IMPACT OF UNRELATED DIVERSIFICATION ON FIRM FINANCIAL PERFORMANCE OF THE LISTED HOTEL COMPANIES IN SRI LANKA

H.A. Maheshi Dinushika
Department of Accounting, University of Sri Jayewardenepura

R.P.G. Hasini Yasodara
Department of Accounting, University of Sri Jayewardenepura

P.D. Ishara Gimhani
Department of Accounting, University of Sri Jayewardenepura

A.P.N.N. Abeysuriya
Department of Accounting, University of Sri Jayewardenepura

U.H.K. Lokuranamuka
Department of Accounting, University of Sri Jayewardenepura

Abstract

Empirical studies done on the concept of unrelated diversification on firm financial performance have been mainly carried out in foreign countries, there is dearth of research in this respect in the Sri Lankan context. Impact of unrelated diversification on firm financial performance depends on tested economic context, industry and its features. Therefore, a gap can be identified to discover the impact of unrelated diversification on firm financial performance of Sri Lankan hotel industry. Therefore, examination of unrelated diversification and its impact on firm financial performance of listed hotel companies in Sri Lanka is expected to conduct through this research study. Quantitative approach was undertaken for analysis of data and in order to achieve the research objective, simple linear regression model was applied to identify the impact of unrelated diversification and its significance to the firm financial performance using e-views. Furthermore, to test the performance differences in diversified and undiversified hotel companies in terms of unrelated diversification, independent sample t – test method was applied using IBM SPSS Statistic. Firm financial performance was measured based on the ROA, ROCE & Net Profit Margin (NPM) and level of diversification was measured by the number of unrelated sectors that the company is involving. This research contributes the stakeholders of Sri Lankan hotel industry such as shareholders, management, and investors etc. in order to make their investment and diversification decisions accurately.

Key words: Unrelated diversification, Firm financial performance

1 Introduction

Unrelated diversification means the extent to which the companies are operating in many other different businesses and the ultimate function of the unrelated diversification is spreading the business risk beyond its existing borders. It has identified that lot of firms tend to practice the unrelated diversification strategies in order to mitigate the risk of failures (Tan, Chan & Lee 2008). Unrelated diversification may also create the firm strengths such as dynamic capability and it benefits a firm to have a strong competitive advantage (Sun & Govind 2017).

In relevant to the developing countries such as Indonesia, Philippines, Poland and South Africa, a research has been conducted on a sample of nine emerging markets and it resulted that the corporate diversification increases the performance of the firm than the stand alone companies. (Selcuk 2015). However, it has not specifically examined the impact of unrelated diversification on firm financial performance. Likewise, due to lack of studies in Sri Lanka and incapability of generalizing the results of foreign studies to Sri Lankan context, a research gap can be identified to discover any significant impact of unrelated diversification on firm financial performance in Sri Lankan hotel sector.

Diversification within a group of companies would be definitely affected to the performance of the each and every individual companies within that group (Bany-Ariffin et. all 2016). It elaborates that corporate diversification within the group is directly affected to the firm performance of each individual companies. Selcuk (2015) emphasizes that diversified companies in the selected sample are more valued compared to their single segment benchmarks, providing evidence for weak form diversification premium. However, the findings may be differ for firm financial performance against the level of unrelated diversification which is going to be test through the current study.

Hotel sector has selected as the specific industry area in order to examine the impact of unrelated diversification on firm financial performance. All the hotel companies which have been listed in CSE and categorized into hotel sectors were considered as the population as the annual reports and the other analytical and financial data can be gathered only through CSE data base. 20 out of 40 listed hotel companies were taken as the sample where two sample groups have been selected including 10 hotel companies which operate only in hotel sector and 10 hotel companies which are member firms of conglomerates. Firm performance was

calculated through few selected measurements; ROA, ROCE and Net Profit Margin. Finally conclusion arrived through specifying impact of unrelated diversification to firm financial performance, significance of unrelated diversification to describe the firm financial performance and performance difference of two groups by analyzing the output achieved through the interpretation of the gathered data. Here the main focus was on the sector diversification and its impact on financial performance of hotel company of the selected sample of companies and also examined the performance difference between the diversified and undiversified hotel companies.

Number of researchers have conducted their research on this topic. But among all those information, it was able to identify the gap in those research papers and the objective of the conduction of this research is to minimize that gap. Most of the studies which have been conducted on the diversification and its impact on the firm performance were conducted for developed economies, not for the developing economies like Sri Lanka. And the other important factor is that most of those researches depend on various market factors which are inherent to those markets such as Market Turbulence. But when considering about the Sri Lankan context, those studies cannot be directly applicable due to changes in the market conditions.

In consideration of all the above mentioned facts, it was decided to conduct the research to examine the relationship between the corporate diversification and firm performance of the listed hotel companies in Sri Lanka.

2 Literature review

The purpose of investigating the background of this issue have been outlined around few related areas that is, what is unrelated diversification & firm financial performance, relationship, measu rement of the relationship and the gap identified in the context of Sri Lankan economy under this chapter.

2.1 Unrelated diversification

Unrelated diversification can be defined as a means of spreading the base of a business (Booz, Allen & Hamilton 1985, cited in Tan, Chan & Lee 2008). Further if the diversification is defined by other way, it can be explained as the extent to which the firms are simultaneously active in many different businesses (Ramanujam & Varadarajan 1989). Furthermore in another point of view, diversification is spreading the organization beyond its local borders to another market or a sub sector within the industry or the geographical area in

order to enhance the performance of the business by reducing inherent risk whilst improving the returns (Oyewobi, Windapo & Cattell 2013).

Diversification which is the horizontal expansion of the market presence can be categorized in to two sectors as related and unrelated diversification. (Chakrabarti et al. 2007). Diversification of firms is identified in three possible ways by Srivastava (1994) which includes dominant product strategy, related diversification and conglomerate diversification. Related diversification means the business groups with multiple firms which are operating in the same industry whilst unrelated diversification means same concept but operates in more than one industry. (Mishra & Akbar 2007) Mostly the firms use the related diversification to expand the operational interrelationships between business units. (Hill & Hoskisson 1987) So, with the dynamic competition and the globalization of the markets in the present economy, diversification has become a specific strategic option that all the firms should consider to build and maintain the competitive advantage in national and international contexts. (Delbufalo, Poggesi & Boora 2016)

In another point of view, Enterprise diversification can be identified as a self-insuring strategy against the risk and also a method of reducing income variability. It is a risk management strategy against the adverse impacts of the wide fluctuations of the yields occurred due to the fluctuations of the prices of the commodities and many other reasons. (Mishra, El-Osta & Sandretto 2004)

And also, it is critical and crucial for an entity to diversify the investment portfolio in order to reduce the risk due to the economy fluctuations. (Bany-Ariffin et. all 2016) Strategic approach to achieve the mission encourages the related diversification by concentrating on specific products and thereby enhancing the technological and organizational capabilities.

But philosophical approach to mission concentrates on wide range of products and it encourages the unrelated diversification. (Pakneiat, Panahi & Noori 2010)

2.2 Benefits of Diversification

When considering about the benefits of the diversification, it gives rise to the diversification premium (Williamson 1975, cited in Selcuk 2015). Diversification may benefit firms with imperfectly correlated earnings derived from combining businesses. (Shleifer & Vishny 1992) Diversified companies can share the resources among its divisions and get the benefits from economies of scope. (Teece 1980, cited in Selcuk 2015) Further, Diversification creates

a tax benefit by offsetting the losses of some segments against the profits of the others. (Majd & Myers 1987, cited in Selcuk 2015) Unrelated diversification allows the firms to reduce the cash flow volatility, transfers the knowledge between the business units and improves the efficiency in terms of the resource allocation. (Kuppuswamy & Villalonga 2010) Firms implement diversification strategies to enhance the strategic competitiveness of entire company to gain the power of the market related to the competitors. (Hitt et al. 2001)

2.3 Drawbacks of Diversification

In relation to the drawbacks of the diversification, it is been able to identify lot of drawbacks with the prior study reports. The first cost of the diversification is the agency problem which is considered the diversification as an activity implemented by managers for their own benefit, at the expense of shareholders. (Jensen 1986, cited in Selcuk 2015) The prominent drawback of the diversification is diversification discount which is arising from inefficient allocation of resources for wealthier product segments (Berger and Ofek, 1995, cited in Jara-Bertin, Lopex-Iturriga & Espinosa 2015), and the operational inefficiencies which can be arisen due to complexity of the organization. (Klein and Saidenberg, 2010) Diversification discount depicts large shareholders' incentives to maximize private benefits and keeping high levels of asymmetric information. (Fluck and Lynch 1999, cited in Jara-Bertin, Lopex-Iturriga & Espinosa 2015)

2.4 Firm Financial Performance

Firm financial performance can be considered as an economic measure reflecting the operation results of a business. As a result firm financial performance can be identified as a reflection of firms' efficiency in the market throughout the business organization's lifespan. The investors tend to make business decisions based on the firm performance. It is stated that there are five main types of firm performance creation activities; activities that create product & services, activities that is involved in marketing and selling of the products and services, activities involved in procuring inputs to the organization, activities that are directed towards creation of future performance and supporting activities (Bowman & Ambrosini 2007) It has been verified that the firms which are diversified other than the undiversified firms are composed of high firm performance. The investor perception to lower investment risk will result in higher firm performance and it has been found that the firms which have established corporate governance are consisting of higher firm performance indicators. Size, growth and leverage are positively associated with firm performance suggesting that larger firms, firms

with more investment opportunities or high growth and firms having high leverage are likely to have higher firm performance (Siagian, 2013). It emphasizes that the firm financial performance will rise with the increase of firm size and the growth. Investors give higher marginal value to cash holdings in firms with higher growth rates and a higher level of uncertainty in their cash flows.

For the firms to recognize as high performed firms, the business organization should be operating and expanding with higher growth rates (Pinkowitz & Willimson 2007).

It can be identified that the risk management benefits have an effect on three aspects of firm financial performance. It tends to occur by reducing the cost of capital, by reducing the variability of cash flows and by reducing taxes. Better risk management should lead to better risk taking, and not simply a reduction in risk. Either, firm financial performance will increase with the amount of risk afforded by the management and reduction of risk will not result in increment of the firm financial performance (Stulz, 2015).

2.5 Relationship between unrelated diversification and firm financial performance

Delbufalo, Poggesi and Boora (2016) suggests that a linear relationship can be seen between the product diversification and firm performance and an inverted U shaped relationship between product diversification and the performance of the firm.

A positive relationship between the related diversification and firm financial performance can be elaborated in an emerging market whilst unrelated diversification has no impact on the firm financial performance. (Mishra & Akbar 2007) As per the results, it shows that a positive relationship is existed between the risk calculated by Beta and international diversification and it is verified that no risk reduction due to the international diversification and this is mainly due to the types of the foreign investment activities involved. (Bany-Ariffin et. all 2016)

It is found that a high financial performance in construction firms that diversify in to many regions. As per the results, it is shown that, more diversified firms are, higher the profit margin. Firm that diversifies around their core business are able to achieve a higher success rate than other approaches to the diversification. (Oyewobi, Windapo & Cattell 2013) Both related and unrelated diversification have impact on the firm financial performance in opposite directions. Most commonly accepted rule is that whilst related diversification is associated with higher levels of performance, unrelated diversification gives the lower

performance level. (Rumelt 1982, cited in Tan, Chan & Lee 2008) Diversified companies in the selected sample are more valued compared to their single segment benchmarks, providing evidence for weak form diversification premium. (Selcuk 2015)

Unrelated diversification itself is not the sole driver of Firm performance, the impact on firm performance can be affected by the industry settings, economic conditions, governance structure, and firm's resource position. The information, competitors and the suppliers within the industry is referred here as industry setting. Even though diversification might lead to an increase in firm performance, this industry setting can be negatively influenced if setting is not very well organized. When taking economic conditions into consideration it is evident that the corporate diversified firms are less tendency to decline in times of economic and financial crisis when compared to standalone firms. It can be concluded that Economic condition also impacts on the relationship between diversification and firm financial performance. (Meijer 2015)

Mishar and Akbar (2007) states that although group affiliation is a beneficial structure, unrelated diversified business groups (conglomerates) has no impact on firm financial performance. While unrelated diversified structure is discounted in developed economies, shareholders are indifferent to the performance effects from excessive diversification.

Similarly for companies with small shares are recommended to embrace in unrelated diversification. The study was based on 484 manufacturing companies that were operated in India during the period of 2001 to 2011.

The relationship between diversification and firm financial performance is a common research area in the field of strategic management. As per the studies of Deng, Tian, Li and Abrar (2012), it has been found that unrelated diversification is negatively correlated with financial performance whereas, related diversification is having a positive relationship with the firm performance. The related diversification performance is higher than the performance by specialization and unrelated diversification.

According to Mas, Nicolau and Ruiz (2004), it has been identified that foreign expansion announcements have resulted in positive excess returns in the stock prices of the companies that are listed in Spanish stock market. Accordingly it has been identified that the foreign diversification is positively associated with the firm financial performance. They have further identified that a direct relationship between the firm financial performance and unrelated

diversification strategy does not exist and other market and product factors are also affecting to the relationship.

Chen-Ying Lee (2016) finds that there is a negative relationship between product diversification and firm financial performance in Property and Liability insurance companies, which implies that potential benefits from diversification are likely to be offset by the extra costs associated with product diversity. The study has also indicated that diversification of larger insurers could significantly increase the performance in developing capital markets, but not in less developed capital markets

Even though the expectation is that diversification should relate to performance positively; the findings of Gyan (2016) show that diversification add no significant performance difference to firms and even reduces profitability in the estimates of industrial conglomerates. The results also show that productivity has no moderating impact on a market-based performance of an unrelated diversified firm.

2.6 Factors affecting the relationship between diversification and firm financial performance

Firms tend to diversify into industries which use resources similar to their own. Chatterjee and Wernerfelt (1991) describe how physical resources of a firm such as plant and equipment, Intangible assets such as brand name and financial resources affect to the relationship between unrelated diversification and firm financial performance. Bhatia and Thakur (2018) designate, physical capital intensity has a negative and significant impact on firm financial performance. Perhaps companies are unable to upgrade their assets immediately with the change in technology if they are owing high physical capacity, due of investment has been already done and tied up which resulting into low profitability.

Another important factor affecting the relationship between diversification and firm financial performance is Risk management. Firms that use sound risk management techniques are able to obtain higher performance. And this has been explored to significant extent in the finance, accounting and information management literature. (Krause 2016) Further skills of managers towards risk management, business resource management has a significant and positive relationship with unrelated diversification strategy. This indicates that highly skilled staff leads to increase in extent of diversification. Diversification entails new technology, new products and new markets. (Ansoff, 1957). In other way, Mishar and Akbar (2007) have

stated that due to the information asymmetry, the performance effects from excessive diversification are indifferent to shareholder decision making. Unrelated diversified firms have no impact on the firm financial performance.
(Bhatia, 2006; Pandey, 2010) have identified that Leverage of a company has an impact on its choice of diversification strategy which indicates debt/equity ratio may assist to change the extent of diversification.

The effect of institutional factors such as country's labor markets, capital markets and product markets on the firm performance in case of diversification can be clearly distinguished. The underlined idea of the case study is that the diversified firms are able to attract employees and also to influence the regulatory process and as a result there might be an indirect impact on the firm performance. (Ivashokvskaya & Skvortsova 2005)
In addition to above factors (Ying Lee, 2017) conducted study on Product diversification and firm performance based on Taiwanese property and liability insurance sector, which indicated that firm's size has been found to have a relationship with its performance. Further it is found that larger firms are more cost and revenue efficient, resulting greater premium growth, Firms with large market share are able to exercise market power in pricing products and earn higher profit. Firm Size, profitability and growth opportunities are 3 main control factors other than the above mentioned, which are having an impact on the excess performance generated by diversification.

2.7 Identification of the gap

Most of the empirical studies on the unrelated diversification and its impact on firm financial performance have been conducted for developed economies. These studies result that depending on several market factors such as market turbulence, increasing diversification may raise the firm inherent risk. When in a low turbulence market, expanding to more product markets and simultaneously emphasizing key markets will decrease inherent risk. (Sun & Govind 2017) Previous study was done based on large group of public traded US-based hotels companies subject to some limitation, such as lack of specification to the sample base which focused large entities. Therefore, result may be different if a particular industry or a particular country is separately focused as an example Sri Lanka for a specific time period. Subsequently, increasing inherent risk might adversely affect the firm financial performance, many scholars have done studies to identify the direct impact of unrelated diversification. A Study done based on a sample of nine emerging markets, resulted that related diversification

increases financial performance more compared to their single-segment benchmarks and similarly unrelated diversification has no impact on the company's financial performance. (Selçuk 2015)

Diversification and the firm financial performance concepts are highly related with the hotel industry with in Sri Lankan context. Further diversification is involved with both advantages and disadvantages. On the other hand, the relationship between diversification and the firm financial performance portrays a positive, negative and mixed relationship based on several factors. Research gap has been identified, since the relationship between unrelated diversification and the firm financial performance has been tested inadequately with in Sri Lankan Industry. Overall objective of this research is to test the relationship between firm unrelated diversification and firm financial performance of the listed hotel companies in Sri Lanka.

3 Research design and methods

In order to verify the corporation of the unrelated diversification strategies to the uplift of the firm financial performance of a business, 10 hotel companies which are member firms of diversified conglomerates and 10 hotel companies which are not were analyzed.

3.1 Research Approach

Quantitative approach was undertaken for the analysis purpose and accordingly, simple linear regression model was used to identify the impact of level of unrelated diversification on firm financial performance. In order to test the performance differences in diversified and undiversified hotel companies in terms of unrelated diversification, independent sample t – test method was applied using IBM SPSS Statistics.

3.2 Population and Sample

In order to mitigate the industry variance in statistics results, it is planned to focus on one sector by referring to Colombo Stock Exchange sector classification details. As the priority should be given to the listed conglomerates, it is focused on the diversified holdings listed and from the 19 companies in that list, it is clearly depicted that in most of the listed diversified holdings, operate in hotel/ leisure sector. On that basis, decision was taken to select the hotels sector. Under the hotel sector, there are companies which are stand alone and only operate only in hotel industry under related diversification strategy. Even though there are other most significant sectors such as banking and Finance including 73 companies & manufacturing companies including 41 companies, the basis for selecting hotels companies is

due to the majority of the diversified holdings operates in hotel sector/ industry and the emerging trend of tourism industry. Further it is found the difficulty of calculating ratios of firm financial performance to the level of diversification into different industries of such finance companies (Elif 2015). Accordingly, it will be much easier to compare the firm financial performance of the two groups of hotel companies in terms of unrelated diversification factor.

Since the study is based on hotel sector the population referred was 40 hotel companies which are listed in Colombo Stock Exchange. From the population sample was selected applying convenient sampling basis (Luqman, Abimbola & Keith 2013). When considering the control variable for the selection, age and size of the companies were specified.

Further the sample size is decided to limit to 20 hotel companies where 10 of them are members of diversified conglomerates as it has found that only 14 hotels from total of 40 hotel companies listed in CSE are consoled to diversified conglomerates. One of the analysis was independent sample t-test where performance means of both groups compared to identify and significant difference and therefore equal number of sample units were selected from two pools of populations.

For the purpose of analyzing the data, it is considered 5 years data of the selected companies and data was taken as the secondary data which was from annual reports of the selected companies for the period from 2012/2013 to 2016/2017.

3.3 Sample Size and the Selection of the Sample

In order to select the 10 hotel companies consoled to a diversified conglomerate, among 19 listed holdings in CSE listing, 10 holdings were selected which a hotel company included.

In order to select the 10 hotel companies which are stand alone or a member of group of companies which report turnover only from hotel sector, the population which used was the 40 listed hotel companies in the CSE listed company directory. Among those 40 companies, 10 companies have been selected by using the convenient sampling basis.

3.4 Sources and Collection of Data

Data for the research purpose was taken from annual reports of selected companies for the period of five years. Company details were extracted from Colombo Stock Exchange data base and the companies' web pages.

And the time period which will be used to gather the data is from year 2012/13 – 2016/17. For all five years, annual reports will be extracted for company in the sample listing and it can be extracted from the CSE database.

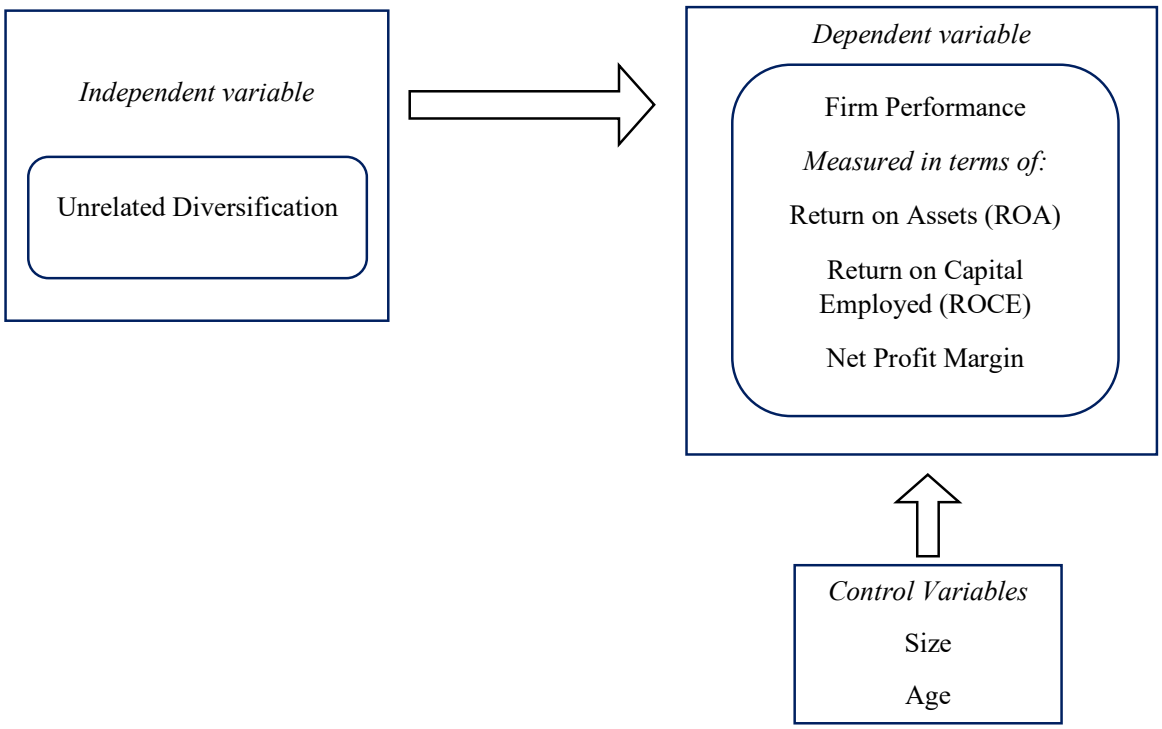
3.5 Conceptual Diagram

The objective of the research study is to examine whether unrelated diversification strategy has any impact on firm financial performance of hotel companies and whether there is any performance difference between two identified groups of hotel companies in terms of unrelated diversification. The measurements of the diversification and the firm financial performance have discussed in operationalization sector.

The argument for the selection of the hotel industry is that it records a higher performance in relation to the foreign exchange earnings within tourism industry during the year 2016/17. Further the argument for selecting the comparison of the corporate diversification and firm performance is that in Sri Lankan context, inadequate research studies have been conducted on this scenario.

Based on the above arguments, in order to achieve the specified objectives, following conceptual diagram was developed.

Figure 01: Conceptual Diagram



3.6 Hypotheses Development

Unrelated iversification is mostly attracted by firms which have intended aim to be in a higher stage in future (Ofori & Chan 2000, cited in Luqman, Abimbola & Keith 2013). Accordingly, it is important to identify the real impact of unrelated diversification on their firms' performance. In order to find out the real scenario, development of hypothesis has been done here.

Based on the research objectives and gap founded, following hypothesis were identified.

H1a: There is a significance impact of unrelated diversification on firm financial performance in terms of ROA

H1b: There is a significance impact of unrelated diversification on firm financial performance in terms of ROCE

H1c: There is a significance impact of unrelated diversification on firm financial performance in terms of Net Profit Margin

H2: There is a performance difference between diversification and undiversified firm in terms of corporate diversification

3.7 Operationalization

The analysis is mainly based on two factors that are unrelated diversification and the firm financial performance. Following table is given further reference to data variable that the analysis would be based on.

Variable	Measurement	Supportive literature
Diversification	Firms which report sales in more than one business segment **1= Operate in 2-3 sectors** **2= Operate in 4-5 sectors** **3= Operate in 6-7 sectors** **4= Operate in 8-9 sectors** **5= Operate in 10 sectors**	Elif Akben Selçuk (2015)

Firm performance	ROA	Luqman Oyekunle Oyewobi, Abimbola Olukemi Windapo, Keith S. Cattell (2013)
	ROCE	
	Profit margin	

3.8 Data Analysis Strategies with Justification

Firm financial performance measurements, are considered to be ROA, ROCE & Net Profit Margin (NPM) as of dependent variables (Luqman, Abimbola & Keith 2013). These information were extracted from annual reports from 2012/2013 – 2016/2017 (5 years).

Return of Assets (ROA) depicts, how much of profit before interest & tax has been generated through the total assets which is before considering payments to be done for contractual obligations.

$$ROA = \frac{Profit\ before\ interest\ \&\ tax\ (EBIT)}{Total\ Net\ Assets}$$

Return on Capital Employed (ROCE) is considered, how much of profit before tax has been generated, after adjusted the payments for contractual obligations (interest payments).

$$ROCE = \frac{Profit\ before\ \ tax\ (EBT)}{Total\ ETotal\ Assets - current\ liabilities}$$

Net Profit Margin (NPM), is about how much of profit that company has earned against its turnover.

$$Net\ profit\ margin = \frac{Net\ profit\ before\ tax}{Net\ sales}$$

To conclude whether the impact of unrelated diversification on firm financial performance is significance, it is analyzed hotel companies in to unrelated diversification with the level of diversification against their firm financial performances (ROA, ROCE & Net Profit Margin).

Level of diversification is identified as below (Elif 2015).

1= Operate in 2-3 sectors

2= Operate in 4-5 sectors

3= Operate in 6-7 sectors

4= Operate in 8-9 sectors

5= Operate in 10 sectors

Conclusion was made, based on 5 years panel data regression analysis of 10 diversified hotel companies; using e-views statistics and found the relationship, impact and its strength between unrelated diversification and the firm financial performance. Linear regression model was taken for analysis as there is one independent variable against four measurements of dependent variable, firm performance.

$$\gamma = \beta_0 + \beta_1 x + \varepsilon$$

$$ROA = \beta_0 + \beta_1 UD + \varepsilon$$

$$ROCE = \beta_0 + \beta_2 UD + \varepsilon$$

$$NPM = \beta_0 + \beta_3 UD + \varepsilon$$

$\boldsymbol{\gamma} - Dependent\ varaible(ROA, ROCE, NPM)$

$\boldsymbol{\beta_0} - Coefficient$

$\boldsymbol{\beta_1} - Impact$

$\boldsymbol{x} - UD\ (Unrelated\ Diversification - Number\ of\ sectors)$

$\boldsymbol{\varepsilon} - Error\ factor$

To identify whether there is a performance difference in diversified and undiversified hotel companies in terms of unrelated diversification, a dummy variable is used as "D" to differentiate the status of diversification (Division of sample is based on this classification). Accordingly, the data were input to the SPSS as follows (Elif 2015).

0 = the firm is a member of a company which reports sales in more than one segment

1 = the firm reports sales only in hotel sector

By performing an independent sample t-test, it is measured the mean score of ROA, ROCE & Net Profit Margin (NPM) independently of two groups (Diversified hotels & Undiversified hotels). Here undiversified hotels were considered as control group. Based on the measurement, it is conclude that whether there is a significant performance difference in terms of corporate diversification.

4 Findings and discussion

This section comprehends the results obtained from the statistical analysis as well as a discussion of the findings. Accordingly, the results of the descriptive analysis, correlation analysis, panel versions of regression analyses and the results of the independent sample t-test are presented with the resulting discussion in this section.

4.1 Descriptive Statistics

Table 1 and Table 2 below provide descriptive statistics for sample of 10 diversified hotel companies and 10 non-diversified hotel companies from 2012/13 to 2016/17.

Table 1: Descriptive statistics of diversified hotel companies

Variables*	N	Mean	Median	Std. Deviation	Skewness	Kurtosis
No of sectors	50	6.340	7.000	2.0365	-.182	-.492
ROA	50	8.9795%	8.9881%	5.36211%	.436	1.189
ROCE	50	9.0962%	9.1143%	6.82866%	.208	1.674
NPM	50	40.3585%	28.8255%	46.57358%	1.546	1.651

*Definitions of these variables are given (see Section 3.8).
Source: Author's calculations

Table 1 provides descriptive statistics for sample of 10 diversified hotel sectors from 2012/13 to 2016/17. Diversified Hotel companies in Sri Lanka operate within average of 6 sectors. Return on total asset (ROA) and Return on capital employed (ROCE) have an average of 8.98% and 9.09% respectively. Average Net profit margin (NPM) is 40.36% in diversified hotel sector and it indicates that there is significant deviation of 46.57% which is reported as the highest average financial performance measure compared to other financial performance measures. Numbers of sectors, ROA, and ROCE have the skewness between positive 0.5 and negative 0.5. Hence the data distribution is approximately symmetric excluding NPM which has 1.546 indicating high positive skewness. Correspondingly, kurtosis for above data

distribution fall between the acceptable ranges, which are reported in between negative 0.47 to positive 1.67.

Table 2: Descriptive statistics of non -diversified hotel companies

Variables*	N	Mean	Median	Std. Deviation	Skewness	Kurtosis
ROTA	50	4.0620%	3.8446%	3.86479%	-.955	3.768
ROCE	50	3.8140%	3.7437%	4.90879%	-.248	2.036
NPM	50	9.1304%	13.3087%	26.03379%	-4.256	23.432

*Definitions of these variables are given in (see Section 3.8)
Source: Author's calculations

Table 02 provides the results of descriptive statistics for the sample of 10 non-diversified Hotel sector companies for 2012/13 to 2016/17.Non-diversified hotels represent 4.062% of average ROA and 3.81% of average ROCE, which is approximately 50% lower compared to ROA and ROCE diversified hotels. Average Net profit margin (NPM) is 9.13% and it indicates that there is a significant deviation of 26.03%. Both diversified and non-diversified hotel companies have been resulted significant deviation in terms of NPM. For future research, it is suggested that the various accounting estimation and reporting differences among the hotel entities may have an impact of net profit margin (NPM) and caused the significant deviation. Number of sectors, ROA, ROCE reported skewness between positive 1 and negative 1; Hence data distribution is moderately skewed. NPM has negative skewness of 4.256 which indicate high skewness. Similarly, kurtosis for NPM is resulted a higher kurtosis.

4.2 Impact of Unrelated Diversification on Firm Financial Performance

This section represents the results of the regression analysis and the discussion on those findings.

Regression Analysis

In order to test, whether there is any significant impact of unrelated diversification on financial performance a simple linear regression was run. Based on the hausman test results, random regression results to be accepted as it was given a probability which is more than 5%, where H0 (Null hypothesis) to be accepted.

Following tables show the regression analysis of the selected sample of dependent variables.

Table 3: Regression Analysis

Models	ROA		ROCE		NPM	
Variable	Coefficient	Std.Error	Coefficient	Std.Error	Coefficient	Std.Error
C	0.096629	0.031425	0.119288	0.039682	0.739445	0.220236
SECTORS	-0.002341	0.009554	-0.009699	0.011884	-0.115018	0.060411
Weighted Statistics						
R-squared	0.001249		0.013687		0.070217	
Adjusted R-squared	-0.019559		-0.006861		0.050847	
S.E. of regression	0.036036		0.043353		0.194705	
F-statistic	0.060017		0.666087		3.62497	
Prob(F-statistic)	0.807513		0.418451		0.062923	

According to the regression analysis, Unrelated Diversification has a negative but not significant effect on the financial performance measures; ROA, ROCE and NPM.

As per the analysis, the built up model is as follows.

$$ROA = 0.0966 - 0.00234UD + 0.036036 \longrightarrow (1)$$

According to the model, Unrelated Diversification is having a negative insignificant impact on ROA while the constant being 0.0966.

$$ROCE = 0.11928 - 0.00969UD + 0.043353 \longrightarrow (2)$$

The formula for the regression line of the dependent variable ROCE indicates that Unrelated Diversification makes a negative insignificant effect.

$$NPM = 0.73944 - 0.11501UD + 0.194705 \longrightarrow (3)$$

The regression model for the NPM explains that NPM is consist of a negative insignificant effect of 0.115 by the unrelated diversification of hotel companies listed in Colombo stock exchange.

The analysis is based on data collected for ten companies that are unrelatedly diversified and are operating in the hotel industry of Sri Lanka. The sample consists of financial information

over a period of five years. The regression model is incorporated with a *p-value* that is more than 0.05. Accordingly, the null hypothesis for hypothesis H1 (a) is not rejected resulting a negative relationship between unrelated diversification and firm financial performance. Similarly, the effect of the negative relationship is insignificant as the coefficients for the dependent variables ROA, ROCE and Net Profit Margin are small according to the regression model. Further, the explanatory power of this model is weak as the adjusted r^2 value of the model is too insignificant.

The results validate prior studies of Mishra & Akbar (2017) which suggests that unrelated-diversified business groups has no impact on firm performance. This is further validated by the findings of Oyewobi, Windapo & Cattell (2013) that states both related and unrelated diversification makes impact on opposite directions. According to their studies unrelated diversification do contribute a lower level of performance. The effect on related diversification is higher than the effect of unrelated diversification on performance (Deng *et al.* 2012). Another possible explanation can be derived from the findings of Gyan A. (2016) which has identified that diversification does not add a significant value to firms' performance.

Independent Sample T - test

The independent Sample t-test compares the mean scores of two groups on a given attribute (In terms of the characteristics). This testing is used when there are two independent samples and here we have selected two independent samples such as the firm performance in terms of financial figures of the diversified hotel companies and undiversified hotel companies. The results obtained from the independent sample t-test in terms of the financial performance for each period (05 years separately – from 2012/13 up to 2016/17) are depicted in table no. 4

Table 4: Independent Sample t-test

Year	Dependent Variable	Group Variable	N	Mean	Std. Deviation	Std. Error Mean	t-test for Equality of Means Sig. (2-tailed)
2016/17	ROA	0	10	10.1589%	2.76353%	0.87390%	.000
		1	10	0.9608%	4.90664%	1.55161%	.000
	ROCE	0	10	10.4418%	2.91027%	0.92031%	.000
		1	10	-0.1921%	4.15910%	1.31522%	.000
2015/16	ROA	0	10	10.7586%	7.07607%	2.23765%	.045

	ROCE	1	10	4.9719%	4.72566%	1.49438%	.047
		0	10	11.3786%	9.36264%	2.96073%	.123
		1	10	4.9636%	8.32176%	2.63157%	.123
2014/15	ROA	0	10	3.0756%	3.79139%	1.19894%	.563
		1	10	3.8755%	2.01433%	0.63699%	.565
	ROCE	0	10	1.5875%	5.78126%	1.82820%	.224
		1	10	4.0601%	2.26657%	0.71675%	.233
2013/14	ROA	0	10	7.8186%	2.30296%	0.72826%	.007
		1	10	4.3505%	2.77294%	0.87688%	.007
	ROCE	0	10	7.9238%	2.53624%	0.80203%	.004
		1	10	4.0605%	2.72651%	0.86220%	.004
2012/13	ROA	0	10	13.0860%	3.88945%	1.22995%	.000
		1	10	6.1513%	2.56531%	0.81122%	.000
	ROCE	0	10	13.5785%	3.95766%	1.25152%	.000
		1	10	6.1779%	2.53480%	0.80158%	.000

Here the independent sample t-test has been performed for all five years starting from 2012/13 up to 2016/17 which are the periods used for the secondary data collection and the testing was done using SPSS model. The objective of this testing is to identify whether there is any significant difference between the firm financial performance in the means of the financial terms of the diversified hotel companies and undiversified hotel companies.

As per the results obtained from the independent sample t-test, it can be identified the significance difference in between two individual groups in respect of the firm financial performance by using the significance value obtained ($p<.05$). And also the firm financial performance has been measured using two measurements such as Return on total assets and Return on capital employed.

Within the years 2012/13, 2013/14 and 2016/17 the significance values obtained from the independent sample t-test in terms of both measurements of performance, ROA and ROCE are below 5% and it is depicted in the *Table no 04* above. With that result, it can be elaborated that there is a significance difference in between the financial performance of the diversified hotel companies and undiversified hotel companies. But specifically, in the period 2015/16, the significance value which is below 5% ($p<.05$) has been gained in terms of ROA only. It depicts that in year 2015/16, a mixed evidence can be gained such as that there is no significant difference between the firm financial performance of the diversified and undiversified hotel companies when performance is calculated using ROCE and when the

performance is calculated using ROA, a significant difference is there in between the financial performance of the above mentioned two independent sectors. Further, a totally different evidence can be gained in the year 2014/15 as both the measurements of the financial performance (ROA and ROCE) depicts that there is no any significant difference between the financial performance of the diversified and undiversified listed hotel companies in Sri Lanka. And the reason for the deviation may be due to any sort of other factors affecting the financial performance of the company such as external environmental factors: political and environmental. And this will be an opportunity for the future researchers to identify the reasons for the insignificant difference between the firm financial performance of the diversified and undiversified hotel companies in Sri Lanka during the period of 2014/15.

As per the results obtained from the independent sample t-test, it is safer to conclude that there is mixed evidence for the prevalence of the significant difference between the firm financial performance of the diversified and non-diversified listed hotel companies with the evaluation of the results in between the years of data collection.

5 Conclusion

The Sri Lankan hotel industry is one of the fast moving industries of the economy and most of the listed hotel companies are a member of a group of conglomerates. Based on that understanding, hotel industry has been selected in order to examine the impact of unrelated diversification on the financial performance of the firms. Firm financial performance is measured examining ROA, ROCE & Profit margin of selected companies for last five years and level of unrelated diversification is measured by the number of unrelated firms that the company is holding. The population was selected referred to the 40 hotel companies which are listed in Colombo Stock Exchange.

Data was collected for 10 diversified hotels companies and 10 undiversified companies for a period of 5 years. Panel Data Analysis was performed using E views module through the regression analysis in order to examine the relationship and the impact of the unrelated diversification on the firm financial performance and independent sample t – test was performed through IBM SPSS module to arrive at a conclusion whether there is any significant difference in between the financial performance of the diversified and undiversified listed hotel companies. Data was collected by referring to the Financial Statements of the companies available on CSE website and ASPI index.

As per the results of the regression analysis, the study indicated that there is a negative relationship between unrelated diversification and the firm financial performance and also that relationship is insignificant by accepting the null hypothesis developed. It can be verified as per the past literature as it elaborates that unrelated diversified business groups have no impact on the firm financial performance. In line with the results obtained from the independent sample t-test, a mixed evidence can be obtained about the existence of the significant difference in between the performance of the diversified and undiversified hotel companies as except one year, all other four period results have been depicted that there is a significant difference in between the performance of the two independent sectors mentioned above. As for the future research directions, the unavailability of the significant difference in between the performance of the above mentioned two independent sectors can be considered together with the specific reasons for the deviation as well.

References

Alberto, F, Stefano, B & Manlio, D G 2016, 'International diversification and firm performance: a four-stage model', *EuroMed Journal of Business*, vol. 11, no. 3, pp.362-375.

Ananda, M 1998, 'The relationship between prior performance and diversification: a study of three industries', *Management Decision,* vol. 36, no. 3, pp.180-188.

Anurag, M, Akbar, M 2007, 'Empirical examination of diversification strategies in business groups: evidence from emerging markets', *International Journal of Emerging Markets*, vol. 2, no. 1, pp.22-38.

Ashok, K M, Hisham, S E & Carmen, L S 2004, 'Factors affecting farm enterprise diversification', *Agricultural Finance Review*, vol. 64, no. 2, pp.151-166.

Bany, A, Bolaji, T M, Liza, W & Siti, A 2016, 'International Diversification and firm's performance: evidence from developing nations', *Review of International Business and Strategy*, vol. 26, no. 2, pp.166-183.

Cliff, B & Véronique, A 2007, 'Firm value creation and levels of strategy', *Management Decision*, vol. 45, no. 3, pp.360-371.

Elif, A S 2015, 'Corporate diversification and firm performance: evidence from emerging markets', *International Journal of Emerging Markets*, vol. 10, no. 3, pp.294-310.

Emanuela, D, Sara, P & Simone, B 2016, 'Diversification, family involvement and firm performance: empirical evidence from Italian manufacturing firms', *Journal of Management Development*, no. 35, issue. 5, pp.663-680.

Ferraris, A, Bresciani, S & Del Giudice, M 2016, 'International diversification and firm performance: a four-stage model', *EuroMed Journal of Business*, vol. 11, no. 3, pp.362-375.

Krause, T & Tse, Y 2016, 'Risk management and firm performance: recent theory and evidence', *International Journal of Accounting & Information Management*, vol. 24, no.1, pp.56-81.

Luqman, O O, Abimbola, O W & Keith, S C 2013, 'Impact of business diversification on South African construction companies' corporate performance', *Journal of Financial Management of Property and Construction*, vol. 18, no. 2, pp.110-127.

Mauricio, J B, Felix, L I & Christian, E 2015, 'Is there a corporate diversification discount or premium? evidence from Chile', *Academia Revista Latinoamericana de Administración*, vol. 28, no. 3, pp.396-418.

Michael, N & Harminder, S 2012, 'The diversification discount and takeovers: some Australian evidence', *International Journal of Managerial Finance*, vol. 8, no. 1, pp.36-57.

Mishra, A, El-Osta, H & Sandretto, C 2004, 'Factors affecting farm enterprise diversification', *Agricultural Finance Review*, vol. 64, no. 2, pp.151-166.

Mohammad, P, Monireh, P & Javad, N 2010, 'Firm capabilities and diversification: how mission matters', *Business Strategy Series*, vol. 11, no. 4, pp.248-260.

Mukherji, A 1998, 'The relationship between prior performance and diversification: a study of three industries', *Management Decision*, vol.36, no. 3, pp.180-188.

Pehrsson 2006, 'Business relatedness measurements: State-of-the-art and a proposal', *European Business Review*, vol. 18, no. 5, pp.350-363.

Timothy, A K & Yiuman, T 2016, 'Risk management and firm performance: recent theory and evidence', *International Journal of Accounting and Information Management*, vol. 24, no. 1, pp.56-81.

Wenbin, S & Rahul, G 2017, 'Product market diversification and market emphasis: Impacts on firm idiosyncratic risk in market turbulence', *European Journal of Marketing*, vol. 51, no. 7/8, pp. 1308-1331.