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## CHALLENGES AND BARRIERS OF ADOPTING FAIR VALUE ACCOUNTING FOR REAL ESTATE VALUATION IN PUBLIC LISTED COMPANIES -SRI LANKA



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Abstract: Sri Lanka adopted IFRS with effect from 1st January 2012. With IFRS gaining rapid acceptance across the globe with over a 100 countries adopting it, Sri Lanka too is now in line with the global trend in enabling a common language for financial reporting processes following the adoption of IFRS. The Adoption of IFRS is a major breakthrough for companies in Sri Lanka as they will have a common, high quality and internationally accepted set of accounting and financial reporting standards and is also seen as a way forward to bring in 'more credibility' to financial reporting in the country. However, there are challenges and barriers to Sri Lanka in the process of adopting IFRS. Hence, this research was aimed to analyze Challenges and Barriers of Adopting Fair Value Accounting for Real Estate Assets Valuation in Sri Lanka Public Listed Companies. To accomplish this purpose, three objectives were developed and to achieve the objectives eighteen (18) hypotheses were developed and tested. The first objective was to find out the major determinant factors of adopting FVA for Real Estate Valuation. That was basically achieved through a solid literature review related to the problem statement. Accordingly five firms based characteristics and three behavioral factors of managers for of adopting FVA for Real Estate Valuation were identified. Second objective was tested to identify the relationship between firms based characteristics and behavioral factors of managers for of adopting FVA for Real Estate Valuation. Accordingly fifteen hypotheses were developed on firms based characteristics in terms of Firm Size, Leverage, Profitability, Amount of Real Estate and Extent of Expertise for Fair Value Accounting. The results obtained for all fifteen hypotheses were significant. Thus, the proposed link between firms based characteristics and behavioral factors of managers for adopting FVA for Real Estate Valuation was fully supported. Third objective was to identify the relationship between behavioural factors of managers and adoptability of FVA for Real Estate Valuation in PLCs' in Sri Lanka. As per that, Attitudes, Subjective Norms, and Perceived Behavioural Control were considered as behavioural factors of managers as suggested in literature chapter. Three hypotheses were tested and all of them were significant to confirm the proposed link between behavioural factors of managers and adoptability of FVA for Real Estate Valuation in

PLCs' in Sri Lanka. The results obtained for second and third objectives, confirmed the barriers and challenges of adopting FVA for Real Estate Valuation in Sri Lankan context. Perceived Control is the most influencing factor, followed by Subjective Norms and Attitudes .As far as exogenous factors: firms based characteristics and endogenous factors: behavioral factors of managers for adopting FVA for Real Estate Valuation are concerned; Extent of Expertise for Fair Value Accounting has the most significant influence on Attitudes of managers. Level of Leverage of company determines the Perceived Control of managers in the process of Fair Value adoptability. At the same time, Firm Size has a significant impact on Subjective Norms of managers in the process respectively.

**Key words**: IFRS-FVA, Real Estate Valuation, Public Listed Companies in Sri Lanka, Firm Based Characteristics, Managers' Behavioral Factors.

#### 1.1 INTRODUCTION

Academics and practitioners alike are actively debating the movement toward fair value accounting, around the world including Sri Lanka. Over 100 countries have already adopted or on their way to embrace International Financial Reporting Standards (IFRS) in the near future (Djatej et al., 2012).

For real estate entities, the adoption of IFRS 13 could result in significant changes to processes and procedures for determining fair value and providing the required disclosures. While the requirement to determine fair value by reference to market participants is not new, the definition of fair value in IFRS 13 differs from that proposed by IVS, which are the generally accepted standards for professional appraisal practice in valuing real estate internationally. The fair value framework set out in IFRS 13 contains specific requirements relating to highest and best use, valuation premise, and principal (or most advantageous) market. This may require entities and their appraisers to re-evaluate and reconsider their methods, assumptions, processes and procedures for determining fair value (Young, 2013).

Specifically, the research investigates magnitude of relationships of managers' attitude, subject norm, and perceived control toward adoption of the Fair Value Accounting for Real Estate assets with respect to firm size, leverage, profitability, the amount of Real Estate assets, and the extent of expertise for fair value accounting which significantly influences the intention of IFRS adoption.

As per that the research evolves as follows. In section two past and contemporary literatures on spread of IFRS around the globe and views of the Sri Lankan practitioners toward IFRS is reviewed. Section three discusses the research

model and hypotheses. Section four presents the methodology applied and data analysis. Section five is dedicated to the discussion and analysis of results and Section six presents research conclusions and possible routes for future research.

#### 1.2 PROBLEM STATEMENT

More studies on fair value measurement and reporting, particularly for non-financial assets, are needed as the IASB continue to work on their convergence projects and the SEC continues to move toward accepting IFRS. Knowledge as to how capital market participants, including managers, sophisticated information Intermediaries (e.g., stock analysts, credit rating agencies), and investors, react to the fair value adoptability will help regulators provide a meaningful transition to IFRS (Jung, et al., 2013). In addition, it is valuable in itself to obtain knowledge about the consequences of implementing IFRS in a given country and compare results across nations (Barth, 1996). The advantage of adopting IFRS has been widely discussed and questioned in countries characterized by having a developed accounting regulation prior to IFRS (Barth, 1996). The challenges and barriers faced by the companies in IFRS implementing process are also timely important to discussed. Firm based characteristics such as firm size, leverage, profitability, the amount of Real Estate assets, and the extent of expertise for fair value accounting may affect managers' attitudes toward adoption of the Fair Value Accounting for Real Estate assets. Fundamentally, managers' decisions to adopt the Fair Value Accounting for Real Estate assets depend on the benefits and costs of the adoption to firm value. Utilizing the Theory of Planned Behavior (TPB) investigate above mentioned firm based characteristics which are influencing the intention of implementation of Fair Value Accounting for Estate assets. These factors include attitude, subjective norms, and perceived control. The attitude toward the behavior is an individual's belief of consequences of performing the behavior; the subjective norm refers to the perceived social pressures that an individual perceives regarding whether the behavior should or should not be performed; perceived behavior control refers to one's perception of the ease or difficulty of performing the behavior of interest. Numerous studies demonstrated the applicability of TPB to various content domains (Ajzen, 1991). Accordingly, the objective of this research is to employ Theory of Planned Behavior (TPB) to empirically investigate the challenges and barriers of adoption of IFRS in the in Sri Lankan Public Listed Companies.

As per that problem of the this study is formed as, what are the challengers and Barriers of adopting Fair Value Accounting (FVA) for Real Estate Valuation in Sri Lankan Public Listed Companies (PLCs')?

#### 1.3 OBJECTIVE OF THE STUDY

This research study is aiming to find out the barriers and challenges of adopting FVA for Real Estate Valuation in PLCs' in Sri Lanka. In order to that, following objectives will guide the research.

## 1.3.1 General Objective

• To find out the challenges and barriers of adopting FVA for Real Estate Valuation in PLCs' Sri Lanka.

## 1.3.2 Specific Objectives

- To identify the relationship between firms based characteristics and behavioral factors of managers for of adopting FVA for Real Estate Valuation.
- To identify the relationship between behavioral factors of managers and adoptability of FVA for Real Estate Valuation in PLCs' Sri Lanka

#### 2. LITERATURE REVIEW

#### 2.1 Introduction

The objective of this chapter is to review the available literature relating to the identified research problem. Accordingly, International Financial Reporting Standards (IFRS) Fair Value adoption on Real Estate Valuation and related issues were are presented via findings of various empirical studies and reviews. Then the challenges and barriers of adopting fair value accounting for Real Estate Valuation were discussed in order to develop the conceptual framework and hypothesis to achieve the research objectives stated in chapter one.

## 2.2 International Financial Reporting Standards (IFRS)

There is an enormous amount of literature concerning the process of international accounting harmonization and more recently, that of convergence. The most significant role in achieving international convergence is played by the International Accounting Standards Board (IASB) (RUSU, 2012). It is concerned with the development of accounting standards to be applied globally for increasing the international comparability of the financial information. Many countries intend to

adopt International Financial Reporting Standards (IFRS) or make their national regulations converge with IFRS.

#### 2.2.1 IFRS 13 Fair Value Measurement for Real Estate assets

Although Real Estate assets consist mainly of investment property, intangible assets, and property, plant, and equipment (PPE) (Christensen & Nikolaev, 2012), more studies usually focus on fair value accounting for PPE.

The fair value option is more controversial for Real Estate assets like real estate than for financial assets, as the estimations by managers that it requires are more subjective than are those for financial assets whose quoted prices are usually either available in the active market or observable from the price of comparable assets (Christensen & Nikolaev, 2012). Active markets for Real Estate assets in many cases do not exist, particularly for operating assets, such as PPE. When active markets are not available, the fair value of real estate like should be determined based on the present value of estimated future cash flows or by qualified appraisals. It is one of the main challenges to the use of fair value adoption.

#### 2.3 Theoretical Literature

## 2.3.1 Attitudes, Subjective Norms, and Perceived Behavioral Control

The theory of planned behavior suggests three conceptually independent determinants of intention (Ajzen, 1991). The first is the attitude toward the behavior and refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question. The second predictor is a social factor termed subjective norms; it refers to the perceived social pressure to perform or not to perform the behavior. The third antecedent of intention is the degree of perceived behavioral control which refers to the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles (Ajzen, 1991).

#### 2.3.1.1 Attitudes

As (Norbert & Gerd, 2001) stated Allport (1935) has defined that an attitude is "a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related". As per that Attitudes have long been considered a central concept of social psychology (Norbert & Gerd, 2001).

Accordingly, attitudes may be positive or negative. Attitudes are relatively stable. But it may change with time and contextual situational factors. Attitudes shape up the behavior. Adjzen (1991) indicates that if a person is having favorable attitude toward a particular behavior, his/her intention to perform that behavior is very high. On the other hand, when an individual is having negative attitude toward a particular behavior his/her intention to perform that behavior is low.

## 2.3.1.2 Subjective norms

In socio-psychological theories proposes that human/consumer behavior is motivated by two kinds of norms: descriptive norms and injunctive norms. According to the Cialdini et al., (1990) descriptive norms are defined as what others do while injunctive norms can be defined as what others think a person should do. In fact, descriptive norms refer to the perception of other's behavior or observations are based on how people act in a given situation.

Although, the TPB has successfully explained the some firms may want to adopt IFRS earlier to gain the possible competitive advantages. The peer pressure will have an effect on the intention of adopting IFRS (Djatej, et al., 2012).

#### Perceived control

The importance of actual behavioral controls self-evident: The resources and opportunities available to a person must some extent dictate the likelihood of behavioral achievement (Ajzen, 1991). Greater psychological interest than actual control, however, is the perception of behavioral control and is impact on intentions and actions.

According to (Arsen, et al., 2012) Perceived behavior control refers to someone's perception of the ease of difficulty of performing the behavior of interest. It is assumed to reflect anticipated impediments and obstacles. Adopting IFRS needs significant investment. Environmental limitations, such as money, computer system, and people skill, affect the behavior intention of IFRS adoption.

## 2.3.2 Firm based characteristic to adopt IFRS

According to (Anon., 2013) Firm based characteristics which were associated with IFRS adoption included company size, debt, and equity financing needs. Finally, the implementation of IFRS provides more value relevant accounting measures in the year subsequent to adoption compared to the year of adoption.

#### Firm Size

Evelyne, et al., (1980) stated that the firm size is determined by the numbers of employees of the responding firm. The World Bank defines enterprise size in Sri Lanka based on the number of employees those with fewer than 49 employees are small, those with 50-99 employees are medium-sized;

According to (Djatej, et al., 2012), while multinationals might be able to absorb the costs, serious questions remain about the ability of small and midsize businesses to afford the conversion especially during the times of economic downturn. Thus, it is only prudent to investigate whether company's perceived control over IFRS conversion has any impact on actual adoption of IFRSs.

## Leverage

Leverage, as a business term, refers to debt or to the borrowing of funds to finance the purchase of a company's assets. Online Oxford dictionary defines leverage as "the ratio of a company's loan capital (debt) to the value of its ordinary shares (equity); gearing". Many researchers have studies the impact of leverage on firms' operations. Accordingly (Larry, et al., 1996) has revealed that there is a negative relation between leverage and future growth at the firm level and for diversified firms. Financial leverage affects the cost of capital which is calculated as the expected cost of debt and the expected cost of equity. With everything else being equal, the lower the overall cost of capital, the greater the value of a business (Ron, 2014). (Hans B. & Valeri, 2009) has stated that companies with higher leverage are more likely to choose fair value over historical cost. As per (Christian & Christian, 2010) fair-value accounting fuelled the high leverage prior to the crisis.

## Profitability

(Muhammad, 2012)We tested the impact of adoption as it relates to profitability, growth, leverage, and liquidity performance. Furthermore, under IFRS firms tend to exhibit higher values on a number of profitability measures, such as earnings per share (EPS).

(Annette, 2012) Fewer procedures may be required as more companies use IFRS and differences in profitability arising solely from differences in accounting methods are reduced between comparable companies" Thus, this will encourage less distortion in transfer prices.

#### Lack of expertise

In addition, in order to analyze whether my results were driven by a lack of expertise or willingness to adopt IFRS I also removed adopters of IFRS that were deemed less serious using proxies such as magnitude of accruals and number of annual report pages before and after the adoption. Contrary to expectations, I find stronger evidence of a decrease in the quality of financial reporting after the adoption of IFRS (Mari, 2008)

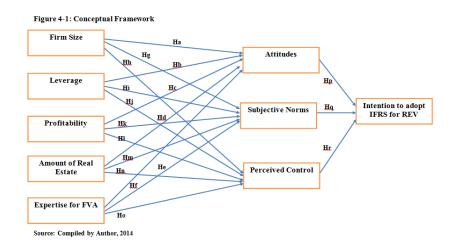
As stated in (Bhattacharjee & Islam, 2009) Bangladesh, SEC lacks expertise to formulate standards which led them to delegate the responsibility to the ICAB.

#### 3. RESEARCH DESIGN

#### 3.1 Introduction

As research methodology discussed in two phases, data in the both first and second phases were collected using a Likert Scale (7 – Strongly Agreed, 1 – Strongly Disagreed) Questionnaire from accounting practitioners; Accountants, Finance Managers etc in PLCs. During the data collection, face to face interviews were conducted to collect desk information from experts in Public Listed Companies to verify the relevancy of data collection for the study.

With the literature review in related studies, the theoretical framework has identified. Then the conceptual framework derived how the research could be facilitated to conclude an ideology which will examine the reality compared to the ideology developed. This has revealed the relationship between challenges and barriers of adopting IFRS-FV for real estate assets valuation and intension of adoption. This is shown in the following figure 4.1.



Following eighteen hypotheses have been derived with the above conceptual framework. These hypotheses revealed the answers to the objectives.

## 3.2 Population

The population of this study is all Public Listed Companies-PLCs in Colombo Stock Exchange. In order to get precise data about barriers and challenges of implementing IFRS, companies were considered in sector wise. In Sri Lanka, Public Listed Companies are categorized in to 20 major sectors.

In this study, it is considered to select all sectors for the study proportionately. There are 293 PLCs operates in the Colombo Stock Exchange and the sample size is 106.

## 3.3 Sample

The process of selecting the right individuals, objects or events as representatives for entire population is known as sampling (Sekaran & Roger, 2010). In order to achieve the objectives of the study, researcher selected to study the perceptions of mangers on challenges and barriers towards adoption of IFRS for Real Estate Valuation in public listed companies in Sri Lanka.

Researcher selected the all sectors greater than 5 no of companies in a sector for the study mainly based on two main reasons. First, based on the available literature, researcher decided to select all sectors registered in CSE as far as possible since each and every sector having more or less real estate assets in their balance sheets.

Second ,all sectors registered in CSE have well known management accounting practices than some small industry specific management accounting practices, also public listed companies have given the birth to most of the management accounting techniques that are being used today (Johnson & Kaplan, 1991). This will provide better setting to observe the use of well-known variety of management account practices.

The above mentioned reasons lead researcher to focus on public listed companies in Sri Lanka in testing and achieving the research objectives of the study.

Thus, the population of the study will be limited to the senior/top managers in the public listed companies in Sri Lanka. Accordingly, the unit of analysis of the study is identified as individuals. The study focus on individuals who designated with "Senior manager" positions (Hambrick & Mason, 1984) in the public listed companies in Sri Lanka.

The study was designed to focus on senior managers who are either categorized as administrators or technical (professionals) for the study. Thus, the senior managers were selected mainly focusing on their educational and functional experience. As per Sekaran & Bougie (2010), Judgmental sampling involves the choice of subjects who are most advantageously placed or in the best position to provide the information required. Accordingly the sampling design for the study is judgmental sampling method.

Population of PLCs in Sri Lanka=280 (>=5 no of companies in a sector) Severage food and Tobacco ootwear and Textiles 3anking Finance and **Diversified holdings** Hotels and Travels and and Property nvestment Trust harmaceuticals ower & Energy Manufacturing Themical and **Jealth** care antations rading ervices **Aotors** 21 12 19 6 7 36 10 18 37 6 19 8 8 66 7 4 7 2 2 14 5 6 14 2 7 3 2 3 28

Table Error! No text of specified style in document.-1: Sample Design

According to above table 4.3, Sample was taken using Sampling Calculator where 95% confidence level and 7.5% confidence interval. Accordingly 106 sample size was suggested to carry out the study out of total population 280. Sampling technique used in this research is Stratified Random Sampling method.

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The sample size is important as it affects the magnitude of difference in covariance matrices (Malhotra& Dash 2010). If the sample is inadequate, the probability to project the results to the population becomes severely limited. Therefore, a 'minimum sample size' is needed. A priority statistical power analysis can be calculated using various methods. Subsequently, there are different arguments on the size of the sample.

The total sample size was fixed at 106 in view of time and cost considerations. Even for population of 10,000 or more, most experienced researches would probably

consider a sample size between 200 and 1,000 respondents (Sekaran, 2003). Accordingly, 106 out of 280 deemed to be good representative of the population.

#### 3.4.3 Research Instruments

A standard questionnaire was used as the research instrument in collecting primary data which were used to analyze and understanding the established relationships (Refer annexure 06). Based on the literature review, standard questionnaire which were tested in prior studies were used in developing the research instruments. Some of these questions were adopted according to the Sri Lankan public listed companies by the researcher.

The questionnaire was pre-tested using fifteen senior managers, in order to ensure face validity and other weaknesses. The mistakes, ambiguous writing and other weaknesses were corrected according to the respondents responses and suggestions received in the pre-test. The final questionnaire prepared had two main sections.

#### 3.4 Data Collection

## 3.4.1 Primary Data collection

This has taken the form of semi-structured and unstructured interviews. The researcher participated to workshops, seminars, and gatherings held in Institute of Charted Accountants Sri Lanka. Data collection has guided by three principles of data collection: using multiple sources; creating a case study database; and maintaining chain of evidence (Robert K., 2004). This primary data collection basically helped to draft the questionnaire which was used to collect perceptions of senior managers in Public Listed Companies in Sri Lanka

Accordingly, Unit of analysis of the research was senior managers of Public Listed Companies in Sri Lanka. Total Sample of 106 PLCs was selected using the population as a sampling method covering all sectors; more than 5 companies in a sector listed in CSE for this purpose. Data analysis was done basically using SPSS.20 and SmartPLS 2.0 software packages.

Prior to the actual data gathering, pilot test on the questionnaire was carried out for randomly selected 15 companies. Since the researcher identified errors in the questionnaire, same has been re-designed and data was collected accordingly. Before the actual surveys were conducted, proper contacts had been made with respective companies.

#### 3.4.2 Factor Analysis

Factor analyses are performed by examining the pattern of correlations (or covariances) between the observed measures. Measures that are highly correlated (either positively or negatively) are likely influenced by the same factors, while those that are relatively uncorrelated are likely influenced by different factors. (Jamie De, 1998)

## 3.4.3 Secondary data collection

Secondary data was collected from literature search such as books, journals, and reports. Because some of the information may not be accessible in libraries and internet, an archive study of reports conducted at industry level and at the national archives in the industry. The whole process took considerable period of time.

### 3.4.4 Validation of Measurement Properties

Properties of the measurement should be assessed at least through ensuring content validity and construct validity (Sekaran, 2003). Hence, the validations of measurements used in the study are discussed in the following sections.

Content validity is a function of how well the dimensions and elements of a concept have been delineated (Sekaran, 2003). Constructs used in the survey have high content validity as they were developed based on a rigorous literature survey.

Construct validity testifies to how well the results obtained from the use of the measure fit the theories around which the test is designed (Sekaran, 2003). Factor analysis is a multivariate technique that would confirm the dimensions of the concept that have been operationally defined, as well as to indicate which of the items are most appropriate for each dimension (establishing construct validity) (Sekaran, 2003). Therefore to measure the construct validity of the study, factor analysis was used for each dimension. Further, item correlation was also performed in order to ensure convergent and discriminant validity.(Sekaran& Bougie,2010)

Reliability of the measure indicates the extent to which it is without bias hence ensures the consistent measurement across time and across various items in the instrument. This helps to assess the "goodness" of the measure. (Sekaran & Bougie, 2010) In order to test the reliability of the constructs, Inter-item consistency reliability, Cronbach's coefficient alpha was used.

## 3.5 Analysis of Data

The above literature provides a justification for the current study to use PLS for the purpose of data analysis. First as mentioned earlier, this study is very first study that

is being conduct in Sri Lanka, to analyze the challenges and barriers of adopting IFRS-FVA for real estate valuation in public listed companies. As per the literature, PLS is well suited for studies relating to early stages of theory building and testing (Hair et al., 2011;Vinzi, et al., 2010;). Further, the study used relatively small sample size of about 100 where PLS is well designed to cater for small sample sizes.

Thus the hypotheses of the study is to be tested with PLS using smartPLS 2.0 release, the software written specifically for PLS path analysis. Even though the PLS is available with well-known softwares like SPSS, SmartPLS is a well-known software package among researchers who use PLS as a path modeling which is similar to Structural Equation Modeling (SEM) and thus SmartPLS was used for the purpose of data analysis.

#### 4. DATA ANALYSIS

#### 4.1. Introduction

Firstly, it describes the profile of the sample and descriptive data. Secondly, the data will be cleaned and check for normality. Thirdly data will be presented and analyzed to identify the challenges and barriers of adopting Fair Value Accounting for Real Estate Valuation in Sri Lankan Public Listed Companies with a view to meet the objectives of the study.

#### 4.2. Sampling Frame of the Study

As described in the methodology section, the data were collected from the senior managers in the public listed companies who were from different companies representing sectors in the Colombo Stock Exchange (CSE). As per that, only 15 sectors out of total 20 which have more than 5 companies were used for selecting the sample. Table 5.2 presents the information about the different sectors in which the respondents operates.

Out of the total sample of 106 Public Listed Companies 28 were selected from Banking Finance and Insurance (26%), 14 were from Hotels and Travels (13%) and 14 were from Manufacturing (13%) etc.

#### 4.1.1 Tests of Normality Distribution of Data

Normality magnifies the shape of the sample data distribution to the population. Subsequent estimates of sample means will have representative variations with the population mean (Malhotra & Dash, 2011). Normality is used to describe a curve that

is symmetrical and bell-shaped. The highest score frequency is depicted in the middle, with lower frequencies towards the extremes.

Even though there are multiple ways of assessing the normality of the distribution of scores, to assess normality for this study the researcher used Kolmogorov-Smirnov statistic (K-S test) and the Shapiro-Wilk statistic test.

## 4.1.2 Validity and Reliability of the Measurement Model

As explained earlier, the PLS model has two sub models, where the first part is called the measurement model. In this model the focus is on establishing the validity and reliability of the measures used to represent each construct of the measurement model.

- Firm Size –FS, Leverage LV, Profitability FT, Amount of Real Estate REA, Extent of Expertise for Fair Value Accounting - EFA were regarded as independent variables which were considered as challenges and barriers of adopting IFRS-FVA for real estate valuation as identified in literature review chapter.
- Attitudes-AT, Subjective Norms-SN and Perceived Control-PC were identifies as mediating variables of the model. And also those are independent variables effect on intension to adopt IFRS -IN
- Intension to adopt IFRS -IN is the dependent variable of the model which represents the adoptability of IFRS in Real Estate Valuation in PLCs'

To follow the first step of the SmartPLS, the initial measurement model was run using the PLS algorithm option. The Path Weighting Scheme was selected for the inner weights estimation and standardized data was selected for the data metric (Mean Value of 0, Variance of 1) (Hair, et al., 2011).

Firstly, the content validity of the indicators were measured based on the results of indicator reliability test. The content validity measures to what extent a measurement model's variables belongs to the domain of the construct (Vinzi, et al., 2010). The indicator reliability specifies which part of an indicator's variance can be explained by the underlying latent variable. A common threshold criterion is that more than 70% of an indicator's variance should be explained by the latent construct. But, for each construct the factor loadings that had less than .7 need to be removed from further analysis (Hair, et al., 2011) to ensure the indicator reliability so that it meets the content validity of the measures. But factor loadings less than 70%, (Factors related the variable "Amount of Real Estate") also were used for further

analysis as those factors seem to be significant in the study. The variables that were selected for the further analysis are presented in Table 5.4.

As per the indicator reliability analysis, factor loading records above 0.6 other than, EFA1, REA2, REA3 and REA4.But all of them can be considered for further analysis with content validity of the statements.

After establishing the construct's indicators and indicator reliability, in respect of uni-dimensionality, further evaluation is required regarding the reliability and validity (Vinzi, et al., 2010). With a view of catering to this requirement, the construct reliability, convergent validity and the discriminant validity of the measurement model were ensured as follows.

## 4.1.1 Construct reliability

In order to ensure the construct reliability, the composite reliability and the cronbach's alpaha is used (Vinzi, et al., 2010). The composite scale reliability for each construct (an internal consistency estimate similar to alpha) and the Cronbach's alpha are expected to meet.70 or above to ensure the construct reliability of each construct used in the measurement model (Hair, et al., 2011).

## 4.1.2 Convergent validity

Convergent validity is based on the correlation between responses obtained by maximally different methods of measuring the same construct. A common measure to examine convergent validity is known as average variance extracted (AVE) (Vinzi, et al., 2010). If the AVE measure is measured at more than or equal to .5, it is assumed to achieve the convergent validity of the measures ( Hair, et al., 2011; Vinzi, et al., 2010).

#### 4.1.3 Discriminant validity

The discriminant validity of the measurement model is used to ensure that a construct is more strongly related to its own measures than with any other construct (Vinzi, et al., 2010). To test for this, it needs to compare the square root of the average variance extracted (AVE) with the correlations among constructs. Further, Factor cross loadings and their correlations are used to measure the discriminant validity of the measurement model indicators (Vinzi, et al., 2010).

Table 5.5 presents the information relating to the composite scale reliability, cronbach's alpha and AVE measure for each construct of the measurement model.

## Table Error! No text of specified style in document.-2: Variables used for the Analysis

Construct	Code assigne d	Factor loadings	Statements
	EFA1	0.6354	Increased estimation errors, lack of verification, and excessive subjectivity discourage adoptability of IFRS for Real Estate Valuation
Extent of Expertise For Fair Value AccountingEFA	EFA2	0.7805	Adoption of Fair Value Accounting for Real Estate Valuation is much easy with large extent of expertise for fair value accounting.
	EFA3	0.8014	Adoption of Fair Value Accounting for Real Estate Valuations are complex and costly because the absence of liquid markets
	FS1	0.8983	Information environment is important for larger firms than for smaller firms as far as Adoption of Fair Value Accounting is concerned
Eima Cina EC	FS2	0.8792	Investors in larger firms seek to access many different information sources.
Firm Size -FS	FS3	0.6551	Reporting for Real Estate assets on financial statements will lower the information asymmetry between investors and managers to a larger extent for smaller firms
	FS4	0.8006	Cost of adopting the fair value accounting for Real Estate assets are not affordable to small firms
	FT1	0.9100	Firms with lower operating performance are more reluctant to choose the Fair Value Accounting for Real Estate Valuations because it increases the book value of assets.
Profitability FT	FT2	0.7541	An increase in the book value of Real Estate assets reduces operation performance measures such as return on assets (ROA).
	FT3	0.7064	Managers of less profitable firms will be less willing to adopt the Fair Value Accounting for Real Estate Assets
	LV1	0.8262	Firms that rely heavily on the debt are commonly required by independent appraisers to provide valuations for Real Estate Assets
Language LV	LV2	0.7901	Firms with higher leverage; violating covenants, tend to revalue assets.
Leverage LV	LV3	0.8459	Firms adopt the fair value to reevaluate their Real Estate assets to raise new loans as a result of a strengthened balance sheet
	LV4	0.9102	Frm's reliance on debt financing is positively related to the choice of the Fair Value Accounting for

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			Real Estate Valuations
	REA1	0.6364	Amount of Real Estate compared to total assets will affect adoptability of IFRS
	REA2	0.5536	Larger the proportion of Real Estate to total assets, the greater the effect on firm value
Amount of Real Estate REA	REA3	0.5884	Cost of using fair value for Real Estate increases may be more reluctant to adopt the IFRS
	REA4	0.5694	Larger the proportion of Real Estate incentives to adopt the fair value option to provide more value
	KEA4	0.3094	relevant information to investors.
	PC1	0.6424	Lack of significant investment is a barrier to adopt IFRS on Real Estate Valuation
Perceived Control PC	PC2	0.8165	High implementing cost is a barrier to adopt IFRS on Real Estate Valuation
	PC3	0.7710	Skill of people, affect the adoptability of IFRS adoption on Real Estate Valuation
	PC4	0.7720	Availability of technology, affect the adoptability of IFRS adoption on Real Estate Valuation
	SN1	0.8361	Willingness to adopt IFRS earlier to gain the possible competitive advantages
Subjective Norms SN	SN2	0.7357	The peer pressure will have an effect on the intention of adopting IFRS
	SN3	0.7522	Awareness of what competitors do in IFRS adopting process
	AT1	0.7948	Readiness to accept anything benefit to the company in IFRS adopting process
Attitudes AT	AT2	0.7728	Adoption of IFRS to Real Estate Valuation is favorable for the company
Attitudes AT	AT3	0.7048	IFRS is adopted as key requirement for maintain the standard of the company
	AT4	0.6848	Positive minded about the adoption of IFRS to Real Estate Valuation
Intention to adopt IFRS	IN1	0.9200	Fair Value adoption for Real Estate Valuation is timely essential
intention to adopt if its	IN2	0.8491	Fair Value adoption for Real Estate Valuation adds more benefits than costs for a firm

Source: Author compiled based on SmartPLS output

**Table** Error! No text of specified style in document.-3: Reliability and Convergent Validity of Constructs

		Composite	R	Cronbachs	Commun	Redunda
Construct	AVE	Reliability	Square	Alpha	ality	ncy
Intention to adopt						
IFRS-IN	0.7837	0.8785	0.7395	0.7294	0.7837	0.1050
Extent of Expertise						
For Fair Value						
Accounting -EFA	0.5517	0.7852		0.6029	0.5517	
Firm Size -FS	0.6625	0.8856		0.8338	0.6625	
Profitability -FT	0.632	0.8358		0.7058	0.6320	
Leverage- LV	0.7127	0.9082		0.8674	0.7127	
Amount of Real Estate-						
REA	0.3455	0.6780		0.3959	0.3455	
Attitudes- AT	0.5487	0.8289	0.2665	0.7250	0.5487	0.0813
Perceived Control- PC	0.5674	0.8389	0.1944	0.7451	0.5674	0.0429
Subjective Norms- SN	0.6020	0.8190	0.2583	0.6712	0.6020	0.0233

Source: Author compiled based on survey data

All reflective constructs have high levels of internal consistency reliability, as demonstrated by the above composite reliability values. The AVE values (convergent validity) are well above the minimum required level of .50, other than in Amount of Real Estate –REA which is about 0.3455 AVE recorded. Hence, all other construct are demonstrating convergent validity.

The discriminant validity which is well supported by the results of the interconstruct correlations table and cross loadings table presented in table 5.6. When refereeing to the table 5.6 the square root of AVE is which is represent in the diagonal is higher than its column wise and row wise correlation values which suggest a strong discriminant validity of measures, and this is well supported by the table of cross loadings which evident the loadings of the constructs that are meant to measure by the measures are higher than the loadings the particular measure has for the other constructs.

Hence, the first step of the PLS analysis, which is the about establishing the measurement model validity and reliability is completed and the results obtained, are well justified the reliability and validity of the model.

Table Error! No text of specified style in document.-4: Latent Variable Correlation

	ADT-								
	IFRS	AT	EFA	FS	FT	LV	REA	PC	SN
Intention to adopt IFRS-	0.8853								

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IN									
Attitudes- AT	0.607	0.740							
Extent of Expertise									
For Fair Value Accounting									
-EFA	0.324	0.408	0.742						
Firm Size -FS	0.353	0.293	0.221	0.742					
Profitability -FT	0.264	0.325	0.239	0.124	0.813				
Leverage- LV	0.348	0.232	0.217	0.247	0.158	0.795			
Amount of Real Estate									
REA	0.346	0.357	0.590	0.248	0.436	0.182	0.753		
Perceived Control- PC	0.796	0.499	0.327	0.237	0.214	0.277	0.339	0.844	
Subjective Norms-SN	0.727	0.664	0.305	0.331	0.293	0.299	0.382	0.602	0.7759

Source: Author compiled based on survey data

## 5.3 Structural model and the hypothesis testing

The purpose of the structural model is to draw conclusions from the sample, such as causal relationships and predictions. The structural model presents the relationship between exogenous and endogenous variables. It offers a direct test of the theory of interest as the structural model is used to capture the linear regression effects of the exogenous constructs on the endogenous constructs, and the regression effects of the endogenous constructs upon each another (Vinzi, et al., 2010).

PLS provides three estimates to assess the structural model or the relationship between latent variables; path coefficient, corresponding significant score, and the coefficient determinant. The path coefficient is similar to the beta value of the traditional regression model. The significant score determined using the t-value generated through the bootstrapping procedure in PLS. The coefficient of determination indicates the overall effect size and can be used to examine the degree of variance of the dependent variable which is explained by the independent variables (Vinzi, et al., 2010).

The theoretical model proposed to test eighteen hypotheses (18) which include fifteen hypotheses each for firm based characteristics and behavioral factors of managers and three hypotheses each for behavioral factors of managers with Fair Value adoptability for Real Estate Valuation. The bootstrapping procedure was performed using 5000 samples, where the use of individual sign changes was used as sign change option ( Hair, et al., 2011; Vinzi, et al., 2010) and the results of the structural model are depicted in the Figure 5.2.

The model tests the relationship between the firm based characteristics and behavioral factors of managers, and also the relationship between behavioral factors of managers and IRFS-FVA adoptability for real estate valuation. Thus, firm based characteristics which are Likert Scaled-ordinal variables are the exogenous construct. The constructs to measure the behavioral factors of managers are namely; Attitudes, Subjective Norms and Perceived Control which are used as mediating variables. Finally, the intension to IFRS Fair Value adoptability for Real Estate Valuation is considered as endogenous constructs of the model.

Table Error! No text of specified style in document.-5: Path Coefficients of the Model

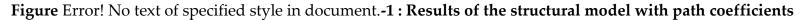
				Intension to
				IFRS
		Perceived	Subjective	Adoptabilit
	Attitudes	Control	Norms	у
Extent of Expertise				
For Fair Value				
Accounting	0.2733	0.1540	0.0734	
Firm Size	0.1738	0.1121	0.2065	
Profitability	0.2028	0.0654	0.1365	
Leverage	0.0887	0.1764	0.1746	
Amount of Real Estate	0.0484	0.1602	0.1964	
Attitudes				0.1242
Perceived Control				0.5427
Subjective Norms				0.3183

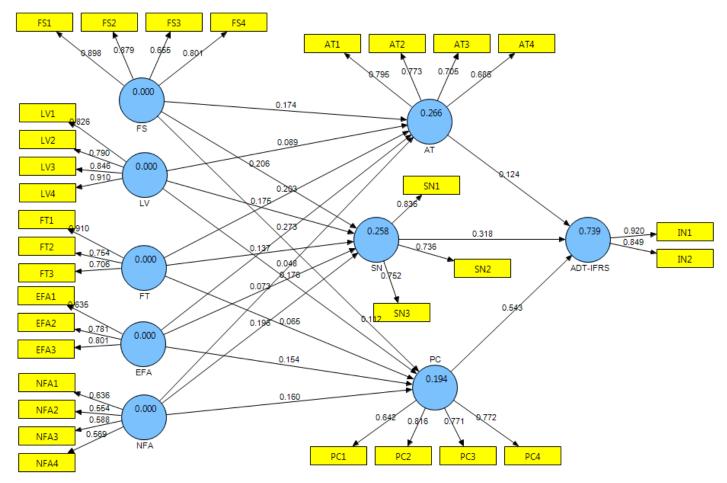
Source: Author compiled based on SmartPLS output

Structural model path coefficients can be interpreted relative to one another. If one path coefficient is larger than another, its effect on the endogenous latent variable is greater. More specifically, the individual path coefficients of the path model can be interpreted just as the standardized beta coefficients in an Ordinary Least Square (OLS) regression. These coefficients represent the estimated change in the endogenous construct for a unit change in a predictor construct (Hair, et al., 2011).

As per that, looking at the relative importance of the exogenous driver constructs in predicting the dependent construct of Adoptability of IFRS for Real Estate Valuation in PLCs (ADT-IFRS), PC- Perceived Control (0.5427) is the most influencing factor, followed by SN-Subjective Norms =(0.3183) and AT-Attitudes =(0.1242). As far as exogenous factors - firms based characteristics and endogenous factors- behavioral factors of managers for adopting FVA for Real Estate Valuation are concerned; Extent of Expertise for Fair Value Accounting (0.2733) has the most significant influence on Attitudes of managers. Level of Leverage of company determines the Perceived Control of managers in the process of Fair Value

adoptability. At the same time, Firm Size has a significant impact on Subjective Norms of managers in the process





Source: Author compiled based on SmartPLS output

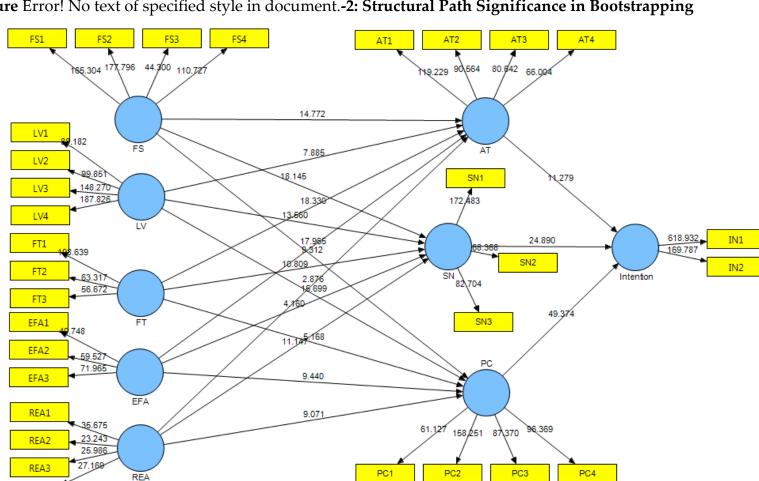


Figure Error! No text of specified style in document.-2: Structural Path Significance in Bootstrapping

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All formative indicators are significant as T Statistics are greater than 1.96. After reviewing the path coefficient for the model, it can explore the outer model by checking the T-statistic in the "Outer Loadings (Means, STDEV, T-Values)" (Ken & Kay, 2013).

The lowest outer loadings of above indicators are NFA2 <- NFA=0.5536, NFA4 <- NFA=0.5694, NFA3 <- NFA=0.5884. And all t values are clearly above 2.57, which indicates the significance of their outer loadings (p < .01). These results provide support for retaining these items in the model fit in figure 5.2 to present the challenges and barriers of adopting IFRS-FVA for real estate valuation.

The significance of the path coefficients, T Statistic > 1.96 is significant with a two-tailed test, and >.98 is significant for a one-tailed test (Hair, et al., 2011). The results indicate that all paths are statistically significant using a one-tailed test.

# Objective 01: To Identify the Relationship between Firms-Based Characteristics and Behavioral Factors of Managers

The set of fifteen hypotheses from 1 to 15 (Ha to Ho) were developed to achieve the second objective of the study, to identify the relationship between firms-based characteristics and behavioral factors of managers. The results for these hypotheses in the direct path with their values are given in the table 4.1

As per table 4.1, hypothesis numbers 1,2,3,4 and 5 were developed to identify the relationship of Firms-Based Characteristics and Attitude-Behavioral Factor of Managers Accordingly, the path coefficients or the beta values for the above relationships are positive and 0.1738, 0.0887, 0.2028, 0.0484, and 0.2733 respectively. Also these path coefficients are significant as the T-value is greater than the significant critical values (> 1.96, for significance at 95% level and > 2.65, for significance at 99% level).

Hence, hypotheses Ha, Hb, Hc, Hd and He are not rejected and the impact of Firms-Based Characteristics on Attitude-Behavioral Factor of Managers to adopt IFRS for Real Estate assets in Sri Lankan PLCs', explains about 17%, 8%, 20%, 5% and 27% respectively.

On the other hand, hypothesis numbers 6,7,8,9 and 10 were developed to identify the relationship of Firms-Based Characteristics and Subjective Norms-Behavioral Factor of Managers. Accordingly, the path coefficients or the beta values for the above relationships are positive 0.2065, 0.1746, 0.1365, 0.1964 and 0.0734 respectively. Also these path coefficients are significant as the T-value is greater than

the significant critical values (> 1.96, for significance at 95% level and > 2.65, for significance at 99% level).

Hence, hypotheses Hf, Hg, Hh, Hi and Hj are not rejected and the impact of Firms-Based Characteristics on Subjective Norms-Behavioral Factor of Managers to adopt IFRS for Real Estate assets in Sri Lankan PLCs', explains about 21%, 17%, 14%, 20% and 7% respectively.

Finally, hypothesis numbers 11,12,13,14 and 15 were developed to identify the relationship of Firms-Based Characteristics and Perceived Control-Behavioral Factor of Managers Accordingly, the path coefficients or the beta values for the above relationships are positive and 0.1121, 0.1764, 0.0654, 0.1602 and 0.1540 respectively. Also these path coefficients are significant as the T-value is greater than the significant critical values (> 1.96, for significance at 95% level and > 2.65, for significance at 99% level).

Hence, hypotheses Hk, Hl, Hm, Hn and Ho are not rejected and the impact of Firms-Based Characteristics on Perceived Control-Behavioral Factor of Managers to adopt IFRS for Real Estate assets in Sri Lankan PLCs', explains about 11%, 18%, 7%, 16% and 15% respectively.

Therefore, the fifteen hypotheses that were developed To Identify the Relationship between Firms-Based Characteristics and Behavioral Factors of Managers, are significant either at 0.05 level or at 0.01 level and it is evident that the Firms-Based Characteristics, have a significant impact on Behavioral Factors of Managers, in terms of Attitudes, Subjective Norms and Perceived Control towards implementation of IFRS on Real Estate Assets Valuation in Sri Lankan PLCs'.

Table Error! No text of specified style in document.-6: Results of the structural model for Ha to Ho

		Path	Hypotheses	P.C	CO D	P	S.E	T- Stat	Supp ort
1	На	FS -> AT	There is a relationship between Firm Size and Attitudes towards the IFRS implementation for	0.17	0.17	**	0.01	13.30	Yes
2	Hb	LV -> AT	Real Estate assets.  There is a relationship between Leverage and Attitudes towards the IFRS implementation for	38 0.08	43 0.08	*	31 0.01	21 7.746	Yes
3	Нс	FT -> AT	Real Estate assets.  There is a relationship between Profitability and Attitudes towards the IFRS implementation for	87 0.20	89 0.20	*	14 0.01	5 18.75	Yes
4	Hd	NFA ->	Real Estate assets.  There is a relationship between Amount of Non-Financial Assets and Attitudes towards the IFRS implementation for Real Estate assets.	28 0.04 84	4 0.04 97	**	08 0.01 72	12 2.823 3	Yes
5	He	EFA -> AT	There is a relationship between extent of expertise for FVA and Attitudes towards the IFRS implementation for Real Estate assets.	0.27 33	0.27 23	**	0.01 63	16.75 11	Yes
6	Hf	FS -> SN	There is a relationship between Firm Size and Subjective Norms s towards the IFRS implementation for Real Estate assets.	0.20 65	0.20 66	**	0.01 12	18.37 44	Yes
7	Hg	LV -> SN	There is a relationship between Leverage and Subjective Norms towards the IFRS implementation for Real Estate assets.	0.17 46	0.17 41	**	0.01 26	13.84 6	Yes
8	Hh	FT -> SN	There is a relationship between profitability and Subjective Norms towards the IFRS implementation for Real Estate assets.	0.13 65	0.13 77	**	0.01 15	11.84 59	Yes
9	Hi	NFA ->	There is a relationship between Amount of Non-Financial Assets and Subjective Norms towards the IFRS implementation for Real Estate assets.	0.19 64	0.19 64	**	0.01 75	11.24 26	Yes
10	Hj	EFA -> SN	1	0.07	0.07	**	0.01	3.867	Yes

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			There is a relationship between extent of expertise for FVA and Subjective Norms towards the IFRS implementation for Real Estate assets.	34	35	*	9	8	
11	Hk	FS -> PC	There is a relationship between Firm Size and Perceived Control towards the IFRS implementation for Real Estate assets.	0.11 21	0.11 26	**	0.01 15	9.739 8	Yes
12	Hl	LV -> PC	There is a relationship between Leverage and Perceived Control towards the IFRS implementation for Real Estate assets.	0.17 64	0.17 65	**	0.01 14	15.42 31	Yes
13	Hm	FT -> PC	There is a relationship between profitability and Perceived Control towards the IFRS implementation for Real Estate assets.	0.06 54	0.06 61	**	0.01 31	4.972 9	Yes
14	Hn	NFA -> PC	There is a relationship between Amount of Non-Financial Assets and Perceived Control towards the IFRS implementation for Real Estate assets.	0.16 02	0.16	**	0.01 84	8.719 7	Yes
15	Но	EFA -> PC	There is a relationship between extent of expertise for FVA and Perceived Control towards the IFRS implementation for Real Estate assets.	0.15 4	0.15 47	**	0.01 6	9.635 7	Yes
	**, an	nd *** Signific	ant at 0.05 and 0.01 levels respectively (Two-tailed)						
	So								

So

**urc** Author Complied based on the PLS output

e:

Path

PC Coefficien

t

CO

D Coefficient of determination

## Objective 02: To Identify the Relationship between Behavioral Factors of Managers and Adoptability of FVA for Real Estate Assets in PLCs' In Sri Lanka

In order to achieve the third objective of the study, a set of three hypotheses from 15 to 18 (Hp to Hr) were developed, to Identify the Relationship between Behavioral Factors of Managers and Adoptability of FVA for Real Estate Assets in PLCs' In Sri Lanka. The results for these hypotheses in the direct path with their values are given in the table 4.15.

As per table 4.15, hypothesis numbers 16, 17 and 18 were developed to identify the relationship between Behavioral Factors of Managers and Adoptability of FVA for Real Estate Assets in PLCs' in Sri Lanka. Accordingly, the path coefficients or the beta values for the above relationships are positive 0.1242, 0.3183 and 0.5427 respectively. Also these path coefficients are significant as the T-value is greater than the significant critical values (> 1.96, for significance at 95% level and > 2.65, for significance at 99% level) (Hair, et al., 2011).

Hence, hypotheses Hp, Hq and Hr are not rejected and the impact of Behavioral Factors of Managers on Adoptability of FVA for Real Estate Assets; explains about 12%, 32%, and 54% respectively.

Thus, it can be concluded that the Perceived Control factor relating to Behavioral Factors of Managers in Sri Lankan PLCs' has the most significant impact over Adoptability of FVA for Real Estate Assets where 54% explanation level is provided. Subject Norms take second importance level with 32% explanation of the total and Attitudes gets third level importance as 12% explained by it.

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**Table** Error! No text of specified style in document.-7: **Results of the structural model for Hp to Hr** 

		Path	Hypotheses	P.C	COD	P	S.E	T-Stat	Support
			There is a relationship between Attitudes towards the						
16	Hp	AT -> ADT-IFRS	IFRS implementation for Real Estate assets and	0.1242	0.124	***	0.012	10.3554	Yes
			Adoptability						
			There is a relationship between Subjective Norms						
<b>17</b>	Hq	SN -> ADT-IFRS	towards the IFRS implementation for Real Estate assets	0.3183	0.3185	***	0.0134	23.8029	Yes
			and Adoptability						
			There is a relationship between Perceived Control						
18	Hr	PC -> ADT-IFRS	towards the IFRS implementation for Real Estate assets	0.5427	0.5426	***	0.0117	46.2572	Yes
			and Adoptability						
	**, and ***	* Significant at 0.05 an	d 0.01 levels respectively (Two-tailed)						
	Source:	Author Complied ba	ased on the PLS output						
	PC	Path Coefficient							
	COD	Coefficient of deterr	nination						

#### 5. CONCLUSION

#### 5.1 Introduction

This research study was aiming to find out the barriers and challenges of adopting FVA for Real Estate Valuation in PLCs' in Sri Lanka. To accomplish this purpose, three objectives were developed and to achieve the objectives eighteen (18) hypotheses were developed and tested as discussed in chapters 4 (Research Design) and 5, (Data analysis).

The first objective was to find out the major determinant factors of adopting FVA for Real Estate Valuation. That was basically achieved through a solid literature review related to the problem statement. Accordingly five firms based characteristics and three behavioral factors of managers for of adopting FVA for Real Estate Valuation were identified.

Second objective was tested to identify the relationship between firms based characteristics and behavioral factors of managers for of adopting FVA for Real Estate Valuation. Accordingly fifteen hypotheses were developed in chapter 4 on firms based characteristics in terms of Firm Size, Leverage, Profitability, Amount of Real Estate and Extent of Expertise for Fair Value Accounting. The results obtained for all fifteen hypotheses were significant. Thus, the proposed link between firms based characteristics and behavioral factors of managers for adopting FVA for Real Estate Valuation was fully supported.

Third objective was to identify the relationship between behavioural factors of managers and adoptability of FVA for Real Estate Valuation in PLCs' in Sri Lanka. As per that, Attitudes, Subjective Norms, and Perceived Behavioural Control were considered as behavioural factors of managers as suggested in literature review chapter. Three hypotheses were tested and all of them were significant to confirm the proposed link between behavioural factors of managers and adoptability of FVA for Real Estate Valuation in PLCs' in Sri Lanka. The results obtained for second and third objectives, confirmed the barriers and challenges of adopting FVA for Real Estate Valuation in Sri Lankan context.

## 5.2 Key findings

First, results of the study show that firm based characteristics are resistant to the adoptability of IFRS-FV for real estate valuation in public listed companies Sri Lanka;

firm size and profitability of the firm have the more resistant level, consistent with prior studies based on firms in Europe and Australia (Hans B. & Valeri V., 2012).

Second, five firm based characteristics – firm size, leverage, profitability, the amount of Real Estate assets, and expertise in fair value measurements affect the managers' behavioral factors towards the adoptability of IFRS-FVA. The results show that firm size, leverage, the amount of Real Estate assets, and expertise in fair value measurements all positively affects the managers' behavior to the adopt of IFRS-FVA. A summary of the responses from the mangers to a direct question about their reasons for choosing or rejecting the IFRS-FVA reveals that the main reason for their resistance is that determining the fair value is too costly, and lack of expertise for FVA which corresponds to the results on firm size. The most dominating reason for selecting the IFRS-FVA is that it provides a better picture of the firm's position, which is also consistent with the results on leverage.

The relative importance of the exogenous driver constructs (Mediator) in predicting the dependent construct of Adoptability of IFRS for Real Estate Valuation in PLCs (ADT-IFRS), PC- Perceived Control is the most influencing factor, followed by SN-Subjective Norms and AT-Attitudes. As far as exogenous factors - firms based characteristics and endogenous factors- behavioral factors of managers for adopting FVA for Real Estate Valuation are concerned; Extent of Expertise for Fair Value Accounting has the most significant influence on Attitudes of managers. Level of Leverage of company determines the Perceived Control of managers in the process of Fair Value adoptability. At the same time, Firm Size has a significant impact on Subjective Norms of managers in the process.

Thus, it can be concluded that the Perceived Control relating to Behavioral Factors of Managers in Sri Lankan PLCs' has the most significant impact over Adoptability of FVA for Real Estate Assets; where 54% explanation level is provided. Subject Norms take second importance level with 32% explanation of the total and Attitudes gets third level importance as 12% explained by it.

#### REFERENCES

- 1. Ajzen, I., (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Process*, 50, 179-211.
- 2. Annette, O., (2012). *Perspectives on Eventual IFRS Adoption*. [Online] Available at: http://www.albany.edu/honorscollege/files/Or\_Honors\_Thesis.pdF [Accessed 4 May 2014].
- 3. Anon., (2013). The Effects of Adopting IFRS: The Canadian Experience. [Online] Available at: http://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1016&context=bus\_admin\_diss [Accessed 25 04 2014].
- 4. Arsen, D., Duanning, Z., David, G. & William, M., (2012). Critical factors of IFRS adoption in the US: an empirical study. *Journal of Finance and Accountancy*, 1-14.
- 5. Barth, M. E. C. G., (1996). International Accounting Differences and Their Relation to Share Prices: Evidence from U.K., Australian, and Canadian Firms. *Contemporary Accounting Research*, XIII(1), 135-170.
- 6. Bhattacharjee, S. & Islam, M. Z., (2009). Problems of Adoption and Application of International Financial Reporting Standards (IFRS) in Bangladesh. *International Journal of Business and Management*, 4(12), 165-175.
- 7. Christensen, H. B. & Nikolaev, V., (2012). *Does fair value accounting for non-financial assets pass the market test?*, s.l.: University of Chicago Working Paper.
- 8. Christian, L. & Christian, L., (2010). Did Fair-Value Accounting Contribute to the Financial Crisis? *Journal of Economic Perspectives*, Issue 4.
- 9. CSE, 2014. Listed Company Directory. [Online]
  Available at: http://www.cse.lk/list\_by\_market\_cap.do
  [Accessed 2 March 2014].
- 10. Djatej, A., Zhou, D., Gorton, D. & McGonigle, W., (2012). Critical factors of IFRS adoption in the US: an empirical study. *Journal of Finance and Accountancy*, 1-14.
- 11. Evelyne, V., Kenneth K., B. & Ann, V., (1980). Supply chain information flow strategies: an empirical taxonomy. *International Journal of Operations & Production Management*, 29(12), 1213-1241.
- 12. Hair, J. F. J., Black, W., Babin, B. J. & & Anderson, R. E., (2011). *Multivariate Data Analysis*, New Jersey: Pearson Education.

- 13. Hambrick, D. C. & Mason, P. A., (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *The Academy of Management Review*, IX(2), 193–206.
- 14. Hans B., C. & Valeri V., N., (2012). *Does Fair Value Accounting for Non-Financial Assets Pass the Market Test?*, Chicago: The University of Chicago.
- 15. Hans B., C. & Valeri, N., (2009). Who uses fair value accounting for non-financial assets after IFRS adoption?, Chicago: The University of Chicago.
- 16. Henseler, et al., (2009). The Use of Partial Least Squares Path Modeling in International Marketing. *Advances in International Marketing (AIM)*, XX, 277-320.
- 17. IFRS, 2013. IFRS Application around the World Jurissdictional Profile: Sri Lanka. [Online]
  - Available at: http://www.ifrs.org/Use-around-the-world/Documents/Jurisdiction-profiles/Sri-Lanka-IFRS-Profile.pdf [Accessed 16 December 2013].
- 18. Jamie De, C., (1998). Overview of factor analysis. Retrieved December, Volume 26, p. 2012.
- 19. Johnson, H. T. & Kaplan. (1991). Relevance lost: the rise and fall of management accounting. s.l.: Harvard Business Press.
- 20. Jung, B., Hamid, P., Eric, W. & Shirley J., D. (2013). The association between firm characteristics and CFO's opinions on the fair value option for non-financial assets. *Advances in Accounting, incorporating Advances in International Accounting*, 1-12.
- 21. Ken, K. & Kay, W. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. [Online] Available at: http://marketing-bulletin.massey.ac.nz/V24/MB\_V24\_T1\_Wong.pdf [Accessed 1 May 2014].
- 22. Larry, L., Eli, O. & Rem M., S. (1996). Leverage, investment, and firm growth. *Journal of Financial Economics*, 1-29.
- 23. Malhotra, N. K. & Dash, S. (2011). *Marketing Research an Applied Orientation*. 6th ed. s.l.: Pearson.
- 24. Mari, P. (2008). *The IFRS Adoption's Effect on Accounting Quality in Sweden.* United Kingdom: Business School University of Hertfordshire.
- 25. Muhammad, T. (2012). The Effect of International Financial Reporting Standards (IFRS) Adoption on the Performance of Firms in Nigeria. *Journal of Administrative and Economics Science*, V(2), 133-157.

- 26. Norbert, S. & Gerd, B. (2001). The Construction of Attitudes. Oxford, UK: s.n.
- 27. Robert K., Y. (2004). Case Study Research-Design and Methods. 4 ed. s.l.:Sage.
- 28. Ron, K. (2014). The Impact of Debt and Leverage on the Valuation of a Business.

  [Online] Available at: http://www.enterprise.com/content/fleets/pdf/whitePaper\_leverage.pdf

  [Accessed 1 May 2014].
- 29. Rusu, A., 2012. *IFRS Adoption Around the world A Brief Literature Review,* Romania: "Alexandru Ioan Cuza" University of Iasi.
- 30. Sekaran, U. (2003). Research method for business: A skill building approach. 4th ed. s.l.:John Wiley & Sons..
- 31. Sekaran, U. & Roger, B. (2010). Research Methods for Business: A Skill Building Approach. 5th ed. s.l.:Wiley.
- 32. Vinzi, V. E., Chin, W. W., Henseler, J. & Wang, H. (2010). *Handbook of Partial Least Squares: Concepts, Methods and Applications*. s.l.:Springer.
- 33. Young, E. (2013). Fair value implications for the real estate sector and example disclosures for real estate entities. *Applying IFRS in Real Estate*, January.