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Financial Risk, Financial Risk Management Practices and Performance of Sri Lankan SMEs: Special Reference to Anuradhapura District

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Abstract
All type of business organizations need to have careful monitoring of current expenses and forecast potential costs, which could be caused by risky actions. Risk is inherent in all business functions and in every kind of activities. This is especially true for Small and Medium sized Enterprises (SMEs) that are most exposed to the harmful effects of the risks, due to limited resources and structural features. Therefore, the objective of this study is to identify the relationship and impact of financial risk and quality of financial risk management towards performance of SMEs in Anuradhapura district. There are around 5000 registered SMEs in district which have been registered under divisional secretarial office and chamber of commerce branch. From them, 30 SMEs were selected by using purposive sampling method. Financial risk such as Capital Structure risk, Insolvency risk, and Liquidity risk and quality of financial risk management are the independent variables and performance of SMEs is the dependent variable. Data were collected from financial statements to calculate financial risk and some qualitative data were collected to measure quality of financial risk management through questionnaire. Collected data were analyzed by mean testing, correlation and regression analysis. The results reveal that there is no any significance relationship between financial risk and performance of the SMEs and there is a strong positive relationship between quality of financial risk and performance of the SMEs.
Keywords: Small and Medium size Enterprises, capital structure risk, insolvency risk, liquidity risk, profitability growth rate

1. Introduction

Small and Medium Enterprises (SMEs) is the backbone of all nations and is increasingly recognized as a prime vehicle for economic development of both developed and developing nations (Zacharakis, Neck, Hygrave & Cox, 2002). This sector plays an important role in any economy through employment generation, contributing to the growth of Gross Domestic Product (GDP), embarking on innovations and simulating of other economic activities (Gamage 2003; Kotey & Meredith 1997). So, the development of this sector is of paramount importance for any country, irrespective of their level of development.

SMEs perform as a useful vehicle for economic growth of countries because they have the capacity to achieve rapid economic growth, while generating a considerable extent of employment opportunities (Reddy 1992).

Significant portion of small industries in Sri Lanka includes variety of very small enterprises of the cottage and household–types and their activities are often concealed from the state for a variety of reasons such as business registration, labor regulations, taxation and provident fund contributions. For this reason and of the well-known problem of the data collection, the activities of this sector normally do not feature in official statistics (Wijewardena, 1989).

SMEs are facing different types of risks while they are running the businesses and risk management is playing a vital role within this risky environment. However, risk management is a challenge for the most SMEs. In contrast to larger companies they often lack the necessary resources, with regard to manpower, databases and specialty of knowledge to perform a standardized and structured risk management. The result is that many smaller companies do not perform sufficient analysis to identify their risk.

In Sri Lankan context, SMEs are facing different type of risks in their business activities and due to those risks they are facing some losses. Problems in the SME sector will lead to create uncertainties in the sector and it will badly affect the performances of SMEs. SME sector is running their businesses activities at low level due to those uncertainties and risks. For the most SMEs they are running their businesses without addressing risks across the whole of their business. Then it is interesting to find out impact of financial risk and financial risk management on business performances of SMEs.

2. Identification of SMEs

In Sri Lanka, there is no generally accepted definition for SMEs. Different government agencies use different criteria to identify SMEs. Among these, the number of employees, firm size of fixed investment and nature of the business and the sector; ie formal or informal, in which the industry operates, are considered as main criteria.

There are different terms used in different documents to identify this sector. Small and Medium industries or enterprises, micro enterprises, rural enterprises, small and medium activities, cottage and small scale industry etc are some terms frequently used (Gamage 2003).

Using the size of capital and number of employees as the criteria the Industrial Development Board (IDB) defines a small industry as an establishment whose capital investment in plant and machinery does not exceed LKR 4 million and the total number of regular employees does not exceed 50 persons. The Department of Small Industries (DSI) classifies enterprises with capital investment of less than LKR 5 million and fewer than 50 employees as SMEs (Ponnamperuma 2000).

For the purpose of assistant of programs implemented by the Sri Lankan Export Development Board (SLEDB) for export oriented enterprises, SMEs are define as those enterprises with capital investment excluding land and buildings of less than LKR 8 million or with annual export turnover of less than LKR 50 million (Hewaliyanage 2003). The World Bank defines enterprise size in Sri Lanka based on the number of employees: those with fewer than 49 employees are small; those with 50-99 employees are medium sized: and those with more than 100 employees are large. The number of employees as the criterion for size appears reasonable because it distinguishes between enterprises regardless the line of business and the amount of capital investment must be revised frequently due to inflation (Ponnamperuma 2000).

3. Literature Review

3.1. Risk in business

As a first step for the definition, similar terms, which are often used exchangeable in every day's speech, need to be distinguished, namely: uncertainty, danger and risk. Uncertainty is used when the outcomes of future events are uncertain and the different states cannot be connected with probabilities of occurrence .The term danger in general stands for unplanned and unpredictable outcomes having a negative impact on something. Like those two terms, risk summarizes events that are uncertain regarding their outcome. The difference is that in the case of risk, the outcomes can be connected with a probability of occurrence (Valsamakis at el. 2000).

Furthermore, risk can be split into two categories. On the one hand there are pure risks or systematic risks, which cannot be influenced by the manager and are independent of business decisions. On the other hand there are unsystematic risks, which are the result of managerial decision-making and can either have a negative or a positive outcome (Valsamakis at el, 2000).

This positive or negative outcome impacts on the firms' activities and life of the entities. Today risk is perceived as an event that could happen in the future with a certain probability, and if this happens, it would certainly have an impact on a target. When risk is positive, it is called "upper-side risk" or "good risk", otherwise when its impact is negative, it is called "the bottom side risk" or "bad risk" (Dhuci 2011)

However, there are differences in the definitions of risk. First of all some include also possible positive outcomes of a risk, also referred to as upside risks or chances. Other only define the possible occurrence of negative outcomes, or downside risks, as risks because they are more in the focus of the management (Bernstein 2007). The inclusion or exclusion of chances is not the only difference in the common definitions.

The understanding and awareness of risk to both professionals and individuals, including the sophistication of risk management techniques, have increased remarkably in the past few years (Bernstein 2007). However, the professional status of risk management as a mainstream business discipline (e.g., accounting, marketing, strategy, etc) has yet to evolve. Interestingly, the evolution of Enterprise Risk Management (ERM) has emerged both as a concept and a management function (Dickinson 2001).

When doing business, constantly decisions, where the outcomes cannot be foreseen with certainty due to incomplete information, have to be made (Napp 2013). This uncertainty connected with every kind of business activity is risks. Although this term is of central importance, there does not existing an overall definition of the meaning of risk (Valsamakis at el. 2000).

Risk is injected into economic activity through various outflows of economic resources, which are performed without knowing if it would follow the positive cash flows (Kimbell,2000). According to Smith concept of risk can be viewed as combined with uncertainty, giving the perception that it is uncertainty that leads to the birth of risks (Smit 2002). Events, in which there is a lack of prediction, keep within themselves risks, although the results of these events can be predicted with an objective probability. Results affected by the risk have in itself the possibility of occurrence of multiple values (Valsamakis at el. 2000).

They range from (negative) deviations of planned outcomes, over danger of making wrong decisions to danger of losses due to information lacks (Valsamakis at el. 2000). When focusing on the common features of the definitions, risk is the possibility of deviation from a planned outcome or goal. This implies that all business is connected with risks resulting from the fact that future states of the world and outcomes of decisions can only be predicted. As business activities are uncertain regarding their outcome and this uncertainty implies risks to the profit of the firm, a company needs to manage its' risk exposure (Dickinson 2001)

3.2. Financial risk and Financial risk management in SMEs

Financial risk appears in various forms. On the one hand the risks appear as external financial risks that are related to the external financial environment in which business operates, and on the other hand they are identified as internal financial risks, where the business itself is a source of risk. There are major three components of financial risk as capital structure risk, Insolvency risk and liquidity risk in SMEs (Kociu 2015).

Financial risk is equivalent to the capital structure risk, because it is considered as an additional risk born by the need to replace debt with equity. In a broader sense the financial risk will be considered any fluctuations in cash flow, financial performance and business value as a result of various factors such as interest rates, exchange rates, price changes, etc. (Blach 2010).

Risk management is a continuous monitored integrated formal process for defining objectives, identifying sources of uncertainty, analyzing uncertainties and formulating managerial resources to produce an acceptable balance between risk and opportunities. Similarly, risk management can be defined as an ongoing process that can help improve operations, priorities and resources, ensure regulatory compliance, achieve performance targets, improve financial stability and ultimately prevent loss and damage to the entity (Dickinson 2001).

It is generally agreed that risk management process includes four interrelated steps including identification of risk, quantification and evaluation of risk, management and control of risks and continued reporting on the development of risks (Vaughan & Vaughan 2001). Similarly, Smallman (1996) argues that a holistic risk management is characterized by three main aspects including continuous monitoring of all sources of risk, combination of qualitative and quantitative techniques, risk assessment and monitoring and organizational learning for a positive approach to dealing with risk, risk assessment, risk analysis and risk handling (Smallman, 2006). On the other hand, risk strategy is based on the purpose of the risk management that should include necessary advance preparation with respect to defined approach, tasks and tools. The risk assessment step is to identify, qualify, quantify and prioritize the risk while the risk analysis step deals with the consequences, options and decision making. Finally, the risk handling phase identifies what actions need to be taken on identified risks, where the actions should be either to reduce, accept, and avoid or to transfer risks.

Financial risk management has received increased attention over the past years (Glaum 2000). The reason for this is that financial risks, though they are not a core competency of non-financial firms, also influence their business operations to a large extends (Napp 2013). Financial risks can be of different forms. On the one hand there are external financial risks depending on changes on financial markets. On the other hand there are internal financial risks, where the company itself is the source of the risks (ibid).

External financial risks are based on the risk factors of exchange and interest rates as well as commodity prices (Smallman 2006). Firm financing can become a risk for the company due to different reasons. The choice between fixed rate and floating rate debt, the duration of the debt and the overall amount of debt financing are possible sources of risks. The firm wants to be flexible and at the same time lower the costs for financing (Blach 2010). The duration of loans is important in connection with the assets, which are financed with the loan. Here, often a mismatch between the durations can be observed. Long term assets are then financed with short-term and adjustable rate loans, leading to a shortfall in cash flows in times of rising interest rates. This fact again can lead to a worse ranking of the company and worse conditions to get future loans. Furthermore difficulties regarding follow-up financing over the rest of the lifetime of the asset can occur. Vice versa long-term financing of short-term assets might lead to access financing when the asset is no longer existent. This causes unnecessary interest payments for the company (Valsamakis, Vivian & Du Toit 2000). Finally, a high amount of debt financing can become a risk to the organization. In case the return decreases and is lower than the demanded interest rate, the organization is not able to pay the interest without making a loss in that year. This consumes part of the equity and might lead to an even more dramatic situation in the next period (Napp 2013).

3.3. Risk and Risk management in SMEs

SMEs show little separation between the entrepreneur's strategic thinking and decision making and firm formal planning system (Kraus, Reiche & Reschke 2007). SMEs are characterized with the central role of the owners and multiplicity of duties and close identity with employees (ibid).Enterprises in their startup phase often underestimate risks or even ignore them completely. Startup SMEs usually face a high degree of uncertainties and the necessity to make quick decisions (Smallman 2006). Empirical studies show that the attitudes of SMEs towards risks and their risk assessment differ significant from that of large firms. Risk management is a challenge for SMEs in contrast to larger firm they often lack of the necessary resources, with regard to human capital, data base and specificity of knowledge to perform a standard and structured risk management (Smit 2002). Similarly, Most of SMEs do not have the necessary resources to employ specialists at every position in the firm. They focus on their core business and have generalists for the administration function (Kraus, Reiche & Reschke 2007). In contrast to larger firms, in SME one of the owners is often part of the management team. His intuition and experience are important for managing the firm (Dickinson 2001). Therefore, owner manager in

SME is often more responsible for many different tasks and important decisions.

Financial risk and risk management practices are the major issues in SMEs, better management of financial risk support for the existence and value creation of SMEs.

According to the literature review, the objectives of this study are:

- To identify the relationship between financial risk and performance of SMEs.
- To identify the relationship between quality of financial risk management practices and performance in SMEs.

4. Methodology

4.1. Sample selection and Data collection

This sample consists of SMEs registered in Anuradhapura district, Sri Lanka. To get successive data, researcher chooses firms which have reasonable book keeping methods and which are doing their operations at least 2 years. From total registered SMEs in Anuradhapura district, 30 SMEs were selected by using purposive sampling method to represent all SMEs in geographic location including city and other distance areas within selected District. In order to calculate the financial risk, secondary data were used from annual reports and primary data were collected to measure the financial risk management practices.

Sample firms were chosen with enterprises with capital investment of less than LKR 5 million and fewer than 50 employees as SMEs (Department of Small Industries).

4.2. Variables

Total financial risk (Capital Structure risk, Insolvency risk, and Liquidity risk) and quality of financial risk management practices are the independent variables and performance of SMEs is the dependent variable. Here, Capital structure risk refers the ratio between total liabilities and total assets. Insolvency risk refers the ratio between current liabilities and current assets, liquidity risk is the ratio between current liabilities and current assets and insolvency risk is the ratio between fixed assets and owners' equity. And also, performance of SMEs has been measured by using profitability growth rate. To calculate the profitability growth rate, following equation has been used.

$$Profitability\ growth\ rate = \frac{Net\ profit\ of\ 2015 - Net\ profit\ of\ 2014}{Net\ profit\ of\ 2015} \times 100$$

4.3. Method of Data Analysis

According to Hair.J at el. 2006, the following decision criteria have been used to identify the level of risk management practices in SMEs.

Table 1: Decision criteria

Mean Value	Decision
1.0-2.49	Low level
2.5-3.49	Moderate level
3.5-5.0	High level

Furthermore, to extend the objectives of the research, Pearson correlation analysis have been used to prove the relationship between dependent and independent variables. In the case of measuring the impact of financial risk and financial risk management practices towards business performances in SMEs, the following models were framed.

$$PER = \alpha + \beta CSR + \beta LR + \beta IR \quad \longleftarrow \quad \text{Model 01}$$

$$PER = \alpha + \beta QFRM \quad \longleftarrow \quad \text{Model 02}$$

Where,

- PER= Profitability growth
- CSR= Capital Structure Risk
- LR= Liquidity Risk
- IR=Insolvency risk
- QFRM= Quality of Financial Risk Management Practices

5. Data Analysis

Quality of risk management practices were measured by five point likert scale method. Therefore it is vital to do a reliability test for the part two of the questionnaire. Here, internal consistency has been tested using Cronbach's alpha in SPSS statistic. Output of that analysis is as follows.

Table 2 : Reliability Test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.832	**.884**	6

Table 2 shows that Cronbach's Alpha is 0.832. It is higher than 0.7. It indicates that, there is a high level of internal consistency for this scale with this specific sample.

Table 3: Mean Testing

Risk Criteria	**Mean Value**	**Risk Management Practices**
Defining Objective	3	Moderate level
Identifying sources of uncertainty	2.83	Moderate level
Analyzing uncertainties	3.5	High level
Acceptable balance between risk and opportunities	3.4	Moderate level

Table 3 shows that means test of the variables which are coming under risk criteria. It shows that the all four types of financial risk management practices are in moderate and high levels according to decision criteria. That means most of the SMEs which have been included in the sample of this study have been implementing quality financial risk management practices.

Table 4 : Pearson Correlation Matrix

	CSR	LR	IR	TFR	QFRM	PGR
Capital Structure Risk (CSR)	1					
Liquidity Risk (LR)	-.031	1				
Insolvency Risk (IR)	.676**	.141	1			
Quality of Financial Risk Management (QFRM)	.113	-.188	-.129	-.192	1	
Profitability Growth Rate (PGR)	-.012	-.142	-.191	-.162	0.713**	1

**. Correlation is significant at the 0.05 level (2-tailed)

According to the Table 4, there is no significance relationship between components of financial risk which is measured by capital structure risk, liquidity risk, insolvency risk and business performances in SMEs at 0.05 significant level. But, there is a significance relationship between quality of financial risk management practices and profitability growth rate in SMEs at 0.05 level.

Table 5: Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.297[a]	.070	.633	.13309
2	.697[a]	.509	.485	.09412

a. Predictors: (Constant), TFR_2014

Table 5 shows the regression analysis results of the model 01 and model 02. According to R^2 value of model 02, impact of quality of financial risk management practices towards performance of SME is 50.9%. According to R^2 value of model 01 impact of Capital Structure Risk, Insolvency Risk and Liquidity Risk towards performance of SMEs is 7% only. So, it refers that quality of financial risk management is affecting hugely towards performance of SMEs rather than financial risk.

6. Conclusion and Recommendations

According to correlation analysis, there is a significant relationship between quality of finance risk management practices and performance of SMEs and there is no significant relationship between Capital structure risk, Insolvency risk, Liquidity risk and performance of SMEs. As per regression analysis, impact of quality of financial risk management practices towards performance of SME is 50.9% and impact of Capital Structure Risk, Insolvency Risk and Liquidity Risk towards performance of SMEs is 7%.

Findings of this study disclose that SME owners/ Managers should put more attention on increase the degree of quality of financial risk management practices in SMEs rather than bear large degree of financial risk. SMEs should identify the most suitable level of financial risk and manage that risk properly. But practically implementing quality of financial risk management practices is not an easy task for SME managers/ owners.

Owners/ Managers should put more attention on financial risk management practices. For it they should gather more knowledge. So, if owner have not particular knowledge for doing proper financial risk management, best thing to do is recruit a person who have particular knowledge.

On the other hand, identify the basis of financial risk management practices such as identify the main purpose of using financial, identifying the environmental affections, trying to reduce uncertainties themselves by using their experiences and go to government/ non government organizations such as chamber of commerce branches and try to gather knowledge regarding financial risk management are possible to do every firms. Then with the experiences they can implement quality financial risk management practices. In the very small size SMEs this is the best option to do to increase the quality of their financial risk management practices.

Further, most significance thing is involvement of government and other related organizations as a third party regarding making awareness of financial risk management practices. Contribution to GDP from SMEs is vital. So, if SMEs develop, that will directly affect to economy. So, government also should consider significance of SMEs development and barriers facing by SMEs. Ninety percent of SMEs have registered in divisional secretarial offices. Some of them have registered in chamber of commerce branches also. There is at least one university in every province and lots of NGOs who willing to support SMEs in Sri Lanka. So, through these organizations government can arrange consultancy workshops to develop SMEs (to create a knowledge base development). Build up financial risk management practices also should be one part of it.

Government and private sector banks have been presented lots of loan schemes for SMEs. Rather than providing loan for SMEs, directing the SMEs regarding managing that financial and managing financial risk also should be done by banks. Bank of Ceylon has introduced that type of loan scheme. They provide the loan step by step according to progress of the particular project and same time inspections and consultancy programs are also done. That type of loan schemes should be introduced by other institutions also.

A knowledge base improvement should be happened in SMEs. There should be a proper network between SMEs and other helping and assisting organizations to improve the knowledge in SME owners and to access to information sources.

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