IMPACT OF CORPORATE GOVERNANCE ON FINANCIAL INNOVATION: A CONCEPTUAL FRAMEWORK MODEL

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Abstract

This paper presents a conceptual framework that could be applied to the relevant empirical research studies on the relative importance of the concept of corporate governance in order to strengthen the innovative practices in financial services industry. The main data and information for the development of this model is obtained from of the available literature, web sites and supplemented with interviews conducted with key relevant stake holders in financial sector. Thus, this research framework could be utilized to examine the corporate governance and innovation related issues in the other industrial sectors though it has been originally designed for the financial services industry.

Key words*:* Corporate governance, Disclosure practices, Financial innovation, Financial services industry, Agency theory.

Introduction

We, "the mankind" have passed various eras since our origin on the planet called earth about 200,000 years ago and by now, we all have stepped on to the era called knowledge-based era (knowledge-based society). In this knowledge-based era, almost all the artifacts in the world are considered to be an offshoot of these knowledge-driven processes. The importance of the concept of knowledge could simply be realized through the quotation made by the world-renowned polymath and scientist, Benjamin Franklin, "*An investment in knowledge pays the best interest.*" .Within this knowledge-based society, one of the most widely discussing concepts, which is inevitably a consequence of knowledge, is the innovation. Innovation is a result of both the invention (based on knowledge) and commercial viability. This innovation could be witnessed in different industrial sectors of an economy or a nation and this research paper emphasizes on the innovative practices occurring in the financial services industry, which are commonly referred to as financial innovation. Though there is multiplicity of factors affecting this financial innovation behavior of a particular organization, this paper especially focuses on the impact of corporate governance and its main constituents.

Corporate governance signifies the system by which business corporations are directed, managed and controlled and the purpose of this is to facilitate build an atmosphere of trust, transparency and accountability necessary for ensuring long-term investment, financial stability and business integrity, thereby supporting stronger and long-lasting growth (OECD ,2015). A business organization is managed not merely for short term results, but to ensure that both of its short-term and long-term objectives are achieved in a sustainable manner. The entire process of achieving these objectives is the foremost responsibility of the Board of Directors of that company. This involves ensuring a sustainable value for the shareholders and all the other stakeholder groups such as customers, employees and even the general public at large.

The popularity and the importance of corporate governance came to light with some world famous corporate scandals such as the collapse of Enron, WorldCom and Lehman Brothers which occurred during last two decades time period. These types of corporate and financial scandals are not a novel experience to Sri Lanka and several such incidents could be seen in Sri Lankan context too. The collapse of the Pramuka Bank was one of the biggest ever noteworthy and remarkable financial scandals occurred in Sri Lankan history. It's been nearly a decade since the occurrence of this incident and this led to thousands of depositors being desperate after being deprived of monies deposited with the aforementioned bank. Furthermore, Golden Key company case and Sakvithi's case were some other popular incidents occurred in recent history of Sri Lanka. Immediately after these incidents, there was a serious discussion as to who was responsible for the mismanagement of the bank. Besides, the public perception of the effectiveness of statutory audits carried out by leading world class audit firms was also adversely affected by this incident at that time (Financial Times, 2008).

Aftermath of these corporate scandals, the regulatory mechanisms of corporate governance began to emerge all over the world and they were introduced as best practices on corporate governance. OECD principles of corporate governance (1999,2004 and 2015),Cadbury code(1992),Combined code(2003) are some major global initiatives on corporate governance. When Sri Lankan context is taken into consideration, the Institute of Chartered Accountants of Sri Lanka (ICASL) was the pioneer in introducing Corporate Governance to Sri Lanka. The first Code was issued by ICASL in December 1997 in the name of "Code of Best Practice on matters related to financial aspects of Corporate Governance" and it was updated in March 2003 as the "Code of Best Practice on Corporate Governance". Thereafter, the Securities & Exchange Commission (SEC) and the Institute of Chartered Accountants (ICASL) jointly issued "Code of best practice on corporate governance" in 2008 and 2013 (SEC and ICASL, 2008; SEC and ICASL, 2013).

Figure 1 below shows the world's top ten countries based on the corporate governance overall rating (Governance Metrics International, 2010).According to this graph, the first position has been secured by United Kingdom (UK) and South Africa has been able to place ninth position. When analyzing the entire list of countries, it can be seen that Sri Lanka has been unable to secure a position within the rankings due to poor level of corporate governance performance.

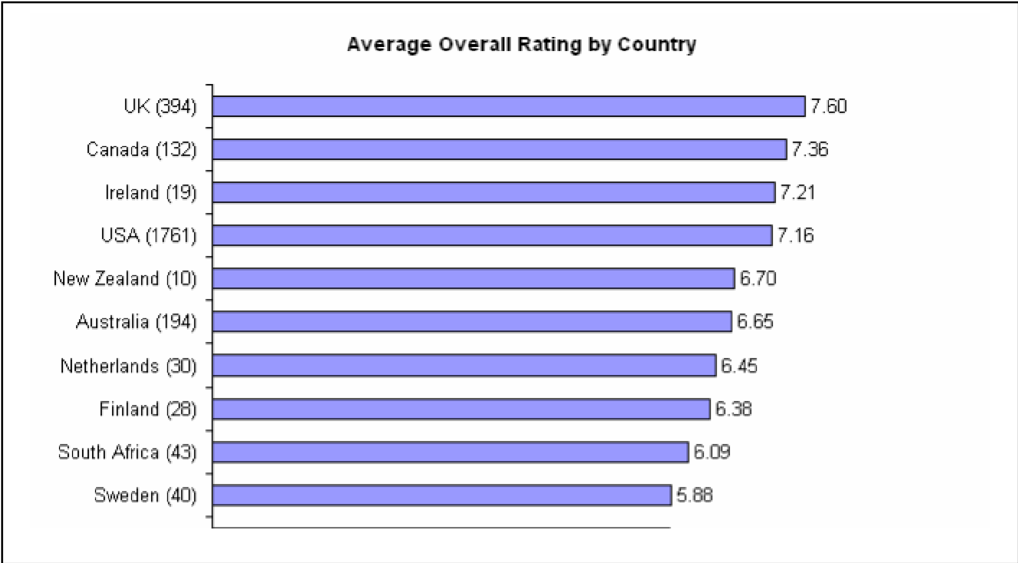

Figure 1: List of top 10 countries by average overall rating in corporate governance

Source: GMI Ratings-Country Rankings as of September 27, 2010

The other aspect of this paper, especially the most important part, is the financial innovation and it can be defined as the act of creating new financial instruments (products) as well as new financial technologies, processes, institutions and markets. As per Van Horne (1985), financial innovation is one of the bedrocks of financial system and hence it could be considered as the life blood of efficient and responsive capital markets. Financial innovation is also a term coming under the umbrella term called "innovation". In other words, it is a type of innovation which is specific to the financial services industry.

Some recent statistics including innovation score and ranking of innovation activities are shown in Table 2 along with respective countries (Cornell University, INSEAD, and WIPO, 2017).Here, it is considered that financial innovation activities are incorporated in the innovation index. As per the statistics given in the table, Switzerland and Sweden have secured first and second positions respectively. Sri Lanka has come to ninetieth position with a score value of 29.85 out of 127 countries included in the index.

Table 1: Global Innovation Index rankings for selected countries

Country/Economy	Score (0–100)	Rank
Switzerland	67.69	1
Sweden	63.82	2
United States of America	61.40	4
United Kingdom	60.89	5
Singapore	58.69	7
China	52.54	22
India	35.47	60
Sri Lanka	29.85	90

Source: The Global Innovation Index 2017

Research Problem and Objectives

When reviewing past literature sources, it could be clearly identified that there is a dearth of prior empirical research studies in relation to the impact of corporate governance practices as determinant of the financial innovation-related activities of financial services industry in both global and Sri Lankan context. When it comes to Sri Lanka, this phenomenon is highly valid and true. Apart from that, the existing few research studies carried out based on the said relationship have utilized various conceptual models that are inadequate to represent both concepts holistically. This is the research gap that is expected to be fulfilled by this research paper. Accordingly, this study attempts to propose a conceptual framework model to evaluate *how corporate governance practices affect financial innovation of a particular organization.* This paves the way for the problem statement of this study.

In this context, the main objectives of the study could be identified as, 1) to formulate and prescribe a conceptual framework model to investigate how corporate governance, especially the key constituents of it, affects the financial innovation activities of organizations operating in the financial services sector, 2) to encourage the future researchers to apply this model in their research studies with possible upgrades and modifications to suit their research requirements.

Scope of the Framework

The scope of this research paper can be explained in two broad ways as theoretical scope and empirical scope. Firstly, theoretical scope mainly focuses on two concepts as corporate governance (which further consists of board size, board independence, board diversity and number of board committees) and financial innovation. Apart from that, size and age of the organization are included in the role model as controlled variables. Secondly, when the empirical scope is considered, it is expected to apply this model to evaluate the organizations in the financial services industry (especially the banking sector) of Sri Lanka. However, the proposed model in its original form could be applied and tested in the global context too.

The remainder of this paper is organized as follows. Section 2 elaborates a review of past literature sources. Section 3 demonstrates the research methodology adopted and Section 4 concludes with the potential implications and recommendations of the proposed conceptual model.

Literature Review

This section reviews the existing literature that is directly related to the variables used in the study. It consists of key theories on both the corporate governance and financial innovation (theoretical review) and past empirical studies by research scholars in relation to the relationship between corporate governance and financial innovation.

The key theories on corporate governance and financial innovation include Agency theory by Jensen and Meckling in 1976, Stakeholder theory, Stewardship theory, Political economy theory, and Resource dependency theory (Wanjama, 2015).Most of them explain the separation of ownership and control and resultant effect on various stakeholder groups in companies. Moreover, these highly affect the operations and the performance of the companies including innovation and R&D projects.

In reviewing the past empirical research findings on the relationship between corporate governance and financial innovation, it could be observed various opinions put forward by research scholars. According to Belloc (2011), organizing such a body of literature is difficult, because existing studies on this topic form a heterogeneous puzzle that covers interrelated aspects of corporate organization. When the two concepts of corporate governance and innovation are generally analyzed as a whole, the some past research scholars suggest that poor governance reduces innovative activity (O'Connor, M. & Rafferty, M. (2012).This indicates a positive association between the two constructs in general.

The corporate governance is composed of several key attributes such as board size, independence of board members, diversity within the board, committees in the board, CEO duality, etc. However, there can be seen a very less number of empirical research studies done in order to ascertain the association between each and every attribute of corporate governance mentioned before and financial innovation.

Board size refers to the number of members in the board of directors. According to Guest (2009), board size has a strong negative impact on performance aspects of a company including profitability and innovation activities and this may be due to the fact that large board size is likely to reflect the malfunction of the board's advisory functionality. Further, agency theory and resource dependency theory suggest that the board size positively influences performance aspects, while stewardship theory encourages smaller board size and argues that larger board size negatively affects the organizational performance (Kalsie and Shrivastav, 2016).

Board independence means the extent to which the board of directors consists of independent-outside directors. According to Jermias (2007), board independence also has a negative impact on the innovative efforts of an organization. This scholar further explains that this is consistent with the managerial-incentive theory, which stresses that inside directors are in a better position than outside directors to undertake more profitable projects including innovation related activities, because they have direct access to specific information of the organization.

Board diversity means a situation where there is a combination of many people who are different from each other in terms of characteristics such as age, race, gender, educational background and professional qualifications. Galia and Zenou (2012) point out significant evidence of both positive and negative relationships between gender diversity on boards and various innovation types.

Board committees are specific units within the board which are assigned with specific tasks or functions. Audit committee, nomination committee and remuneration committee are several such important committees that can be seen in corporate boards. In a research study carried out by Wanjama(2015), it has been identified that the number of board committees has a positive effect on financial innovation.

CEO duality arises, when the Chief Executive Officer (CEO) of the company is also the chairman of the board of directors. Jermias (2007) asserts that CEO duality has a negative effect on innovative efforts, because it hinders board's ability to effectively monitor R&D investments. Tsui et al. (2001) too conclude that CEO duality adversely affects towards the operations of the company.

It is observable through the past literature that most of the research scholars have identified size of the firm, fixed assets (non-current assets) position and debt structure of the organization as controlled variables in their studies (Kyereboah Colemanet al.,2008). These controlled or exogenous or extraneous variables could contaminate the cause-and-effect relationship, but the possible effects of which can be controlled through a process of either matching or randomization (Sekaran & Bougie, 2009).

Methodology

This section and following subsections explain the methodological foundation utilized to develop the conceptual framework of this study.

The **positivistic approach** has been used as the main research philosophy to formulate this framework. The main data and information for the development of this conceptual framework model were obtained from both primary and secondary sources. Accordingly, the primary data were collected mainly through the interviews conducted with key relevant stake holders in financial services sector and the secondary data were from available literature sources (mainly, journal articles) accessed through online databases, and other web sources.

Proposed Conceptual Framework

The proposed conceptual framework is depicted in Figure 1 and it clearly demonstrates the impact of various constituents of corporate governance on the innovative practices adopted in financial services sector.

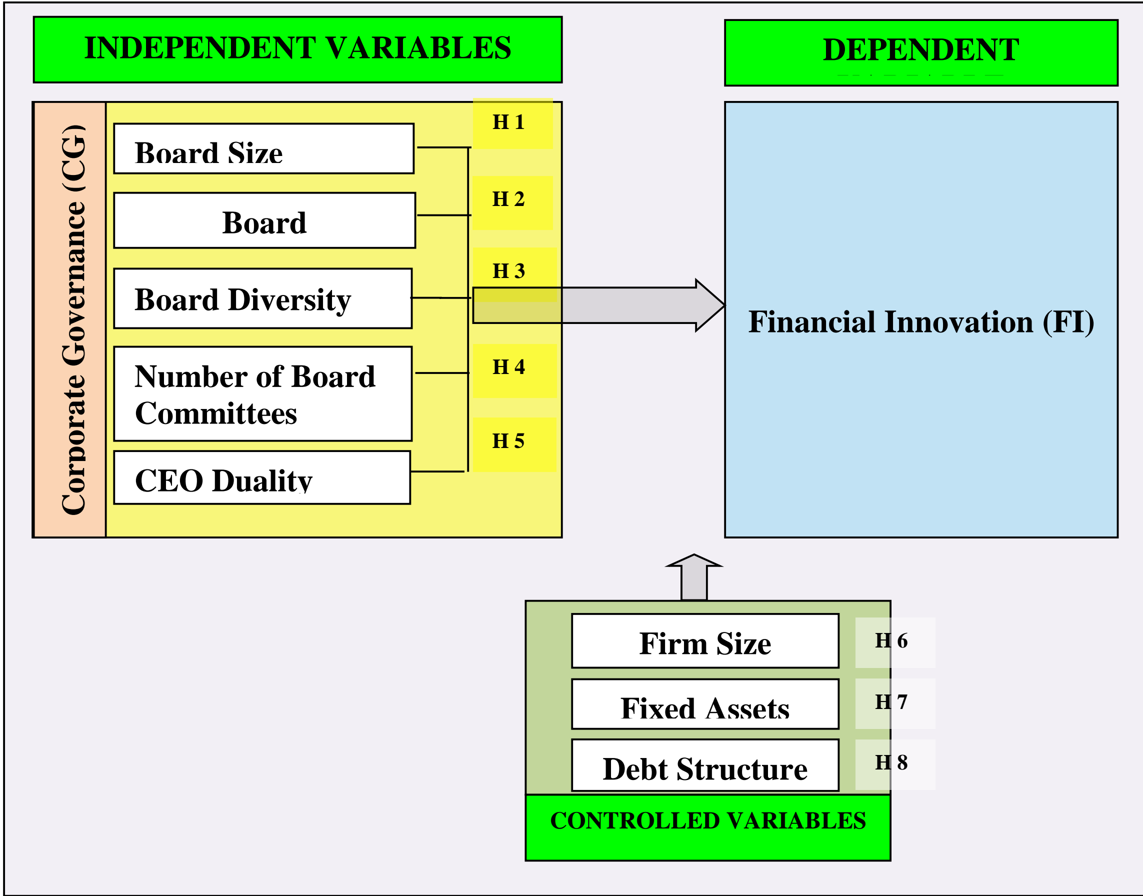

Figure 2: Conceptual Framework Model

Source: Prepared by Authors (2017) based on literature review

Within this conceptual framework model, financial innovation is considered as the dependent variable, whereas corporate governance constituents are deemed as the independent variables. Furthermore, firm size, fixed assets and debt structure are defined as controlled variables.

The innovation equation or the predictive model pertaining to the above conceptual framework model is formulated as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon$$

Where:

Y	=	Financial Innovation (Score)
X_1	=	Board Size
X_2	=	Board Independence
X_3	=	Board Diversity
X_4	=	Number of Board Committees
X_5	=	CEO Duality
X_6	=	Firm Size
X_7	=	Fixed Assets
X_8	=	Debt Structure
β_0	=	Intercept or constant
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8$	=	Respective coefficients of independent and controlled variables
ε	=	Error term

Once the empirical data are collected and analysed, this innovation equation could be presented with more meaningful numerical figures by using multiple regression analysis and in turn, which will be helpful in managerial decision making process.

Measurement of the Variables

The constructs/concepts used in this study are summarized and operationalized in Table 1 along with their underlying literature sources.

Table 2: Operationalization of concepts

Constructs/ Concepts	Variables	Indicators	Number of item scales	Source
Corporate governance	Board Size	Number of members in the board of directors	1 item scale	Kyereboah-Colemanet al.(2008); Wanjama(2015)
	Board Independence	Ratio of independent directors to executive directors	2 items scale	Wanjama(2015)
		Ratio of outside directors to the total number of directors		Kyereboah-Colemanet al.(2008)
	Board Diversity	Ratio of female to male directors	1 item scale	Wanjama(2015)
	Number of Board Committees	Number of board committees	1 item scale	Wanjama(2015)
	CEO Duality	Whether CEO and board chairman are separate two	1 item scale	Kyereboah-Colemanet al.(2008)

		persons		
Financial innovation*	Product innovation	Enhancement of quality of current products	3 items scale	Adapted from Gunday et al. (2011)
		Decreasing the development cost of current products		
		Newness to existing products leading to enhanced ease of use for customers		
	Process innovation	Eliminating non value adding activities in business processes	3 items scale	
		Decreasing variable cost in business processes		
		Increasing output quality in business processes		
	Institutional innovation	Renewing the procedures used to execute firm activities	3 items scale	
		Renewing the human resources management system		
		Renewing the management information system(MIS)		
Firm size		Log of assets	1 item scale	Kyereboah-Colemanet al.(2008)
Fixed Assets		Ratio of fixed assets to total assets	1 item scale	Kyereboah-Colemanet al.(2008)
Debt structure		Total of debts (both short and long term) divided by total assets	1 item scale	Kyereboah-Colemanet al.(2008)

Source: Prepared by Authors (2017) based on literature review

*Here, it should be clearly noted that in this study, it has been used the concept of financial innovation, not innovation performance. However, in some research studies, it can be observed that the terms, innovation and innovation performance are used interchangeably. But they are two distinct concepts.

The data required to measure the constructs/concepts mentioned in the Table 1 could be collected by developing a self-administered questionnaire. Almost all the indicators representing each and every construct/concept are measured using a 5 point Likert scale.

Hypotheses of the study

Based on the proposed conceptual framework mentioned in Figure 1, the following hypotheses could be derived.

H 1: There is a negative relationship between **board size** and **financial innovation**.

H 2: There is a negative relationship between **board independence** and **financial innovation**.

H 3: There is a positive relationship between **board diversity** and **financial innovation**.

H 4: There is a positive relationship between **number of board committees** and **financial innovation**.

H 5: There is a negative relationship between CEO duality and financial innovation.

Apart from the aforementioned main hypotheses relating to main independent variables, the below-mentioned hypotheses could be presented in relation to the controlled variables.

H 6: Firm size positively affects financial innovation.

H 7: Fixed Assets positively affect financial innovation.

H 8: Debt structure positively affects financial innovation.

These hypotheses or the propositions are expected to be empirically tested by the researchers through a sample survey carried out in the Licensed Commercial Banks (LCBs) and Licensed Specialized Banks (LSBs) of financial services sector of Sri Lanka.

Conclusions

This paper has proposed a conceptual model to evaluate how corporate governance practices of a business entity can affect the financial innovation process. This could be identified as the theoretical or conceptual contribution of this proposed model.

When practical implications of this model are considered, it could be applied and tested by top level managers of financial services institutions to understand the most decisive components in the concept called corporate governance that foster or hinder the innovation activities of their organization and then to prioritize the most important favorable variables and to mitigate or eliminate the adverse variables. Accordingly, the business organizations engaged in the financial services sector will be in a position to enhance the various research & development (R&D) activities and innovation-centered activities and thereby achieving the ultimate goal of increasing the overall organizational performance and wealth (value).

Apart from the organizations operating in the financial services sector, this model may be applied by different other industries with certain modifications to test the association between the corporate governance practices and their respective innovation activities.

The future researchers are highly recommended to apply this proposed model in their empirical studies and to make further modifications where necessary and suitable depending on the situation applied for. Since this model was exclusively introduced to address and bridge the existing gap of a comprehensive model (lack of a model encompassing essential aspects) to test the relationship between corporate governance and financial innovation, it is too early to identify the possible inherent limitations of this proposed model. Once it was applied and tested using empirical data in organizational scenarios, some other aspects to be addressed might arise and it is up to the future researchers to cater to such limitations with reference to the literature sources.

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