

# **UNRECOGNISED INTANGIBLE ASSETS AND MARKET VALUE OF PUBLIC LISTED COMPANIES IN SRI LANKA**

**Shehani Amarasekara**

*Department of Accounting, University of Sri Jayewardenepura*

**Sahan Wijendra**

*Department of Accounting, University of Sri Jayewardenepura*

**Sewwandi Kudawaduge**

*Department of Accounting, University of Sri Jayewardenepura*

**Niluka Deepanjali**

*Department of Accounting, University of Sri Jayewardenepura*

**Maheshika Weerasinghe**

*Department of Accounting, University of Sri Jayewardenepura*

**Chathuranga Sandaruwan**

*Department of Accounting, University of Sri Jayewardenepura*

## **Abstract**

## **Background**

This paper represents the relationship between unrecognised intangible assets and the Market Value. According to the initial observation it was that the unrecognised intangible assets play a vital role in current business context. Therefore, it is worthwhile to carry out a research to pinpoint whether there is any relationship between value of unrecognised intangible assets and the market value.

## **Methods**

This paper surveys recent literature and in the unrecognised intangible assets value and impact to the market value, intending to find out the relationship between market value and unrecognised intangible assets. In order to gather primary data, it was used the annual reports of 90 listed companies representing six sectors of Sri Lankan capital market.

## **Results**

In this paper, researchers find that recent literature on valuation of unrecognised intangible assets and the impact of such unrecognised intangible assets on the market value of the firm. The secondary analysis assisted to pinpoint the level of such relationship in Sri Lankan context.

## **Discussion and Conclusion**

This study investigates the relationship which exist in between unrecognised intangible assets and the Market Value. The analysis indicates that there is statistically significant and positive relationship between the market value and unrecognised intangible asset value of the business organizations.

**Key words:** Unrecognised Intangible assets, Market Value

## **1 INTRODUCTION TO THE STUDY**

This study explored the relationship between unrecognised intangible assets and the value of the firm. The subsections of the introduction in this research article deliver an all-inclusive introduction to the research by having a thorough discussion of research background, research problem, objectives of the study and scope of the study.

### **1.1 Background of the study**

In developed economies, production requires not only the traditional factors including labor, material and capital, but also the intangible resources including organizational structures, processes, culture, and other factors. Those are collectively referred as “Intangible Assets” (Erik Brynjolfsson, Lorin M. Hitt, Shinkyu Yang, 2002). There are number of resources and assets which are coming under the broader umbrella of intangible assets comprising Brand Name, Software, Trade mark, Licensing, Unique Business Processes, Knowledge assets, Brands, Goodwill, Patents. A recent survey commissioned by the consulting firm Accenture confirmed that most executives around the world believe that intangibles are critical for the future success of their businesses (Bernard Marr, 2007). Nevertheless, such asset could be measurable easily in certain instance and some are not measurable in simple manner.

The industrial age characterized by enormous manufacturing facilities brought to the forefront of management attention and concerted their effort in managing, measuring and reporting tangible assets comprising buildings, plant, equipment, and machinery. Yet, the present information era has shifted the focus of management in to intangible assets due to its complex and dynamic behavior of the business environment (Shital Jhunjhunwala, 2009). Empirical studies that has been conducted on unrecognised Intangible Assets (UIA) in the advanced markets have indicated that the unrecognised intangibles are imperative strategic assets in generating the comparative advantage. Nevertheless, measuring unrecognised Intangible Assets in an accurate and a complete manner is essential to determine the firm's true value. One key reason for measuring intangibles comes from the widening gap between what really matters and what companies disclose in their annual reports. Second one is improving strategic decision making in business through competitive advantages of the economy. Most directors, managers as well as the controllers around the world believe that unrecognised intangibles are essential for the future success and it improves Market Value of their businesses. Thus, it is imperative to conduct a research on relationship between value of unrecognised intangible assets and value of the business organizations.

## **1.2 Research problem identification**

Key concern that has been raised with regard to the unrecognised intangible asset is the recognition and measurement of such unrecognised intangible assets. The significant gap between corporate market value and accounting book value of the business organizations have invited wide research on the unexplained value or hidden reserve ignored by current financial reporting standards (IFRS) and accounting professionals (Salamudin et al., 2010). Based on such fact it has been stated that the financial statements have been failed in delivering accurate financial information for the economic users (Salamudin et al., 2010). Further it has been stated that one way to enhance the reliability of financial information is bringing the value of unrecognised intangible assets in to financial statements. Accordingly, there are various studies that have been in foreign context on the subject matter. Such as, an empirical investigation of the relationship between Intellectual Capital and firms market value and financial performance. (MC Chen, SJ Chen, Y. Hwang - Journal of Intellectual Capital, 2005). Intellectual capital and firm performance of US multinational firms. (A Riahi-Belkaoui - Journal of Intellectual Capital, 2003) However, there is a lack of published research work related to the mentioned topic to be found in Sri Lanka. Hence, a wide gap could be observed between the international and local context. Through this research the

relationship between unrecognised intangible assets and market value of the companies which operates in the Sri Lankan context are studied.

### **1.2.1 Defining research problem**

Prior to determine the problem domain of the research, it had to be gone through the existing knowledge on relationship between unrecognised intangible asset and Market Value in global context. Accordingly, after reviewing the existing literature the research problem was stated as follows for the purposes of this exploratory study;

*What is the relationship between unrecognised intangible assets and market value of the firms in Sri Lanka?*

### **1.2.2 Research question**

For the purposes of this study, the research question was developed and the research question is as follows:

- How much of unrecognised intangible assets are available in PLCs?
- Is there any relationship between unrecognised Intangible Assets and Market Value of Public Listed Companies in Sri Lanka?
- What is the impact of the unrecognised intangible Assets to the Market Value of the organization?

## **1.3 Research objectives**

In solving the above identified research question, the researcher was guided by three specific objectives as stated below which were derived from the research questions of the study:

- To examine how much of unrecognised Intangible asset are available in the PLCs.
- To identify the relationship between unrecognised Intangible Assets and Market Value of the Public Listed Companies in Sri Lanka.
- To examine the impact of the Unrecognised Intangible Assets to the Market Value of the organization.

## **1.4 Scope of the Study**

The relationship between unrecognised intangible Assets and the Market Value has been selected to study in this research because of the limited number of researches that had been done in Sri

Lanka previously under the same topic. Ninety companies registered in the share market that belong in the Bank Finance and Insurance, Beverage Food and Tobacco, Chemicals and Pharmaceuticals, Hotels and Travels, Manufacturing and Telecommunication are used as the research population as at 31<sup>st</sup> March 2018.

### **1.5 Significance of the study**

Even though there are many academic researches done in foreign context with regard to “The Relationship between unrecognised intangible Assets and Market Value”, it could be noted that there are limited number of studies that have been conducted in the Sri Lankan context relating to subject matter. Nevertheless, it could be noted that most of the organizations are based on unrecognised intangible assets especially when concern about the Sri Lankan service sector. Thus, the findings of the study will provide a strong foundation to pinpoint the relationship which exist in between unrecognised intangible assets and the Market Value. Accordingly, it will assist to draw the attention of management in to most important and contributory assets to the success of the organization.

And also, this study was done by referring in to other researches done in the field of unrecognised intangible assets. Consequently, this study can also be regarded as enrichment in the local understanding on relationship between unrecognised intangible asset and the Market Value.

On the other hand, the study may support to the government and private plans for initiating regulations as a part of economic development. And also, the study may demonstrate the usefulness of identifying and measuring unrecognised intangible assets and market value, thereby contributing to the well-being of non-government and government development organizations. So different people and different organizations have different perspective regarding unrecognised intangibles assets and market value. This research "unrecognised intangible assets and market value of Public Limited Companies in Sri Lanka" Cannot be found in Sri Lanka. The lack of finding researches like this the research team objective is to fill the gap and give further understanding about unrecognised intangible assets and market value and how they linked together to achieve organizations and its stakeholder's goals.

### **1.6 Limitation of the study**

The research is only narrow down to focus on selected unrecognised intangible assets which are incorporated in to the annual reports of listed companies in Sri Lanka.

On the other hand, the research consists of conducting a survey using selected appropriate fact-finding techniques in order to discover the relationship between unrecognised intangible asset and market value in listed companies due to the easiness of the accesses to information. Therefore, results may not be applicable for other business organizations including private companies and partnerships. The relationship between unrecognised intangible assets and the value of the firm can be different based on the industry and as a result generalization may not be reasonable. This study heavily depends on secondary data and limited to one way of data collection method as data is collected through annual reports of selected companies. Therefore, it depends on third party data which have been collected not specially for the purpose of study.

In addition to above, there is a reasonable doubt arose that whether all the information disclosed, and expresses are exactly accurate and reliable being financial statements are subject to creative accounting and manipulation.

## **1.7 Summery**

It was dealt with providing information regarding the research carried out in detail manner by referencing to the background of the study, scope, objectives, research problem, limitation etc. Simply it provided the framework within which the research was carried out. Next, it will provide an exhaustive understanding on existing literature in relation to the unrecognised intangibles assets and market value. Based on the findings of literature review, chapter three has been developed and it will discuss about the methodology of the study. After that will provide the comprehensive discussion of findings of the survey and it is further associated with the recommendations based on such findings. Finally, the study is responsible for the conclusion of the study.

## **2 LITERATURE REVIEW**

Literature review encompasses an exhaustive examination of literature in relation to the research scope. The main areas covered in the literature review are the concept of unrecognized intangible asset, market value, factors affecting to market value.

### **2.1 Introduction to Market Value**

Corporate world is not wisely use universal definition for market value. Although, the market value model provides a starting point for further valuation analysis and it facilitates the information process between investors and stakeholders (Penman 1996). A firm's capabilities and skills determine the degree to which the company can meet these requirements and provide a greater value than its competitor (Hamel 1991). According to the Claessens et al (2002) article, market value has increased with increased by ultimate controlling shareholders cash flow who examined 1301 listed firms in eight economics of East Asia. The danger thinking of market value is inevitable complete which impossible to determine value.

Market value mostly links with resources of the firm's environment. Edith Penrose derived a founding idea of firm's resources – “A firm is more than an administrative unit; it is also a collection of productive resources the disposal of which between different uses and over time is determined by administrative decision” in 1959. According to the Wernerfelt's (1984), Significance of resources-based view has recognised to identify the market value and performance. However different kind of resources and firm utility of these resources are varied firm to firm. Usually, the literature proposes several corporate finance models to obtain an approach of the market value. (Stewart 1991; Penman 2001 & Damodaran 2002).

Bowman and Ambrosini, (2007) summarized the value of complex firm diverse economic activities in global market into a single measure. It used several strategies from literature articles;

- I. Operational corporate strategy – firms' activity level is represented by the after-tax earnings result in moment, (Barth 2000, Ohlson 1995).
- II. Investment corporate strategy – firms' level of significance resources invested in their assets that must be used productivity, (Zhang 2000, Sorescu & Spanjol 2008).

- III. Market corporate strategy – market value recognised the market – book ratio which is determined by the market price divide by the book value, (Mercjt 1970).
- IV. Financial corporate strategy – Effects of liabilities and equity analysis and the need spilt a market value in financial autonomy, (Feltham 2007).
- V. Dividend corporate strategy – market value is established dividend policy as a financial instrument of firm and investor, (Akbar & Stark 2003).

## **2.2 Advantages of Market Value**

According to Barth et al (2001), the main objective of researches in the field of value relevance is to increase the awareness level of the users of financial statements in terms of qualitative features of “relevance” and “reliability” of reflected accounting information in the market value of the owner's equity.

## **2.3 Limitations of Market Value**

Yin 2008 find out the issue of accounting information would not provide sufficient and appropriate about the market value in different demands. market value structure can be changed from one firm to another firm which is affected by culture and market-oriented information etc. The issue of market value wasn't showing a statistically significant relationship between accounting data and market value of owners' equity (Beaver, 2002, p.459).

## **2.4 Introduction of the Intangible Assets**

Peter Ducker analyzed the intangible assets as a most important assets type in a corporate value in 1993. General Idea of intangible assets can be defined as a right for future benefits that do not have a physical or financial body (Lev 2001). According to Srivastava et al. (2001) divided market based intangible assets into two related types: relational assets and intellectual assets. Relational assets are intangible and associated with external parties that are not owned or fully owned by the company. Intellectual assets are internal generated knowledge that are intangibles and embedded in the individuals and process. Intangible capital consists of the stock of non-material resources that enter the production process and is important for the creation or improvement of products as well as production processes (Arrighetti et al. 2014).

Intangible assets are becoming widely accepted as a more unrecognised intangible asset capable of generating more financial performance. (Barney 1991). Edvinsson and Malone (1997) define the difference between a firm's market value and book value as the value of unrecognised



intangible assets. According to Wong al. (2014) intangibles lead to firm operational and financial performance.

Unrecognised intangible assets based on drivers of innovation, quality, customer relation, management capabilities, alliances, technology, brand value, employee relations, and environmental & community issues by (Kalafut and Low 2001). Sveiby (2002) reviewed 28 intangible asset valuation methods, based on the frameworks of Luthy (1998) and William (2001), and classified them into four categories. However, there are no universal methods for classified as unrecognised intangible assets.

Eckstein (2004) investigated the accounting standards which affected to the reporting intangible assets in International Standards committee. De Angelis, Habib, Davide & Naghshineh, (2005) identified a research & development activity are important to ensure innovation and marketing to increasing earnings. Godfrey et al., (2006) found out that unrecognised intangibles include advertising expenditure, patents, trade name, trade mark franchise costs and all deferred expenditures such as start-up costs. Intangible assets are critical for the future success of their companies. The literature on Intangible capital is significant and includes the discussion of Intangible capital as a source of growth in various countries at national and industry levels (Fukao et al. 2009; van Ark et al. 2009; Marrano et al. 2009; Corrado and Hulten 2010; Borgo et al. 2013; Corrado et al. 2013; Haskel and Wallis 2013; Miyagawa and Hisa 2013; Chun and Nadiri 2016). In Sri Lanka context, there hasn't found the published articles related to intangible assets.

According to the Eckstein 2004, U.S indicated that reported earnings of U.S firms have no relevance relationship between intangible assets. Therefore, Goodwin and Ahmed (2006) calculated Australian firms indicate value relevance in intangible assets. The research was identified the firms that invest the intangible assets have growing strong value in firm's earnings. Boulerne et al (2011) examined intangible assets in reported under international standards in financial reporting in European stock exchange. Mehedi at all (2011) suggested intangible assets have a directly relationship with the market value of all firms listed in Tehran Stock Exchange. Intangible assets valuation in the Malaysian context, Intangible assets may be desired from the past financial crisis periods. Malaysian financial market reveals the book value of net assets which has developed in employing intangible assets (Salamudin, 2010).

Finally, Researchers observed the direct relationship between intangible assets based on various countries and various markets in the world. However, Research of unrecognised intangible and Market Value which was examined a Sri Lankan markets, couldn't find by the recommended articles.

In developed economies, the relative use of tangible capital is decreasing while the relative use of intangible capital such as production technologies, product design, market power and intangibles embodied in employees and firm structure has been increasing (Fukao et al. 2009; van Ark et al. 2009; Marrano et al. 2009; Corrado and Hulten 2010; Miyagawa and Hisa 2013; Chun and Nadiri 2016).

## **2.5 Limitations of Intangible Assets**

It has been noted that the intangible assets are associated with various drawbacks as well. Firms do not report a value for many of the Intangible Assets on their balance sheets, forcing investors to rely on other sources of information to value these assets. As a result, investors and analysts appear to devote relatively more time and effort to assessing the value of companies with larger stocks of intangible asset (Barth, Elliott, and Finn 1997). As a result, one cannot use residuals of market over book values, as in Hansen, Heaton, and Li (2005) and Hulten and Hao (2008), since this will understate Intangibles. Lev 2001, company fails to identify difference between accounting value and corporate value which will be fail to recognised through the accounting rules. Then Lev (2001) explained the corporate value in Intangible Assets as unexplained value. Lev 2001, company fails to identify difference between accounting value and corporate value which will be fail to recognised through the accounting rules. Then Lev (2001) explained the corporate value in Intangible Assets as unexplained value.

## **2.6 Performance of Intangible Assets**

Several research articles produce empirical evidence for the hypothesis of the potentiality of intangibles in the generation of future economic benefits for companies. Hallet al (2001) found positive influence between the quantity of patents and the company performance. According to Yeund and Ramasaroy (2008) the effects exposition that firm with strong brands are more profitable and also represent evidence in the relationship bond and company performance.

A future trending world, the accounting and technology will more improve gradually. Erawati and Sudana (2005) proposed the premise that the intangible assets together with the tangible assets are

one unity that: (1) determine the value of the company and (2) affect the company's financial performance.

In the study conducted by Villalonga (2014) investigated the influence of intangibles on the higher performance of North American companies found in his studies that intangibles play an effective role in competitive advantage and producing higher economic performance.

In particular, stock market valuations of firms which have explanation may be the growing use of IT and the associated investments in intangible. (Chan, Lakonishok, Sougiannis, (1999).

Recently, researchers have begun more systematic efforts to help quantify the extent to which companies have adopted various organizational practices. According to the Aksoy, Fosfuri, Giarratana (2011), firms could utilize these types of Patents and Software resources, The product portfolio will achieve higher market value.

Courtis, 1973 defined as “Goodwill is the benefit arising from connection and reputation, the probability of old customers going to the new firm which has acquired the business”. Oliviera et al (2010) identified intangible assets of goodwill and other significant intangible assets that significantly related to stock price in firm which based on Portugal market. Carrying value of goodwill has decreased below its market value which is determining to assess “qualitative” factor. (Lange, Fornaro, 2014).

Though there are many researches have been carried out in the context of unrecognised intangible assets, it was notorious majority of these studies have been conducted primarily on Western economies. But it is important to note that the unrecognised intangible assets play a vital role in Sri Lankan context as well. Therefore, the purpose of this research is to bridge the research gap on the unrecognised intangible assets and market value in Sri Lankan context.

### 3 RESEARCH METHODOLOGY

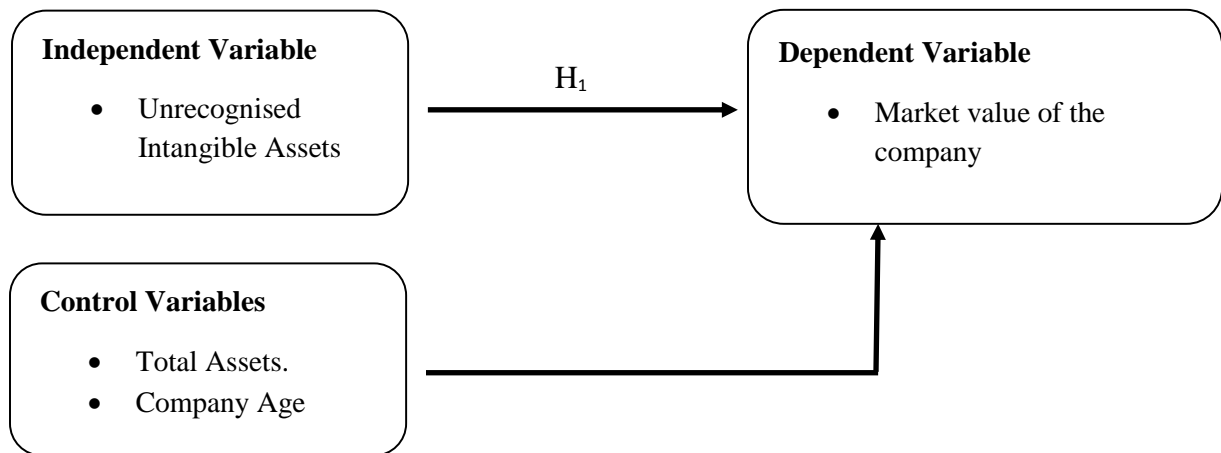
It was provided detailed justifications about the selection of relevant research approaches and methodologies. These areas include an account of the conceptual diagram, population, sample, and data collection procedures and data analysis strategies.

#### 3.1 Conceptual Framework of the research

After reviewing the existing literature relating to factors affecting to employee motivation, the conceptual framework for the research was developed by the researcher identifying dependent and independent variables as follows.

The purpose of this study is to examine the relationship between unrecognised intangible assets and market value. Unrecognised intangible assets represents the independent variable and the market value consider as the dependent variable as well as total assets and company age consider as the control variables. The figure1: shows the conceptual framework.

**Figure 1:conceptual framework**



*Source: Authors developed*

#### 3.2 Development of Hypotheses

The purpose of the study is to identify the relationship between above mentioned independent variables and dependent variable. Thereby it was anticipated to figure out to what extent the unrecognised intangible assets affect to the market value of the firms. The following hypothesis was tested in the study.

H<sub>1</sub>= There is a relationship between unrecognised intangible assets and the Market Value.

### 3.3 Operationalization

Market value- the market value is measured by using the share price of respective business organizations. Numbers of issued shares have been multiplied by market price per share.

Unrecognised Intangible assets- Unrecognised intangible asset value could be generated by using a formula as below:

Market value= Book value of assets- Book value of liabilities+ Value of unrecognised intangible assets

Book value of assets = this is the value of the assets as specified in the statement of financial position

Book value of liabilities = this is the value of the liabilities as specified in the statement of financial position.

**Table 1: Operationalizing of the variables**

Variables	Definition	Measurements
Market Value (MV)	Enterprise Value (MV) is a measure of a company's total value. It looks at the entire market value rather than just the equity, so all ownership interests and asset claims from both debt and equity are included.	Stock Price $\times$ No of shares Outstanding
Value of unrecognised intangible assets	Intangible assets; non-monetary assets which are without physical substance and identifiable.	Unrecognised intangible asset value is calculated by using below formula;  $UIA = MV - BVA + BVL$
Total assets	Net book value is the value at which a company carries an asset on its balance sheet.	Value reported in statement of financial position.
Company age	The length of time that a company has existed.	Company age = Current year (2018) – Establish year

*Source: Authors developed*

### **3.4 Research Design**

According to our scope of data collection analysis, research should be designed by following approaches, procedures and methods.

#### **3.5.1 Research approach**

The study has been conducted using the quantitative approach. Accordingly, data has been collected from existing annual reports of the selected business organizations in Colombo Stock Exchange.

#### **3.5.2 Sampling Design**

The studied sample of this research was a representative sample of the listed companies in Sri Lanka. Further, the sample was designed by referring to different sections in the Colombo Stock Exchange. Convenience sampling will be used in selecting the sample of 90 companies from 6 sectors namely, Bank finance and Insurance, Beverage food and tobacco, Chemicals and Pharmaceuticals, Hotel and Travels, Manufacturing, Construction and Engineering and Telecommunications.

#### **3.5.3 Population**

Population of this study contained all the listed companies in Colombo Stock Exchange. The reason for the selection of listed companies for this study is due to the information accessibility. Accordingly, the population contain 299 companies which have been categorized in to 20 sectors (As at 2018.04.06).

#### **3.5.4 Sample Selection Procedure**

90 companies are considered as the sample for this study. Researcher wanted to identify whether there is any statistically significant relationship between the sector of the companies and the relationship between unrecognised intangible assets and Market Value. It is expected that the sample was able to represent entire population while enabling to generalize the findings of the survey among all the companies.

### **3.5 Data collection methods and techniques**

An annual report data for public listed companies was conducted by using the 90 companies to assess the data collection in Sri Lankan context.

#### **3.6.1 Source of Data**

Both primary and secondary data was gathered in finding the ripostes for research objectives. The primary data was gathered to bridge the research gap in the existing literature. Primary data has

been gathered by referring to the annual reports published by selected business organizations while secondary data was gathered from the existing research articles. Other than that, many academic journals and articles were used as sources of data in achieving the pre-determined objectives of research.

### **3.6.2 Data analysis strategies**

Data has been conducted by using Microsoft excel and SPSS where necessary. Further below formula has been explained that the value of unrecognised intangibles assets including presented in the financial statements and hidden assets could be derived from the formula (Salamudin, 2010).

$$UIA = MV - BVA + BVL$$

MV = Market value

BVA = Book value of assets

BVL = Book value of liabilities

UIA = Unrecognised intangible assets

## **4 DATA PRESENTATION AND ANALYSIS**

Data analysis includes a discussion on findings of the survey. It is based on the results of the analysis conducted with the 90 selected companies which represent various sectors of Colombo Stock Exchange. The findings assist to draw the relationship between unrecognised intangible assets and the market value.

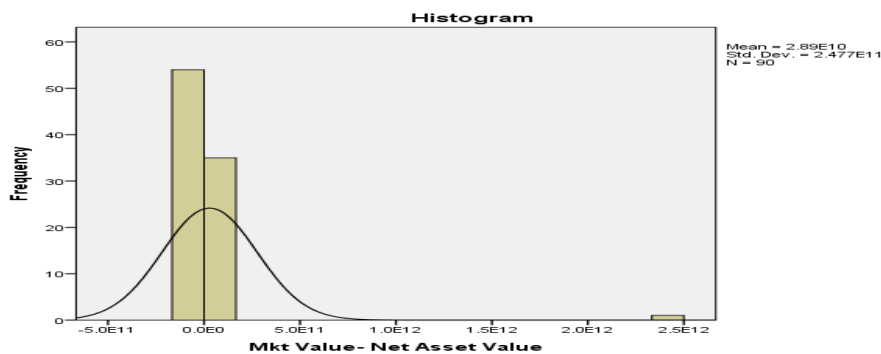
### **4.1 Normality Analysis**

According to figure 2 can see two kind of test of normality that are Kolmogorov-Smirnov and Shapiro-Wilk. According to Kolmogorov-Smirnov method and Shapiro-Wilk, significance level is 0.000 that is less than 0.05. Therefore, we reject the null hypothesis and accept the alternative hypothesis. That means there is a relationship between unrecognised intangible assets and market value of the firm and also data set is not statistically significant difference from normal distribution. Therefore, we can say the data set is normally distributed.

**Table 2: Test of normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mkt Value	.444	90	.000	.112	90	.000

Source: Survey Data

**Figure 2: Test of normality**

Source: Survey Data

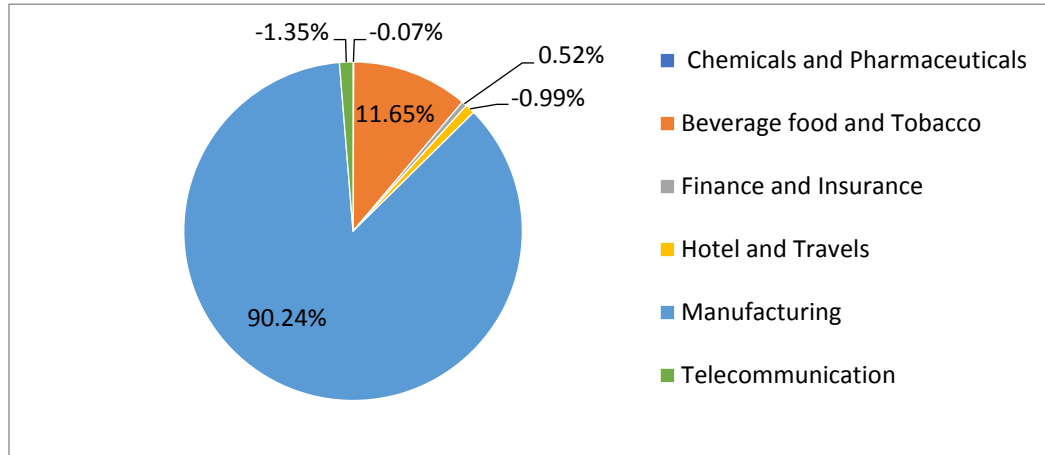
## 4.2 Descriptive statistics

Relevant to the objective 01 (To examine how much of Unrecognised Intangible Assets are available in PLCs). Descriptive statistics analysis is used to examine how much of Unrecognised Intangible Assets of total intangible assets that belong in the selected sectors such as Bank Finance and Insurance, Beverage Food and Tobacco, Chemicals and Pharmaceuticals, Hotels and Travels, Manufacturing and Telecommunication.

Accordingly, it was identified available unrecognised Intangible Assets that 0.52% of the selected companies represent finance and insurance sector. On the other hand, 11.65% is represented by Beverage Food and Tobacco sector. Further the chemicals and pharmaceutical sector also represent the -0.07% of selected companies. Moreover, hotel and travels represent -0.99% while manufacturing companies also contribute to 90.24%. On the other hand, telecommunication sector has represented -1.35% of the selected sample of listed companies. It shows figure 4: industry wise of the available unrecognised intangible assets.



**Figure 3: Industry wise unrecognised intangible assets**



Source: Survey Data

### 4.3 Correlation analysis

Relevant to the objective 02(To identify the relationship between unrecognised intangible assets and market value of the public listed companies in Sri Lanka). Correlation is used to identify the relationship between unrecognised intangible assets and market value of the PLCs in Sri Lanka.

#### Hypothesis

H1= There is a relationship between unrecognised intangible assets and the Market Value.

According to the findings of bivariate correlation between unrecognised intangible assets and the market value of the business organizations selected, the null hypothesis that have been developed was strongly rejected ( $p$ -value= 0.002) and it was concluded that there is a strong relationship between unrecognised intangible assets and the market value of the selected business organizations (Pearson Correlation- .992). Table 3 shows the relationship between and the indirect effect with their respective significances.

**Table 3: Correlation analysis**

		Market value
Unrecognised intangible assets value	Pearson Correlation	.992**
	Sig. (2-tailed)	0.002
	N	90

Source: Survey Data

#### 4.4 Regression analysis

Regression Analysis is used to examine impact of the Unrecognised Intangible Assets to the Market Value of the PLCs. (objective 03). The regression analysis has been carried out to develop a model by which the market value could be derived by using value of unrecognised intangible assets, book value of assets and book value of liabilities. Being the correlation analysis concluded that there is strong relationship between market value of the firm and value of unrecognised intangible assets, the analysis will assist pinpoint the way it affects to the market value.

Table 4 shows the regression analysis for all sectors as follows;

**Table 4: Regression analysis- all sectors**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	1.000 <sup>a</sup>	1.000	1.000	7.85292

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	2.592E18	3	8.640E17	.	.000 <sup>a</sup>
	Residual	863.357	14	61.668		
	Total	2.592E18	17			

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
	(Constant)	-2.326E-7	1.992		.000	.000
	Book Value of Asset	.600	.000	1.006	2.486E7	.000
	Book Value of Liabilities	-.320	.000	-.691	-2.196E7	.000
	Unrecognised Intangible asset value	.080	.000	.634	4.562E7	.000

*Source: Survey Data*

The regression analysis was conducted by considering the entire sample selected irrespective of their sectors and thereby it was pinpointed that the three factors considered including value of unrecognised intangible assets, book value of assets and book value of liabilities account for 100% of the variability in the market value of the firm (R Square= 1).

The null hypothesis that all repressors are zero is strongly rejected (P value = 0.000). Furthermore, it was noted that the three parameters considered (value of unrecognised intangible assets, book value of assets and book value of liabilities) emerge as significantly different from 0. Accordingly changes in such factors could significantly affect to the changes in the market value.

#### 4.5 Testing the control variables

Other than independent variable, company age and total asset can consider as a control variable to affected the Market value of the companies.

##### 4.6.1 Testing the control variable for Total Assets

H1= There is a relationship between Total assets and the Market value.

Table 5 below provides the correlations of total assets and market value for the selected sample

**Table 5: Correlations of total assets and market value**

Correlations			
		Total assets	Mkt Value
Total assets	Pearson Correlation	1	.119**
	Sig. (2-tailed)		.262
	N	90	90

*Source: Survey Data*

According to the findings of bivariate correlation between total assets and market value of the company selected, the alternative hypothesis that have been developed was strongly rejected (p value = .262). and it was concluded that there is a no real relationship between total assets and Market Value of the selected companies (Pearson Correlation=.119). As well as it was concluding that total assets are no controllable to the market value.

#### 4.6.2 Testing the control variable for Company's Age

H1 = There is a relationship between Company age and Market Value.

Table 6 below provides the correlations of company age and market value for the selected sample

**Table 6: Correlations of company age and market value**

		Company	
		Age	Mkt Value
Company	Pearson Correlation	1	.470**
Age	Sig. (2-tailed)		.000
	N	90	90

*Source: Survey Data*

According to the findings of bivariate correlation between company age and the market value of the companies selected, the null hypothesis that have been developed was strongly rejected ( $p$ -value= 0.000) and it was concluded that there is a strong relationship between Company age and Market value. As well as it concludes company age is controllable to the market value.

The study discussed the findings of survey, it was initiated by analyzing the demographic factors of the selected business organizations. Then the hypothesis was tested using correlation analysis and thereby it was figured out the relationship which exist between unrecognised intangible assets and Market Value. The descriptive analyzes result in significant findings on such relationship.

## 5 CONCLUSION

Unrecognised Intangible assets play a vital role in current business context. The studies conducted on unrecognised intangible assets have pinpointed that the management of most of the business organizations pay a considerable attention to the unrecognised intangible assets in creating competitive advantage and the focus of such management has given to the enhancement of such asset as well. The significant gap between market value and accounting book value of the business organizations have invited wide research on the unexplained value or hidden reserve ignored by current financial reporting standards being it results in inaccurate information to the economic users. Nevertheless, the researchers noted that the studies that have been conducted on relationship between unrecognised intangible assets and the market value of the business is at lower level

especially in the Sri Lankan context. Accordingly, the study was conducted to pinpoint the relationship between unrecognised intangible assets and market value of the selected listed companies. The study was conducted by referring to 90 listed companies representing Bank finance and Insurance, Beverage food and tobacco, Chemicals and Pharmaceuticals, Hotel and Travels, Manufacturing, Construction and Engineering and Telecommunications. The study assisted to pinpoint the relationship between unrecognised intangible assets and the market value of selected business organization and being the sample is a representative sample the findings could be generalized among the listed entities in Sri Lankan capital market.

Accordingly, the results implied that majority of the investors make the investment decisions mainly referring to the tangible assets of the respective companies. Nevertheless, the correlation analysis conducted assisted to identify that there is a positive relationship in between unrecognised intangible assets and the market value of the business organizations. Higher the value of unrecognised intangible assets, the market value of the business is going up. And, also testing the control variables of total assets and company's age whether it influence to the market value. According to the analysis, total assets are not positive relationship and company's age are positive relationship with market value. Further it is recommended to conduct the survey by using different business organizations including private companies as it assists to generalize the findings across all business organizations.

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