 126-132.
- Nooteboom, B. (1988), "The Facts About Small Business and the Real Values of Its 'Life World'", *American Journal of Economics and Sociology*, Vol. 47 No. 3, 299-314.
- Marom, S. and Lussier, R.N. (2014), "A Business Success versus Failure Prediction Model for Small Businesses in Israel", *Business and Economic Research*, Vol. 4 No. 2, pp. 63-81.
- Morrison, A., Breen, J. and Ali, S. (2003), "Small Business Growth: Intention, Ability, and Opportunity", *Journal of Small Business Management*, Vol. 41 No. 4, pp. 417-425.
- Mu, J., Peng, G. and Tan, Y. (2007), "New Product Development in Chinese SMEs: Key Success Factors From a Managerial Perspective", *International Journal of Emerging Markets*, Vol. 2 No. 2, pp. 123-143.
- Pompe, P.M. and Bilderbeek, S. (2005), "The Prediction of Bankruptcy of Small-and-Medium Sized Industrial Firms", *Journal of Business Venturing*, Vol. 20 No. 6, pp. 847-869.
- Reynolds, P. and Miller, B. (1989), "New Firm Survival: Analysis of a Panel's Fourth Year", in Brockhaurs, R.H., Churchill, N.C., Katz, J.A., Kirchoff, B.A., Vesper, K.H. and Wetzels, W.E. (Ed.), *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, Mass.

- Rogoff, E.G., Lee, M.S. and Sub, D. (2004), "Who Done it? Attributions by Entrepreneurs and Experts of the Factors that Cause and Impede Small Business Success", *Journal of Small Business Management*, Vol. 42 No. 4, pp. 364-376.
- Saffu, K., Obeng Apori, S., Elijah-Mensah, A. and Ahumatah, J. (2008), "The Contribution of Human Capital and Resource-Based View to Small-and Medium-Sized Tourism Venture Performance in Ghana", *International Journal of Emerging Markets*, Vol. 3 No. 3, pp. 268-284.
- Santarelli, E. and Vivarelli, M. (2007), "Entrepreneurship and the Process of Firms' Entry, Survival and Growth", *Industrial and Corporate Change*, Vol. 16 No. 3, pp. 455-488.
- SBA-Small Business Administration (2014), "Frequently Asked Questions about Small Business", SBA Office of Advocacy, available at: www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf Accessed April 17, 2014.
- Sriram, V. and Mersha, T. (2010), "Stimulating entrepreneurship in Africa". *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 6 No. 4 pp. 257-272.
- West, G.P., Banford, C.E., and Marsden, J.W. (2008), "Contrasting Entrepreneurial Economic Development in Emerging Latin American Economies: Applications and Extensions of Resource-Based Theory", *Entrepreneurship Theory and Practice*, Vol. 32 No. 1, pp. 15-36.
- Zamperi Ahmad, S. (2012), "Micro, small and medium-sized enterprises development in the Kingdom of Saudi Arabia: Problems and constraints". *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 8 No. 4, pp. 217-232.
- Zamperi Ahmad, S. and Xavier, S.R. (2012), "Entrepreneurial environments and growth: evidence from Malaysia GEM data", *Journal of Chinese Entrepreneurship*, Vol. 4 No. 1, pp. 50-69.

Table 1
Descriptive Statistics and Ch-Square Test of Differences (N = 450)

Model Variables	Success Frequency/ Percentage (n = 250)	Failed Frequency/ Percentage (n = 200)
1. Capital** More than needed About right Less than needed	33 / 13% 173 / 69% 44 / 18%	24 / 12% 105 / 53% 71 / 35%
2. Record keeping & financial control** Poor Good	41 / 16% 209 / 84%	122 / 61% 78 / 39%
3. Business experience** 0 1-5 6-9 10+	30 / 12% 57 / 23% 53 / 21% 110 / 44%	51 / 26% 60 / 30% 33 / 17% 56 / 28%
4. Management experience** 0 1-5 6-9 10+	43 / 17% 83 / 33% 52 / 21% 72 / 29%	66 / 33% 62 / 31% 32 / 16% 40 / 20%
5. Business Plan** Yes No	148 / 57% 102 / 41%	30 / 15% 170 / 85%
6. Education** Ordinary Advanced Degree	18 / 7% 35 / 14% 197 / 78%	24 / 12% 70 / 35% 106 / 53%
7. Staffing** Difficult Not too difficult Ease	28 / 11% 152 / 61% 70 / 28%	56 / 28% 119 / 60% 25 / 13%
8. Product Stage* Introduction Growth Mature Decline	78 / 31% 125 / 50% 45 / 18% 2 / 1%	62 / 31% 87 / 44% 40 / 20% 11 / 6%
9. Partners* 1 owner 2 or more owners	96 / 38% 154 / 62%	100 / 50% 100 / 50%
10. Marketing Knowledge** Poor General Expertise	17 / 7% 149 / 60% 84 / 33%	50 / 25% 122 / 61% 28 / 14%

Note that all 10 variable measures are significantly different between the successful and failed firms

* Success and failure difference is significant at the .05 level.

** Success and failure difference is significant at the .01 level.

Table 2
Logistic Regression Model Test Results

Model Parameter Estimates	Model	
<i>Variables Name</i>	β	Sig.
1. Capital	.224	.279
2. Record keeping and financial control	-1.557	.000
3. Business experience	-.068	.655
4. Management experience	.204	.168
5. Business Plan	1.521	.000
6. Education	.265	.219
7. Staffing	-.494	.011
8. Product stage	.299	.047
9. Partners	.010	.969
10. Marketing	-.677	.002
Constant	.127	.911

Model Test Results

-2 Log Likelihood	451.00
Model Chi-square	167.23
Model Significance	.000
Nagelkerke R Square	.416

Classification Results

Correctly Classified Cases %	
Success	82%
Failed	74%
Overall	78.4