CORPORATE BOARD:
ROLE, DUTIES & COMPOSITION

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EDITORIAL
Dear readers!

This issue of the journal is devoted to several issues of corporate board practices.

Anthony O. Nwafor explores the principle on the enforcement of a corporation's right of action which is encapsulated as the rule in Foss v Harbottle has continued to attract discombobulating academic and judicial comments in defining the scope and exceptions to that rule. The paper argues that the statutory interventions in jurisdictions under discussion only borders on derivative action which is an exception to the rule. The effect of those statutory provisions on the rule itself is not too significant as would justify the suggestion that the rule is now extinct. Thus, the paper concludes that the rule in Foss v Harbottle remains the principal approach to the enforcement of a corporation's right of action.

Hasan Mohamed Hasan Al-Mannaei and Allam Mohammed Mousa Hamdan aim to assess corporate governance and innovation in selected listed companies at Bahrain Bourse. The study sample included 39 companies in the year 2013. The study built one Linear Regression Model to study the relationship between corporate governance and innovation. After testing the first hypothesis, there is an accepted level of corporate governance in selected listed companies at Bahrain Bourse. And after testing the second hypothesis, there is no relationship between corporate governance and innovation in selected listed companies at Bahrain Bourse, whether the corporate governance is strong in selected listed companies at Bahrain Bourse or not, it has no relationship to Innovation. In Kingdom of Bahrain the innovation is weak due to the fact that Bahrain imports innovation from other countries. The study recommends that all companies listed in Bahrain Bourse to send their employees for special courses on corporate governance, which shows its benefits and to increase their awareness and advises to conduct a workshop of innovation in companies listed in Bahrain Bourse by professional institutes.

Nuria Reguera-Alvarado and Francisco Bravo analyze whether the number of appointments of directors influences corporate reputation. For that, we focus on a sample of US firms listed on the New York Stock Exchange (NYSE) for the period 2007-2010 and we examine a total of 30,813 directors. Our results indicate that there is a curvilinear relationship between the number of directorships of board members and corporate reputation. These findings shed some light on the value of boards of directors and also have implications for companies in the selection of board members.

Jimmy A. Saravia and Silvia Saravia-Matus extend the Transaction Cost Economics (TCE) theory of the equity governance structure by introducing a (hitherto absent) full analysis of the key TCE issue of bilateral dependency between the firm and its shareholders. In addition, the paper discusses the implications of the analysis for the topic of corporate governance and firm performance. We find that when bilateral dependency holds contractual hazards are mitigated as predicted by TCE, but that when it does not contractual safeguards are altered to the disadvantage of shareholders and managerial discretion costs increase as reflected by lower firm valuation. Importantly, our study documents for the first time a class of transactions where business relationships persist indefinitely even though transaction costs are not minimized.

Zaini Rohmad, Agung Nur Probohudon, Waskito Widi Wardojo and Agung Wibowo discuss good governance model for conflict resolution around water tourism area in Indonesia. This paper developed structural factors that influence water tourism such as the population, economic development, regional generated revenue, real-time sector revenue, poverty rates, and water management which is the focus of the study affected the rising of the water conflict. This study is field research qualitative study. The objects in this research are water tourism stakeholders which are composed of three different water tourism management in Karanganyar, Central Java, Indonesia, namely Grojogan Sewu, Jumog and Peblengan. This study conducted in Karanganyar as a district that has a natural beauty with huge potential to further develop its natural attractions. The data sampling is done by observation and interview. From the result of this study it can be concluded that (1) there needs to be a clear explanation for the villagers near the water tourism area that the natural resources of water needs to be preserved and used moderately ; (2) a communication needs to be established between the stakeholders and those using the water resource, for the sake of the villagers' welfare as well as the economic improvement; (3) the government, both the regional government as well as the central government need to make regulation to keep the condition of the nature without ignoring the possibility of conflict ensuing because of water usage by the villagers; (4) increasing the role of the villagers in managing the water resource so that there will be no prolonged conflict in the future.

Tariq Tawfeeq Yousif Alabdullah, Sofri Yahya, Mohamed Ibrahim Nor and Firas Qassim Majeed aim to investigate the mechanisms of corporate governance in companies and to delineate their effect from the perspective of two variables: the financial performance of firms; and an examination of executive turnover. An analysis on theoretical grounds of these two variables is made with respect to non-financial companies specifically in the context of the country of Jordan. The study has examined the structure of the board of directors and its effects on the financial performance (financial leverage) of the non-financial Jordanian companies. Evidence suggests that the corporate governance mechanisms such as increasing the board size has a positive effect on reducing the level of financial leverage, thus leading to enhanced levels of financial performance.

CORPORATE BOARD: ROLE, DUTIES AND COMPOSITION

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CONTENT

ENFORCEMENT OF CORPORATE RIGHTS-THE RULE IN FOSS v HARBOTTLE: DEAD OR ALIVE

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Abstract

The principle on the enforcement of a corporation's right of action which is encapsulated as the rule in Foss v Harbottle has continued to attract discombobulating academic and judicial comments in defining the scope and exceptions to that rule. The recent statutory interventions which are witnessed in the UK and South Africa by redefining the right of the minority shareholders and other persons to intervene in the corporation's right of action are seen by some writers as having extinguished the flame ignited by the decision in Foss v Harbottle. A detailed examination of the real purport of Wigram VC's pronouncement in that case is undertaken, streamlining the rule and the subsequent decisions of courts carving out rooms for departure from the rule. The paper argues that the statutory interventions in jurisdictions under discussion only borders on derivative action which is an exception to the rule. The effect of those statutory provisions on the rule itself is not too significant as would justify the suggestion that the rule is now extinct. Thus, the paper concludes that the rule in Foss v Harbottle remains the principal approach to the enforcement of a corporation's right of action.

Keywords: Corporate Rights, Derivative Action, Enforcement Common Law, Statute

1. INTRODUCTION

Since that famous pronouncement made by Sir James Wigram VC about the middle of the nineteenth century in *Foss v Harbottle*[1] which accorded judicial recognition to the corporation's right of action in its own name, divergent views have continued to emerge from writers and the judiciary in their restatement of the scope and applications of that rule. This conundrum of views was succinctly captured by French, Mayson and Ryan as follows:

> The rule in *Foss v Harbottle* is the deepest mystery of company law but it is of great practical importance. A lawyer must be able to determine whether his or her client's claim will or will not be heard by the court. So if the client's claim concerns the affairs of a company of which the client is a member, the lawyer must determine whether the claim is an exception to the rule. Unfortunately there is disagreement over defining the rule itself, let alone its exceptions, and the topic has been, and will continue to be, the subject of a vast amount of academic and judicial comment.[2]

The parliament in the UK and South Africa seem to have joined the fray, more as arbiters than as combatants. The parliamentary intentions are felt mostly in that aspect of the rule which seeks to draw exceptions rather than modifications of the substantive rule as stated by Wigram VC. The aim seems to be to open a wider window for individuals interventions in corporate matters for the enhanced protection of corporate interests. The significance of those interventions on the common law concept of derivative action has witnessed the description by writers of the rule in *Foss v Harbottle* as having been consigned to the dustbin of history.[3] The undergoing analysis of judicial decisions and statutory provisions in the UK and South Africa, however, does not seem to lend credence to any suggestion that the rule has been abolished.

2. THE RULE IN FOSS V HARBOTTLE

The principles laid down in that case which have metamorphosed into an arm of the common law rules of corporate governance relating to the enforcement of corporate rights have been subjected to various interpretations and expatiations by academics and the judiciary. The proper appreciation of what those principles are can be gleaned from the facts and the pronouncement of Sir James Wigram VC upon those facts. The relevant part of the facts that informed the decision of the court are that some of the directors of the company had in their capacity as such, purchased their own land at an over-value for the use of the company. They were also alleged to have mortgaged the land and applied the money raised from the mortgage for payment to themselves of the price of the land. The plaintiffs alleged that the two remaining directors had refused to institute the suit, and

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[1] [1843] 2 Hare 460.

[2] Derek French, Stephen Mayson & Christopher Ryan, *Mayson, French & Ryan on Company Law 31st ed* (Oxford: Oxford University Press, 2014) p. 547.

[3] Paul L Davies, Sarah Worthington, Eva Micheler, *Gower and Davies' Principles of Modern Company Law 9th ed* (London: Sweet & Maxwell 2012) p. 654 stated that the rule in *Foss v Harbottle* is consigned to the dustbin. In the South African statutory context, Cassim observed that the abolition of the common law derivative action happily relegates to the history books the 'notorious' rule in *Foss v Harbottle*. See FHI Cassim 'Shareholder Remedies and Minority Protection' in FHI Cassim, MF Cassim, R Cassim, R Jooste, J Shev and J Yeats (eds), *Contemporary Company Law2nd ed* (Cape Town: Juta & Co Ltd, 2012) p. 778.

showed, in fact, that it would be against their personal interest to do so, inasmuch as they were answerable in respect of the transactions in question; if the plaintiffs could not, therefore, institute the suit themselves they would have no redress. These set of facts were legally reconstructed by Wigram VC reflecting the nature of the alleged injury and the real victim of the wrongdoing as follows: "[t]he Victoria Park Company is an incorporated body, and the conduct with which the Defendants are charged in this suit is an injury not to the Plaintiffs exclusively; it is an injury to the whole corporation by individuals whom the corporation entrusted with powers to be exercised only for the good of the corporation."[4]

Upon this foundation was laid the first principle of the enforcement of corporate rights which is described by writers as the 'proper plaintiff principle/rule'.[5] This inference was drawn from that arm of the decision of Wigram VC where he held that "it was not, nor could it successfully be, argued that it was a matter of course for any individual members of a corporation thus to assume to themselves the right of suing in the name of the corporation. In law the corporation and the aggregate members of the corporation are not the same thing for purposes like this."[6]

The strength of this finding lies on the distinct legal personality of the company. The fact that a company is separate or distinct from the members has never been in doubt. This legal contraption which received unparalleled judicial impetus from the House of Lords in *Salomon v Salomon & Co Ltd*[7] has never waned in its acceptance even in modern company statutes. Section 19 of the South African Companies Act[8] (in like manner as its English counterpart[9]) declares *ex abundante cautela* that a company enjoys juristic personality from the date and time of its incorporation having all the legal powers and capacity of an individual as prescribed by the Act.

The underlying question in this arm of the judgment which recognizes the company as the proper plaintiff and at the same time as a juristic person borders on the rightful persons that could in law institute legal action for and in the name of the company. The artificial nature of the corporate entity invariably deprives the company of that unique character of self will which is inherent in natural persons. Wigram VC had obviously ruled out the individual members as competent persons to seek redress for the company as that would amount to a departure from the rule which, *prima facie,* would require that the corporation should sue in its own name and in its corporate character.[10] This is a rule of law and practice which is admittedly technical, but founded on the general principles of justice and convenience which could only be departed from upon compelling reasons of very urgent character.[11] Reading through the company's Act of Incorporation, the judge held that the directors as the governing body are the only ones vested with power to sue in the name of the company. The residuary power lies in the general meeting which could be exercised where the governing body is incapacitated, but no individual incorporators is empowered to sue in the manner proposed by the plaintiffs on the present record.[12]

The vesting of the company's management powers in the directors has consistently continued to receive judicial approval. This feature of corporate governance has been elevated to the status where any interference by the general meeting is deemed unacceptable by the courts.[13] In *Shaw & Sons (Salford) Ltd v Shaw*[14] Greer LJ was very specific on this issue where he stated that "if powers of management are vested in the directors, they and they alone can exercise these powers. The only way in which the general body of the shareholders can control the exercise of the powers vested by the articles in the directors is by altering their articles, or, if the opportunity arises under the articles, by refusing to re-elect the directors of whose actions they disapprove."

The importance of shielding the board's management powers from shareholders control founds justification for the paradigm shift of that practice in South Africa from a mere matter of company's internal arrangement to a statutory affair.[15] Section 66(1) of the South African Companies Act, for instance, provides that "[t]he business and affairs of a company must be managed by or under the direction of its board, which has the authority to exercise all of the powers and perform any of the functions of the company, except to the extent that this Act or the company's Memorandum of Incorporation provides otherwise." This provision is complemented by the standard set in section 76(4) (a) (iii) of the Act which provides that:

> (4) In respect of any particular matter arising in the exercise of the powers or the
> performance of the functions of director, a particular director of a company—
> *(a)* will have satisfied the obligations… if—
> (iii) the director made a decision, or supported the decision of a committee or the board, with regard to that matter, and the director had a *rational basis* for believing, and did believe, that the decision was in the best interests of the company.[16]

Both provisions do not only preclude unwarranted shareholders interference in management powers, but also enjoins respect for decisions honestly taken by the directors which they

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[4] *Foss v Harbottle* above note 1 p. 202 para. 490.

[5] See French, Mayson & Ryan above note 2 p 546 where the authors stated that if a wrong is done to a company, as a person separate from its members, only the company may sue for redress. This is the significant principle stated by Wigram VC in *Foss v Harbottle* itself and is known as 'proper claimant' principle.

[6] Above note 4.

[7] (1897) AC 22 (HL). Lord Macnaghten's speech at page 51 reflects the court's position. He said: "The company is at law a different person altogether from the subscribers to the Memorandum and, although it may be that after incorporation the business is precisely the same as it was before, and the same persons are managers, and the same hands receive the profits, the company is not in law the agent of the subscribers or trustees for them.' In *Dimbleby & Sons Ltd v National Union of Journalists* [1984] 1 WLR 427 at 435, Lord Diplock explained the essence of this judicial attitude as being "to enable business to be undertaken with limited financial liability [on the part of the members] in the event of the business proving to be a failure."

[8] Act 71 of 2008.

[9] S 16 of the UK Companies Act 2006.

[10] Above note 6 para 491.

[11] Ibid 203 para 492.

[12] Ibid 203 para 493.

[13] See *Breckland Group Holdings Ltd v London and Suffolk Properties Ltd* [1989] BCLC 100. *Automatic Self-Cleansing Filter Syndicate Ltd v Cunninghane* [1906] 2 Ch 34. *Scott v Scott* [1943] 1 All ER 582.

[14] [1935] 2 KB 113 CA at 134.

[15] It remains a matter of internal arrangement in the UK. See The Companies (Model Articles) Regulations 2008, SI 2008/3229, art 3.

[16] Emphasis added.

consider to be in the interests of the company. This statutory position is drawn from the judicial disinclination to interfering in management decisions. Lord Wilberforce buttressed this judicial stance in *Howard Smith v Ampol Petroleum Ltd*[17] where he held that there is no appeal on merits from management decisions to courts of law nor will courts of law assume to act as a kind of supervisory board over decisions within the powers of management honestly arrived at. In *Burland v Earl*[18] Lord Davey was very explicit in his objection to any form of judicial interference in matters of internal management of the company and in fact emphasized that the court has no jurisdiction to do so.

The exclusion of shareholders from interfering in management decisions is a strong reason for the courts to exhibit some reluctance in doing so, as the simple question is; if the shareholders as a general meeting cannot interfere in management decisions, why should the courts? The courts cannot be more interested in the running of the affairs of the company than the shareholders themselves except perhaps when the interests of the creditors are involved.[19] Respecting management decisions ensures corporate functionality though the necessary checks and balances should not be rule out. This perhaps is what the parliament had in mind by demanding in that provision that the decision taken by the director should have a 'rational basis'. The requirement of 'rational basis' for decision making demands some level of objectivity in the assessment of the relevant decision to ascertain its sustainability in the context of the director's acclaimed state of mind. An illustration is found in the decision of Jonathan Parker J in *Regentcrest plc v Cohen*[20]

> The question is not whether, viewed objectively by the court, the particular act or omission which is challenged was in fact in the interests of the company; still less is the question whether the court, had it been in the position of the director at the relevant time, might have acted differently. Rather, the question is whether the director honestly believed that his act or omission was in the interests of the company. The issue is as to the director's state of mind. No doubt, where it is clear that the act or omission under challenge resulted in substantial detriment to the company, the director will have a harder task persuading the court that he honestly believed it to be in the company's interest.

The judicial reluctance if not refusal to interfere in matters of corporate management is identified as one of the reasons for the rule in *Foss v Harbottle*.[21] Although Wigram VC did not explicitly state as such, there are sufficient grounds in the judgment to justify such inference.

The second arm of the rule is described as the ratifiability principle or the majority rule.[22] Wigram VC had articulated this principle in his judgment where he said:

> The complaint is that those trustees have sold lands to themselves, ostensibly for the benefit of the *cestui que trusts.* The proposition I have advanced is that, although the Act should prove to be voidable, the *cestui que trusts* may elect to confirm it. Now, who are the *cestui que trusts* in this case? The corporation, in a sense, is undoubtedly the *cestui que trust;* but the majority of the proprietors at a special general meeting assembled, independently of any general rules of law upon the subject, by the very terms of the incorporation in the present case, has power to bind the whole body, and every individual corporator must be taken to have come into the corporation upon the terms of being liable to be so bound. How then can this Court act in a suit constituted as this is, if it is to be assumed, for the purposes of the argument, that the powers of the body of the proprietors are still in existence, and may lawfully be exercised for a purpose like that I have suggested? Whilst the Court may be declaring the acts complained of to be void at the suit of the present Plaintiffs, who in fact may be the only proprietors who disapprove of them, the governing body of proprietors may defeat the decree by lawfully resolving upon the confirmation of the very acts which are the subject of the suit.[23]

The principle was reaffirmed even more explicitly by the same Judge in *Bagshaw v Eastern Union Railway Co*[24] where he stated that if the act, though it be the act of the directors only, be one which a general meeting of the company could sanction, a bill by some of the shareholders, on behalf of themselves and others, to impeach that act cannot be sustained, because a general meeting of the company might immediately confirm and give validity to the act of which the bill complains. Successive court decisions have continued to expatiate and explain the practicalities of this principle.[25] But those decisions are mired in controversy in defining what is or is not ratifiable by the majority of the members.[26] Lord Davey had

[17] [1974] AC 821 at 832 (HL). See also *Richard Brandy Franks Ltd v Price* (1937) 58 CLB 136.

[18] [1902] AC 83 at 93 (PC). See also *Shuttleworth v Cox Brothers and Co (Maidenhead) Ltd* [1927] 2 KB 9 per Scrutton LJ at 22-24. *Regentcrest v plc v Cohen* [2001] 2 BCLC 80 per Jonathan Parker J at 105.

[19] See *Hellard & Anor (Liquidators of HLC Environmental Projects Ltd) v Carvalho* [2013] EWHC 2876 (Ch) para 92. *Colin Gwyer & Associates Ltd v London Wharf (Limehouse) Ltd, Eaton Bray Ltd v Palmer* [2002] EWHC 2748 (Ch), [2003] 2 BCLC 153 para 74. *Kalls Enterprises Pty Ltd v Baloglow* [2007] NSWCA 191, 25 ACLC 1094 para 162. *Roberts v Frohlich* [2011] EWHC 257 (Ch) para 85, *Bell Group Ltd v Westpac Banking Corporation* [2008] WASC 239 paras 4438-4439, *Kinsela v Russell Kinsela Pty Ltd* (1986) 4 NSWLR 722 at 730, *Brady v Brady* [1988] BCLC 20 (CA) at 40h-I, *GHLM Trading Ltd v Maroo & Ors* [2012] EWHC 61 (Ch) para 164.

[20] [2001] 2 BCLC 80 at 105. See also *Vivendi SA Centenary Holdings Iii Ltd v Richards & Ors* [2013] EWHC 3006 (Ch) para 147.

[21] See French, Mayson & Ryan above note 5 p. 548.

[22] Hannigan observed that at common law shareholder's remedies are dominated by the rule in *Foss v Harbottle* which has two elements: first, the proper plaintiff in respect of a wrong allegedly done to a company is *prima facie* the company; secondly, where the alleged wrong is a transaction which might be made binding on the company by a simple majority of the members, no individual member of the company is allowed to bring a claim in respect of it. Brenda Hannigan, *Company Law 3rd ed* (Oxford: Oxford University Press, 2012) p. 417. See also French, Mayson & Ryan above note 21 p 550.

[23] *Foss v Harbottle* above note 12 pp. 203-204 para. 494.

[24] (1849) 7 Hare 114 at 130.

[25] *Davidson v Tulloch* (1860) 3 Macq 783 at 792, *Edwards v Halliwell* [1950] 2 All ER 1064 at 1066 per Jenkins LJ, *MacDougall v Gardiner* (1875) 1 ChD 13 at 25 per Mellish LJ, *Prudential Assurance Co Ltd v Newman Industries Ltd (No 2)* [1980] 2 All ER 841, per Vinelott J, *Smith Croft (No 2)* [1987] 3 All ER 909 per Knox J.

[26] See KW Wedderburn, 'Unreformed Company Law' (1969) 32 MLR 563. KW Wedderburn, 'Shareholders Rights and the rule in *Foss v Harbottle*' (1957) CLJ 194.

sought, early in the 20th century, in *Burland v Earle*[27] to clear the air on the ensuing controversy by suggesting that acts which are of fraudulent character or *ultra vires* are not ratifiable. Examples of such acts were given as where the majority are endeavoring directly or indirectly to appropriate to themselves money, property, or advantages which belong to the company, or which other shareholders are entitled to participate.

But the conducts which Wigram VC found to be ratifiable in *Foss* are not significantly different from some of the illustrations offered by Lord Davey. Indeed, cases of expropriation of company's opportunity have been found to be ratifiable as witnessed in *Regal (Hastings) Ltd v Gulliver*[28] where Lord Russell of Killowen had suggested, in the judgment of the House of Lords, that the directors could, had they wished, have protected themselves by a resolution (either antecedent or subsequent) of the shareholders in the general meeting. Not even the approach adopted by Vinelott J in *Prudential Assurance Co Ltd v Newman Industries Ltd and Others (No 2)*[29] where the judge held that fraud lies, not in the character of the act or transaction giving rise to the cause of action, but in the use of the voting power by the controlling shareholders/directors to ratify the transaction, could resolve the controversy. That decision draws a line between the majority and the minority shareholders and locates fraud in a ratification process which places the minority shareholders at a disadvantage. This is not, however, suggesting that fraud cannot also be found on the character of a transaction. The expropriation of corporate opportunities and self-dealing by the directors are good instances of fraud founded on the character of the transaction.[30] Although it is accepted that the shareholders could ratify frauds arising from the directors breach of duty in certain circumstances, there is still an underlying controversy relating to the nature of the transaction and in what circumstances a ratification would be allowed.[31]

These discombobulated judicial decisions on the issue of ratification demanded parliamentary intervention. When that intervention came, it was not geared at defining the conduct that is ratifiable or not, but rather the effect of such ratification or ratifiability of a particular conduct on the minority shareholders right of action. The provisions toeing this innovative path are found in sections 263 and 165 of the UK and South African Companies Acts respectively. The intrinsic impact of those provisions on the second arm of Wigram VC's decision seems to form the basis upon which the suggestion is made by some writers that the rule in *Foss v Harbottle* is now extinct.[32] Incidentally, those statutory provisions in both jurisdictions deal with the concept of derivative action. The veracity of those writers' opinions will as such be tested in that context.

3. DERIVATIVE ACTION

Derivative action is a common law device by which the shareholder is allowed to seek redress for and on behalf of the company for an injury done to the company. This meaning is now statutorily recognized in the UK and affirmed in recent judicial decisions.[33] The first description of a minority shareholder right of action for an injury to the company as derivative action was made by the United States Supreme Court.[34] The aim was to address the real owner of the right of action which is the company. The shareholder's right to sue is thus derived from the company.

Prior to the US court pronouncement on this concept, the English courts have dealt with this type of action more as a representative action by the shareholder on behalf of the company.[35] The circuitous nature of the proceedings then was described by Lord Denning MR in *Wallersteiner v Moir (No 2)*[36] as a cumbersome process demanding two stages of proceedings: first, in the name of the shareholders and, subsequently in the company's name after leave is obtained from the court. An innovative path adopted by Lord Hatherly LC in *Menier v Hooper's Telegraph*[37]which required only one action in the name of the minority shareholder against the wrongdoer and the company as a nominal defendant was approved by the Court of Appeal.[38]

An aspect of Lord Denning MR's decision that is relevant to this discourse lies in the justification for a derivative action which was set down as follows:

> If it is defrauded by a wrongdoer, the company itself is the one person to sue for the damage. Such is the rule in *Foss v Harbottle*. The rule is easy enough to apply when the company is defrauded by outsiders. The company itself is the only person who can sue. Likewise, when it is defrauded by insiders of a minor kind, once again the company is the only person who can sue. But suppose it is defrauded by insiders who control its affairs - by directors who hold a majority of shares - who can then sue for damages? Those directors are themselves the wrongdoers. If a board meeting is held, they will not authorise proceedings to be taken by the company against themselves. If a general meeting is called, they will vote down any suggestion that the company should sue them themselves. Yet the company is the one person who is damnified. In one way or another some

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[27] [1902] AC 83 at 93.
[28] [1967] 2 AC 134n (HL).
[29] [1980] 2 All ER 841.
[30] See *Burland v Earle* [1902] AC 83 where Lord Davey referred to the transaction as being of fraudulent character.
[31] For more discussion on the various facets of this controversy, see Anthony O Nwafor & Gloria C Nwafor, 'Breach of Duty: Power of Shareholders to Ratify Directors Fraudulent Dealings' (2014) 10 (2) *Corporate Board: Role, Duties & Composition* 32.
[32] See Davies *et al* above note 3 p 654, Cassim above note 3 p 778.
[33] See s 260(1) of the UK Companies Act 2006. See *Abouraya v Sigmund* [2014] EWHC 277 (Ch) para 12, *Hughes v Weiss* [2012] EWHC 2363(Ch) para 27, *Iesini v Westrip Holdings Ltd* [2009] EWHC 2526 (Ch) paras 68, 73.
[34] See *Hawes v City of Oakland* 104 U.S. 450 (1882) where the United States Supreme Court gave judicial expression to the concept known as derivative action. See also *Whitten v Dabney* 171 Cal 621 (1915), quoted in *Heckman v Ahmanson* 168 Cal App 3d 119, 214 Cal.Rptr. 177 (Ct. App. 1985), at 183-184.
[35] Which was why it was originally referred to as minority shareholder's action. See *East Pant Du United Lead Mining Co. Ltd. v Merryweather* (1864) 2 Hem. & M. 254.
[36] [1975] 2 WLR 389 at 395-396 (CA)
[37] (1874) 9 Ch App. 350.
[38] The two stage proceedings is retained in both UK and South Africa but in the manner recommended by Lord Hatherley LC in *Menier's case*. See *Bamford v Harvey* [2012] EWHC 2858 (Ch) para 2, *Cinematic Finance Ltd v Ryder* [2010] EWHC 3387 (Ch) para 2. See also See also *Francis George Hill Family Trust v South African Reserve Bank and Others* [1992] ZASCA 50; 1992 (3) SA 91 (AD), *TWK Agriculture Ltd v NCT Forestry Co-operative Lt and Others* 2006 (6) SA 20 (N), *Kalinko v Nisbet and Others* 2002 (5) SA 766 (W).

> means must be found for the company to sue. Otherwise the law would fail in its purpose. Injustice would be done without redress.[39]

The passage explicitly demonstrates what the rule in *Foss v Harbottle* entails, i.e., that the company itself is the only person to sue for the damage done to it. The right of the minority shareholder to sue which could only be triggered when the company's right of action is incapacitated due to the involvement in wrongdoing by the relevant organ that would have instituted action for the company is not an intrinsic part of that rule. Indeed, in *Foss*, Wigram VC had described the shareholders action as a '*departure*' from the rule[40] and an '*anomalous form of suit*' which he could not see any reason why it should be resorted to when the powers of the corporation could be called into exercise.[41] A further confirmation that the minority shareholders' right of action was not the concern of the court is buttressed by the finding by Wigram VC that "during the years 1840, 1841 and 1842 there was a governing body, that by such body the business of the company was carried on, that there was no insurmountable impediment to the exercise of the powers of the proprietors assembled in general meetings to control the affairs of the company, and that such general meetings were actually held."[42] Thus, as the relevant organs of the company that could seek redress in the name of the company were all active, there was no basis for the consideration of the minority shareholders right of action on behalf of the company. This position of the law was recently given credence by Lewison J in *Iesini & Ors v Westrip Holdings Ltd & Ors*[43] where the Judge held that whether a company should bring proceedings to redress a wrong was a matter that was to be decided by the company internally; that is to say by its board of directors, or by a majority of its shareholders if dissatisfied by the board's decision and that the court would not second guess a decision made by the company in accordance with its own constitution.

Subsequent court decisions have, as such, consistently referred to the minority shareholders right of action as encapsulated by the concept of derivative action as an exception to the rule in *Foss v Harbottle*. In *Burland v Earle*[44] Lord Davey had recognised that the cardinal principle is that company should sue for an injury done to it as laid down in *Foss v Harbottle,* but that an exception is made where the persons against whom the relief is sought are themselves in control of the majority of the shares in the company, and will not permit action to be brought in the name of the company. In *Prudential Assurance Co Ltd v Newman Industries Ltd and others (No. 2)*[45] the UK Court of Appeal stated that "[a] derivative action is an exception to the elementary principle that A cannot, as a general rule, bring an action against B to recover damages or secure other relief on behalf of C for an injury done by B to C. C is the proper plaintiff because C is the party injured, and, therefore, the person in whom the cause of action is vested. This is sometimes referred to as the 'Rule in *Foss v Harbottle*'" Similarly, in *Cinematic Finance Ltd v Ryder*[46] Roth J observed that the general rule is that a cause of action vesting in a company should be pursued by the company and not by its shareholders. A similar approach was adopted by the South African court in *Hillcrest Village (Pty) Ltd and Another v Nedbank Limited and Others*[47] where Mavundla J held that save for certain exceptions, in general, when a wrong is alleged to have been done to a company the proper plaintiff to sue the wrongdoer is the company itself.

A derivative action is conceived as an exception to the rule in *Foss* to deal with the particular circumstances when the company cannot or will not bring an action against the alleged wrongdoer. In *Edwards v Halliwell*[48] Jenkins LJ observed that the rule in *Foss* is not an inflexible rule and will be relaxed where necessary in the interest of justice. Wigram VC did not, however, relax the rule in *Foss.* Although there are statements in the judgment suggesting positive disposition of the judge in that regard,[49] the facts as pleaded did not give room for a consideration of that possibility.

The rule itself is a substantive rule bordering on the powers of the company to conduct its own affairs as a juristic entity. The exception referred to as derivative action is described by the court as a 'mere matter of procedure designed to afford remedy to the company for wrong which would otherwise escape redress'.[50] It simply lays down when and how the minority shareholder may seek redress for wrong done to the company. Such power is secondary in nature and cannot extinguish the primary and substantive rule on which its existence is predicated.

This submission, however, does not put an end to the ensuing controversy over that rule. The second arm of the rule that denies the minority shareholder a right of action where the wrong is ratifiable by a majority of the shareholders seems to have fallen severely under the weight of the statutory innovation. Section 263(2)(c) which is contained in Part 11 of the UK Companies Act that deals generally with the concept of derivative action directs the courts to decline permission to commence a derivative action if the court is satisfied that:

> (c) where the cause of action arises from an act or omission that has already occurred, that the act or omission—
> (i) was authorised by the company before it occurred, or
> (ii) has been ratified by the company since it occurred.

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[39] *Wallersteiner v Moir (No 2)* (1975) 1 All ER 849 (CA) at 857 D – F. See also *Francis George Hill Family Trust v South African Reserve Bank and Others* [1992] ZASCA 50; 1992 (3) SA 91 (AD) where Denning MR's decision was considered and applied by the South African Court of Appeal.
[40] *Foss'case* above note 23 para 491.
[41] Ibid para 504.
[42] Ibid paras 502-503.
[43] [2009] EWHC 2526 (Ch) para 73.
[44] [1902] AC 83 at 93.
[45] [1982] Ch. 204 at 210. See *also Abouraya v Sigmund & Ors* [2014] EWHC 277 (Ch) para 26.
[46] [2010] EWHC 3387 (Ch) para 9.
[47] [2008] ZAGPHC 134 para 5.2.
[48] [1950] 2 All ER 1064 at 1067.
[49] For instance, at page 204 para 494, the judge stated that "[i]n order then that this suit may be sustained it must be shown either that there is no such power as I have supposed remaining in the proprietors, or, at least, that all means have been resorted to and found ineffectual to set that body in motion: this latter point is nowhere suggested in the bill."
[50] *Burland v Earle* [1902] AC 83 at 93 per Lord Davey.

Factors which the court should consider in deciding whether or not to grant permission to commence an action are also set down in section 263(3) and include:

> (c) where the cause of action results from an act or omission that is yet to occur, whether the act or omission could be, and in the circumstances would be likely to be—
> (i) authorised by the company before it occurs, or
> (ii) ratified by the company after it occurs.

A distinctive feature of subsection 2(c) is that actual ratification forecloses the right of action. But that provision does not foreclose the power of the court to examine the validity of the ratification process. That position was adopted by Hodge QC sitting as a Judge of the High Court in *Singh v Singh*[51] where the judge declined to grant permission on the ground that the conduct on the part of the first defendant of which the complaint is made has been 'effectively' ratified by the company. The emphasis is on 'effective' ratification and not just mere ratification. A ratification to be effective must satisfy the threshold laid down in section 239 of the Act relating to disqualification from voting by interested wrongdoer and connected persons. The judicial power to scrutinise the ratification process is strengthened by section 239(7) which provides that section 239 does not affect any other enactment or rule of law imposing additional requirements for valid ratification or any rule of law as to acts that are incapable of being ratified by the company. Although the position at common law, remains uncertain as to what is or is not ratifiable, and it has in fact been held by the court that there is no limit to the power of the majority to ratify an act or transaction,[52] what is certain is that the circumstances or process of ratification can be inquired into by the court. This legal position is buttressed by the decision of Knox J in *Smith v Croft (No 2)*[53] to the effect that the ultimate,

> question has to be…: is the plaintiff being prevented improperly from bringing these proceedings on behalf of the company? If it is an expression of… an appropriate independent organ that is preventing the plaintiff from prosecuting the action he is not improperly but properly prevented and so the answer to the question is No. The appropriate independent organ will vary according to the constitution of the company concerned and the identity of the defendants, who will in most cases he disqualified from participating by voting in expressing the corporate will.

The provision set down in section 263(2)(c) differs from Wigram VC's position in *Foss* in that the provision emphasises actual ratification as against mere prospect of the conduct being ratified which was the concern of the court in *Foss*. The prospect of ratification does not bar derivative proceedings under the Act but an actual and effective ratification certainly does.[54]

The South African Companies Act of 2008 embodies extensive provisions on derivative action in section 165. Apart from subsections 1 and 2 of that section (which clumsily runs up to subsection 16) all other provisions in that section are matters of procedure. While subsection 1 provides statutory route to a derivative action, subsection 2 redefines the scope of persons that may institute derivative proceedings to protect the interests of the company.[55] The provision of subsection 1 of section 165 deserves some attention as it forms the basis upon which the suggestion is made that the rule in *Foss v Harbottle* is now abolished in South African. That provision is as follows:

> Any right at common law of a person *other than a company* to bring or prosecute any legal proceedings on behalf of that company is abolished, and the rights in this section are in substitution for any such abolished right.[56]

The provision does not harbour any ambiguity on what is abolished. It is the right at common law of any person to bring or prosecute legal proceedings on behalf of the company. That is actually what the common law concept of derivative action stands for. It is only by that concept that an individual is allowed to vindicate a company's right of action. The right of the company at common law to seek redress for wrong done to the company is not affected and is indeed explicitly preserved in that provision by the exemption phrase 'other than the company' as contained in the provision. The recognition and preservation of the corporation's right of action is exactly what the rule in *Foss v Harbottle*, a common rule, entails. The explicit nature of this provision makes inescapable the questioning of the basis for the suggestion that the rule in *Foss* is now abolished in South Africa.

On issue of procedure, although the Act now provides an alternative route for a derivative action, this does not suggest that those standards set at common law for granting of leave to the applicant to prosecute this type of action are also abolished. In fact some of those conditions set down by the Act as prerequisites for bringing of a derivative action remain either explicitly or implicitly the same as under the common law. This is buttressed by the provision of section 165(5) which requires that the court may grant leave only if satisfied, among other conditions, that the applicant is acting in good faith, and that the action is in the interests of the company.[57] In *Mouritzen v Greystone Enterprises (Pty) Ltd & Another*[58] where this provision was considered, Ndlovu J observed that in most, but not all, instances both requirements would overlap. An instance where a person does not act in good faith but is driven by an ulterior motive, such as personal vendetta, will generally not be in the best interests of the company. If a broad view of these concepts is taken by the court,

[51] [2013] EWHC 2138 (Ch) para 39.
[52] See *Prudential Assurance Co Ltd v Newman Ind Ltd (No 2)* [1981] Ch 257 at 307 per Vinellot J who held that there is no obvious limit to the power of the majority to authorise or ratify an act or transaction whatever its character provided that the majority does not have an interest which conflicts with the interests of the company.
[53] [1987] 3 All ER 909 at 955-956. See also *Iesini v Westrip Holdings Ltd* [2009] EWHC 2526 (Ch) paras 127.
[54] See *Hughes v Weiss* [2012] EWHC 2363(Ch) para 42, *Bamford v Harvey* [2012] EWHC 2858 (Ch) para 5.
[55] See s 165(2)(a-d) which confers right of action on the shareholder or beneficial owner of shares, director or prescribed officer of the company, registered trade union and another person granted leave by the court.
[56] Emphasis added.
[57] See s 165(5)(b)(i)(iii). Note that both requirements are also prescribed at common law.
[58] 2012 (5) SA 74 (KZD) para 62.

it cannot realistically arrive at a fair decision by shutting its eyes to the position of the wrongdoer either within or outside the company when brought to the attention of the court. That of course is a common law position on this type of action.[59] An illustration is found in the Australian case of *Swansson v Pratt*[60] where Palmer J observed that an action sought to be instituted by a former shareholder with a history of grievances against the current majority of shareholders or the current board may be easier to characterize as brought for the purpose of satisfying nothing more than the applicant's private vendetta. An applicant with such a purpose would not be acting in good faith even when the alleged wrongdoers are seemingly in control of the company. In *Mouritzen's case*[61] Ndlovu J expressed the view that factual proof of any pre-existing personal animosity between the parties, as in that case, does not *per se* serve as conclusive proof that any person referred to in section 165(2) of the Act is not acting in good faith in serving a demand under that subsection, or instituting an application under section 165(5). However, personal animosity between the opposed parties is an important factor which the Court will always take into account *together with other relevant evidentiary material* presented before the Court in a given situation, in determining whether or not an applicant has, on a balance of probabilities, satisfied the 'good faith' requirement. The reference to 'other evidential material' is an indication that the factors which could be considered by the court as provided in section 165(5) of the Act are not exclusive and would as such include the relationship or position of the wrongdoer in the company.

There are no mandatory grounds for declining leave as is the case under the English law, but one of the factors which should inform the decision of the court and is of primary importance to this discourse is found in section 165(14) of the Act which provides as follows:

> (14) If the shareholders of a company have ratified or approved any particular conduct of the company-
> (a) the ratification or approval-
> (i) does not prevent a person from making a demand, applying for leave, or bringing or intervening in proceedings with leave under this section; and
> (ii) does not prejudice the outcome of any application for leave, or proceedings brought or intervened in with leave under this section; or
> (b) the court may take that ratification or approval into account in making any judgment or order.[62]

This provision is particularly of significance in redefining the second arm of the rule in *Foss v Harbottle*. It embodies a paradigm shift from that arm of the rule which recognises a mere possibility of ratification as sufficient to prevent a derivative action. It also differs from the UK Companies Act provision in that it does not recognise actual and effective ratification as a bar to a derivative action. But the provision should not be taking as implying that ratification of wrong done to the company by shareholders does not have any real impact on derivative action under South African law. Section 75 of the Act provides for the ratification of directors wrongful acts. Subsection 7 of that section provides that:

> A decision by the board, or a transaction or agreement approved by the board, or by a company…, is valid despite any personal financial interest of a director or person related to the director, only if -
> (a) it was approved following disclosure of that interest in the manner contemplated in this section; or
> (b) despite having been approved without disclosure of that interest, it -
> (i) has subsequently been ratified by an ordinary resolution of the shareholders following disclosure of that interest.

This provision implies that ratification is valid if effectively obtained as prescribed by law. Thus, the requirement of section 165(14)(b) that the court may take the ratification into account in arriving at its decision should be read as an obligation on the court to examine the effectiveness or validity of the ratification as provided in section 75 of the Act. It is important that such consideration should be undertaken by the court at the early stages of the proceedings when leave is sought as it is done under the English law[63] to prevent a long drawn litigation on a wrong which has become extinct following an effective ratification process. Thus, the major difference between the statutory position in South Africa as under the English law and the rule in *Foss* remains that the former emphasises effective ratification and not just a mere prospect of ratification as in the latter as a vitiating factor for an individual's right of action to vindicate a wrong done to the company.

4. CONCLUSION

The fact that in both jurisdictions there are presently elaborate statutory provisions on derivative action are simply not sustainable as ground for any suggestion that the rule in *Foss v Harbottle* is now extinct. Dignam and Lowry had observed in relation to the UK Companies Act provisions that:

> If we compare the language of ss 261-264 with the common law rule it replaces, it is apparent that there is little or no change of emphasis in terms of formulation. The focus of the rule laid down in *Foss v Harbottle* and its jurisprudence was on prohibiting claims unless one of the exceptions to the rule was satisfied. The statutory language similarly proceeds from the rather negative standpoint that the court *must*

[59] See *Bamford v Harvey* [2012] EWHC 2858 (Ch) para 29 where Roth J accepted that even as 'wrongdoer control' was not an explicit condition in section 263(2) of the UK Companies Act, it remains a factor to be taken into consideration as section 263(3) of the Act is not exclusive. See also *Stimpson v Southern Private Landlords Association* [2009] EWHC 2072 (Ch) para 46 per Judge Pelling QC sitting as a Judge of the High Court.
[60] [2002] NSWSC 583 para 41 per Palmer J, referred to by Ndlovu J in *Mouritzen's case* above note 58 para 59.
[61] Ibid.
[62] As amended by s 104 of Companies Amendment Act 3 of 2011.
[63] See *Singh v Singh* [2013] EWHC 2138 (Ch) para 39 where Hodge QC (sitting as a Judge of the High Court) in dismissing application for leave to commence a derivative action held that "this is a clear case where permission to bring a derivative claim should be refused…, the principal reason for that is that the conduct on the part of the first defendant of which complaint is made is conduct that was either authorised by the company before it occurred, or has effectively been ratified by the company since then."

> *dismiss* the application or claim in the circumstances specified in [the Act].[64]

In *Cinematic Finance Ltd v Ryder & Ords*[65] Roth J affirmed the subsistence of the rule in *Foss* inspite of the statutory provisions where he said:

> I accept that proceedings for a derivative claim are now comprehensively governed by the Act. But in my judgment the Act is not seeking to change the basic rule that a claim that lies in a company can be pursued only by the company or to disturb the fundamental distinction between a company and its shareholders. There is nothing to suggest that the Act intended such a radical reversal of long-standing and fundamental principles.

The position adopted by the Judge finds credence, as stated by Roth J, in the Report of the Law Commission on Shareholder Remedies which states *inter alia*: "(i) *Proper plaintiff* Normally the company should be the only party entitled to enforce a cause of action belonging to it. Accordingly, a member should be able to maintain proceedings about wrongs done to the company only in exceptional circumstances."[66] Thus, in *Bamford v Harvey*[67] Roth J declined to grant permission to commence a derivative action where the company is in a position to initiate proceedings in its own name. Similarly, in *Stimpson v Southern Private Landlords Association*[68] Judge Pelling QC (sitting as a Judge of the High Court) adopted a stance which is reminiscent of Wigram VC's position in *Foss* by declining to grant permission where the claimant is found to be in a position to "requisition an EGM, obtain if he can a replacement Board and that Board can if it judges it appropriate to do so, applying the duties imposed upon them by Sections 172, authorise the litigation."

The major achievement of the statutory provisions in both jurisdictions is that the law now prescribes more flexible criteria than the 'wrongdoer control' and 'fraud on minority' exceptions to the rule in *Foss v Harbottle*,[69] thus making the concept of derivative action more easily accessible by the shareholders and other persons who are given the right of action under the statute. Thus, a decision such as that handed down by Mavundla J in *Hillcrest Village (Pty) Ltd and Another v Nedbank Limited and Others*[70] where the Judge declined to allow a derivative action on the ground that none of the defendants were either directors or shareholders nor that any majority of such directors or shareholders as constituted were among the defendants, but on the contrary the defendants were all outsiders, i.e. persons not being directors and or shareholders of the company, may no long stand as good law in South Africa. But the fact that the company is the proper plaintiff to vindicate any wrong done to it as a juristic person, a position which was indisputably articulated by Wigram VC in *Foss*, remains as potent under the existing statutory arrangements in both the UK and South Africa, as it was at common law.

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[65] [2010] EWHC 3387 (Ch) para 11.
[66] Ibid, paras 11–12. See Law Commission Report No 246 (1997) para 1.9. See also *Bamford v Harvey* [2012] EWHC 2858 (Ch) para 25 where this position was reaffirmed by Roth J.
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CORPORATE GOVERNANCE AND INNOVATION: EVIDENCE FROM BAHRAIN BOURSE

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Abstract

The study aims to assess corporate governance and innovation in selected listed companies at Bahrain Bourse. The study sample included 39 companies in the year 2013. The study built one Linear Regression Model to study the relationship between corporate governance and innovation. After testing the first hypothesis, there is an accepted level of corporate governance in selected listed companies at Bahrain Bourse. And after testing the second hypothesis, there is no relationship between corporate governance and innovation in selected listed companies at Bahrain Bourse, whether the corporate governance is strong in selected listed companies at Bahrain Bourse or not, it has no relationship to Innovation. In Kingdom of Bahrain the innovation is weak due to the fact that Bahrain imports innovation from other countries. The study recommends that all companies listed in Bahrain Bourse to send their employees for special courses on corporate governance, which shows its benefits and to increase their awareness and advises to conduct a workshop of innovation in companies listed in Bahrain Bourse by professional institutes.

Keywords: Corporate Governance, Innovation, Bahrain

1. INTRODUCTION

Countries at international level have become more interested in implementing good corporate governance practices with the increased global challenges and competition to be able to participate in the global economy, attract foreign investments and build a foundation for sustainable economic growth. Bahrain is also one of those countries that have placed a great interest in the existence of corporate governance state, and it has placed a great effort in issuing the Corporate Governance Code.

The Government of Kingdom of Bahrain is keen to promote good corporate governance principles in Bahrain in order to enhance investor confidence and foster economic development. Over the past several years, the Ministry of Industry and Commerce, in cooperation with the Central Bank of Bahrain, has worked with the National Corporate Governance Committee to develop a Corporate Governance Code through a consultative process and recognizing the great effort of many stakeholders (Bahrain Code of Corporate Governance, 2010).

The Ministry of Industry and Commerce (MOIC) has drafted a new Commercial Companies Law, which incorporates numerous corporate governance provisions and rules. The MOIC has also issued a booklet and CD which provide guidance to directors as to the various laws which govern financial reporting requirements and other obligations to the different stakeholders. The Central Bank of Bahrain (CBB) is also very active in reviewing new corporate governance-related requirements for listed companies, and its licensees. MOIC, with the CBB, created National Steering Committee on Corporate Governance primarily to develop the new Company Law and in 2006 the Committee began its work to create Code of Corporate Governance (CCG). The committee was formed from representatives of various interested stakeholder groups. The committee developed a code of corporate governance, with the aim to support and strengthen Bahrain's corporate governance framework for all companies. The draft code was presented at a public conference on 6 May, 2008 and the code was officially issued by the MOIC in 2010. All companies are required to adopt it starting from January 1, 2011, where full compliance required by end of the year 2011 (Kukreja, 2013).

Corporate governance broadly refers to the mechanisms, processes and relations by which corporations are controlled and directed. Governance structures identify the distribution of rights and responsibilities among different participants in the corporation (such as the board of directors, managers, shareholders, creditors, auditors, regulators, and other stakeholders) and include the rules and procedures for making decisions in corporate affairs. Corporate governance includes the processes through which corporations' objectives are set and pursued in the context of the social, regulatory and market environment. Governance mechanisms include monitoring the actions, policies and decisions of corporations and their agents. Corporate governance practices are affected by attempts to align the interests of stakeholders.

Deschamps (2012) mentioned that innovation governance can be thought of as a system of mechanisms to align goals, allocate resources and assign decision-making authority for innovation, across the company and with external parties. Many have gone further by allocating specific responsibilities and setting up dedicated mechanisms to manage cross-functional processes, for example new product development. But how can they stimulate, steer and sustain innovation, an ongoing transformational endeavor that is increasingly becoming a corporate imperative. Certainly, innovation consists of several cross-functional processes from generating ideas to taking technologies to market. It deals with "hard" business issues like growth strategy, technological investments, project portfolios and the creation of new businesses. But it also relates to "softer" challenges, like promoting creativity and discipline, stimulating entrepreneurship, accepting risk, encouraging teamwork, fostering learning and change, and facilitating networking and communications; in short, it requires a special type of organizational culture. Like marketing, innovation is a mindset that should pervade the whole organization.

Current innovation management techniques and organizational solutions tend to focus on many – not all – of the hard aspects of innovation, but much less on its softer elements. The scope of innovation is so broad that few companies appear to have thought deeply about what it takes now and will take in the future to steer and manage innovation in an integrated way, across all its aspects, hard and soft (Deschamps, 2012).

This study is based on corporate governance and innovation management in selected listed companies at Bahrain Bourse (BB) according to the prevailing corporate governance environment and strategies to sustain or have potential competitiveness to meet the standards of the ever changing market. Organizations are considering innovative ideas as their potential informational resource along with financial and non-financial resources. Approximately, most of the sectors in Bahrain have embedded the innovation concepts in their organizational hierarchy to get optimum utilization of resources and benefits through market and organizational performance. Innovation is the core competency factor for every market oriented approach.

Saxena (2012) stated that real success of the different sectors reforms will however depend primarily on the organizational effectiveness of these sectors, for example the commercial banks sector that include cooperative banks, for which initiatives will have to come from the banks themselves. With elements of good corporate governance, sound investment policy, appropriate internal control systems, better credit risk management, focus on newly-emerging business areas like micro finance, commitment to better customer service, adequate automation and proactive policies on house-keeping issues, definitely would be able to grapple these challenges and convert them into opportunities.

1.1. Statement of the problem

When companies efficiently mobilize and allocate funds, this lowers the cost of capital to firms, boosts capital formation and stimulates productivity growth. Thus, weak governance of different sectors reflects throughout the economy with negative consequences for economic development. This research study is important because it will analyze the corporate governance and innovation in selected listed companies at Bahrain Bourse. Recent academic and policy analysis gives insight into the governance problems exposed by the financial crisis and suggests possible solutions. Thus, this study is conducted due to no previous work on this subject. Kingdom of Bahrain is an emerging market, so the study should examine the corporate governance and its impact on innovation in selected listed companies at Bahrain Bourse.

Specifically the study will answer the following:

a) Is there accepted level of corporate governance in selected listed companies at Bahrain Bourse?

b) Is there relationship between corporate governance and innovation in selected listed companies at Bahrain Bourse?

1.2. Objective and significance of the study

The study aims to assess corporate governance and innovation in selected listed companies at Bahrain Bourse. The specific objective of the study is to analyze the corporate governance and innovation of many sectors and its importance in the economic expansion. Kingdom of Bahrain is a small island and has limited resources, at the same time when multiple needs of its population are growing continuously, it seeks to use its available resources in most efficient way and reach the optimal allocation of resources.

This study is significant because the centrality of corporate enterprises for allocating resources in the economy has sparked the recent debate among economists about the manner in which corporations should be governed to enhance economic performance. The process through which resources are developed and utilized is central to the dynamic through which successful enterprises and economies improve their performance over time as well as relative to each other. The leading theories of corporate governance - the shareholder and stakeholder theories - do not, however, incorporate a systematic analysis of innovation in their analytical frameworks. Both of these theories, in fact, rely on concepts of resource allocation, borrowed from neoclassical economics that contradict what we know about the innovation process.

To deal with the economics of innovation, a theory of corporate governance must come to terms with the developmental, organizational and strategic dimensions of innovative resource allocation. This study describes an organizational control theory that demonstrates the implications of innovation for corporate governance.

2. LITERATURE REVIEW AND HYPOTHESIS

Tseng *et al* (2013) noted that the Report of International Institute for Management Development (IMD) mentions two indicators about corporate governance, efficiency of board directors supervising ability to management and efficiency of shareholder value. Recently, Taiwan Government worked hard on enhancing the efficiency of corporate governance and realize the concept and system of corporate governance. Under the knowledge-based economy, effective management of knowledge and innovation thus has become important for corporate. Innovation ability of corporate usually is evaluated by input of Research and Development and new technology form foreign companies. Moreover many studies employed patent count to examine innovation ability of corporate.

In previous study Lacetera (2001) suggested an original interpretation of some organizational settings, as the increased importance of skilled scientists within firms and the development of inter-organizational alliances for the division of scientific labor. Following recent theorizing on corporate governance issues, which points out the intrinsic organizational and relational dimensions of the resource allocation processes and strategic decision-making, the author propose a role of the organizational practices on corporate governance, and, in turn, an influence of different governance arrangements on innovative activity. Wang and Miozzo (2002) noted that corporate governance refers to the system, by which companies are controlled, directly or indirectly, by shareholders and other stakeholders. A system of corporate governance shapes who makes investment decisions in corporations, what types of investments they make, and the decisions on Research and Development expenditures and how returns from investments are distributed. Innovation, on the other hand, is the process through which productive resources are developed and utilized to generate higher quality and/or lower cost products than had previously been available. Both concepts are central to the interaction through which successful economies and firms improve their performance over time as well as relative to each other. In Chinese companies some unique corporate governance mechanisms such as the two-tier board structure designed to enhance a company's smooth strategy implementation and performance may instead impede a company's innovative outcomes by distracting top manager's attention to crucial innovative initiatives (Chen *et al*, 2015).

The corporate governance regime in the Gulf countries is still being developed. Regulators, investors, corporate managers, and professional accounting bodies need to support new initiatives in corporate governance if the region is to enhance its competitiveness and to become a regional financial and commercial centre. The challenge is to develop effective practices which will facilitate innovation and support business operations. Ensuring greater transparency to address the problems of information asymmetry is crucial if shareholders are to influence the decision making process in their companies (Baydoun *et al*, 2013).

Malla (2004) suggested that one of the biggest challenges to global corporate governance is convergence of corporate best practices as well as convergence of global corporate legal systems. Political will is absolutely crucial to the developing of means and methods to integrate domestic corporate practices with the best standards followed internationally. Only then can integrity of a country's economic system get reflected properly and foreign investment in domestic business increase.

In different study Okeahalam (2004) claimed that the corporate governance in Africa does not mean that a different standard of corporate governance applies to Africa. What makes the African situation difficult is the fact that African economies are very much transition economies. Some of the peculiarities include: the existence of a large number of state-owned enterprises, the culture of corruption or the pursuit of easy wealth, the weak nature of institutions, the lack of transparency in the business environment and low financial intermediation.

In Ghana, political and legal governance on corporate governance challenges include an inadequate legal framework, mainly dominated by the Companies Code of 1969. The Institute of Directors in the country has recommended the need for enhancement of laws that demand more transparency; clarify governance roles and responsibilities, the enactment of competition and solvency laws and strengthening of enforcement mechanisms. The Securities and Exchange Commission, since it took over the responsibilities and powers of the Corporate Law Authority in 1999, has been acutely alive to the changes taking place in the international business environment, which directly: and indirectly impact local businesses. As part of its multi-dimensional strategy to enable Pakistan's corporate sector meet the challenges raised by the changing global business scenario and to build capacity, the SEC has focused, in part, on encouraging businesses to adopt good corporate governance practices. This is expected to provide transparency and accountability in the corporate sector and to safeguard the interests of stakeholders, including protection of minority shareholders' rights and strict audit compliance (Ameer, 2013).

The major problem of this study is reflected in its attempt to find answers for the following questions: Is there a relationship between corporate governance and innovation in selected listed companies at Bahrain Bourse?

The hypothesis can be written based on the question as follows:

H_{o2}: There is no relationship between corporate governance and innovation selected listed companies at Bahrain Bourse

Corporate governance philosophy lies in the separation of ownership of the company's capital and management, process control and supervision within these companies, is the famous theory of the agency, which was found to have positive effects on various aspects of corporate performance.

When separated from the property lease with the increase in size of the company and its transformation into a public company highlights the importance of efficient governance system and the need that the company is managed in the best interests of the owners (Hamdan et al, 2013), not only ensure the interests of owners but all parties related to the company.

Emphasize the importance of the principles of corporate governance has been after the recent financial crises and the collapse sequence in major international companies from making the necessary framing these rules and laws, And developed in order to protect the interests of all parties in the facility (Hamdan, 2011). Hamdan and Al-Sartawi (2013) stated that corporate governance characteristics can be define as: ownership of the largest shareholder in the company that should not exceed 20%; the size of board of directors must be at least 7 members but not more than 13 members; the ownership of the three largest shareholders in the company should not exceed 50% of the shares; and the board of directors should be controlled by more than 50% independent outside directors; and finally, the chairman and CEO duties must be separated. These characteristics are independent variables and the dependent variable is innovation. Ayyagari et al (2011) defined that innovation process broadly include not only core innovative activities, such as the introduction of new products and new technologies, but also other types of activities that promote knowledge transfers, such as joint ventures with foreign partners or new licensing agreements, and other actions that affect the organization of the firm's business activities, such as opening a new plant or outsourcing a productive activity. Based on Rogers' definition of the diffusion of innovation, there are four main elements in the diffusion of innovation process: (1) the innovation's characteristics, (2) the channels used to communicate the benefits of the innovation, (3) the time elapsed since the introduction of the innovation, and (4) the social system in which the innovation is to diffuse (Zolait, 2014). Dutz (2007) also argues that innovation in emerging markets is less of shifting outward the global technological frontier and rather more of improving practices across the entire economy and includes innovations in processes and organizational models.

3. RESEARCH METHODOLOGY

This section describes the research methods of the study, including sample description, data collection, how the dependent and independent variables are operationalized, and the analysis used to test the two hypothesis.

3.1. Sample selection and data sources

Multiple sources have been use in this study to generate the data set employed in the analysis. Innovation information and the information about the factors of corporate governance regarding the companies are compiled from the publicly available database of the Bahrain Bourse. The corpus of the study is composed of selected listed companies at Bahrain Bourse includes nine sectors are: Commercial Banks, Investment, Services, Insurance, Industrial, Hotels and Tourism, Preferred Share, Closed Company and Non Bahraini Co. The final sample consists of 39 companies. The ability to get to the information depended on the annual reports of selected listed companies at Bahrain Bourse to conduct the analysis of the relationship between corporate governance and innovation. This research study uses cross sectional data, because corporate governance depends on the end of the year data and in this study the year 2013 is chosen, because annual reports are issued at the end of the year, while this study is conducted at the beginning of the year.

3.2. Study model

To examine the relation between innovation and corporate governance after controlling the factors that are associated with both or either of the two variables, we estimate the following Linear Regression Model:

$$InNva_i = \beta_0 + \beta_1 \mathrm{OwLShi} + \beta_2 \mathrm{SBoardD_i} + \beta_3 \mathrm{OwThLSh_i} + \beta_4 \mathrm{IndepBD_i} + \beta_5 \mathrm{ChCEO_i} + \beta_6 \mathrm{CoSize_i} + \beta_7 \mathrm{FLeverage_i} + \beta_8 \mathrm{FirMAgE_i} + \beta_9 \mathrm{MarCap} \sum i \quad (1)$$

Where:

InNvai: is a continuous variable; the dependent variable innovation, that measured by the total of intangible assets, for the company (i).

β_0: is the constant.

β_{1-9}: is the slope of the independent and controls variables.

OwLShi: is dummy variable, coded 0 if a shareholder owned more than 20% and 1 otherwise, for the company (i).

SBoardDi: is dummy variable, coded 0 if the board of directors' members is not between 7-13 members and 1 otherwise, for the company (i).

OwThLShi: is dummy variable, coded 0 if the ownership of the three largest shareholders more than 50% and 1 otherwise, for the company (i).

IndepBDi: is dummy variable, coded 0 if the board of directors is not controlled by more than 50% independent outside directors and 1 otherwise, for the company (i).

ChCEOi: is dummy variable, coded 0 if the chairman is also the CEO and 1 otherwise, for the company (i).

CoSizei: is a continuous variable: the company size, by natural log of total assets for the company (i).

FLeveragei: is a continuous variable: Financial Leverage is the ratio of total debt to the book value of total assets, for the company (i).

FirMAgEi: is a continuous variable: is the number of years since the firm first appeared in the BB database, for the company (i).

MarCapi: is a continuous variable: Market Capitalization is the aggregate value of a company or stock and it's calculated by multiplying a company's shares outstanding by the current market price of one share, for the company (i).

$\sum i$: random error.

3.3. Measuring of variables

The selection of variables is based on previous empirical studies, table 1 summarize the dependent variable, independent variables in terms of corporate governance, and the control variables employed for all estimated models of the study.

Dependent Variable

The dependent variable in the study will be the innovation which was measured by the total of intangible assets. In previous study Chen *et al* (2015) mentioned that innovation has been found to be positively associated with the number of patents granted (Kaplan, 2008), entrepreneurial orientation (Cho and Hambrick, 2006), and innovative actions. Zolait (2014) indicated that innovation stems from the confluence of both physical assets, which include both tangible assets and intangible assets.

Independent Variables

The independent variables of the study are the corporate governance characteristics which were measured using the dummy variables and are coded one if the companies complied with corporate governance standards and zero if otherwise. Based on previous study, Hamdan *et al* (2013) stated that corporate governance characteristics can be defined as: ownership of the largest shareholder in the company that should not exceed 20%; the size of board of directors must be at least 7 members but not more than 13 members; the ownership of the three largest shareholders in the company should not exceed 50% of the shares; and the board of directors should be controlled by more than 50% independent outside directors; and finally, the chairman and CEO duties must be separated.

Control Variables

The study will use some control variable such as the size of the company by its natural log of total assets; the financial leverage by the ratio of total debt to total assets; the age of the company since it was established (Hamdan and Al-Sartawi, 2013). Finally, the study will use the market capitalization that is measured by the aggregate value of a company.

Table 1. The Measurement of the Variables

Variables	*Acronym*	*Measurement*
Dependent variable		
Innovation	InNva	Measured by the total of intangible assets.
Independent variable		
Corporate governance characteristics		
Ownership of the largest shareholder	OwLSh	Dummy variable coded 0 If a shareholder owned more than 20% and 1 otherwise.
Size of the board of directors	SBoardD	Dummy variable coded 0 if the Board of Directors members are not between 7-13 members and 1 otherwise.
Ownership of the three largest shareholders	OwThLSh	Dummy variable coded 0 if the ownership of the three largest shareholders more than 50% and 1 otherwise.
Independency of Board of Directors	IndepBD	Dummy variable coded 0 if the board of directors is not controlled by more than 50% independent outside directors and 1 otherwise.
Posts of chairman and CEO	ChCEO	Dummy variable coded 0 if the chairman is also the CEO and 1 otherwise.
Control variables		
Company size	CoSize	Natural log of total assets.
Financial leverage	FLeverage	The ratio of total debt to total assets.
Firm age	FirMAgE	Is the number of years since the founding of the company.
Market capitalization	MarCap	Is the aggregate value of a company, by multiplying a company's shares outstanding by the current market price of one share.

4. DATA ANALYSIS AND TESTING OF HYPOTHESIS

This section includes three sections. The first section is validity tests applied to validate the data used for the research. The second section is the descriptive statistics followed by the third section which is empirical analysis and testing the hypothesis of the study.

4.1. Data validity tests

This study belongs to General Linear Model (GLM) which requires certain conditions before applying it. The tests that were conducted to validate the data of the study are Normal Distribution Test, Multicollinearity Test, Autocorrelation Test and Heteroscedasticity Test.

Normal distribution test

Jarque-Bera, *p*-value, Kurtosis and Skewness were conducted to test the Normal Distribution of data as shown in table 2 To test the data (Jarque-Bera) test was conducted and results showed that the data of the study was normally distributed as p – value is more than 5% except three variables which are the innovation, company size and market capitalization where p – value is less than 5%. To solve this problem, natural logarithm of these variables was taken.

Table 2. Normal Distribution

Variables	*Acronym*	*J.B*	*p-value*	*SK*	*KU*
Innovation	InNva	440.270	0.000	3.930	17.460
Company Size	CoSize	157.260	0.000	95.200	10.860
Financial Leverage	FLeverage	2.980	0.220	0.420	1.940
Firm Age	FirMAgE	1.460	0.480	-0.160	2.110
Market Capitalization	MarCap	279.020	0.000	3.160	14.460

Multicollinearity test

The strength of the General Linear Model (GLM) depends on the independency of each variable of the independent variables used in the model. If this condition was not met, then the GLM is not considered to be good to be used and applied. To test the independency of the independent variables, Collinearity Diagnostics Test was used by measuring the Tolerance of each independent and control variables and then finding the Variance Inflation Factor (VIF) as this test is used as a measure of the effect of correlation between the independent variables. If the value of VIF is more than 10, this indicates that there is a problem with the Multicollinearity of the measured independent variable (Gujarati, 2003). From table 3, the study notices that VIF is less than 10 for all the independent variables, which means that the study model does not suffer from multicollinearity problem. The independent variables (Posts of Chairman and CEO) were excluded from the validity test and testing of hypothesis as the study was found to be 100% complied.

Table 3. Multicollinearity test

Variables	*Acronym*	*Tolerance*	*VIF*
Ownership of the largest shareholder	OwLSH	0.362	2.762
Size of the board of directors	SBoardD	0.833	1.200
Ownership of the three largest shareholders	OwThLSh	0.319	3.138
Independency of board of directors	IndepBD	0.805	1.242
Company Size	CoSize	0.332	3.016
Financial Leverage	FLeverage	0.630	1.586
Firm Age	FirMAgE	0.644	1.553
Market Capitalization	MarCap	0.328	3.046

Autocorrelation test

Autocorrelation problem appears in the model when following observations are related which will affect the validity of the model as the independent variables will be affecting the dependent variables in a high degree because of that correlation. To test the presence of that correlation (Durbin Watson D-W) test was used. From table 4 the study notices that Durbin Watson test result is 2.042, and this indicates that DW is located in the range between (2 – 2.5), so the study model is accepted.

Heteroscedasticity test

When using Ordinary Least Squares (OLS), variance of random error should be constant and the average of it should equal zero, and if the variance is not constant, then the model has heteroscedasticity (Awad, 2000). So to solve this problem, there are some statistical methods are used, one of them is (White test) which is used automatically when using programs like (E-views) when detected by the program itself. From table 4, *p*-value for White test is more than 5% for the study model (0.446 is more than 0.05), which means that the study model has heteroscedasticity, to solve this problem, White test method will be taken.

Table 4. Durbin Watson and White tests

Durbin Watson	2.042
White Test	0.446

4.2. Descriptive statistics

In this section, refer to table 5; descriptive analysis was done for the corporate governance characteristics. This variable is dummy variable and is coded one if the companies are complied with corporate governance standards and zero if otherwise.

Table 5. Descriptive Statistics of Corporate Governance

	Frequency of 1's		*Frequency of 0's*	
Corporate Governance Characteristics	*Frequency*	*Percentage, %*	*Frequency*	*Percentage, %*
Ownership of the largest shareholder	12	30.800	27	69.200
Size of the Board of Directors	34	87.200	5	12.800
Ownership of the three largest shareholders	17	43.600	22	56.400
Independency of Board of Directors	18	46.200	21	53.800
Posts of Chairman and CEO	39	100.000	0	0.000

Descriptive analysis of Corporate Governance

The first corporate governance characteristic is the ownership of the largest shareholders. After analyzing the data, the study indicates that only 12 companies listed in Bahrain Bourse out of 39 companies had their shareholder with less than 20% ownership of total shares with a percentage of 30.8%. Regarding the international rules no shareholders can exceed owning 20% of total company shares, while 27 companies listed in Bahrain Bourse with 69.2% had their shareholder with more than 20%. The second corporate governance characteristic is the size of the Board of Directors. After investigating the data, the study mentioned that 34 companies listed in Bahrain Bourse out of 39 companies had their Board of Directors members between 7-13 members with a percentage of 87.2% and this percentage is the highest compared with other corporate governance characteristics, and regarding the international rules the Board of Directors members must be between 7 to13 members, while only 5 companies listed in Bahrain Bourse with 12.8% had their Board of Director less than 7 members or more than 13 members. The third corporate governance characteristic is the ownership of the three largest shareholders. After analyzing the data, the study indicates that 17 companies listed in Bahrain Bourse out of 39 companies had their ownership of the three largest shareholders less than 50% of total shares with a percentage of 43.6%. Regarding the international rules the three largest shareholders should not exceed 50% of total company shares, while 22 companies listed in Bahrain Bourse with 56.4% had their three largest shareholders with more than 50%. The fourth corporate governance characteristic is the Independency of board of directors. After analyzing the data the study notes that 18 companies listed in Bahrain Bourse out of 39 companies the board of directors is controlled by more than 50% independent outside directors with percentage of 46.2%. Regarding the international rules the board of directors it must be controlled by more than 50% independent external directors, while 21 companies listed in Bahrain Bourse with 53.8% had their board of directors controlled by less than 50% outside directors.

The last corporate governance characteristic is the Posts of chairman and CEO. After investigating the data, the study mentions that all the 39 companies listed in Bahrain Bourse with percentage of 100% the chairman is not the Chief Executive Officer as the international rules states that the chairman is not also the CEO.

In different study Hamdan *et al* (2013) noted that the ownership of the largest shareholders in Kuwait Stock Exchange, only 65 companies out of 222 companies had their shareholder with less than 20% ownership of total shares with percentage of 29.3%, while 157 companies with percentage 70.7% had their shareholder with more than 20%. The study also mentioned that there is a high variance between the two percentages and it is the same as the companies listed in Bahrain Bourse. The size of the Board of Directors, the study mentioned that 116 companies out of 222 companies had their Board of Directors members between 7-13 members with percentage of 52.3% while 106 companies with percentage 47.7% had their Board of Director less than 7 members or more than 13 members. The ownership of the three largest shareholders, the study notes that 98 companies out of 222 companies had their ownership of the three largest shareholders less than 50% of total shares with percentage of 44.1%, while 124 companies with the rate of 55.9% had their three largest shareholders with more than 50%. Regarding Independency of board of directors, the study indicates that 118 companies out of 222 companies the board of directors is controlled by more than 50% independent outside directors with percentage of 53.2%, while 104 with 46.8% had their board of directors controlled by less than 50% outside directors. Finally, the Posts of chairman and CEO, the study found that 142 companies out of 222 companies the chairman posts differ than the Chief Executive Officer posts with the rate 64% and 80 companies with the percentage 36% the chairman is also the Chief Executive Officer.

Table 6. Descriptive Statistics of Innovation and Control Variables

Variables	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Innovation	0.000	337.000	18816.000	67192.000
Company Size	5949.000	12310.000	1216291.000	2755679.000
Financial Leverage	0.035	0.896	0.392	0.273
Firm Age	7	56	29	13
Market Capitalization	4480.000	15480.000	175214.000	288915.000

Descriptive analysis of innovation

The innovation was measured by the intangible assets, the maximum intangible assets between the listed companies was analyzed to be BD337 thousands, while the minimum value of intangible assets was BD0, the results indicate that there is high variance between the maximum and minimum amount, the mean of the total intangible assets of the company's are BD18816.31 thousands, and the standard deviation is BD67192 thousands.

4.3. Path analysis

Referring to table 7, the study used path analysis by dividing the firm corporate governance into firms with high corporate governance and low corporate governance based on the value of the median (60%) to compare between firms according to corporate governance. When doing so the study ends up with two groups, 22 companies are the high corporate governance and 17 companies are the low corporate governance, and then the study finds the mean and standard deviation for the variables. To identify the significance in the variance between the means of the two samples *t*-test was used. The results are summarized in table 4.6 and showed that all *p*-values were more than 5%, which means that the relation is not statistically significant.

Referring to table 7, the first variable to be analyzed was innovation. It can be mentioned from the calculated mean that companies with high Corporate Governance have more innovation than those with low Corporate Governance, because the application of corporate governance supports the creation of innovation and provides work environment that encourages innovation because each person knows the extent of his power. The second variable to be analyzed was company size. It can be noticed from the calculated Mean that companies with low corporate governance have more total assets than those with high Corporate Governance, while it was noticed that the small companies size tend to have better control in general, due to their small size and absence of complications, therefore they tend to have higher focus and control over the implementation of corporate governance than the large companies size. The third variable to be analyzed was financial leverage. It can be noticed from the calculated mean that companies with low corporate governance has more debts than companies with high Corporate Governance, because companies with low corporate governance tend to borrow huge money to pay their debts, and they do not use the available cash. The fourth variable to be analyzed was Firm Age. It can be noticed from the calculated Mean that companies with high Corporate Governance are younger in age than companies with low corporate governance, because small companies are modern and aware of corporate governance, while the big companies are resisting change. The last variable to be analyzed is market capitalization. It may be noticed from the calculated mean that the high corporate governance companies have more market capitalization than those with low corporate governance, because the companies with high corporate governance have high value and market share.

Table 7. Path analysis

Variables	High Corporate Governance			Low Corporate Governance			Independent Sample Test	
	No	*Mean*	*S.D.*	*No*	*Mean*	*S.D.*	*T-test*	*p-value*
Innovation	22	26755.820	87425.479	17	8541.650	22183.080	0.836	0.408
Company Size	22	830929.360	2593199.695	17	1714993.240	2956450.701	-0.993	0.327
Financial Leverage	22	0.331	0.245	17	0.473	0.294	-1.651	0.107
Firm Age	22	26.090	13.064	17	33.240	12.448	-1.728	0.092
Market Capitalization	22	182415.450	351724.699	17	165892.590	188976.306	0.175	0.862

4.4. Empirical analysis and testing of hypothesis

After validating the data used, the study used statistical tests to ensure that this data goes with the conditions of applying General Linear Model (GLM) and Ordinary Least Squares (OLS). As data is considered as cross sectional data (39 companies) that are listed in Bahrain Bourse for the year 2013.

The study hypothesis tests the relationship between the corporate governance and innovation by using Linear Regression Model, so this hypothesis was formed based on what was found in previous studies regarding the relation between corporate governance and innovation. In different study Wang and Miozzo (2002) argued that corporate governance refers to the system, by which companies are controlled, directly or indirectly, by shareholders and other stakeholders and Innovation, on the other hand, is the process through which productive resources are developed and utilized to generate higher quality and/or lower cost products than had previously been available, so they mentioned that both concepts are central to the interaction through which successful economies and firms improve their performance over time as well as relative to each other.

After testing this hypothesis (table 8), the study concludes that all independent variables were positive in t-test and statistically are not significant, because the *p*-value of all independent variables is more than 5% and these results are summarized in table 8. The results indicate that there is no relationship between corporate governance and innovation in selected listed companies at Bahrain Bourse, because whether the corporate governance is strong of selected listed companies at Bahrain Bourse or not, it has no relationship with innovation. Innovation in Kingdom of Bahrain is weak due to the fact that Bahrain Imports Innovation from other countries, as Bahrain member of GCC countries has deeply depended on their plentiful natural resources, especially petroleum and gas. Nevertheless, natural resources endowment is not a sufficient basis for economic growth; it must be accompanied by investments in technological innovation. So, Kingdom of Bahrain should seek knowledge that can facilitate technological innovation for sustainable development. Thus the study rejects the alternative hypothesis.

The types of innovations that drive productivity increases in developed and developing countries differ. Most firms in emerging markets are engaged in activities far from the technological frontier, and entrepreneurs innovate not just through original inventions but also by adopting new means of production, new products, and new forms of organization already in use in more developed countries (Ayyagari *et al,* 2011).

In related study, Allen and Gale (2000) mentioned that in emerging markets where standard corporate governance mechanisms may be ineffective, encouraging dynamic competition in product markets via globalization or foreign trade is crucial for firms to innovate. In different study, Ayyagari *et al* (2011) mentioned that in developing countries the firm characteristics – access to finance, governance, and competition have positively associated with innovation in emerging market firms.

Table 8. Linear Regression Model

Variables	*Linear Regression Model*	
	t.test	*p-value*
Independent variables:		
(Constant)	0.903	0.374
OwLSH	0.052	0.959
SBoardD	0.088	0.93
OwThLSh	0.691	0.495
IndepBD	0.996	0.327
Control variables :		
CoSize	0.555	0.583
Fleverage	0.578	0.568
FirmAgE	-1.462	0.154
MarCap	3.114	0.004
R	0.665	
R -squared	0.443	
F-statistics	2.977	
p-value (F-statistics)	0.014	

t-Critical: at df 38, and confidence level of 99% is 2.423 and level of 95% is 1.648 and level of 90% is 1.303.

F-Critical (df for denominator n-β-1 = 39-8-1 = 30) and (df for numerator =β =8 and confidence level of 99% is 3.17 and confidence level of 95% is 2.77 and confidence level of 10% is 1.88.

Testing the effect of control variables on innovation

Refer to table 8 the company size has a positive relationship with innovation as t-test appears to be 0.555, but *p*-value is not accepted, since it is more than 5%. In Bahrain big companies have a huge capital and plenty of resources, so they can support and encourage innovation. Financial leverage has a positive insignificant effect on innovation, because as debts increase, cash increase and this cash should be used to support innovation. The firm age has a negative relation with innovation as seen in table 4.8 and it is not a statistical significant. Innovation in new companies is accepted due to that the companies are now creating their culture, while old companies tend to resist change. The study proved that market capitalization has a positive significant effect on innovation, because while market capitalization of the company increases, the chance of funding increases, which motivates innovation in the company.

5. CONCLUSION, STUDY LIMITATION AND FUTURE STUDIES

The main objectives of the study were; assessing the corporate governance and innovation in selected listed companies at Bahrain Bourse, and analyzing the many sectors and its importance to the economic expansion. The study raised the following questions: Is there a relationship between corporate governance and innovation in selected listed companies at Bahrain Bourse? And is there an accepted level of corporate governance in selected listed companies at Bahrain Bourse? Many studies conducted in the Arab Countries and in Gulf Corporation Council (GCC) area about corporate governance. One of these studies is by Hamdan and Al-Sartawi (2013). The study assessed the relationship between corporate governance and innovation in selected listed companies at Bahrain Bourse to cover this gap. It is beneficial to know what really affects company innovation in this area and whether corporate governance really affects innovation. To conduct this study, 39 companies were chosen to be the whole Bahraini companies listed in Bahrain Bourse at the year 2013. Nine companies were excluded because they were non-Bahraini, suspended or closed during the year 2013. After that the study considered corporate governance as independent variable and innovation as the dependent variable. Different characteristics of corporate governance were studied. The characteristics that were chosen to represent corporate governance were: Ownership of the largest shareholder, size of the board of directors, ownership of the three largest shareholders, independency of board of directors and posts of chairman and CEO. Based on previous studies several control variables were chosen and what was believed to be affecting the variables of the study. The variables that were chosen are: the company's size, financial leverage, company's age and market capitalization.

The study built one Linear Regression Model to study the relationship between corporate governance and innovation. This model was used to capture the relationship between them and justify the conflicting results found by different previous studies and then we compared between them using statistical tools to determine the company innovation.

Different validity tests were conducted on data and the model to validate them before testing them. The data and the model were valid and any errors that were found were overcome using statistical tools. Two hypotheses were developed regarding the relation between corporate governance and innovation. The model is tested and some descriptive statistics and path analysis were defined, the following results were obtained:

a) By using the path analysis, the study divided the firm corporate governance into firms with high corporate governance and the other with low corporate governance based on the value of the median (60%).

b) The study ends up with two groups, 22 companies are the high corporate governance and 17 companies are the low corporate governance.

c) The high Corporate Governance has more innovation than those with low Corporate Governance.

d) The application of corporate governance supports the creation of innovation and provides work environment that encourages innovation because each person knows the extent of his power. The low Corporate Governance has more total assets than those with high Corporate Governance. The small companies size tend to have better control in general, due to their small size and absence of complications, therefore they tend to have higher focus and control over the implementation of corporate governance than the large companies size.The low corporate governance companies have more debts than the high corporate governance companies.

e) There is an accepted level of corporate governance in selected listed companies at Bahrain Bourse. Kingdom of Bahrain is new in applying the corporate governance standards and this percentage is accepted when they are at the beginning, so the study accepts the alternative hypothesis and rejects the null hypothesis.

f) After testing the hypothesis based on the Linear Regression Model, all independent variables were positive in the t-test and statistically are not significant. There is no relationship between corporate governance and innovation in selected listed companies at Bahrain Bourse. Whether the corporate governance is strong in selected listed companies at Bahrain Bourse or not, it has no relationship to innovation.

g) Innovation in Kingdom of Bahrain is weak due to the fact that Bahrain Imports Innovation from other countries, as Bahrain member of GCC countries has deeply depended on their plentiful natural resources, especially petroleum and gas. Nevertheless, natural resources endowment is not a sufficient basis for economic growth; it must be accompanied by investments in technological innovation, so the study rejects the alternative hypothesis.

This study although analyzed corporate governance and innovation in selected listed companies at Bahrain Bourse in terms of innovation and corporate governance. There were limitations in the study that the sample size is small, so results might not be generalizable. The other limitation of the study is that the year (2013) may be unstable, because of consequences of global financial crisis.

Also the study suggest several future studies to complete the view of the studies that include: comparing the impact of relationship between corporate governance and innovation in Bahraini companies with GCC companies, because the GCC economies are considered to be having a lot of similarities in laws, rules and nature of economy and study the impact of innovation in Bahraini companies comparing with developed countries.

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MULTIPLE DIRECTORSHIPS AND CORPORATE REPUTATION

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Abstract

The previous literature suggests that firms may use the characteristics of the board members as a signal for building their own image. The objective of this paper is to analyze whether the number of appointments of directors influences corporate reputation. For that, we focus on a sample of US firms listed on the New York Stock Exchange (NYSE) for the period 2007-2010 and we examine a total of 30,813 directors. Our results indicate that there is a curvilinear relationship between the number of directorships of board members and corporate reputation. These findings shed some light on the value of boards of directors and also have implications for companies in the selection of board members.

Keywords: Corporate Reputation, Board of Directors

1. INTRODUCTION

Directors' characteristics have been linked to several firm outcomes, but the evidence of their effect on corporate reputation remains scarce. The definitions of corporate reputation indicate that it is based on the aggregate perceptions of all the stakeholders of a firm (Fombrum, 2002; Walker, 2010). Therefore, an improvement in the stakeholders' perceptions about a firm leads to an improvement in corporate reputation. In addition, corporate governance mechanisms, such as the board of directors, can affect the stakeholders' expectations (Brammer et al., 2009). Firms may use the characteristics of the board members as a signal for building their own image.

In particular, there is an ongoing debate concerning the costs and benefits for companies of multiple directorships, and therefore the number of appointments of directors on boards might affect a company's image. Both practitioners and academics have suggested that multiple appointments of directors can be beneficial only up to certain levels. Organisms all over the world have highlighted the relevance of this issue and the existing literature indicates that whereas the value of advising is enriched by multiple directorships, the role of monitoring is damaged, and this can therefore have an effect on a firm's image.

The objective of this paper is to analyze whether the number of appointments of directors influences corporate reputation. In relation with our research question, several authors have pointed out that the ultimate responsibility for achieving and maintaining a good reputation lies with the board of directors (Mintzberg, 1983; Dowling, 2004; Tonello, 2007). However, previous research fails to provide evidence of the effect that multiple directorships may have on a firm's image. We focus on a sample of US firms listed on the New York Stock Exchange (NYSE) for the period 2007-2010 and we examine a total of 30,813 directors. In order to measure corporate reputation, we incorporate the multidimensional nature of this concept by using the ranking provided by Fortune magazine. This is generally accepted as a reference for large companies in the United States in the assessment and management of their reputation. We find that, at lower levels, there is a positive relationship between the number of directorships and corporate reputation. Nevertheless, corporate reputation is negatively affected if the directors have too many appointments. Our findings indicate that a firm's reputation is harmed when the directors sit, on average, on three different boards.

This paper contributes to the previous literature in several ways. First, our study extends previous evidence about the relevance of boards of directors for the creation of corporate reputation. Our results confirm that as stakeholders are concerned by corporate scandals, the interest in good governance has increased, the board of directors being a mechanism that determines a firm's image. Second, we contribute towards the debate about the advantages and disadvantages of having board members with multiple directorships. More specifically, we point out the optimal level of directorships in order to enhance corporate reputation.

The remainder of the paper is organized as follows. The literature review and the hypothesis development are provided in the next section. Section 3 describes the data collection process and the sample, and explains the research method. Section 4 discusses the results of the empirical analysis and Section 5 summarizes the study's main contributions.

2. PREVIOUS LITERATURE

The literature has provided several definitions of corporate reputation. Fombrun (2002) proposed that "corporate reputation is the collective representation of a company's past actions and future prospects that describes how key resource providers interpret a company's initiatives and assess its ability to deliver valued outcomes." According to Walker (2010) corporate reputation can be defined as "a relatively stable, issue specific aggregate perceptual representation of a company's past actions and future prospects compared against some standard".

This author highlights that corporate reputation is based on perceptions and that it is the aggregated perception of all the stakeholders. Reputation contributes towards an enhancement of competitive advantage (Weigelt and Camerer, 1988; Fombrun and Shanley, 1990) and improves financial performance (Roberts and Dowling, 2002; Fernández and Luna, 2007).

Any characteristic of the firm that has been perceived as a determinant of firm strategy and/or performance can be a signal which affects corporate reputation (Delgado-García et al., 2010), including corporate governance characteristics. Companies that have better governance practices have a better image and are more valued in terms of reputation (Bravo et al., 2015). A number of studies have discussed the concept of good corporate governance and codes across the world have claimed for the need of improving corporate governance practices. In particular, the board of directors has received a great deal of attention in the literature and has been considered a key factor in the determination of firm strategy (Hillman and Dalziel, 2003; Pugliese et al., 2009; Johnson et al., 2013). Nevertheless, the definition of "the right board" is still an open question. In corporate governance research, this question has traditionally been answered using agency and resource dependence theories. From an agency point of view, a board of directors is an internal control mechanism to protect shareholders' interests (Fama and Jensen, 1983). Boards' monitoring functions include a variety of activities regarding the supervision of company strategies. According to the resource dependence theory, directors use their resources to enhance the firm's external legitimacy (Pfeffer and Salancik, 1978). Directors are expected to contribute towards an improvement in strategic decision-making by providing the firm with advice and counsel (Zahra and Pearce, 1990). However, the role of directors goes beyond monitoring and advising the management. Several authors have also indicated that the board of directors has the ultimate responsibility for the achievement and maintenance of a good reputation (Kitchen and Laurence, 2003; Dowling, 2004). The board should have an oversight function in protecting and enhancing reputation (Mintzberg, 1983; Tonello, 2007). Therefore, a company's reputation can be affected by who serves on the board of directors (Bazerman and Schoorman, 1983; Hillman and Dalziel, 2003).

The configuration of the board of directors can determine its quality and its ability to develop its functions, and may have an influence on how stakeholders value a firm in terms of reputation. Directors can therefore improve the status and credibility of their firms (Daily and Schwenk 1996). Previous research suggests that directors' characteristics have an effect on corporate reputation. Delgado-García et al. (2010) focus on the ownership structure and also suggest that board independence positively affects corporate reputation. Vélez-Castrillón (2012) shows that board expertise, social capital and demographic diversity can influence the reputation of a firm. Bravo et al. (2015) highlights that corporate reputation is positively affected by board independence and gender diversity. Nevertheless, there is a lack of evidence which examines the specific relationship between the number of external directorships and a firm's reputation. Although there are a few studies that examine the relationship between multiple directorships and firm performance, the previous literature fails to provide the influence of external directorships on other firm outcomes, such as corporate reputation - one of the drivers of performance. While many researchers have argued in favour of the benefits of interlock, others have questioned its importance (Harris and Shimizu, 2004). The value of advising is enriched by multiple directorships, but the role of monitoring is harmed.

First, directors with multiple appointments contribute towards an improvement of the quality of the board (Fama and Jensen, 1983). Directors with multiple appointments are likely to have good reputations since being a director is a prestigious job. These directors may have richer experiences, connections and/or expertise (Ferris et al., 2003; Lei and Deng, 2014; Perry and Peyer, 2005; Sarkar and Sarkar, 2009). They can provide valuable strategic advice to cope with a variety of problems and enhance firm growth (Carpenter and Westphal, 2001; Kor and Sundaramurthy, 2009). Through these connections, directors can better connect with the demands of various stakeholders (Hillman et al., 2008).

Therefore, they can increase corporate reputation as they are seen as providers of key resources for the firm. However, multiple directorships can worsen a firm's performance due to the directors' lack of proper functions (Kor and Sundaramurthy, 2009). A large number of appointments can make directors over-committed and consequently compromise their ability to monitor company management effectively on behalf of shareholders and adversely affect the firm's value (Fich and Shivdasani, 2006; Lei and Deng, 2014). Multiple directorships result in inefficiency in directors tasks and therefore reduce shareholder wealth (Jiraporn et al., 2008). The number of appointments that directors can accept on boards has become a controversial issue in society. In the US, as in the majority of developed countries, there is still an ongoing debate about whether the number of directorships of board members should be limited. In this line, the Principles of Corporate Governance (2012) states that service on too many boards can interfere with an individual's ability to satisfy his or her responsibilities. Taking into consideration previous theoretical arguments and recommendations, one could consider that stakeholders may negatively value the composition of a board whose members have too many directorships.

In this study, we address the effect of multiple directorships on corporate reputation. On the one hand, we expect board members who have multiple directorships to be seen as advisors or providers of knowledge to management. Stakeholders can also perceive that these directors will share their experience or business connections, which can be helpful for the board and increase the likelihood of firm success. Therefore, the following hypothesis is formulated:

Hypothesis 1: There is a positive relationship between the number of directorships and corporate reputation.

On the other hand, stakeholders can perceive that directors with too many appointments may not effectively contribute to a company's performance. Then, the number of directorships would positively impact corporate reputation only up to a certain level. This leads to the next hypothesis:

Hypothesis 2: There is a curvilinear relationship between the number of directorships and corporate reputation.

3. RESEARCH DESIGN

3.1. Sample and data

Our final sample is composed of 2,733 firm-year observations for firms listed on the NYSE for the period 2007-2010. The NYSE is, by its market capitalization, the world's largest stock exchange and is made up of the big companies that are most visible in the capital markets. The board of directors of these companies is more likely to play an important role in determining corporate reputation. Data about directors were obtained from the Investor Responsibility Research Center (IRRC). The IRRC gathers most of the data from proxy statements and it is considered by Wharton Research Data Services (WRDS) as the world's leading source of information on corporate governance. 30,813 directors were examined. The information about corporate reputation was obtained by means of the survey performed by Fortune magazine. On the other hand, financial data were extracted from Compustat. The description of all the variables included in the study is presented in the following sections.

3.2. Variables

The dependent variable: corporate reputation

Reputation is an intangible concept based on perceptions and therefore it is difficult to measure. The previous literature in the U.S. context has been largely based on the survey of the America's Most Admired Companies performed by Fortune magazine in order to design a measure of corporate reputation. In this survey, executives, directors and analysts are asked to rate a company according to the different dimensions that determine a company's reputation, from investment value to social responsibility. This survey results in a reputation ranking which is generally accepted as a reference for large companies in the United States in the assessment and management of their reputation.

In this paper, the ranking including the "World's Most Admired" [71] companies is used in order to measure corporate reputation. Therefore, corporate reputation (REPUTATION) was a dummy variable that took a value of 1 if a firm was included in the Fortune ranking and 0 otherwise. This type of measure is commonly used in academic journals (Black et al., 2000; Roberts and Dowling, 2002; Chung et al., 2003; Martínez-Ferrero, 2014).

The explanatory variable: multiple directorships

Multiple directorships is used as the main explanatory variable in the statistical models. Consistent with previous studies (Perry and Peyer, 2005;López and Morros, 2014), the average number of appointments that directors have on external boards is considered to calculate this variable.

Control variables

Several control variables are also considered due to their potential influence on corporate reputation. First, two board-related variables are included: board size and board independence. Previous studies suggest that stakeholders perceive that larger boards have more resources at their disposal (Forbes and Milliken, 1999; Delgado-García et al., 2010), and that independent directors are more likely to protect the stakeholders' interests and that they are more valued in terms of reputation (Zahra, 1989; Delgado-García et al., 2010; Bravo et al., 2015). Board size (BSIZE) is measured by the total number of members on the board (Lückerath-Rovers, 2011; Adams and Ferreira, 2009). Board independence (BINDEP) is calculated as the proportion of independent directors on the board (Volonté, 2015; Zhang, 2012; Baghat and Black, 2002). In addition, in line with the previous literature, some financial variables are also added: firm size, firm performance, and industry reputation. The size of the firm is calculated as the log of market value (SIZE), firm performance is defined as the return on equity (ROE), and industry reputation (IND_REP) is measured by the average reputation score in the Fortune's Most Admired Companies ranking of firms within a specific industry, considering 4-digit SIC codes for the classification of industries. In addition, time effect was also tested through a set year's dummy variables. The definition and the expected sign of the all the variables are indicated in Table 1.

Table 1. Variables definition

Abbreviation	Variable	Definition	Expected sign
REPUTATION	Corporate reputation	Dummy variable: 1 if the company appears in the Fortune ranking; 0 otherwise	
DIRECTORSHIPS	Multiple directorships	Average number of external directorships of board members	+/-
BSIZE	Board size	Number of directors in the board	+
BINDEP	Board independence	Percentage of independent directors on a board	+
SIZE	Firm size	Market value (logarithm)	+
ROE	Firm performance	Net income /Shareholder's Equity	+
IND_REP	Industry reputation	Average reputation by four-digit SIC code	+

3. METHOD

A panel data study for 2007-2010 was performed through a logistic regression analysis in order to determine the association between the number of directorships of board members and the likelihood of being included in the reputation ranking. The general model employed in order to test our hypothesis is:

[71] For detailed information, see http://money.cnn.com/magazines/fortune/most-admired/

$$REPUTATION_{i,t} = \beta_0 + \beta_1 DIRECTORSHIPS_{i,t} + \beta_2 BSIZE_{i,t} + \beta_3 BINDEP_{i,t} + \beta_4 LNTAB_{i,t} + \beta_5 ROE_{i,t} + \beta_6\, INDUSTRY_{i,t} + \sum_{J=1}^{5} \beta_7\, DUM\_YEAR_{jt} + \mu_i + \varepsilon_{it} \quad (1)$$

where β_0 is the intercept and β_i is the coefficient of each independent variable. The sub-index i identifies the individual and the sub-index t the time: μ_i represents the fixed individual effect, and ε_{it}, the stochastic error. The stochastic error term combines both the measurement errors of any independent variable and the omission of explanatory variables.

Our database combines time series with cross-sectional data enabling the formation of panel data. The panel data approach allows the unobservable constant heterogeneity or fixed effects term to be controlled (Arellano 2003). This term is intended to reflect the firm-level characteristics, and it thereby avoids the omission bias and renders more efficient estimates. Thus, we employ logistic panel data. This methodology is a popular and widely used statistical technique to solve classification binary problems. We apply a cross validation or multiple subsets estimation to validate the results obtained with the logistic panel data method and then focus on assessing the predictive ability of the discriminant functions. That is, the discriminant functions for each element ij is estimated by excluding it from the analysis and then performing the prediction, which treats each object as if it were a new item for which group membership must be predicted.

4. RESULTS

Table 2 displays the descriptive statistics for the variables included in the statistical analyses. The table shows that 22% of the companies from our sample appear in the Fortune's ranking. The average number of external appointments of directors on external boards is almost one. This value is consistent with other studies in the US context (Ferris et al., 2003; Hillman et al., 2011; Perry and Peyer, 2005), and indicates that the boards analyzed are not particularly busy since their directors do not serve on many external boards. The dispersion of most variables is at an acceptable level. Specific outliers and influential observations were not found.

Table 2. Descriptive statistics of the main variables

Mean, standard deviation, quartile one, median and quartile three of the variables. REPUTATION is a dummy variable with a value of 1 if a company is included in FORTUNE's ranking and 0 otherwise; DIRECTORSHIPS is the Average number of external directorships of board members; BSIZE is the number of directors on the board; BINDEP is the percentage of independent directors on a board; SIZE refers to the firm's market value; ROE is the return on equity; IND_REP is an industry's average reputation in four-digit SIC codes.

Variable	Mean	Std. Dev.	Q1	Median	Q3
REPUTATION	0.220	0.414	0	0	0
DIRECTORSHIPS	0.944	0.503	0.571	0.917	1.3
BSIZE	9.899	2.287	8	10	11
BINDEP	0.793	0.110	0.727	0.818	0.889
SIZE	8.090	1.490	7.078	7.975	9.049
ROE	0.305	9.362	0.053	0.112	0.185
IND_REP	0.335	0.808	0.151	0.198	0.25

Table 3 reports the correlation matrix between the model's main variables. Multiple directorships is correlated with corporate reputation. Furthermore, all the control variables show the expected association with the reputation of firms. Although the rest of the correlation coefficients are not high, we compute the variance inflation factor (VIF) to test the lack of multicollinearity in our estimates. Given that the VIF values presented are less than two (1.5), multicollinearity does not seem to be an issue with our sample; potential multicollinearity problems can exist for values over 10 (Hair et al., 2008).

In order to confirm our research hypotheses, the association between corporate reputation and multiple directorships is examined by using a logistic panel data approach and the results are presented in Table 4. The assumptions underlying the regression model are verified for all the models, and no problems about multicollinearity and heteroscedasticity[72] are present.

Model 1 includes the number of directorships as an explanatory variable. A positive and significant relationship, at a 1% level, between this variable and corporate reputation is observed. The results from Model 1 are consistent with the theoretical arguments, and we confirm our first research hypothesis (H1). In Model 2, the quadratic variable of DIRECTORSHIPS is also added to the previous model in order to analyze the potential curvilinear relationship between this variable and corporate reputation. Our results with directors who sit on multiple boards provide value resources that can be helpful for the board and increase the likelihood of firm success and enhance corporate reputation. However, since directors need to carefully study every single decision for each firm to fulfil their duties effectively, a high number of directorships can negatively affect the perception of stakeholders concerning the quality of a board, which may harm corporate reputation. Consequently, this evidence

[72]To test the lack of multicollinearity in our estimates we have used the variance inflation factor (VIF). The results are shown in Table 3. Meanwhile, the lack of heteroscedasticity has been tested with the Breusch-Pagan/ Cook-Weisberg test.

leads us to support Hypothesis H2. According to our results, we can conclude that belonging to more than two external boards causes a negative perception about the quality of the board and therefore a reduction in corporate reputation. Our results are in line with previous research in the US context, which has considered that a board member who holds around two external directorships is a busy director (Ferris et al., 2003; Fich and Shivdasani, 2006). Busy directors are more likely to decrease the likelihood of firm success and this can negatively affect corporate reputation.

Table 3. Correlation matrix and variance inflation factors

Pearson's correlations between variables and variance inflation factor (VIF). REPUTATION is a dummy variable with a value of 1 if a company is included in FORTUNE's ranking and 0 otherwise; DIRECTORSHIPS is the Average number of external directorships of board members; BSIZE is the number of directors on the board; BINDEP is the percentage of independent directors on a board; SIZE refers to the firm's market value; ROE is the return on equity; IND_REP is an industry's average reputation in four-digit SIC codes.

	DIRECTORSHIPS	*BSIZE*	*BINDEP*	*SIZE*	*ROE*	*IND_REP*
REPUTATION	0.253	0.259	0.123	0.445	0.038	0.022
	(0.000)	(0.000)	(0.000)	(0.000)	(0.0047)	(0.000)
DIRECTORSHIPS		0.178	0.328	0.409	0.016	-0.006
		(0.000)	(0.000)	(0.000)	(0.395)	(0.770)
BSIZE			0.157	0.475	0.020	-0.044
			(0.000)	(0.000)	(0.287)	(0.021)
BINDEP				0.228	-0.004	-0.035
				(0.000)	(0.831)	(0.069)
SIZE					0.015	-0.102
					(0.434)	(0.000)
ROE						-0.001
						(0.966)
VIF	1.29	1.30	1.14	1.52	1.00	1.01

In line with the previous literature and theoretical arguments, we also find a positive relationship between corporate reputation and several control variables, such as board size, firm size, and the industry's reputation. Firms with larger boards can have a better reputation since stakeholders perceive that these boards have better knowledge, skills and connections to contribute towards firm success. Firm size also appears as a decisive factor for corporate reputation. Larger companies are more exposed to the market and better known to the public, and visibility can be associated with reliability and trustworthiness (Rose and Thomsen, 2004; Bravo et al., 2015). Finally, the industry's reputation also influences the perception of the firms within the industry and determines their corporate reputation (Velez-Castrillón, 2012).

As a robustness test, we replicate the previous analysis, but we also consider that corporate reputation can be influenced by past reputations. Therefore, the lagged variable for corporate reputation is also included in Models 3 and 4. The inclusion of this lagged variable means the loss of one year, and the sample size is therefore reduced. The results show that the variable corporate reputation in the previous year is not statistically significant. However, the results for the multiple directorships variable remain constant. Our results confirm that corporate reputation depends on firm characteristics and board characteristics, but not necessarily on previous corporate reputation.

Table 4. Influence of multiple directorships on corporate reputation

REPUTATION is a dummy variable with a value of 1 if a company is included in FORTUNE's ranking and 0 otherwise; DIRECTORSHIPS is the Average number of external directorships of board members; BSIZE is the number of directors on the board; BINDEP is the percentage of independent directors on a board; SIZE refers to the firm's market value ; ROE is the return on equity; IND_REP is an industry's average reputation in four-digit SIC codes.***for 99% confidence level, **for a 95%, and *for a 90% confidence level.

Variables	***Model 1***	***Model 2***	***Model 3***	***Model 4***
	Marginal effect	***Marginal effect***	***Marginal effect***	***Marginal effect***
$REPUTATION_{t-1}$			0.015	0.110
DIRECTORSHIPS	0.059***	0.221***	0.038**	1.575**
$DIRECTORSHIPS^2$		-0.071**		-0.555**
BSIZE	0.011**	0.011**	0.008**	0.052*
BINDEP	0.049	0.018	0.112	0.630
SIZE	0.100***	0.096***	0.098***	0.728***
ROE	0.01	0.001	-0.009	-0.082
IND_REP	0.037***	0.034***	0.795***	5.786***
Year dummies	Yes	Yes	Yes	Yes
No. observations	2,733	2,733	2,024	2,024
Wald	339.17***	340.22***	335.63***	335.77***

5. CONCLUSIONS

Our research has analyzed the influence of board members who have multiple directorships on a firm's reputation. Our results show that the number of appointments of directors has an impact on the perceptions of stakeholders about a board and therefore affects corporate reputation. Our evidence extends previous findings in this research area by highlighting the role of directors in determining corporate reputation. In particular, our results suggest that boards whose directors have on average up to two external directorships are perceived as high quality boards, since these directors will provide valuable resources to the firm and contribute to its success. However, if these directors have more external appointments, a negative effect on corporate reputation is expected. The most reputable companies are more likely to have larger boards, a greater size and belong to industries which have a better reputation.

These findings shed some light on the value of boards of directors. Companies may have incentives to improve the composition of their boards of directors since corporate reputation is a key resource associated with many potential benefits for firms. These results have direct implications for shareholders who must consider that an adequate selection of board members will help in the creation and maintenance of corporate reputation and as a result increase the value of their investments.

This paper extends the previous literature on corporate governance and corporate reputation. Future research could study other personal characteristics of board members, and/or analyze the effect of board composition in different contexts.

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CORPORATE GOVERNANCE AND TRANSACTION COST ECONOMICS: A STUDY OF THE EQUITY GOVERNANCE STRUCTURE

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Abstract

This paper extends the Transaction Cost Economics (TCE) theory of the equity governance structure by introducing a (hitherto absent) full analysis of the key TCE issue of bilateral dependency between the firm and its shareholders. In addition, the paper discusses the implications of the analysis for the topic of corporate governance and firm performance. We find that when bilateral dependency holds contractual hazards are mitigated as predicted by TCE, but that when it does not contractual safeguards are altered to the disadvantage of shareholders and managerial discretion costs increase as reflected by lower firm valuation. Importantly, our study documents for the first time a class of transactions where business relationships persist indefinitely even though transaction costs are not minimized.

Keywords: Corporate Governance, Transaction Cost Economics, Free Cash flows, Firm Valuation

JEL Classification: D23, G31, G32, G34

1. INTRODUCTION

In contrast to traditional theories of capital structure, Transaction Cost Economics (TCE) holds that debt and equity are alternative governance structures and that their use to finance individual investment projects will depend on the characteristics of the assets required to undertake those projects (Williamson, 2008, 2002, 1996, pp. 171-194). In particular, TCE emphasizes the concept of "specific assets", that is, assets that would lose most of their productive value if the project failed and they had to be redeployed to the second best use. Thus, TCE argues that if the requisite assets are non-specific, then debt is the appropriate governance structure to use in order to finance the project. On the other hand, if the necessary assets are highly specific, then the use of the equity governance structure is warranted.

Thus far the empirical literature has largely corroborated these predictions of the TCE capital structure theory (Balakrishnan and Fox, 1993; Benmelech, Garmaise and Moskowitz, 2005; Kochhar, 1996; Močnik 2001; Titman and Wessels, 1988). However, if we compare this theory with other work in the field of TCE, we find that the usual logic has not been fully developed. While in all discussions of the "make or buy" decision (e.g. Williamson, 2005) all the key TCE concepts are employed, in particular that of bilateral dependency, in the theory of "debt or equity" decision we find that a full treatment of the central concept of bilateral dependency is surprisingly absent. As a consequence, it is evident to us that several important issues are not examined in detail. For instance, consider the following interesting questions: will the managers of the large modern corporation, with its large internal cash flows,[73] depend on shareholders for the financing of non-redeployable assets? Are shareholders, who can sell their shares anytime, dependent on the corporation? If bilateral dependency does not take place at all times, will the governance structures in place effectively prevent opportunism from occurring? If opportunism occurs, in which form(s) will it likely be manifested? Moreover, what will be the role of institutions in mitigating opportunism? Clearly, these questions suggest that the theoretical treatment of the equity governance structure requires a more in-depth analysis of the processes involved.

Thus, in this paper our objective is to extend the TCE theory of the equity governance structure in a way that addresses the aforementioned questions and, in addition, to provide empirical evidence to back the testable predictions derived from the extended theory. We aim to achieve these goals by taking proper account of the concept of bilateral dependency and of the notion that the financial situation of the firm changes in predictable ways over the firm's lifecycle (Mueller, 2003, pp. 80-82). Our theoretical conclusion in this paper is that contractual hazards are indeed mitigated for the case of young fast-growing firms whose managements are dependent on shareholders to finance future growth. On the other hand, we conclude that for the case of mature firms with large free cash flows and few growth opportunities contractual safeguards (such as the board of directors) will lose effectiveness and

[73] In this paper when we speak of "internal cash flows" or simply "cash flows" we refer to cash flows from operating activities.

unconstrained opportunism will emerge as the firm becomes financially independent from its shareholders. Moreover, our empirical tests suggest that increased managerial discretion costs are a characteristic of mature firms. Conversely, the evidence is consistent with relatively low managerial discretion costs for the case of young companies.

The importance of our work is twofold. First, the present TCE study documents a class of transactions for which when bilateral dependency banishes the transaction still persists. Following standard TCE theory, it can be deduced that if unilateral dependency supplants bilateral dependency then opportunistic behavior will tend to occur and the transaction will break down, bringing the transaction to an end. However, our study presents a type of transactions for which the relationship between the parties persists indefinitely even though opportunism is taking place and consequently transaction costs are not being minimized. Second our extension of the TCE theory of the equity governance structure generates a difference between the predictions of TCE and those of other theories used in the field of corporate governance, in particular Agency Theory (AT). At the moment both AT and TCE predict that the board of directors is a reasonably effective governance mechanism which helps to suppress managerial opportunism on behalf of the shareholders (compare Williamson 1996, pp. 171-194 and Fama and Jensen, 1983). In our view, a key reason why TCE has largely been ignored by corporate governance researchers, specifically those that examine the relationship between board composition and firm performance and valuation (Bhagat and Black, 2002; Callahan, Millar and Schulman, 2003; Duchin, Matsuzaka, and Ozbas, 2010; Hermalin and Weisbach, 1991), is that it does not provide significantly different predictions than those of AT. Hence, for such researchers there is no added value in using the TCE perspective in their field as it stands now. As discussed below, our logical extension of the TCE theory of the equity governance structure delivers predictions which diverge from those of AT in important ways, and are also consistent with the data in a way that AT is not.

The rest of this paper is organized as follows: section 2 reviews the TCE theory on the uses of debt and equity, employs the basic TCE logic to fully develop and extend the theory of the equity governance structure and states the main testable propositions of this paper. Section 3 discusses the econometric specifications to test the theory´s predictions. Section 4 describes the data and presents the econometric results. Section 5 concludes.

2. A NEW LOOK AT THE EQUITY GOVERNANCE STRUCTURE

In this section we take up the theoretical discussion on corporate finance where Williamson (2008, 2002, 1996, pp. 171-194) left off. Our objective is to extend the TCE theory of the equity governance structure by introducing a full analysis of the bilateral dependency between the firm and its shareholders.

For the case of debt and equity as governance structures, TCE appeals to the "efficient alignment hypothesis to predict which transactions go where" (Williamson, 2010). According to this hypothesis "transactions which differ in their attributes, are aligned with governance structures, which differ in their cost and competences, so as to effect a (mainly) transaction cost economizing outcome" (Williamson, 2010, 2005). Figure 1 illustrates the key points of the efficient alignment hypothesis for the case of the uses of debt and equity. On the left hand side of the figure we have included two transactions which mainly differ in their degree of asset specificity. As in previous TCE work, we let k denote a measure of transaction-specific assets, and we use $\overline{k}$ to represent the switch over value where parties to a transaction are indifferent as to the choice of debt and equity.

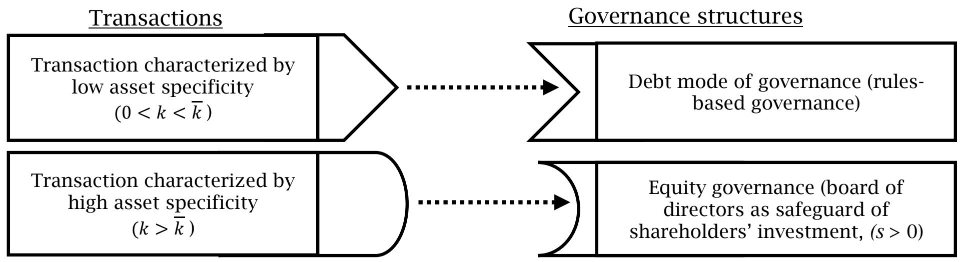
Moreover, on the right hand side of Figure 1, we portray debt and equity as governance structures which differ in their setup and ex-post costs and in their degree of flexibility to adapt to unforeseen disturbances. Thus, while debt is rules-based and consequently has a low degree of flexibility to adapt to unexpected disturbances (default leads to liquidation), it has relatively low setup costs. On the other hand, equity has higher setup and ex-post costs than debt but it is more flexible in that it features safeguards (which following previous literature we denote with the letter '*s*') mainly in the form of a board of directors that is awarded to the shareholders.

As shown in Figure 1, according to the efficient alignment hypothesis transaction costs are economized when transactions featuring low asset specificity ($0 < k < \overline{k}$) are financed using debt, while transactions characterized by a high degree of asset specificity ($k > \overline{k}$) are financed with equity. If the adequate alignment does not occur, TCE predicts that the transaction will be unstable contractually. For instance, if highly specific assets are to be financed with debt far sighted debt-holders will figure out that the value of their preemptive claims are low and will require a high risk premium. The firm in turn, in view of these excessively high financing costs, may attempt to realign the transaction by replacing the specialized assets for more re-deployable ones, but this would cause production costs to increase or quality to decline (Williamson, 1996, p. 184). In contrast, if a transaction characterized by low asset specificity is financed with equity TCE predicts that both setup and ex-post costs will be much higher than optimal, and consequently a leveraged buyout would be the manner in which market forces would realign the transaction to a more economical governance structure (Williamson, 1996, pp. 190-192).

Up to this point we have given an account of the TCE argument on the uses of debt and equity. We concur with the arguments so far and note again that the empirical literature has been largely corroborative. However, if we compare the canonical renditions of TCE with the arguments on the uses of debt and equity (particularly Williamson 2008, 2002, 1996, pp. 171-194) we find that there is basically no discussion on the central concept of bilateral dependency. We propose to fill this gap with the theoretical treatment below.

We start our argument by observing that, taken as a group, shareholders will always depend on the firm (more precisely the party in control of the firm e.g. the entrepreneur or the professional management) to take good care of their resources invested therein. Although individual shareholders can end their connection with the firm by selling their shares, they will usually sell it to other members of the public. The upshot is that, as long as the corporation does not buy back its own equity, the investing public taken as a group will hold the corporation stocks at all times, will be dependent on the firm, and will not be able to terminate the contractual relationship (Williamson, 1985, pp. 304-306).

Figure 1. Efficient alignment hypothesis



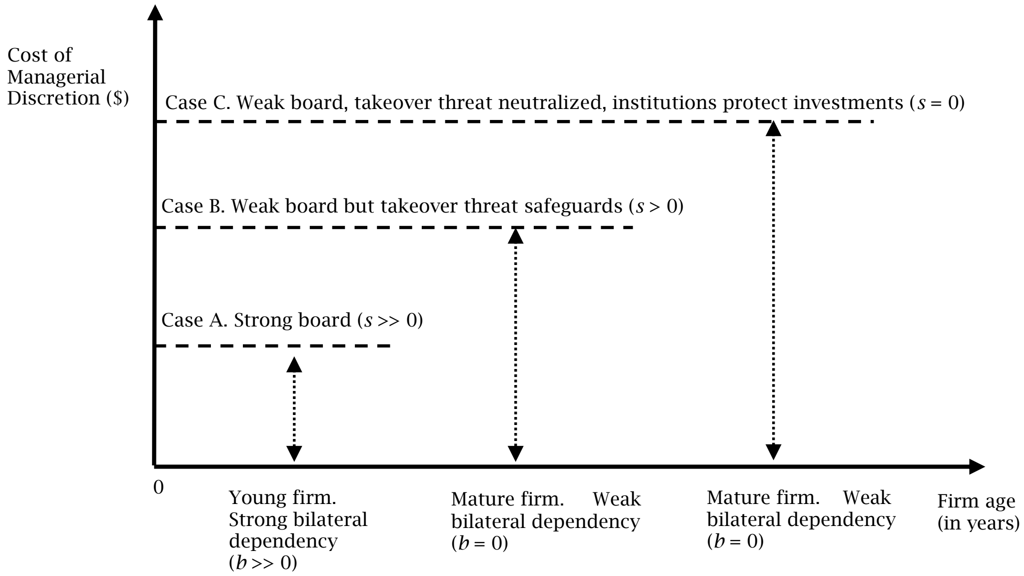
In contrast, work on the lifecycle of the firm, such as that developed by Mueller (2003, pp. 80-82), suggests that the firm will not always be financially dependent on the shareholders to fund investments in highly specific assets. According to firm lifecycle theory, young firms are characterized by rapid growth and by the fact that their positive net present value investment opportunities will generally exceed its internal cash flows. For our present purpose this means that, since the funding as a rule will not be obtainable from internal cash flows, young firms will be dependent on shareholders to finance the specific assets necessary for the growth of the firm. Moreover, it is important to note that as young firms are usually perceived as being riskier than older well established corporations, lenders may be slow to provide the funds and this would tend to increase the company's dependence on shareholders. On the other hand, according to lifecycle theory the corporation's cash flows continually grow over time while its investment opportunities tend to decline. Thus, for mature firms, the budget to fund positive net present value investment opportunities eventually becomes smaller than internal cash flows. This suggests that mature companies will be independent from its shareholders since the funding needed for investments in specific assets will be attainable from retained cash flows. Moreover, as older well established companies are likely to be perceived by lenders as representing a safer bet, the cost of debt for these firms will tend to be lower and this will also tend to increase the corporation's financial independence from shareholders. Thus, from the foregoing, we conclude that bilateral dependency will hold for the case of fast growing young firms while, in contrast, bilateral dependence will not occur for the case of slow growing mature firms.

Now, based on the insight that the intensity of bilateral dependency between a firm and its shareholders weakens over time, in what follows we develop a theoretical account for the equity governance structure which we illustrate with the help of Figure 2. As can be seen on the figure, the horizontal axis represents firm age while on the vertical axis we portray the cost of managerial discretion. In the graph we represent bilateral dependency with the letter b, and as in the previous figure safeguards are denoted with the letter s. We begin our argument by considering the case of a fast growing young firm that is dependent on its shareholders for the financing of specific assets needed for growth, which we designate "case A" on the left hand side of the figure. As discussed above, the shareholders will also be dependent on the firm and thus it is clear that, in this case, bilateral dependency will be strong ($b >> 0$). Thus, case A corresponds to the usual situation described in TCE where it is beneficial for both parties to institute strong safeguards, in the form of an effective board of directors ($s >> 0$), "to infuse order … mitigate conflict and realize mutual gains" (Williamson 2005). Clearly, in this case the contractual relationship will be characterized by low managerial discretion costs and the costs of new equity capital to fund investments in specific assets will be relatively low.

The contractual relationship changes fundamentally as the firm matures and becomes financially independent from its shareholders (case B). If the corporation can rely on its cash flows to fund those projects which involve specific assets and in addition it must pay out part of its earnings as dividends to shareholders then it is likely that insiders in control of the firm (professional management being the typical case) will increasingly view shareholders as a functionless party that only drains the resources available to the firm. This event would evidently mean the end of the bilateral dependency situation ($b = 0$). Thus taking into account the fundamental TCE behavioral assumption of opportunism it is logical to expect that the party in control of the corporation will likely alter the composition of the board of directors to the disadvantage of the shareholders. Moreover, with these changes it can be expected that managerial discretion costs would increase as shown in Figure 2. For instance, the management may start consuming more perquisites (Jensen and Meckling, 1976) or it may decide to reduce the dividend (Jensen, 1986; Mueller, 2003, pp. 80-82). However, there is good reason to expect that for case B the board of directors would still safeguard the investments of equity-holders to a certain extent. In particular, if shareholder dissatisfaction with management is too great the stock price may plummet and although management may be no longer interested in issuing new equity, the fall in the share price may increase the likelihood of a hostile takeover. With the takeover outsiders would gain control of the board of directors and may dismiss the management staff. Thus, although managerial discretion costs would increase compared to the situation in case A, we expect that the threat of hostile takeover would keep them to a moderate level.

In addition, empirical work on corporate governance suggests that the control of the corporation can effectively insulate themselves from the threat of a hostile takeover by having the board of directors set up a wide variety of anti-takeover provisions (Bebchuk, Cohen and Ferrell, 2009; Gompers, Ishii and Metrick, 2003).[74]

Figure 2. Evolution of the equity governance structure (transactions for which $k > \overline{k}$)



Now, if such provisions are deployed we reach "case C" in Figure 2, where managerial discretion costs increase to the point that only the institutional constraints (e.g. legal shareholder protection, monitoring by the financial press) would protect shareholder assets. Unfortunately for shareholders although these institutional constraints may mitigate stealing, they are unlikely to be effective against the reduction of the dividend, or investment in negative net present value "pet projects" that management may decide to implement. This is because (in the context of US institutions) the courts are unlikely to second guess such business decisions (Shleifer and Vishny, 1997).

Clearly, the foregoing discussion suggests the following testable propositions which will be tested empirically in the subsequent sections below:

(i) As bilateral dependency between the firm and its shareholders weakens the costs of managerial discretion will tend to increase; therefore financially dependent firms (case A) should be valued more highly by the market than financially independent firms (case B).

(ii) As financially independent firms deploy anti-takeover provisions the costs of managerial discretion would tend to rise even more, hence financially independent firms (case B) should be more valuable than similarly independent firms when the latter also have a large number of anti-takeover provisions in place (case C).

To sum up, our discussion addresses the questions raised in the introduction by pointing out: (a) that bilateral dependency will not always hold and that what starts as a situation of bilateral dependency between shareholders and the corporation later becomes one of unilateral dependency as the firm becomes financially independent, (b) that once bilateral dependency banishes governance structures, such as the board of directors, will not prevent opportunism from happening (perquisite consumption or reduction of the dividend), (c) that, in the U.S. market, institutions may prevent stealing but may not be able to prevent the reduction of the dividend, and (d) that antitakeover provisions can be deployed to neutralize the possibility of a hostile takeover. Hence, as noted in the introduction, our study presents a class of transactions for which the relationship between the parties persists indefinitely even though opportunism takes place and consequently transaction costs are not minimized. Additionally, by identifying the situations in which the board of directors will not work as an effective governance mechanism in the suppression of opportunistic behavior it is clear that the extended theory at hand generates different predictions than those of traditional TCE and AT. [75]

[74] Note that authors in this field of research have explained that available theory, namely AT, does not provide them with unambiguous predictions on how the variables they employ interact with each other, and that for this reason what they are doing is "asking empirical questions" (Gompers, 2003). Crucially, one consequence of not having a fully developed theory is that there are problems in the interpretation of the results. Thus, in these author's work one usually finds two or even three interpretations of the meaning of their findings. The present study aims to address this problem by providing a theoretical framework, consistent with the postulates and assumptions of TCE, which yields unambiguous predictions and permits a straightforward interpretation of the results.

[75] It may be argued that Jensen's theory of the agency costs of free cash flows yields similar predictions to our extension of TCE theory. In our opinion, this is not correct. While Jensen (1986) correctly points out the agency conflicts that arise between managers and shareholders over payout policy when firms have substantial free cash flows and describes the corresponding agency costs, he immediately suggests that these agency costs can be minimized through debt creation. Thus, in our view, Jensen paper predicts that these agency costs will be minimized in real life because firms with free cash flows will use more

3. ECONOMETRIC SPECIFICATION

In testing the abovementioned propositions empirically, we use *Tobin's q* as the measure of firm value, which we regress on a measure of bilateral independence, an anti-takeover provisions index and control variables which are standard in the corporate governance and firm valuation literature (Bebchuk et al., 2009; Bhagat and Black, 2002; Brown and Caylor, 2006; Morck, Shleifer and Vishny, 1988). In particular, the following regression equation is estimated:

$$Tobin'sq_{it} = \beta_0 + \beta_1 Aindex_{it} + \beta_2 Eindex_{it} + \beta_3 CF_{it} / totalassets_{it} + \beta_4 salesgrowth_{it} + \beta_5 firmsize_{it} + \beta_6 leverage_{it} + \beta_7 firmage_{it} + \sum_{j=1}^{J-1} \lambda_j Industry_{ij} + \sum_{t=1}^{T-1} \theta_t Time_{it} + \varepsilon_{it} \quad (1)$$

Where, *Tobin's q* is calculated as the ratio of the market value of a given firm at the end of year *t* divided by the book value of its total assets at the end of year *t*. Moreover, the right hand side of Eq. (1) takes into consideration the corporate governance factors discussed in our theoretical section, by including, an index of firm financial independence from shareholders the "*A-index*"[76] developed by Saravia (2014) and the index of anti-takeover provisions "*E-index*" (entrenchment index) proposed by Bebchuk et al. (2009).[77]

As explained by Saravia (2014), the *A-index* is constructed by comparing a firm's annual cash flows with the funds it raises through new equity issuance and retained cash flows over the same period (CF *vs.* ΔE + CF - Dividends). Following firm lifecycle theory (Mueller, 2003, pp. 80-82), the author argues that financially dependent firms will tend to be young companies that issue a substantial amount of new equity and pay no dividends so that their CF will usually be smaller than their level of investments in specific assets funded using new equity and retained cash flows (CF < ΔE + CF - Dividends). In contrast, financially autonomous firms will tend to be mature corporations that issue very little new equity and pay dividends, so that their CF will be usually greater than their level of investments in specific assets funded using new equity and retained cash flows (CF > ΔE + CF - Dividends). Furthermore, to mitigate the impact that the business cycle has on the firm's cash flows and investment opportunities, the comparison is performed over a period of seven years. In particular, the *A-index* for a given company in a given year '*t*' is constructed by adding one point for each year in which a company has greater cash flows than investments funded with equity plus retained cash flows. Since the comparison is performed over the 7 years prior to *t*, the A-index ranges from 0 to 7. Clearly, firms that are financially independent from their shareholders obtain a higher score in this index relative to those that are financially dependent on their shareholders.

In addition, we employ Bebchuk et al.´s index of anti-takeover provisions to measure managerial entrenchment. We prefer this index to other alternatives since it is constructed using a more analytic approach than other indices available in the literature. Rather than including every single anti-takeover provision in their index, Bebchuk et al. (2009) base the inclusion of each provision on discussions with lawyers, their own personal analysis and the examination of provisions that attract opposition from institutional investors. The *E-index* comprises six key governance provisions: staggered boards, limits to amend by-laws, poison pills, golden parachutes, supermajority requirements for mergers, and supermajority requirements for charter amendments. The index is created for a given firm in a given year by assigning a point for each of the six key provisions that the firm has. Thus, the *E-index* ranges from 0 to 6.

We expect that there will be a negative relationship between *Tobin's q* and both firm financial independence from shareholders as measured by the *A-index* and managerial entrenchment as measured by Bebchuk et al.'s (2009) index of antitakeover provisions. The reason is that, as mature firms become financially independent and antitakeover provisions are eventually increased in number, the cost of managerial discretion will tend to increase, which in turn will be reflected in a relatively low *Tobin's q*.

Moreover, several additional standard control variables are included in Eq. (1). The first of these variables, i.e. *CF/totalassets*, is the firm cash flow during year *t* divided by the firm total assets at the end of *t*. It is expected on a priori grounds that this variable will have a positive sign. The key idea behind this variable is that a firm with a large cash flow should be more valuable and have a lower risk of default. It may be argued that a large cash flow may be negatively related to firm value due to the agency costs of free cash flows (Jensen, 1986). However, it is only when the cash flows are larger than the amounts needed to fund all positive net present value projects that conflicts of interest manifested in over-investment can occur, and in Eq. (1) this effect is already captured by the *A-index* (Saravia, 2014). Thus, in this paper the positive effect for a firm`s market value of having a large cash flow is captured using the *CF/totalassets* variable in Eq. (1), while the negative effect of having "free cash flows" is captured by the *A-index*.

Additionally, the control variable *salesgrowth* is included in Eq. (1). In an influential article La Porta, Lopez-de-Silanes, Shleifer and Vishny (2002) argue that firms with better investment opportunities should have higher *Tobin's qs*. To control for investment opportunities these researchers included a sales growth variable in their regression equation which was highly significant. Hence, a sales growth variable is also included in the firm valuation regression equation above. This variable will be measured as the percentage change in the firm's total sales between the end of year *t-1* and the end of year *t*. Based on La Porta et al.'s (2002) arguments it can be

debt, and this increased use of debt will cause the management of the firm to pay out the free cash flows to investors rather than using the funds to invest in suboptimal projects or to increase perquisite consumption. Remember, in the field of agency theory it is a common theme that agency costs are a production cost like any other and that these costs are therefore minimized by the party in control of the corporation (e.g. the owner manager) because it has strong incentives to do so (Fama and Jensen, 1983; Jensen and Meckling, 1976).

76 The "A–index" stands for financial autonomy index.

77 See the appendix for details on the calculation and sources of data for all variables in Eq. (1).

expected on a priori grounds that there will be a positive relationship between *salesgrowth* and *Tobin's q*.

The next control variable included in Eq. (1), *firmsize*, is measured as the natural logarithm of the book value of total assets at the end of year *t*. In this paper the rationale behind the inclusion of *firmsize* as a control variable is that traditionally (i.e. before the mid-1980s in the U.S.) large firm size used to be considered a sufficient anti-takeover defense to allow managements to substantially over-invest without the fear of a hostile takeover (Mueller and Reardon, 1993), and this in turn tended to reduce firm valuations. Thus, this variable is expected to have a negative sign. It should be pointed out however that, following the hostile takeover wave of the 1980s large firm size may not be an effective takeover deterrent anymore, and therefore it is likely that this variable may be insignificant for samples taken from more recent periods.

Next, we include a standard control that the corporate governance literature has used in Tobin's q regressions. Namely *leverage*, which is measured as the ratio of the book value of a firm's total debt to its total assets. Previous work has reported a negative and highly significant relationship between *leverage* and *Tobin's q* (Bebchuk et al., 2009), which is also expected in our empirical tests.

Furthermore, firm age is included as a control variable in Eq. (1). For the reasons given in section 2 above, we expect that *firmage* will have a negative sign. This variable will be measured as the natural logarithm of the number of years since the company's incorporation.

Eq. (1) also includes a set of industry dummy variables. These dummy variables have been included in firm valuation regression equations since Morck et al. (1988) to control for possible spurious correlation between corporate governance variables and *Tobin's q*. The rationale for the inclusion of the industry dummy variables in Eq. (1) is the following: since *Tobin's q* is usually computed by dividing market value of the firm by the book value of the firm's total assets, companies in industries with a greater proportion of intangible assets will have a higher *Tobin's q* when compared to firms in industries with a greater proportion of tangible assets. To control for this difference between industries the inclusion of industry dummy variables is required.

Lastly, Eq. (1) includes time dummy variables to deal with time fixed effects. The latter follows recent work by Petersen (2009) on the appropriate econometric methods to employ when using panel datasets in corporate finance. In particular, Petersen's paper shows that in order to avoid important pitfalls associated with traditional panel data methods, a pooled regression with time dummy variables and standard errors clustered by firm can be used. This will be the approach we will follow in the next section.

2. DATA AND ECONOMETRIC RESULTS

2.1. Sample selection

We started with Bebchuk et al.'s (2009) *no dual class* stock *E-index* database which contains entrenchment data on U.S. firms for the years 1990, 1993, 1995, 1998, 2000, 2002, 2004 and 2006. Using Datastream, we then searched for firms in Bebchuk et al's database which are not in the banking and financial industries (SICs 6000 to 6999) or in certain service industries (above 8100) and that were active between 1990 and 2004. The objective behind these criteria was to obtain a sample of firms with a long time series of data with which to build the variables in the model and in addition, to exclude companies whose capital and investment are fundamentally different to those of most firms in the sample. Using these criteria we obtained a list of 475 firms. Following the usual practice in corporate governance studies, observations for the years in which governance provisions data is not available were filled in by assuming that the provisions remain unchanged until the next year with available data (e.g. Gompers et al., 2003; Bebchuk et al., 2009; Bebchuk, Cohen and Wang, 2013). In this way, we are able to assign values for the 475 firm's *E-indices* for a period of 19 years, from 1990 to 2008. Market prices and accounting data for the firms in the sample were obtained from the Datastream database as described in the Appendix.

2.2. Sample description

Table 1 presents summary statistics for the empirical variables. As shown, the firms in the sample contain substantial variation in their age, valuation, entrenchment index, financial independence and other variables of importance for testing our hypotheses.

Table 1. Summary Statistics

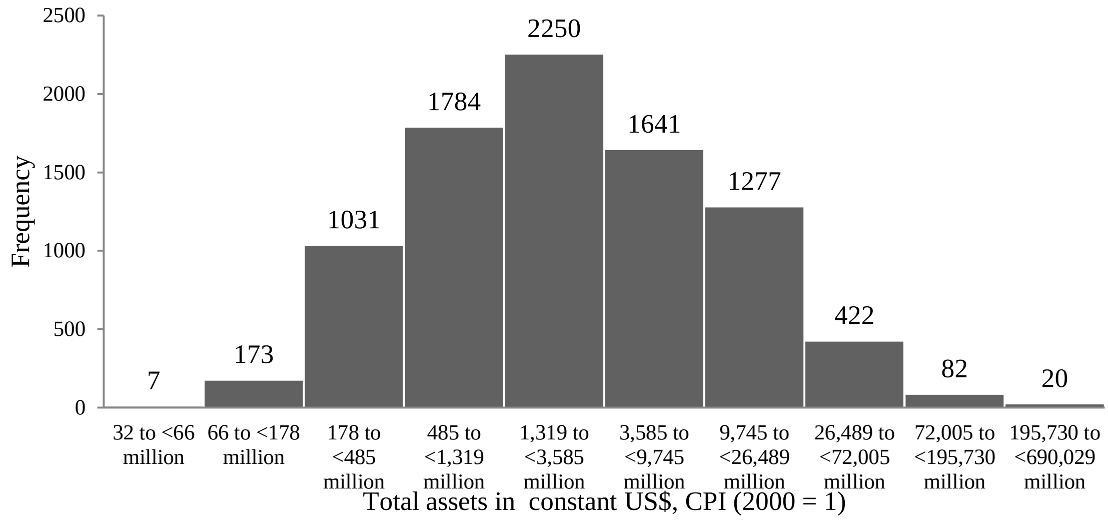
This table presents summary statistics for the empirical variables in the paper. *A-index* is a firm-level index of financial independence (autonomy) from shareholders which is calculated by adding one point for every year in which a given firm's cash flows are greater than its investment in specific assets, over the previous 7 years. *E-index* is the managerial entrenchment index constructed by Bebchuk et al. (2009). *Tobin's q* equals the market value of the firm at the end of year *t* divided by the book value of total assets at the end of year *t*. *CF/totalassets* is the ratio of the firm cash flows during year *t* divided by total assets at the end of year *t*. *salesgrowth* is computed as the percentage change in the firm's total sales between the end of year *t-1* and the end of year *t*. *firmsize* is the natural logarithm of the book value of the firm's total assets measured at the end of year t in USD. *leverage* is the ratio of the book value of a firm's total debt to its total assets. *firmage* is the natural logarithm of firm age which is measured in years since the company's incorporation date.

Variable	*N*	*Mean*	*Median*	*Std. Dev.*	*Min*	*Max*
A-index	8687	5.0199	6.0000	2.1651	0.0000	7.0000
E-index	8687	2.6594	3.0000	1.3638	0.0000	6.0000
Tobin's q	8646	1.5137	1.1258	1.2258	0.0360	15.8453
CF/totalassets	8685	0.1116	0.1043	0.0651	-0.3643	0.6186
salesgrowth	8686	0.0584	0.0365	0.2263	-0.9984	6.8451
firmsize	8687	21.6734	21.5809	1.4737	17.2768	27.2513
leverage	8678	0.2562	0.2581	0.1509	0.0000	0.9387
firmage	8687	4.0373	4.2195	0.6085	0.0000	5.0752

It has been pointed out in the literature that samples constructed using as a starting point the Investor Responsibility Research Centre (IRRC) information are likely to contain a substantial amount of large companies. This is because firms that are relevant from the IRRC perspective are traditionally those in the Standard & Poor's (S&P) 500 as well as the annual lists of large corporations in the publications of Fortune, Forbes, and BusinessWeek (Gompers et al., 2003). Since the database in this paper takes as its starting point Bebchuk *et al.*'s (2009) *E-index* database which is based on the publications of the IRRC, there is a danger that our database contains large firms only. However, inspection of the sample reveals that it contains a number of small firms as well.

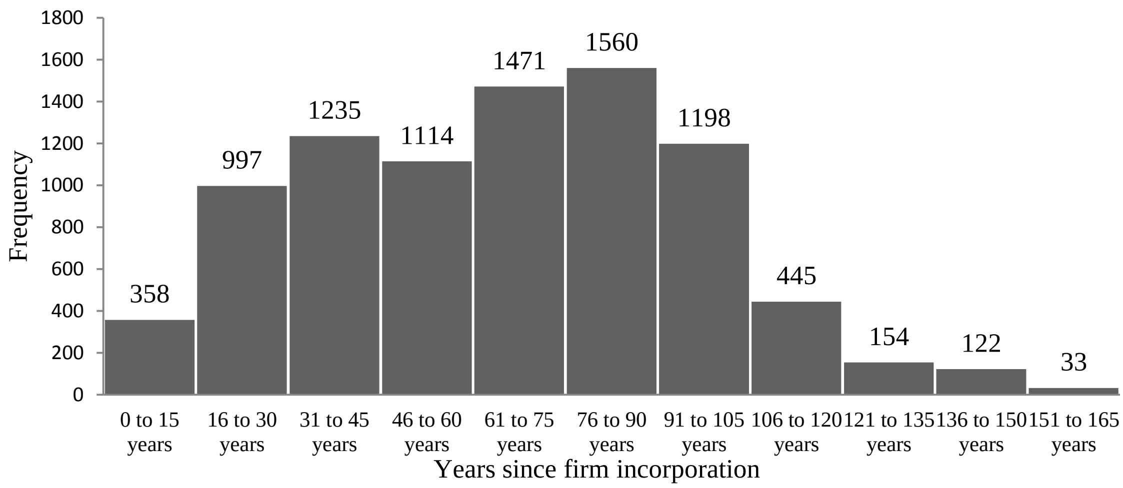
As shown in Figure 3, although the sample does contain a number of very large firms e.g. there are more than 500 firm-year observations in which company total assets are beyond the US$ 25 billion mark, the figure also indicates that the sample contains a number of small firms as evidenced by the fact that there are over 1000 firm-year observations in the sample where firm total assets re less than US$ 500 million. [All relevant items are deflated using CPI (2000 = 1).] Overall, inspection of Figure 3 reveals that the sample is not restricted to the very largest firms; instead the figure shows that the sample contains a reasonably varied range of company sizes.

Figure 3. Firm size at the end of year *t* (log scale)



Similarly there is a danger that databases constructed using the information on corporate governance provisions published by the IRRC may only contain older companies as measured by firm age. This is because older firms are usually also very large. Thus, a sample composed of large firms may also contain a substantial number of older firms. However, inspection of the sample reveals that it contains a reasonably varied range of company ages. As shown in Figure 4, although the database does contain a number of old companies, the figure also indicates that the sample contains a number of young firms as evidenced by the fact that there are over 1000 firm-year observations in the sample where firm age (measured in years since company incorporation) is lower than 30 years.

Figure 4. Firm age at the end of year *t*



Correlations between the empirical variables are presented in Table 2. It is interesting to note that the *A-index* presents a significantly positive correlation with *firmage* and a negative and significant correlation with *salesgrowth* (our measurement of investment opportunities). This suggests that, consistent with firm lifecycle arguments, young companies with a low *A-index* present a higher rate of sales growth, which means that young firms have better investment opportunities than mature firms with a high *A-index* and low sales growth. In addition, the table shows that the *A-index* has positive and significant correlations with *firmsize* and *CF/totalassets.* This implies that companies with a high *A-index* are on average relatively larger and have larger cash flows.

Table 2. Correlation matrix

This table presents the correlation matrix for the empirical variables in the paper. *A-index* is a firm-level index of financial independence (autonomy) from shareholders which is calculated by adding one point for every year in which a given firm's cash flows are greater than its investment in specific assets, over the previous 7 years. *E-index* is the managerial entrenchment index constructed by Bebchuk et al. (2009). *Tobin's q* equals the market value of the firm at the end of year *t* divided by the book value of total assets at the end of year *t. CF/totalassets* is the ratio of the firm cash flows during year *t* divided by total assets at the end of year *t. salesgrowth* is computed as the percentage change in the firm's total sales between the end of year *t-1* and the end of year *t. firmsize* is the natural logarithm of the book value of the firm's total assets measured at the end of year t in USD. *leverage* is the ratio of the book value of a firm's total debt to its total assets. *firmage* is the natural logarithm of firm age which is measured in years since the company's incorporation date. * and ** indicate a statistically significant correlation at the 1% and 5% level respectively.

Variable	*A-index*	*E-index*	*Tobin's q*	*CF/total-*	*salesgrowth*	*firmsize*	*leverag*	*firmag*
A-index	1.0000							
E-index	0.0503*	1.0000						
Tobin's q	-0.1113*	-0.1324*	1.0000					
CF/totalassets	0.0219**	-0.1005*	0.5803*	1.0000				
salesgrowth	-0.1222*	-0.0323*	0.1315*	0.1171*	1.0000			
firmsize	0.0855*	-0.0830*	-0.0076	-0.0353*	0.0435*	1.0000		
leverage	0.1060*	0.1127*	-0.3127*	-0.3717*	-0.0194	0.2533*	1.0000	
firmage	0.4158*	0.1533*	-0.1759*	-0.1314*	-0.0718*	0.2230*	0.2030*	1.0000

Interestingly, while *Tobin's q* presents a significantly negative correlation with the *A-index* it also displays a very strong and significant positive correlation with *CF/totalassets.* This finding indicates that very large cash flows are not necessarily negative for firm valuation; it is the end of the bilateral dependency condition (as measured by the *A-index*) between a firm and its shareholders that increase managerial discretion and not merely the size of the cash flows. In other words, it is only when the cash flows are larger than the amounts needed to fund all positive net present value projects, and consequently firms are financially independent from its shareholders, that conflicts of interest known in the corporate governance literature as the "agency costs of free cash flow" occur (Jensen, 1986).

On the other hand, Table 2 shows that *firmage* presents positive and significant correlations with both the *A-index* and the *E-index.* This implies that as firms mature, and on average become more financially independent, a larger number of consequential anti-takeover provisions are deployed. Moreover, the table indicates that both the *A-index* and the *E-index* have significantly negative correlations with *Tobin's q.* This finding indicates that as firms become more financially autonomous and deploy more antitakeover provisions their valuations tend to decline.

Additionally, Table 2 indicates that both the *E-index* and *firmage* have negative and significant correlations with *salesgrowth.* This suggests that it is not in the fast growing young firms that managements deploy the most antitakeover provisions; on the contrary, it is in the slow growing mature firms where managements are the most entrenched.

Lastly, it is worth noting the strong positive correlation between *firmage* and *leverage.* Since young firms are usually perceived as being riskier than older well established corporations, a clear explanation for this correlation is that lenders require a higher risk compensation for lending to young firms and consequently young firms tend to rely less on debt and instead issue more equity (i.e. young firms tend to depend more on their shareholders). On the other hand, lenders will likely require lower risk compensation in their loans to mature firms. Accordingly, mature firms can rely more on debt which allows these companies to be more independent from their shareholders.

In conclusion, the sample description above demonstrates that the database contains firms with sufficient variation in their age, sizes and other variables for the purposes of testing the paper's hypotheses. Having elucidated this point, the next section employs the econometric methods discussed above to perform multivariate tests of the hypotheses.

2.3. Econometric results

Table 3 presents the econometric results. Column 1 shows a specification in which *Tobin`s q* is regressed on the *A-index*, the *E-index,* as well as the time and industry dummy variables. Both the *A-index* is negative and significant at the 5% level and the *E-index* is negative and significant at the 1% level as predicted. The implication is that *Tobin's q* declines as both firm financial independence (measured by the *A-index*) and managerial entrenchment (measured by Bebchuk et al.'s (2009) *E-index*) increase. In other words, consistent with our theoretical discussion in section 2, as firms become more financially independent over their lifecycle and the number of consequential antitakeover provisions increases, managerial discretion costs escalate. In consequence of the higher managerial discretions costs, firm value (measured by *Tobin's q*) tends to fall.

Table 3. Econometric results

This table presents the results of regressing *Tobin's q* on corporate governance and control variables. *Tobin's q* equals the market value of the firm at the end of year *t* divided by the book value of total assets at the end of year *t*. *A-index* is a firm-level index of financial independence (autonomy) from shareholders which is calculated by adding one point for every year in which a given firm's cash flows are greater than its investment in specific assets, over the previous 7 years. *E-index* is the managerial entrenchment index constructed by Bebchuk et al. (2009). *CF/totalassets* is the ratio of the firm cash flows during year *t* divided by total assets at the end of year *t*. *salesgrowth* is computed as the percentage change in the firm's total sales between the end of year *t-1* and the end of year *t*. *firmsize* is the natural logarithm of the book value of the firm's total assets measured at the end of year t in USD. *leverage* is the ratio of the book value of a firm's total debt to its total assets. *firmage* is the natural logarithm of firm age which is measured in years since the company's incorporation date. Industry dummy variables are constructed based on firms' two digit SIC industry codes. In addition, year dummy variables are included to pick up movements in stock market values that are common to all firms. * and ** indicate a statistically significant coefficient at the 1% and 5% level respectively (one tailed t-test). The table reports standard errors clustered by firm in parentheses.

Variable	***Predicted sign***	***(1)***	***(2)***	***(3)***	***(4)***
A-index	-	-0.0369**	-0.0527*		-0.0441*
		(0.0184)	(0.0142)		(0.0150)
E-index	-	-0.0857*	-0.0462**		-0.0424**
		(0.0290)	(0.0208)		(0.0212)
CF/totalassets	+		8.9612*	8.7745*	8.9026*
			(0.6800)	(0.6760)	(0.6669)
salesgrowth	+		0.2788*	0.3098*	0.2714*
			(0.0774)	(0.0830)	(0.0753)
firmsize	-		0.0134	0.0265	0.0189
			(0.0212)	(0.0223)	(0.0216)
leverage	-		-0.6934*	-0.7283*	-0.6786*
			(0.1761)	(0.1805)	(0.1737)
firmage	-			-0.1625*	-0.0938
				(0.0604)	(0.0624)
Industry dummy variables		yes	yes	yes	yes
Time dummy variables?		yes	yes	yes	yes
Adjusted R^2		0.2238	0.4530	0.4483	0.4544
Number of observations		8646	8637	8637	8637

Column 2 presents the results of regressing *Tobin`s q* on the *A-index*, the *E-index,* as well as most controls in Eq. (1) with the exception of firm age. As shown, the coefficient of the *A-index* becomes more significant and with a higher absolute value than in column 1. In particular, note that the coefficient of the A-index is now significant at the 1% level. On the other hand, the absolute value of the *E-index* coefficient becomes noticeably smaller and it is now significant at the 5% level. Interestingly, the variable *CF/totalassets* is positive as predicted and is significant at 1% level. This indicates that firms with a larger cash flow are more valuable. Taking this result together with that for the *A-index* above, we conclude that with the variable *CF/totalassets* we are capturing in our regression the positive effect on a firm`s market value of having a large cash flow, while the negative effect of having "free cash flows" (so often referred to in the corporate governance literature) is captured by the *A-index.* Moreover, *salesgrowth* is positive and significant at the 1% level. This supports the hypothesis that firms with better investment prospects have higher valuations other things equal. In contrast, the *firmsize* variable is insignificant at any conventional level which may indicate that large firm size was not an effective takeover deterrent in the U.S. stock markets the period in question (1990 to 2008). Importantly, we note that *leverage* is negative as predicted and significant at the 1% level. Considering the correlation between leverage and firm age documented in Table 2, our interpretation of this result is not that higher leverage causes lower firm valuation. Rather, our conclusion is that, other things equal, higher leverage is an indicator of firm maturity. The fact that older firms have relatively lower costs of debt exacerbates firm financial independence from shareholders which results in increased costs of managerial discretion. This is what causes the lower valuation. Finally, it is interesting to note that the adjusted R^2 in column 2 is twice as large as that in column 1. This suggests that in the context of U.S. stock markets, the income and growth prospects of firms, as measured by our control variables, overshadow corporate governance variables in explaining firm valuation.

Next, we remove the *A-index* and the *E-index* variables from the regression equation and introduce *firmage* in their place as a measure of the quality corporate governance (column 3). If bilateral dependency declines over the lifecycle of the firm and eventually antitakeover provisions are put in place by the parties in control of mature firm, as we argue in our theoretical section, then there should be a negative correlation between *Tobin's q* and *firmage.* As expected, *firmage* is negative and significant at the 1% level. On the other hand, it is noteworthy that all control variables retain their magnitudes and significance basically unchanged when compared to the previous regression.

Finally, column 4 presents a regression of *Tobin's q* on the full set of variables in Eq. (1). As can be seen, this time although the coefficient of *firmage* shows the predicted negative sign it is insignificant at any conventional level. Comparing the results in columns 3 and 4, it is clear that the introduction of the *A-index* and the *E-index* variables neutralize the significance of *firmage*. Consequently, we conclude that what drives the lower valuation of mature firms is the end of the bilateral dependency condition and the subsequent managerial entrenchment which occurs over time, as measured respectively by the *A-index* and the *E-index* variables. Overall, we interpret the results in Table 3 as consistent with our theoretical propositions stated in section 2. As bilateral dependency between the firm and its shareholders weakens, as measured by an increase in the *A-index*, the costs of managerial discretion escalate. Consequently, financially dependent firms (case A) have higher valuations than financially independent firms (case B). Moreover, as financially independent firms deploy anti-takeover provisions, as measured by the *E-index*, managerial discretion cost rise further, hence financially independent firms (case B) are more valuable than similarly independent firms when their managements are entrenched (case C).

3. CONCLUSION

According to traditional TCE theory, equity is a governance structure that economizes on transaction costs and effectively cements the relationship between the firm and its shareholders when a firm finances investments that involve specific assets. This paper examines the theory behind this proposition and finds that, for the case of the equity mode of governance, the usual TCE logic is not fully worked out. In particular, the paper finds that in previous work an analysis of the key concept of bilateral dependency between the firm and its shareholders is absent. Taking proper account of the concept of bilateral dependency, the paper concludes that contractual hazards are indeed mitigated for the case of fast growing young firms whose managements are dependent on shareholders to finance future growth. On the other hand, for the case of mature firms the paper argues that contractual safeguards such as the board of directors are altered to the disadvantage of shareholders, and consequently managerial discretion costs increase as the firm becomes financially independent from its shareholders. Consistent with the theoretical section, the empirical section of the paper finds that financially dependent firms have higher valuations than financially independent firms. Moreover, financially independent firms are more valuable than similarly independent firms when their managements are entrenched.

The importance of these results to the theory of TCE is that they document for the first time a type of transaction, namely that between the shareholders and the corporation, where the relationship between the parties does not break down when the safeguards are neutralized, opportunistic behavior surfaces, and transaction costs are not minimized. On the other hand, our theoretical extension of the TCE theory of the equity governance structure generates predictions which diverge significantly from those of AT. It is well known that AT predicts that monitoring by the board of directors will minimize the costs of the transaction i.e. "the agency costs" (Fama and Jensen, 1983). In our extended theory this is only the case when bilateral dependency holds, however when bilateral dependency does not hold our extended theory predicts that transaction costs or "agency costs" will not be minimized. Importantly, the present study shows that the data is consistent with the predictions of the extended TCE theory and not with those of AT.

Finally, in considering the public policy implications of this paper it is important to revisit the *remediableness criterion*. This criterion states that "an extant mode of organization for which no superior *feasible* form of organization can be described and *implemented* with expected net gains is *presumed* to be efficient" (Williamson, 2010, emphasis in the original). In this sense, assuming that the objective of a public policy maker is to improve corporate governance, then the present work suggests that one effective policy would be to outlaw the deployment of anti-takeover provisions. If this policy were implemented, the effect would be an increase in the strength of the safeguards of the equity governance structure. In consequence managerial discretion in mature firms would be curtailed as the attributes of "case C" equity governance structures are transformed into those of "case B" structures (Figure 2). On the other hand, the present TCE analysis suggests that public policy that aims to curtail managerial discretion further, for instance by requiring a majority of independent directors in the board, is unlikely to succeed. Once bilateral dependency no longer holds equity capital is no longer needed, and managements are likely to prefer relief from the monitoring pressures that come from a strong board of directors. It is not difficult to see how managements can achieve this goal, for instance they could appoint sympathetic independent directors. Thus, we conclude that although managerial discretion costs are higher for "case B" equity governance structures when compared to those of "case A" structures, the former structures should be deemed efficient according to the remediableness criterion.

APPENDIX

This appendix explains how the variables used in the empirical section were put together and the data sources used in their construction. Since our main source of market and financial data is Datastream, in what follows we present Datastream data-types in parenthesis.

First, we compute *Tobin's q* by dividing the market value of a given firm at the end of year *t* the book value of total assets (wc02999). Where, the market value of the firm at the end of year *t* is calculated by adding the market value of common stock (wc05301 x P) plus the book value of total debt (wc03255) and preferred stock (wc03451). Note that the value common stock is computed by multiplying the end of fiscal year number of shares (wc05301) times the end of fiscal year price per share (P).

Second, the *A-index* is calculated by adding one point for each year in which a company has greater cash flows (wc04201) than investments financed using equity and retained cash flows over the previous 7 years (from *t-7* to *t-1*).[78] To calculate investment financed with equity and retained cash flows over year *t* we subtract dividends (wc04551) from cash flows (wc04201) and then add net new equity (the change in the number of shares wc05301 times average share price P over year *t*).

Furthermore, Bebchuk et al.'s (2009) *E-index* is taken from Bebchuk's webpage (available at http://www.law.harvard.edu/faculty/bebchuk/data/shtml). On the other hand, we calculate *CF/totalassets*, by dividing the firm cash flow during year *t* (wc04201) by firm total assets at the end of *t* (wc02999). Next, *salesgrowth* is computed by calculating the annual percentage change in the firm's total sales (wc01001) between the end of year *t-1* and the end of year *t*.

We measure *firmsize* as the natural logarithm of the book value of total assets (wc02999) at the end of year *t*. Moreover, *leverage* is measured as the ratio of the book value of a firm's total debt (wc03255) to its total assets (wc02999). On the other hand, to compute *firmage* our main data source was the 2004 Mergent Industrial Manual which lists companies' dates of incorporation. This variable was calculated by subtracting the year in which the firm was incorporated from the appropriate year in the panel dataset. Finally, note that prior to the calculation of the variables all relevant items were deflated by using the CPI (2000 = 1). The CPI data for the U.S. were obtained from the World Bank, World Development Indicators, ESDS International, University of Manchester.

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[78] Please note that 201 firm-year observations of the *A-index* (2.3% of de total) correspond to companies floated in the market less than eight years before the first year in our sample (i.e. 1990), so that in these cases the 7 years data to compute the index was not available from Datastream. Consistent with firm lifecycle theory, we assumed that these companies were floated in the stock market precisely because of the need to finance specific assets in excess of their cash flows. Hence, we computed the *A-index* in these 201 cases by assigning zero points for each of the years before market listing. We recalculated all the tables in the paper with and without these 201 observations. The results were not affected in their sign, magnitude and level of statistical significance. Thus, we decided to present the results with the 201 observations included in the database.

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WATER TOURISM CONFLICT RESOLUTION THROUGH GOOD GOVERNANCE (STORY FROM INDONESIA)

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Abstract

This paper discuss good governance model for conflict resolution around water tourism area in Indonesia. This paper developed structural factors that influence water tourism such as the population, economic development, regional generated revenue, real-time sector revenue, poverty rates, and water management which is the focus of the study affected the rising of the water conflict. This study is field research qualitative study. The objects in this research are water tourism stakeholders which are composed of three different water tourism management in Karanganyar, Central Java, Indonesia, namely Grojogan Sewu, Jumog and Peblengan. This study conducted in Karanganyar as a district that has a natural beauty with huge potential to further develop its natural attractions. The data sampling is done by observation and interview. From the result of this study it can be concluded that (1) there needs to be a clear explanation for the villagers near the water tourism area that the natural resources of water needs to be preserved and used moderately ; (2) a communication needs to be established between the stakeholders and those using the water resource, for the sake of the villagers' welfare as well as the economic improvement; (3) the government, both the regional government as well as the central government need to make regulation to keep the condition of the nature without ignoring the possibility of conflict ensuing because of water usage by the villagers; (4) increasing the role of the villagers in managing the water resource so that there will be no prolonged conflict in the future.

Keywords: Conflict Resolution, Water Tourism, Good Tourism Governance, Indonesia

1. BACKGROUND

Indonesian Government during the new order era applied centralization system in managing the government system. The management of the governing system was fully in the hand of the central government, including all the policies, authorities, up to responsibilities. The regional governments during the new order were passive and only held small parts of the overall responsibilities. However, as time goes by, the urge to execute regional autonomy sparked. The urge came from the internal as well as external condition of Indonesia during that time. The internal came in the form of the people's demand for transparency and autonomy (decentralization), while the external condition was from the demand of competing force from each countries because the world globalisation.

The decentralization system in government management was not used anymore since the application of Law No. 22/1999 that also marked the end of Soeharto's reign as a president. The law No. 22/1999 underwent an amendment and changed into the law No.32/2004 related to regional autonomy. The law No.23/2004 implies maximum regional autonomy for the regional governments (Halim, 2012). The autonomy is given for each region in order to give each government the possibility to explore and manage their own resources for the sake of the people's well-being. The regional autonomy is given to all governmental management divisions at the regions, including resource management such as water resource.

The application of regional autonomy brings consequences towards the authority of certain regions in managing it's own natural resources. The resource management causes exploitation especially the water natural resources. This causes a shift of water resource which initially was resources for the people's well-being, into a resource of commercial commodity. The areas with water resource usually would regulate certain limitations of water usage as well as labeling cost for any regions or countries enjoying the water resource they have. Conflict would arise when the usage quote and the costs were not in balance (Halimatusa'diyah 2013).

In term of natural resource, economic commodity in free market would boil up a conflict of interest between groups with better natural resources and group with less or even no natural resources. Thus, the social gap urges the spark of conflict. Social gap and conflicts related to natural resource come out as a result of pollution and natural damages occurred as well as inequality of profit distribution from the natural resource (Green 2005).

Tourism is one of the largest industries in the world, contributing as much as 9% for Gross Domestic Product (GDP) and this sector has been identified as a potential income (Ahmad 2013). Tourism section could also be considered as a significant contributor in government's effort in differing the dependent on primary export products (natural gas and oil). Hence many government plans are directed in the tourism sector (Scheyvens 2011).

Tourism is a tool that is hoped to be able to cause significant improvement of the people's well-being in Indonesia. That is why tourism development always becoming the priority for the government. The national goal of Indonesia in improving the people's well-being through tourism is engraved in the Indonesia Constitution - UU No. 10/2009 about tourism. In section 4 of UU No. 10/2009, it is mentioned that the objective of tourism is to improve the economic development, enhance the people's well-being, abolishing poverty, solving the problem of many unemployed people, preserve the nature, environment, as well as resources, advancing the culture, polishing the country's image, building nationality, empowering the country's dignity as well as tighten the unity of the country both within and outside with the other countries.

In Indonesia, many of the regional governments either directly or indirectly depend on the tourism in their regional generated revenue - PendapatanAsli Daerah (PAD). One of the examples of how a regional government depends on the tourism sector for its PAD can be seen in Karanganyar Regency. Based on the annual financial report in 2010 up to 2013, the tourism sector of Karanganyar Regency contributes as much as 1% of the total regional retribution. Even though the number is not quite significant, the impact of the tourism sector indirectly will liven up the other sector such as lodgings, restaurant & dining places, as well as parking lots.

Karanganyar Regency is located bellow Mount Lawu at its west side, or east of Solo or Surakarta (Tourism and Culture Department of Karanganyar Regency, 2015). With its beautiful panorama, Karanganyar Regency has potential in tourism department, especially in water attraction. According to the Tourism and Culture Department of Karanganyar Regency, there are at least 6 to 15 natural tourism spots (water) in Karanganyar. However, the fact that abundance of natural resource (water) becoming an important part of the tourism, has created a trouble instead. Conflicts emerge between the government (as the regulator or the authorities in charge), the investors and the native of Karanganyar (as the one using the water at the tourism spots).

The tourism spots with supporting natural beauty, still hides several problems that must be tended and solved immediately. There are all kinds of problem and it has to be solved in order to achieve successful tourism development. Conflict of natural resources mainly water resources happens between the people as the managers, with an investor at Karanganyar Regency. It creates various problems which later causes the decrease of the tourist's interest for the tourism spots there.

This study discusses on three natural tourism spots (water) in Karanganyar Regency which are GrojoganSewu (waterfall), SaptaTirtaPablengan, and GrojoganJumog. Those three tourism spots (water) at Karanganyar Regency have problems and conflicts related to their management. The management problem of those three tourism spots is related to the organization, distribution, financial, capacity, as well as management. The management problem involves internal and external stakeholders in managing the tourism spots (water). The stakeholders are the people around the tourism spots, the Regional Government of Karanganyar Regency, the Manager (Independent), and the Investor.

Grojogansewu has problems related to Organization, Distribution, and Financial. An interview with "Mr. S" at "GrojoganSewu" area shows that the water for the people was not distributed evenly because the water distribution was concentrated only at "GrojoganSewu" which is at the north part of Tawangmangu. In 1999, regional autonomy causes "GrojoganSewu" to be an object of dispute between the central government and the regional government. The management of "GrojoganSewu" is done by an independent party, but with various reasons the independent party refused to contribute and increase the retribution. The resolution for the problem was by holding a meeting and coordination was done in daily basis for the people using the water, stop adding the numbers of parties managing the water in the tourism spot, and for the people, it is forbidden to add the amount of water distributed and there shall be no new waterway based on fair distribution, both for household needs as well as for commercial needs.

The management of Jumog Waterfall was done by the Village's Owned Enterprises (BUMNDes). However, there are still problems with the management of GrojoganJumog. The problem is mainly from the different treatment of the people with assets and those without. The people who have assets or shares on the waterfall area are given authority to manage and process the resource without having to pay any retribution, but this does not apply for those who do not have any shares on the waterfall. Regional government has the tendency to let the management of the waterfall run in the hands of the people, without having any intention to join in for help and this causes the existence of conflicts to be somehow ignored. This gets worse by the difficult access to the waterfall. The resolution is done by holding a regular meeting to improve the management of the water, cleaning the areas around the stream, establishing organization that involves the people living around the area, the governments from the village as well as the region work together to improve the potential of the tourism spot management, and the regulation that fixate the usage of the water by people from the other area have to pay for contribution for the sake of the preservation of the existing water sources.

The SaptoTirta Area, Pablengan, is a natural tourism spot located at the highway connecting Karangpandan and Astana (royal cemetery) MangadegGirilayu. The conflict of this area arose between the Regional Government (Pemerintah Daerah, Pemda) Karanganyar with Mangkunegaran Surakarta family, related to the authority for water management around SaptoTirta area. The authority implies toward the management of water usage as well as the procedure on pilgrims visiting the royal cemetery of MangadegGiriBangun. The conflict resolution of this problem is by the involved parties in SaptoTirta area, which are PemdaKaranganyar and

Mangkunegaran Surakarta Hadiningrat, holding up a gathering to distribute various workload needs to be done. Visitors have to take a bath to purify themselves before they started their pilgrimage at the cemetery and that will results in busy day not only at certain times (Jum'at or 1 Suro).

This paper is trying to see how conflict resolution to handle problems around water tourism area at Karanganyar Regency has developed structural factors such as the population, economic development, regional generated revenue (PendapatanAsliDaerah, PAD), real-time sector revenue, poverty rates, water management which is the focus of the study affected the rising of the water conflict. The difference in structure often causes the existence of alternative choice for revenue improvement as well as regional welfare through the compensation cost of water usage by other regions. If an agreement regarding the water usage compensation fee is not established, then conflicts often become the solution as a form of negotiation and protest from the regional government owning the water resource.

2. LITERATURE REVIEW

UU No. 7/2004 about Water Management explains that water resource is a blessing from God the Almighty and give advantage for the sake of the well-being pf all the Indonesian people in every sectors. In tourism sector, depending on the clean water source and other important factors of clean water usage (Gossling et al. 2012), clean water supplies, poor water quality and limited or media description of critical water supplies could create a bias that endangers the image of tourism destinations (Gossling et al. 2012; Hall 2010;Hall and Härkönen 2006).

The continuity of tourism depends on the quality of the water as well as the quantity of the water (Cole 2012). In 2020, the tourism contribution for the water usage have the tendency to be keep increasing, marked by i) the increase of the tourists number, ii) high hotel standard, and iii) the increase of water usage intensity for tourism activity(Gossling et al. 2012). The increase of the tourism contribution caused water supply to decrease, and of course this causes a big challenge to raises before the people, but this also have to be a strategic consideration and an important factor in the company planning, including tourism company. One of the strategic questions including, for example, how the tourism operator could give contribution in the preservation as well as responsibility towards the water, responsibility for the water management at the tourism spots, the tourism manager has to really being involved in the planning of the water management (Becken 2014). When the water is considered to be a critical resource, various indicators to measure the water supply and water usage intensity has been developed, generally with the objective to decrease water consumption by decreasing direct water usage (Gössling 2015).

The abundance of natural resources could increase the risk of a conflict, has become a pioneer in how to see relation between natural resource and conflict (Halimatusa'diyah 2013).Conflict itself is a differences between groups who competes in authority and usage, as well as responsibility on natural resources (Green 2005). Other than that Sultana (2011) stated that the usage, management, and ownership as well as conflict could be mediated through social authority relation, but also through emotional geographic whereas the gender subjectivity and emotional is natural relation of the people in everyday life. Contest for resource and conflict is not only a material, but also an emotion, mediated through the body, space, and emotion.

The limited natural resource (water) causes water shortage. This shortage brought main risk of international conflict fighting over natural waterresource.Internal conflict risk in a Country is actually greater than the external one. The conflict happened not only because of water shortage, but also because changes adopted by the organizations in order to adapt with the water shortage conditions (Ohisson 2000). The importance of water in a situation such as water shortage often causes problem in everyday life. Thus, conflict for water dominance could not be avoided(Gossling et al. 2012). Other than that, water usage conflict is also caused by the factor of increasing water need while there is a shortage of water supply (Chanya et al 2014). This conflict often surfaced not only between people with interests, but also between areas upstream and downstream in the process of water relocation from farming and industry (Wang et al 2015).

The conflict proofs the need of conflict management. Management could be done by withdrawing, problem solving, and forced obedient. Individualistic culture usually chose forced obedient as the conflict management more often than those with collective culture (Kaushal and Kwantes2006). Collective culture has an interesting style for conflict management. Compromising and problem solving are more preferable for conflict management than in place with individualistic culture (Holt and DeVore 2005).

Local wisdom such as humanity, togetherness, brotherhood and other characteristics are gradually gone from the culture of the people these days. Vision as well as the ideology of development, which suggest more on economic, physical, and material development, more or less affect the way people thinking, away from the spiritual and local wisdom they used to apply and believe in. Resolving a conflict with wisdom, through humanity approach is a wonderful thing. Local wisdom of the people around the area should be done by preserving the nature (Wibowo 2007).

Conflict resolution by improving the local management could be successful. However, without an active support from the government, the conflict would last longer instead. Conflict Management and Resolution depends on the government's capability to (i) classifying positive and negative conflict; (ii) pin-pointing the root of the conflict as well as thinking up a solution for the root problem; (iii) strengthen the capacity of the government's institution in conducting conflict management (Bennett et al 2001).

Solving a conflict for water resource is a complicated task. Power and wisdom are important quality needed, but regulation also plays an important part in this. Conflict resolution only possible when both parties consider the solution suggested in fair situation (Mianabadi et al 2014). Instrument conflict resolution does not work well in solving the conflict for water allocation, because they ignore the interests and advantage from those with interests over the water, especially groups with interests (Wang et al 2015).

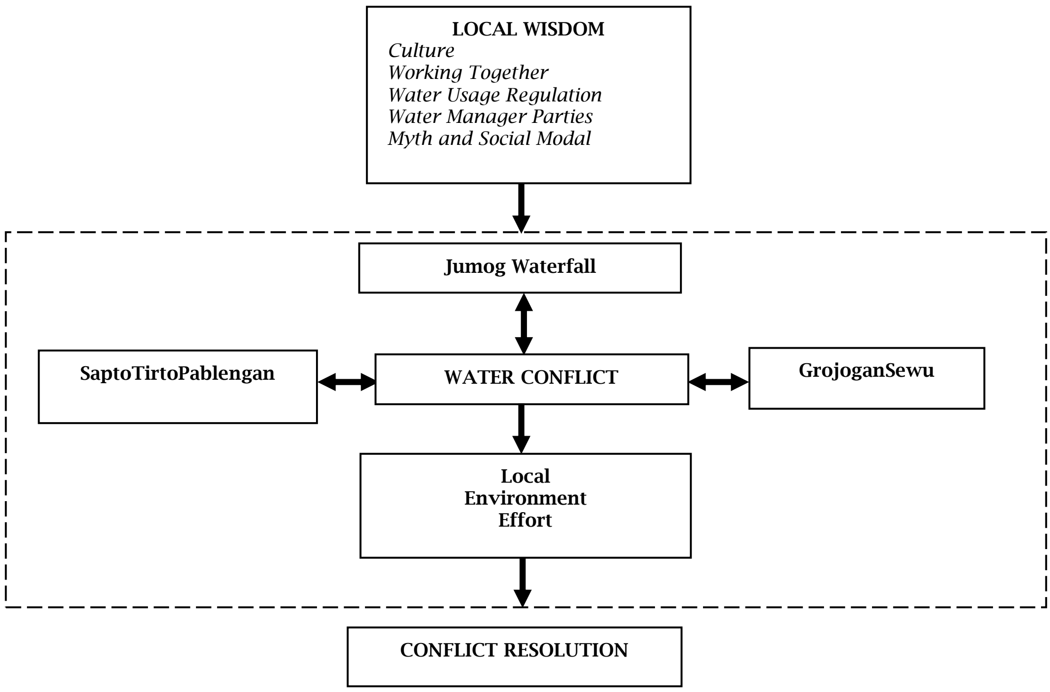
While cooperation and conflict could line up together, water conflict happens while the water demand is high, while the supply is low. There is a restrain towards conflict. In the end, generally cooperation when water problem shows up while the water demand is lower and supply is higher, restrain from the ensuing conflict (Böhmelt et al 2014). Dialog approach is done to develop participation process of the people in resolving the water conflict(Chanya et al 2014).

Struggle over water resource has caused a conflict between the interest holders. Therefore, conflict resolution is focused more on negotiation process(Mianabadi et al 2014).There in an opinion that stated, transaction happened during negotiation agreement, is an obstruction in conflict resolution mechanism in this water agreement. The transaction cost never the same and depends heavily on the context of where the negotiation is held (De Bruyne and Fischhendler 2013).

This effect later causes the water conflict shown in the form of protest by the people such as, water shortage of water pollution, and transforms the farming field which considered not profitable into a tourism spot. This water problem happens between various actors, whether it is vertically between the people and the investors, or horizontal between farmers and farmers. The water conflict also happened in tourism area, especially during the drought season where the water intensity is relatively small. This study also attempt to see the similarity or difference of the conflict happened in GrojoganSewu, Jumog Waterfall and SaptoTirtaPablengan Karanganyar. After understanding the comparison between conflicts happened at these areas, relevant solutions are sought to solve the ensuing conflict.

Beginning from this thought, schematically, the train of thought of this study could be depicted as follow.

Figure 1. Research Model



2. RESEARCH METHOD

This unique problem that is used as the focus of this study in tourism areas is studied with qualitative descriptive method. The qualitative study here is a field research. This field research method is a method used to undergone social research by doing direct observation in the field and doing the written analysis later. This method is chosen because with this method, the researcher could comprehend the situation in real-time and more clearly. The data sampling is done by observation and interview, as well as library research.

2.1. Research location

The research is conducted by interviewing the tourism manager of GrojoganSewu, Jumog Waterfall and SaptoTirtaPablenganKaranganyar, and the stakeholders of water user at the area, in order to gather data from various perspectives. It is hoped that with this research, the researcher could understand the conflict over water including the area around tourism spot GrojoganSewu, SaptaTirtaPablengan, and Jumog Waterfall.

2.2. Data sampling

The data sampling technique used in this research is observation. Observation is done by directly observing the research location, while recording the data of the observed phenomenon systematically. Interview is a data gathering method through asking questions (interview) directly towards the interviewee. During the process, the interview type is the in-depth interview, following a preset interview guide to asking questions for the parties directly involved in the water conflict.

2.3. Data analysis

Generally, the data analysis is conducted in several steps such as data reduction, by identifying units. At first the units are identified up to the smallest count found in the data which would have certain meaning when connected to the focus and problem of the research. Then Categorization is done, which is a process to classify the units into several groups with the same similarity. The next process is sterilization, which is a process of finding relation between one category with the others. The last process is drawing conclusion. Data verification in this research is done continuously during the research. After the data gathering, the researcher analyzes and trying to find the meaning from the data gathered. The researcher looks for any pattern, theme, or relation, which later will be drawn as the conclusion.

The presentation of the result of this analysis is in narrative style, with additional charts and pictures. This is to make it easier for the reader to understand the research result which later will be attached with the result interpretation in accordance with the theory and frame of thought in general.

2. DISCUSSION

Conflict happens not because of the existence of differences between those with production facility and those without. It happens because there are differences in degree of authority and domination between associates. Social conflict becomes the structural source, which is the relation between authorities in the social structure of social organization. In other words, the conflict between groups, seen from the view of legality of authority relation exists or from the view of local social structure (Dahrendorf 1957).

Conflict does not root in the psychological, but in certain imperative coordinated in social association. Therefore, the parties winning the conflict of course would make the other parties bow down towards the authority of the winner. Factors that ensues conflict: (i) Individual difference, including differences in opinion and emotion; (ii) Background difference of culture, creating different personalities; (iii) Difference of interests between individual and group, and (iv) Changes of values, fast and sudden in the life of the people.

3.1. Local wisdom for Water Management

In the middle of all the violence and greeds as well of critical condition of local culture, the bond between individuals gradually thinned out. Despite that, at some places in Indonesia, there are still those who preserve the harmony of living together, with the guidance of the ancestor and local wisdom applied in the middle of the people's daily life. Resolving a conflict with wisdom, through humanity approach is a wonderful thing. The local wisdom comes in the form of tradition of using plain flour to resolve the conflict.

According to "Mr. S", the manager of GrojoganSewu, the people hold a believe that people have to always preserve the natural resource and doing rituals at the spring of GrojoganSewu by bringing foods and doing purification rituals around the streams of the river for the longevity of the streams. This ritual is called "Dawuan", which is an annual rite. "Dawuan" also done at Jumog Waterfall annually said "MrSl", other than that, this is done to preserve the water supply so the people could farm and the soil is healthy keeping water supply for the future use too.

3.2. Conflict and conflict resolution in Karanganyar

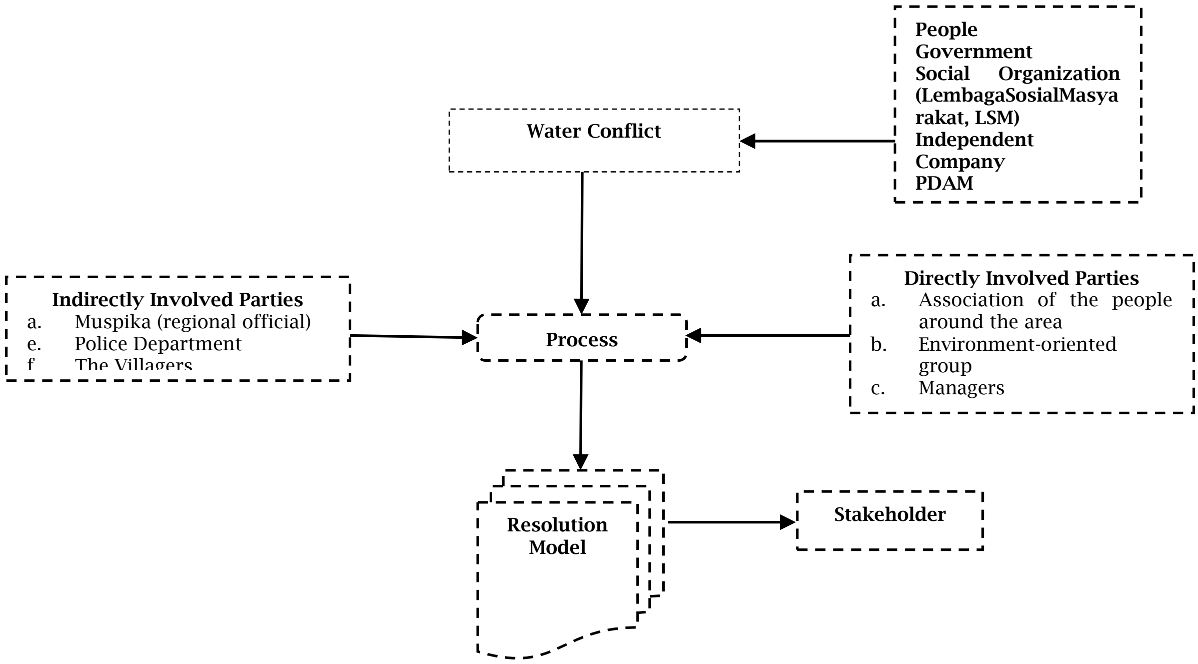
To give a sound resolution related to the management of water resource at Tawangmangu, there are several things need to be done to suppress the conflicts among the people. "Mr. J" stated that the conflict resolution could be done by involving a forum, focusing on the environment, to work together; Giving explanation for the people around the area, on how to properly managing water to preserve the nature as well as the quality of the water; Not mending with the existing regulation because that may trigger another conflict. "Mrs. DA" explained t5hat conflict resolution related to the problem with PemdaKaranganyar could be done by holding a socialization of the entrance fee for the water park at GrojoganSewu, which has been long since becoming the concern of the people around the area. Meanwhile, "Mrs. W and Mr. SS" stated that each leader of the groups shall have coordination with the rest of the member in suppressing the ensuing conflict.

The conflict resolution is hoped to establish a solid schedule for water distribution for each parties. The best model for the conflict resolution is a forum held for every parties involved in the water resource conflict. An agreement must be reach related to the usage of water resource as well as the preservation of the said resource around the water tourism area.

Table 1. Conflict Resolution Model

Problem	*Objective*	*Conflict Resolution Process*		*Result*
		Involve Parties	***Roles of the Party***	
A condition where there is a clash of goals between the parties, ensuing conflict. Marked by a tension in the relation between the parties and/ or the intention of avoiding each other. **Factors of Conflict:** - Individual differences, including differences of opinion and emotion. - Difference of background of the culture causing different personalities. - Difference of individual and group interests. - Changes of value which happens so fast and sudden among the people's daily life. The conflict ensuing at GrojoganSewu : 1. Pemda demands ownership over the water tourism spot, GrojoganSewu 2. The people demand water supply without having to undergone complex procedure. 3. The company managing the tourism spot demands contribution fee for every water used for private and farming needs of the people around the area.	Making a conflict resolution model of management and processing of water resource, involving several parties with interests over the matter, which are: - Pemda (Regional and Central) - Manager (Independent) - Social Organization (LembagaSosialMasyarakat, LSM) - People It is hoped that the resolution method could suppress any ensuing conflict between stakeholders at GrojoganSewu, Karanganyar	1. Directly Involved Parties a. Association of the people around the area b. Environment-oriented group c. Tourism manager 2. Indirectly Involved Parties a. Muspika (regional official) b. Police Department c. The Villagers	1. Directly Involved Parties a. Facilitating the people to conduct a meeting. b. Gathering the villagers and grouping them into members with water distribution to solve the problem together. 2. Indirectly Involved Parties a. Contributing tree buds for reforestation program in the effort to preserve the water supply. b. Warn the environment-oriented group when there is any cheating villager and help in keeping the condition of the forest.	- There is still no clear conflict resolution regarding the ownership of the water park. Whether it is the Regional Government of Karanganyar and Conversational Division of Natural Resource (BalaiKonservasiSumberDayaAlam, BKSDA) under the Ministry of Forestry. Therefore, further discussion needs to be done between the two parties. - Conducting an environment-oriented forum to talk about the best way to preserve the water. - Giving socialization for the villagers regarding the water usage both in preserving the nature as well as the quality of the water. - The group leaders coordinate their members to discuss the solution to keep the conflict to minimum and the representatives of the group shall convey their thoughts to the tourism manager and discuss together the best solution for all parties and from there, a schedule is made to regulate the water usage for each group with interest.

Figure 2. Flowchart. Conflict Resolution Model Good Water Tourism Governance



Notes :

: Data flow and reports

: Reconciliation

4. CONCLUSION

From the result of the interview conducted and the analysis of the information gathered in this research, it can be concluded that:

1. There needs to be a clear explanation for the villagers that the natural resources, in this case, water, needs to be preserved and used moderately. Other than that, planting trees which held water have to be increased. Illegal logging of productive trees needs to be stopped as well.
2. A communication needs to be established between the stakeholders and those using the water resource, for the sake of the villagers' welfare as well as the economic improvement.
3. The government, both the regional government as well as the central government need to make regulation to keep the condition of the nature without ignoring the possibility of conflict ensuing because of water usage by the villagers.
4. Increasing the role of the villagers in managing the water resource so that there will be no prolonged conflict in the future.

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AN INVESTIGATION OF CORPORATE GOVERNANCE FROM A NEW PERSPECTIVE: EXAMINING THE FINANCIAL PERFORMANCE OF COMPANIES AND THE IMPACT OF EXECUTIVE TURNOVER

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Abstract

The aim of this paper is to investigate the mechanisms of corporate governance in companies and to delineate their effect from the perspective of two variables: the financial performance of firms; and an examination of executive turnover. An analysis on theoretical grounds of these two variables is made with respect to non-financial companies specifically in the context of the country of Jordan. Also in the context of this study, a company represents a firm. A sample comprising 109 companies from the non-financial sector for the fiscal year 2011 was selected and analyzed. A cross sectional study tested all hypotheses of the study and used statistical software, SPSS 20, to analyze the data. The study has examined the structure of the board of directors and its effects on the financial performance (financial leverage) of the non-financial Jordanian companies. Evidence suggests that the corporate governance mechanisms such as increasing the board size has a positive effect on reducing the level of financial leverage, thus leading to enhanced levels of financial performance. On the other hand, board independence and the structure of non CEO-duality have no effect on a company's financial performance. In addition, the findings revealed that executive turnover has been found to significantly moderate the relationship between some of the factors and that is the board size and financial leverage. Given the diversity of trends utilized to measure the financial performance of companies in the area of corporate governance and the associated performance relationship, empirical research has continued to undergo new financial performance indicators to prevent manipulation and to obtain a realistic picture of the financial performance of companies. Hence, this is the first study that internationally chooses financial leverage to represent the financial performance of companies in their relationship with corporate governance. Crucially, it is globally the first study to choose executive turnover as a moderating variable on such a relationship. Thus, choosing these two new variables uniquely contributes to the literature of both corporate governance and firm performance from the perspective of developed and developing countries. This is considered to extend and add new insights to prior research in this discipline. The study therefore provides empirical evidence to policy-makers, stakeholders, academia and other interested parties in the Middle East; specifically in Jordan.

Keywords: Corporate Governance, Financial Leverage, Executive Turnover, Jordan

1. INTRODUCTION

Corporate governance is a collection of ideas represented by mechanisms and principles, and if collected and arranged in a convenient and logical manner, it is conducive to the business environment and it will become a system which is precise. Furthermore, when the steps of corporate governance are followed properly the applications will bring positive results which give added value to all interested stakeholder parties and that includes investors, customers, employees and any other parties having a vested interest. Corporate governance is concerned with controlling the performance of a company's executives in such a way that mitigates the conflict of interest between the shareholders and the management. In doing so it is important to ensure the best practices to improve disclosure and transparency and protect all interested parties are introduced and implemented. Internationally, in recent times corporate governance has gained a lot of attention and there has been a considerable growth in the practices of corporate governance in the aftermath of several scandals and worldwide financial crises (Alabdullah, Yahya & Ramayah, 2014; Mitton, 2002). Accordingly, there is a notion that companies worldwide ought to insulate themselves from weak corporate governance by ensuring best practices are adopted. Therefore, there is a view that good corporate governance leads to better performance of a company and those companies will fare better than those with poorer corporate governance practices (Franck & Sundgren, 2012). The existence of corporate governance in a company is to ensure there is separation between ownership and control, and this can lead to problems concerning shareholder-management (Byrnes, Dwyer, Henry & Thornton, 2003). The agency theory highlights the longstanding conflict of interest between the main two parties; the managers and shareholders and gauged to be one of the most controversial issues in the literature concerning management and finance. The structures of corporate governance deal with a number of factors including the composition of the board of directors such as: the number of directors appointed to a board, in other words the board size; and the ability of the board members to act with independence, which is known as the board independence. In addition, the corporate governance mechanisms deal with whether there is separation of the role of the Chief Executive Officer (CEO) and the chairperson of the board. If the structure is such that the Chairperson also undertakes the role of CEO, this is known as CEO-duality. It is acknowledged that a well functioning system of corporate governance can assist a company to raise funds, attract investment and this can all lead to enhanced levels of performance for a company. Furthermore, by adopting best practice corporate governance this can shield a company from being susceptible to future financial distress and crisis. The shareholders in the listed companies are represented by the members of the board. These executives have responsibility for directing the business affairs of a company. Thus, the board of directors can be viewed as a useful tool for shareholders and shareholders can offer an incentive for executives to uphold the interests of shareholders including those who provide finance.

The majority of previous studies have examined the relationship between corporate governance and the performance of firms from two perspectives: firstly, the importance of corporate governance to enhance the performance of a company; and secondly, from the economic viewpoint.

Based on the available literature examining the relationship between corporate governance and the performance of companies, the findings differ. Some of which showed a positive relationship exists, whilst others were positive and negative, finding significant and insignificant relationships exist from the perspective of a number of other mechanisms other than other mechanisms examining the performance of companies. Indeed it may be that a third variable (a moderating variable) has an effect on this relationship, contributing to the other mixed results.

Baron and Kenny (1986), Frazier, Tix and Barron (2004) and Holmbeck (1997) demonstrated that when the relationship between the independent variable and the dependent variable is poor or inconsistent, a moderating variable can be established in such a case to explain when or for what reason an independent variable affects a dependent one, especially when there is a study which empirically explains the existence of a positive effect on the relationship between the independent and dependent variables. This study investigates the role of executive turnover as a moderating variable on the relationship between corporate governance and the performance of a company. In doing so, this study fills an international gap regarding the breadth of examination in the previous studies, through the choice of executive turnover as a moderating variable in the relationship between a company's performance and corporate governance. No previous study has chosen this variable as a moderator to examine such a relationship. The moderating variable of executive turnover, with its potential occurrence, represents an inherent risk faced by executives; in that they may lose their employment, or at the very least their position might be changed. The pressure of turnover of executive managers is a mechanism which can enhance the corporate governance principles and can instill in executive managers an ethos to be flexible and active and as such does not necessarily have a negative connotation. In support of this viewpoint with respect to the importance of CEO turnover, (Lausten, 2002) and (Rachpradit, Tang & Khang, 2012) demonstrated that the probability of turnover that may face CEOs is an encouragement as well as a threat in that it stimulates the CEOs to align their welfare to those of their stockholders. Accordingly, that means the threat of possible CEO turnover ensures the senior executives buildup and maintain the principles and mechanisms of corporate governance to align with the shareholders' and executives' needs and, therefore, the managers' efforts will be tasked towards meeting the needs of shareholders by enhancing the performance of the company. In the same vein, Li, Sun and Ettredge (2010) acknowledged that executive turnover represents an important mechanism impacting on a company's ability to enhance its performance as the executives ultimately have responsibility to promote a company's performance.

A considerable body of literature has been published over the past two decades concerning performance and the literature provides practical evidence (Clarke, Seng & Whiting, 2011; García-Ramos & García-Olalla, 2011). What stands out in the literature regarding performance and its relationship with corporate governance system is the diversity of viewpoints leading to different findings obtained from this relationship. Some of literature in other countries supports the belief that corporate governance is vital, positive and significant in its relationship with a company's performance.

Based on the previous studies in the literature that have dealt with the link between corporate governance and the performance of companies, an obvious importance is revealed about the effect of corporate governance mechanisms on performance. Nevertheless, even with the highlighted importance related to the performance of companies linked to the effectiveness of the application of corporate governance mechanisms (Dwivedi & Jain, 2005), yet there is a real need to examine the indicators of performance of a company from a new viewpoint. Therefore, researches and scholars ought to focus on the important facet of the measurement of a company's financial performance. In addition, this matter lies in giving serious attention to the issue of the existence or non-existence of income smoothing in net income whereby the amount of the net income could be smoothed by managers and might lead to deceptive results. This matter is so important and critical because several studies in the literature are based on financial measurements like Tobin's Q, ROE, and ROA in measuring the financial performance of companies (Amran & Che-Ahmad, 2009; Mashayekhi & Bazaz, 2008) and this might lead to the probability of such measurements to be included with income smoothing. This then could lead to an unrealistic image of performance. Accurately measuring the performance of companies has become such an important research topic by the researchers and scholars due to its recognized positive effect on reducing unemployment levels and helping to alleviate social and economic problems (Cooke, 2001).

With respect to Jordan's economy, there are a number of economic problems. A significant problem is that Jordan's economy has been declining for the last few years as confirmed by World Economic Forum (2008-2012) due to the lack of performance of the non-financial sector as substantiated by the report issued by the Amman Stock Exchange (ASE) for the period (2005-2009) and Al-Qaisi (2013). Moreover, the economic problem in Jordan is that the Jordanian economy has suffered from a high unemployment rate because currently Jordan has received a huge number of migrants (Al-Shatti, 2014). Furthermore, as claimed by Rajoub (2013), Jordan is suffering from several business problems. Firstly, disclosure is not extensively used in Jordanian companies thus Jordanian companies lack information disclosure and transparency and this lack of transparency and disclosure, which are important facets of the practices of corporate governance, impacts negatively on the performance of companies. Secondly, there is a high risk and volatile returns in the firms listed at Amman Stock Exchange (ASE). Thirdly, there is a huge amount of speculation in the Jordanian context, whereby speculators control the market for the interest of big shareholders. Fourthly, the Jordanian businesses are not as mature in comparison to businesses in the developed countries and this lack of maturity indicates that the corporate governance system in the companies in Jordan are weak and yet to be strengthened by adopting best practices of corporate governance.

A further shortcoming in most of previous studies in the literature is due to the use of conventional methods to measure financial performance such as ROE, ROA, etc., whereas the modern trends test and focus on utilizing other measurements. Marr and Schiuma (2003) claimed that in spite of the extensive contemporary trends towards measurement of a company's performance that have been undertaken by several studies in the literature which used many new approaches for the measurement of a company's performance, the field of performance of companies still needs more contributions and deliberations to overcome and recover the lack and weakness in the performance measurements. Hence, here is another problem represented by a scarcity and therefore a lack of the empirical evidence in the previous studies in the literature concerning the provision and utilization of a new measurement to examine the performance of companies.

To address the practical and theoretical issues the current study intends to utilize new measurements to examine the financial performance of companies. For the dependent variable of the present study, financial leverage is utilized to represent the financial performance of the non-financial companies in Jordan. Moreover, the current study introduces a moderating variable of executive turnover in the relationship between the corporate governance mechanisms and a company's financial performance. In addition, the present study investigated financial leverage as a measurement to avoid confusion, to avoid the problem of being misled which might result from the practices of income smoothing. Because of that, the net income might be smoothed which ultimately may affect the performance measurements. Thus, the current study depended on financial leverage measurement which computes, as demonstrated by Lang, Stulz, and Walkling (1991) and Welch (2011), as the total debts to the owners' equity (capital). In line with them, Al-Sakran (2001) concurred with this view.

The theoretical problem in the present study lies in the existence of a global gap in both developing and developed economies resulting from the multiplicities in the findings of previous studies in the literature that analyzed the relationship between corporate governance and the performance of companies, whereby all countries applied the same corporate governance system within their economic environment. Thus, the present study intends to fill this universal gap through investigating the role of executive turnover as a moderating variable on such a relationship and test uniquely from novel perspective a new measurement to represent the financial performance of a company.

In all contexts including Jordan, no previous study has explored the link between the corporate governance mechanisms of ownership structure and board of directors and from the perspective of a company's performance to ensure manipulation of the measurements is avoided Therefore, the present study tries to address this gap through investigating the relationship between corporate governance and the performance of Jordanian companies in the non-financial sector. In addition, the current study aims to investigate executive turnover as a moderating variable in the relationship between corporate governance and the performance of a company. Note that, executive turnover is the instrument which may enhance both corporate governance and the performance of a company; in that executive turnover will most likely necessitate the board of directors to ensure compliance and implementation of good corporate governance practices in order to enhance a company's performance. In view of that, the present study presents the following two questions:

1. What is the relationship between the corporate governance mechanisms and the financial performance of Jordanian companies in the industrial and service sector (non-financial sector)?

2. Does executive turnover moderate the relationship between the corporate governance mechanisms and a company's financial performance?

Based on above the discussion, the present study systematically investigates the relationship between the mechanisms of corporate governance and the financial performance of companies in light of executive turnover as a moderating variable in the Jordanian non-financial listed companies at Amman Stock Exchange (ASE).

This study is structured so that following the introduction some related studies in the literature are presented in Section 2. Next the theoretical framework and hypotheses development are reviewed in Section 3. Section 4 shows the methodology that includes the sample and data source utilized in the study. Section 5 reports the results and provides a discussion. Section 6 outlines the implications of the study and finally Section 7 provides the concluding comments.

2. LITERATURE REVIEW

Corporate governance is tool which can be used to find a solution to the problems arising from conflict between the shareholders and management. The shareholders, as providers, seek ways in which to ensure the agent (management) handles their investment to achieve their interest.

Several studies in the literature (see, for example, Firth, Fung & Rui, 2006; Weir, Laing & McKnight, 2002) claimed that the mechanisms of corporate governance can be divided into internal and external mechanisms. They clarify that the two vital internal mechanisms for corporate governance: the structure of the board of directors; and the ownership structure. They revealed that the external mechanism is a company's market control. In developing countries, market control can be extremely weak and due to this weakness, the internal mechanisms have a key role in corporate governance in these countries (Al-Hawary, 2011; Lei & Song, 2004). In addition to the important elements of the board's attributes, the structure of ownership is supposed to have an impact on the decision-making process of the management-level and consequently on the performance of a company. Several researchers confirm such an issue (Demsetz & Villalonga, 2001; Kapopoulos & Lazaretou, 2007). They claimed that the ownership structure in a company is a main determinant which alleviates the agency problems taking place between the management-level and shareholders. Thus, the internal mechanisms of corporate governance under examination for this study are represented by board of directors' characteristics and the ownership structure.

3. A FIRM'S PERFORMANCE

From agency theory perspective, the performance of a firm in the accounting/management literature has been analyzed as a core dependent variable and a vital goal that should be enhanced and achieved (Haniffa & Hudaib, 2006). As mentioned previously, in the context of this study a company represents a firm. Therefore, the main target of the performance of a company is to improve the efficiency and effectiveness of the company for it to reach its objectives and for survival in the long term (Alabdullah *et al.,* 2014).

The majority of studies in the literature that have examined performance of firms have been published over the past few decades. It has extensively become a very important issue by scholars and academics due to its positive impact to solve social problems by reducing unemployment levels and by enhancing the economy (Cooke, 2001). Hence, there have been a number of intensive studies in the literature in developed countries that investigated the performance of firms (Clarke *et al.*, 2011). Nevertheless, there has been little awareness and attention given in relation to the performance of companies in developing countries and Jordan is no exception (Al-Hawary, 2011).

Furthermore, as admitted by Marr and Schiuma (2003), in spite of the extensive developments in the literature regarding the testing of the measurement of performance of firms several researchers and scholars have used many new methods to measure the performance of firms, yet this field needs further deliberations and contributions to overcome the lack of such measurements. Therefore, the current study internationally contributes to the field of performance of firms through utilizing financial leverage as a measurement to reflect a company's financial performance.

Financial leverage has been chosen in a wave of previous literature as one of the components of capital structure and risk (See Amidu, 2007; Artikis, Eriotis, Vasiliou & Ventoura-Neokosmidi, 2007; de Wet, 2006; Hull, Stretcher & Johnson, 2011; Ooi, 1999). In addition, another wave investigated financial leverage as an important indicator to represent capital structure in the area of corporate governance (Bokpin, 2011; Fauzi & Locke, 2012; Majumdar & Chhibber, 1999; Suto, 2003). However, based on the literature, in top journals of economics and corporate finance, financial leverage is considered as an important issue in relation to performance evaluation; in that financial leverage is seen as one of the important indicators to evaluate performance. More explicitly, financial leverage has been widely recognized and supported by the literature as a choice for representing performance. For example, Griffin and Mahon (1997) utilized financial leverage as one of the variables used to measure financial performance. In the same vein, Fang *et al.* (2009) used three measurements for measuring firm performance: Tobin's Q; OIOA; and financial leverage. Wen, Rwegasira and Bilderbeek (2002) claimed that financial leverage is a tool utilized by managers to reflect a good performance of a firm. They found that in the instance of lower rates of financial leverage, it is understood that performance would be enhanced. In the same vein, another wave of previous literature considered financial leverage as one of financial performance indicators in different areas: corporate governance (Alqisie, 2014; Samad, 2004); performance evaluation (Ertuğrul & Karakaşoğlu, 2009; Oded, Michel & Feinstein, 2011); business performance (Chow-Chua *et al.*, 2003; Monea, 2009); and the value of a firm (Fang, Noe & Tice, 2009). All such literature accepts this variable as a measurement of a company's financial performance.

Besides the contribution of the current study in selecting financial leverage as a financial measurement, this study moreover adds another contribution for utilizing a suitable measurement for examining financial leverage. The majority of studies in the literature (e.g., Alkhatib & Marji, 2012; Bhagat & Bolton, 2008) calculated it as total debts to total assets, also this measurement might include income smoothing. However, the present study utilizes financial leverage in another way. In more detail, the present study will be based on measuring and calculating the financial leverage in a way that is vastly different from that used by previous studies in the literature. Most of studies examining financial leverage relied on total debts (liabilities) divided by total assets. Although this method has widespread acceptance in relation to the calculation of financial leverage, yet it may not show the realistic picture of a company's performance because this method includes income smoothing; a practice used by management teams in companies.

Hence, the method of measurement utilized by the majority of studies in the literature is subject to the behavior of income smoothing and importantly the present study focuses on the necessity and importance of calculating financial leverage by using a method of measurement away from the possibility of the behavior of income smoothing in order to eliminate misleading measurements. Thus, the present study is based on measuring the financial performance (financial leverage) of the non-financial companies by the total debts to the owners' equity; bearing in mind, this equation has been utilized by a few of studies (Ertuğrul & Karakaşoğlu, 2009; Lang *et al.*, 1991). It can be noted that the present study relies on this equation in order to avoid the behavior of income smoothing, if any is in existence. Moreover, this equation utilized by the current study also included short-term debts to be repaid in the same year; as well as long-term debts owed by companies over several years for the coming period and this in turn is an indicator of a company's performance (Ertuğrul & Karakaşoğlu, 2009). Thus, it also focuses on the investment amount in the long-term loans to buy assets that reveal the capability of a company through these assets to generate profits over several years.

4. EXECUTIVE TURNOVER AS A MODERATOR

There are extensive studies in the literature examining corporate governance and the performance of firms (e.g., Heracleous, 2001; Yermack, 1996), for which corporate governance is used as an independent variable and the performance of a company as a dependent variable. However, no previous study has investigated nor chosen the role of executive turnover as a moderating variable in the relationship between corporate governance and the performance of a company.

The current study has two main justifications. The first rationale is related to the reason why the current study has selected a moderating variable, while the second justification shows why executive turnover is suitable to be chosen as the moderating variable in the relationship between corporate governance and the performance of a company.

In examining the first mentioned justification in choosing a moderating variable, as claimed by Baron and Kenny (1986), when the relationship between an independent variable and dependent variable is poor or inconsistent, the moderating variable can be established in such a case to strengthen or weaken such a relationship and to explain when or for what reason an independent variable affects a dependent one.

The second mentioned justification to explain why executive turnover is suitable to be a moderating variable is that one of the important objectives of the system of corporate governance is to deal with the problems and conflicts arising between the executives and shareholders which can lead to lower levels of performance of a company (Morellec, Nikolov, & Schürhoff, 2012). Moreover, due to the fact that studies have indicated that executives are the reason for agency problems and conflict with the shareholders, by focusing on this issue a better understanding can be made of the ways in which to alleviate such problems. Thus, the current research has selected executive turnover as a moderating variable in the relationship between the performance of a company and the mechanisms of corporate governance.

The third reason lies in the belief that when the CEO (the general manager) resorts to the decision to go down the path of executive turnover (about hiring, replacing, and changing the executives), the CEO is in doing so using a tool of pressure on the board of directors to implement to act to hire and or replace executives. This procedure, made by the board of directors on behalf of the shareholders, is characterized by efficiency, control and by monitoring the actions of executives. It is worth mentioning that the existence and survival of executives in a company in the long-term might well create a risk, whereby these executives through the creation of relationships with the members of the board of directors may well dominate and so they may have the power to impose their decisions on the company. In doing so, the power and ability of the board of directors to monitor and control them may well be less than ideal, affecting negatively on the performance of companies and creating agency problems. Furthermore, executive turnover is acknowledged to lessen the likelihood of the executives' ability to manipulate the board of directors This current research's notion strongly asserts, further to the claims of Baysinger and Butler (1985) and Westphal and Zajac (1995), that the board of directors with their power to hire, fire and replace the executive could be a significant solution for the agency problems.

The fourth reason is related to the third one; in that the decision of turnover is promoted by best practice corporate governance principles and processes. Specifically, the moderating variable of executive turnover will be the instrument of pressure imposed by the general manager (CEO) on the board of directors to implement the decision of turnover. This will establish that with best practice corporate governance an efficient board ought to be able to use a precise corporate governance system to assist in enhancing the shareholders' wealth, and to improve the performance of companies.

Finally, the notion of the possible occurrence of executive turnover represents an inherent risk in the minds of executives; in that they may lose their work, or that their position might be changed. As mentioned previously, the pressure of turnover of executive managers is a mechanism which can enhance the principles of corporate governance and can instill in executive managers an ethos to be flexible and active and so does not necessarily be seen to have a negative connotation. Previous studies (Lausten, 2002; Rachpradit *et al.*, 2012) have demonstrated that executive turnover has an important and significant role in relation to shareholders' wealth and the performance of firms. The rationale is that the possibility of turnover might be met by executives as an encouragement and or as a threat that stimulates them to act to align their welfare to the needs of the stakeholders including shareholders. Accordingly, the mechanism of executive turnover can strengthen the principles and mechanisms of corporate governance to benefit the shareholders and executives as the managers' efforts will be directed towards meeting the needs of stakeholders including shareholders and this then might lead to better performance of companies.

It is worth mentioning that the agency theory, as argued by Jensen and Meckling (1976), deals with the inherent problem of the separation of ownership and management. It asserts the necessity to align the wealth of shareholders with management. Hence, the performance of a company depends on the precision of such a relationship that combines these two parties. Accordingly, choosing executive turnover as a moderator is compatible with the principles established by the agency theory.

5. HYPOTHESES DEVELOPMENT

The independent variables in the present study are represented by the corporate governance mechanisms (CGM) as in its board size (BOS), board independence (IND), and CEO-duality. The dependent variable is a firm's financial performance (FFP) represented by financial leverage (FLV). The hypotheses of this study were developed in the direct relationship between CGM represented by BOS, IND, CEO-duality, and a firm's performance. In addition, the hypotheses were also developed based on a moderating effect namely executive turnover (EXE) for the fiscal year 2011. The current study selected 2011 because, as shown in World Development Indicators (2014), the 2011 year is considered as the intersection point between decline and recovery. Figures 1, 2, and 3 below illustrate this point in the Jordanian context.

Figure 1. Unemployment in Jordan

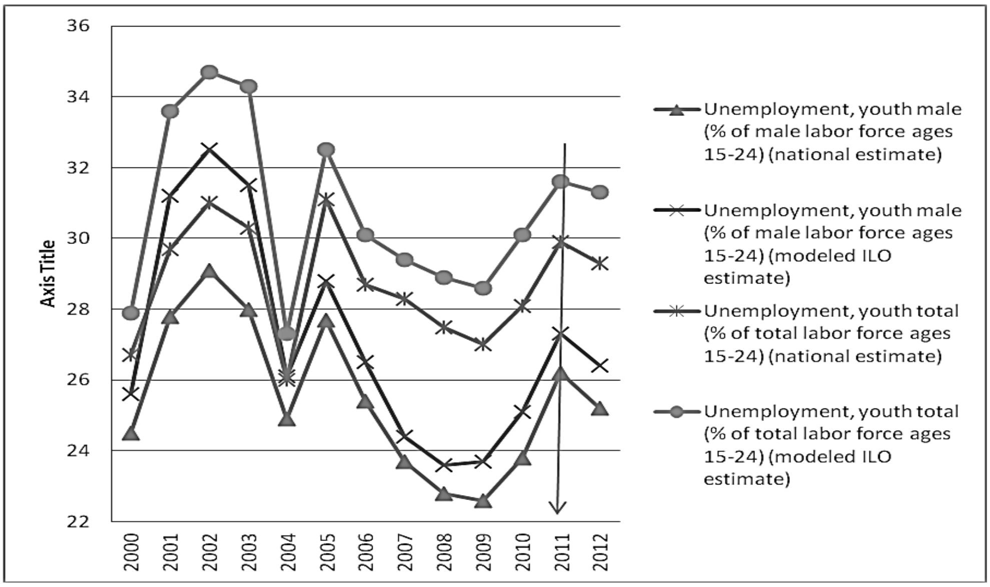


Figure 2. Gross Domestic Product Growth (annual percentage) in Jordan

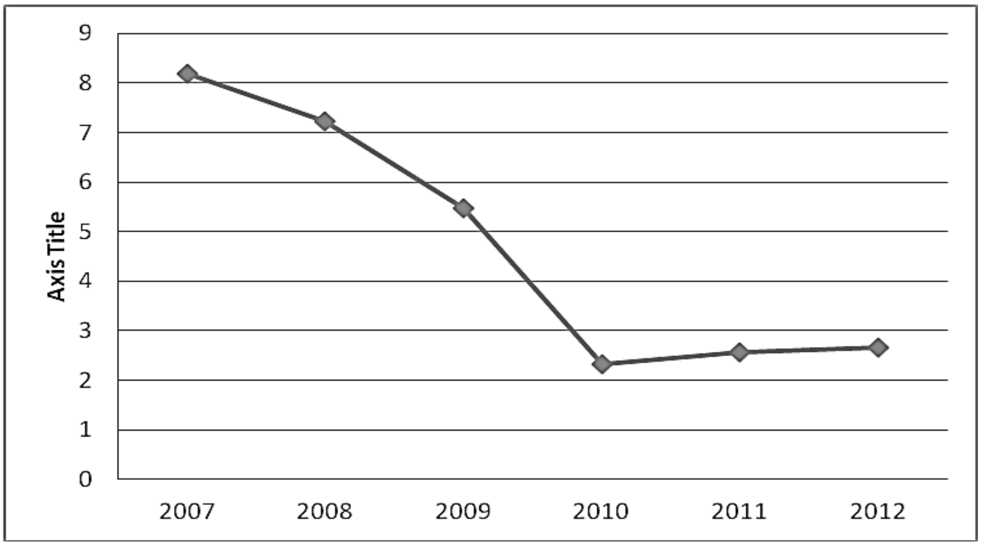
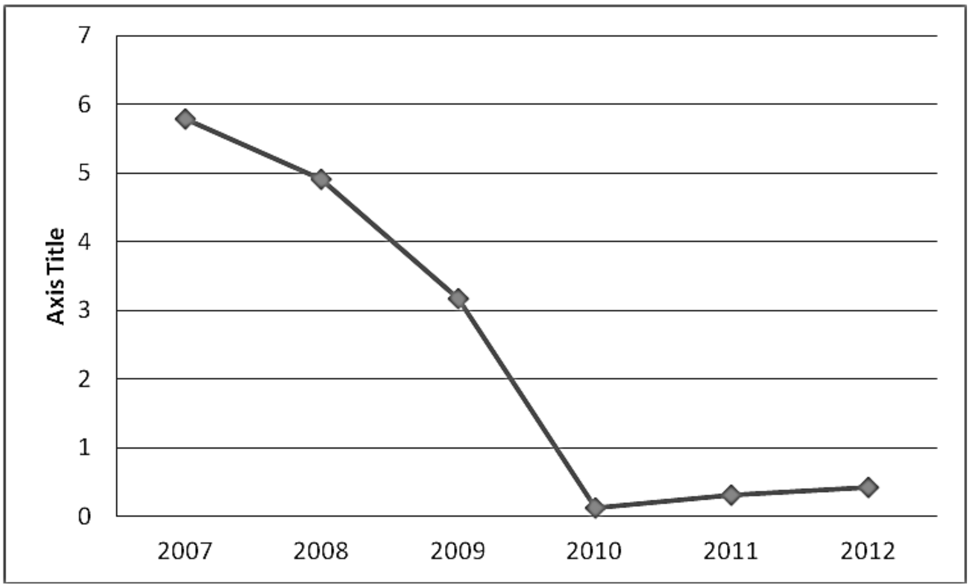


Figure 3. Gross Domestic Product per Capita Growth (annual percentage)



Based on what was is presented above, the Jordanian government, and ASE in particular, ought to consider finding solutions to deal with the problems faced by the non-financial sector in Jordan for an economic recovery for Jordan. Globally, corporate governance is considered as a good control system that is used at both the local and international level as an effective remedy to deal with poor performance in a company and to enhance a company's value. Thus, through the reliance on a corporate governance system, an improvement in the declining Jordanian non-financial sector can be achieved as a key to find a lasting solution to enable economic growth of Jordan's economy in the long-term. Therefore, the present research is considered as a response to a call for new research that aims to examine the relationship between the mechanisms of corporate governance and the performance of companies in Jordan's non-financial sector.

As mentioned previously, for this study corporate governance (CG) is represented by the board size (BOS), board independence (IND), and CEO-duality. These three mechanisms have been chosen in the current study for certain reasons. Firstly, such mechanisms are internal mechanisms and they are suitable for selection and testing in the Jordanian context as Jordan is one of the emerging economies and in such economies the external corporate governance as represented by market control is found to be weak as mentioned above. Secondly, in the previous studies undertaken in the Jordanian context, there is a recommendation from the researchers to test other mechanisms other than the previous focus on ownership concentration, CEO compensation, and board of director's meetings (Alqisie, 2014; Makhlouf, Laili, & Basah, 2014).

6. THE SIZE OF A BOARD AND A FIRM'S PERFORMANCE

A substantial body of work in the area of financial and organizational economics literature contends that the size of the board is an important and influential factor impacting on the performance of a firm and its success (Pfeffer, 1972). It is viewed as one of the effective mechanisms of corporate governance that oversees a firm's business operations and reduces the agency costs and plays an important role in a firm's performance (Shleifer & Vishny, 1997; Yermack, 1996). However, there is a diversity of findings in the previous studies concerning the effect of the size of the board of directors on the performance of a company. Some studies claimed that by increasing the number of directors appointed the board, the more effective the company is with better levels of performance (Jackling & Johl, 2009). Such studies found that a board of directors has a significant role in monitoring and controlling the company and consequently enhancing a firm's performance. On the other hand, as admitted by Yermack (1996), there is a positive relationship between the traditional governance variables, like a small board size and a firm's value. Notwithstanding the two points of view above, some of the previous studies argued that the board size has no effect on the performance of a firm. For example, Topak (2011) demonstrated there is no relationship between the size of a board and a firm's performance.

In the current study, financial leverage is the proxy for a firm's financial performance (FFP). Financial leverage (FLV) has been chosen in a previous wave of literature as one of the essential components or proxies for capital structure (Hull, Stretcher & Johnson, 2011). In addition, another wave of studies examined financial leverage as an important indicator to represent capital structure in its relationship with the mechanisms of corporate governance. Importantly, to the best knowledge of the researchers, there is no previous study that has investigated corporate governance and the financial performance of companies by using financial leverage as a proxy of financial performance. For example, some of previous studies' results in developed countries, (Berger, Ofek, & Yermack, 1997), others in developing countries and more recently in Jordanian context, a study undertaken by Alqisie (2014) found that there is a negative relationship between the board size and financial leverage. Thus, in order to predict a hypothesis between the size of the board and financial leverage (FLV), this study predicts that increasing the number of directors appointed to the board, in other words increasing the size of the board, ought to be associated with increased performance of a firm. Furthermore, a negative relationship with financial leverage will be demonstrated and eventually a positive relationship with a firm's financial performance will be found to exist. From the discussion above, the following hypothesis is made:

H1 There is a negative relationship between the board size (BOS) and a firm's financial leverage (FLV).

7. BOARD INDEPENDENCY AND A FIRM'S PERFORMANCE

It has been argued in the literature that the existence of non-executive directors appointed to the board has a positive effect in alleviating and reducing agency costs. Several previous studies have analyzed the relationship between the independence of a board and corporate performance (Chaghadari, 2011) and the results were inconsistent. A board of directors with a number of outsiders (non-executive independent board members) creates an environment to enable active monitoring by the board and can lead to enhancing a firm's performance (Mashayekhi & Bazaz, 2008). On the other hand, Yermack (1996), for instance, claimed that a high proportion of independent board directors has a negative effect on a firm's performance. More specifically, in the Jordanian context, a study undertaken by Al-Hawary (2011) found that the non-executive directors (independent board directors) had a statistically significant and positive effect on a firm's performance. Based on this viewpoint, the following hypothesis has been developed:

H2 There is a negative relationship between the independent board directors (IND) and a firm's financial leverage (FLV).

8. CEO-DUALITY AND A FIRM'S PERFORMANCE

The role of duality could contribute to a lack of transparency and accountability within a company. The duality of the role of CEO and chairman, as stated by Baliga, Moyer and Rao (1996), has little and very weak evidence related to its effect on the performance of a firm. Nonetheless, when the power and control is devolved to one person it is possible it can lead to the decisions made by them to impact negatively on the shareholders. Thus, CEO-duality can have a negative effect on a firm's performance (Chaghadari, 2011). Dalton, Daily, Ellstrand and Johnson (1998) contended that the agency theory puts forward the viewpoint of a preference of the separation between the CEO and the board chairman position because duality increases the entrenchment of the CEO and consequently reduces monitoring effectiveness of the board of directors. Furthermore, the presence of duality in leadership could even contribute to the lack of transparency and accountability within the company. Baliga *et al.* (1996) argued that the duality of role of CEO and chairman of the board of directors has a negative effect on the performance of a firm. Therefore, it is hypothesized that:

H3 There is a negative relationship between the companies that do not have CEO-duality and financial leverage (FLV).

9. THE MODERATING EFFECT OF EXECUTIVE TURNOVER ON THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE MECHANISMS AND THE PERFORMANCE OF FIRMS

The decision to go down the path of executive turnover is via an instrument of pressure that is predicted by the present study to have a positive impact on the performance of companies as the probability of turnover presents an encouragement as well as a threat to executives and stimulates them to align their welfare to the needs of the stakeholders including the shareholders. The philosophy and interpretation behind the choice of executive turnover as a moderating variable in the relationship between corporate governance and the performance of companies is that the general manager, the CEO, has the right to make the decisions to hire, fire, and replacement any of the firm's executives. In that sense, the role of the board of directors is to follow the instruction made by the CEO for the decision to implement executive turnover. Thus, such a decision is most likely as a consequence of an instrument of pressure exerted on the board of directors to align the interests of the executives with the shareholders which consequently can lead to an enhancement of the performance of a company. Therefore, the present study predicts that higher levels of scrutiny of corporate governance will lead to higher levels of a firm's financial and non-financial performance when there is the presence of executive turnover. Accordingly, the following three hypotheses are made:

H4 A negative relationship between the size of the board (BOS) and financial leverage (FLV) is stronger when executive turnover (EXE) exists.

H5 A negative relationship between the independence of a board (IND) and financial leverage (FLV) is stronger when executive turnover (EXE) exists.

H6 A negative relationship exists between the companies that do not have CEO-duality and financial leverage (FLV) is stronger when executive turnover (EXE) exists.

10. METHODOLOGY

Based on the objectives of this study provided in the introduction and the arguments presented in the literature, the following estimating model is presented:

$$FLV = \alpha_0 + \alpha_1 BOS + \alpha_2 IND + \alpha_3 CEOduality + \alpha_4 M1 + \alpha_4 M2 + \alpha_4 M3 + \varepsilon \quad (1)$$

Where FLV denotes the financial leverage of Jordanian companies, BOS is board size, IND stands for the independency of the board, and M1, M2 and M3 represents the interaction of BOS, IND and CEO-duality with executive turnover respectively.

The sample for the present study was derived from the non-financial companies listed in the ASE in

Jordan as a cross-sectional study through the collection of real data (primary data) from the annual reports for the fiscal year 2011.

For this study, the accounting data and other useful data for the dependent, independent and moderating variable was collected and analyzed to support the current study to achieve its goal. The present study measured the dependent variable of a firm's financial performance through financial leverage. The mechanisms of corporate governance namely the board size (BOS), the board independence (IND) and CEO-duality have been identified as the independent variables and the dependent one is financial leverage (FLV). In addition, executive turnover (EXE) is the moderating variable. Table 1 demonstrates the summary of the measurement of the variables measurement.

Table 1. Summary of the Measurement of the Variables

Number	*Variables*	*Acronym*	*Measurement*
	Dependent Variable		
1	Financial Leverage (as a percentage)	FLV	Financial leverage is measured as the total debt divided by the capital.
	Independent Variables		
2	Board Size (number)	BOS	The number of directors appointed to the board.
3	Independent board (as a percentage)	IND	Outside director equates to the number of outside directors appointed to the board.
4	CEO-Duality (as a number)	CEO-Duality	Whether or not the chairman is also the CEO during the year, where it will take the value of "1" if the CEO is also the chairman of the board, and "0" otherwise.
	Moderating Variable		
5	Executive Turnover (as a number)	EXE	The measurement of the executive turnover variable will be equal to "1" when there is a change in executives in the current year, "0" if otherwise.

The moderating variable of this study is the mechanism of executive turnover (EXE) which is measured by the available data in the annual report of the Jordanian non-financial listed companies for the year 2011. Executive turnover refers to the changes confronted by senior management team within the year in relation to all of the companies (Chi & Wang, 2009). Further, as argued by Denis, Denis and Sarin (1997), executive turnover might be considered as either mandatory or voluntary. Nonetheless, the current study will take into account both types of executive turnover because as mentioned by Chi and Wang (2009) what appears as voluntary turnover may be in fact involuntary, in that when hints are given from the board of directors, executives may choose to resign to avoid embarrassment. In fact, there will be no distinction made between these two types due to the difficulty of sorting and delineating any difference between the two types, in accordance with Chi and Wang (2009).

11. RESULTS AND DISCUSSION

11.1 Descriptive analysis

This section provides the descriptive analysis of the research variables; the dependent, independent and moderating variables for the 109 non-financial companies listed at the ASE through using descriptive statistics (mean, standard deviation, minimum and maximum) as shown in Table 2.

Table 2. Descriptive Statistics of all Variables

Variables	*Mean*	*Standard Deviation*	*Minimum*	*Maximum*
FLV	0.717	0.333	0.300	1.950
BOS	8.810	3.204	3.000	15.000
IND	0.394,	0.375	0.000	1.000

Based on the results of the descriptive statistics, the dependent variable of financial performance showed that the level of financial leverage of Jordanian non-financial companies equated to 71.77 percent representing the average of the companies' total debts to capital with a standard deviation of 0.333. Furthermore, the minimum and maximum reported level of financial leverage was 30 percent and 195 percent, respectively. For the independent variables of the board size (BOS) and the independence of the board (IND), the descriptive analysis for the corporate governance mechanisms (CGM) shows that the average of size of the board of directors for the entire sample is approximately nine members (mean = 8.81) with a standard deviation of 3.204. For the board independency of the companies in the sample, the result reveals that the mean is 39.4 percent with a standard deviation of 0.375. With respect to the dummy variables of CEO-duality and executive turnover, the results are provided in Table 3.

The analysis indicates for the dummy variables of CEO-duality and executive turnover (EXE), the CEO-duality in the non-financial companies in Jordan was 17.4 percent representing 19 companies, while 82.6 percent of the companies did not have duality (non-duality) signifying 90 companies, respectively as shown in Table 3. The descriptive statistics showed that majority of the non-financial companies in Jordan do not have CEO-duality. In relation to executive turnover (EXE), Table 4 shows that in the non-financial companies in Jordan was 61.5 percent signifying that 67 companies embraced executive turnover (EXE), while 38.5 percent for the companies did not as represented by 42 companies, respectively. Accordingly, the descriptive statistic indicated that majority of the non-financial companies in Jordan experience executive turnover (EXE).

Table 3. Statistics of CEO-Duality

	Frequency	*Percentage*	*Valid Percentage*
CEO-Duality	19	17.4	17.4
Non-Duality	90	82.6	82.6

Table 4. Statistics of Executive Turnover

	Frequency	*Percentage*	*Valid Percentage*
Executive Turnover (EXE)	67	61.5	61.5
Non-Executive Turnover	42	38.5	38.5

11.2 Correlation analysis

The correlation between the dependent and independent variables is illustrated in Table 5. The results indicated that two of the three independent variables have a negative relationship with financial leverage (FLV), with values for board size (BOS) at - 0.449, and independence of the board (IND) at - 0.076. On the other hand, the independent variable of CEO-duality was found to have a positive relationship with financial leverage, with a value of 0.143. The results demonstrated that the size of the board has a highly negative relationship with financial leverage with a value of - 0.449. Furthermore, this study analyzed the multicollinearity level between the independent variables which, in accordance with Hair (2010), needs to be less than 80 percent for multicollinearity not to be present.

Table 5. Correlations between Variables

	BOS	*IND*	*CEO-Duality*	*Financial Leverage (FLV)*	*EXE*
BOS	1				
IND	0.195*	1			
CEO-Duality	- 0.109	- 0.093	1		
FLV	- 0.449**	- 0.076	0.143	1	
EXE	0.313**	0.184	- 0.232*	0.136	1

*Level of significance *p < 0.10, **p < 0.05*

11.3 Multiple Linear Regression Analysis

For the present study, linear regression analysis was utilized for testing the hypotheses of the study. There are 6 hypotheses in the current study as mentioned above. Three are related to the direct effect of the corporate governance mechanisms (CGM) on financial leverage (FLV) of a firm's performance. On the other hand, the last three of the hypotheses are associated to the moderating effect of executive turnover (EXE) on the relationship between the independent variable of corporate governance mechanisms (CGM) and a firm's performance.

11.3.1 Regression Results of the Direct Relationship between CGM and FLV

To test hypotheses (H1, H2, and H3) that postulated a negative relationship exists between CGM (BOS, IND, CEO-duality) and financial leverage (FLV), the assumptions of linear regression were proved and the results are shown in Table 6.

The results showed that variance inflation factor (VIF) is less than 10 and tolerance values for the variables are more than 0.1. This means the model contains no multicollinearity as suggested by Dias, Petrini, Ferraz, Eler, Bueno, da Costa & Mourão, (2011). Moreover, the standard kurtosis is within ±3 and standard skewness ±1.96. As demonstrated by Brooks, (2014), the normality of data could be achieved if standard kurtosis is within ±3 and standard skewness ±1.96.

Table 6. Testing the Assumptions of Linear Regression for the Direct Relationships

Variables	*Tolerance Value*	*VIF*	*Kurtosis*	*Skewness*
Board Size	0.954	1.049	- 0.898	0.142
Board Independency	0.957	1.045	- 1.409	0.434
CEO-Duality	0.983	1.018	1.050	1.741

Furthermore, in Table 7, the results of regression analysis show that R square value is 0.211 for financial leverage (FLV). This means that R square value explains 21 percent of the independent variables: board size (BOS); independence of the board (IND) and CEO-duality on the dependent one of financial leverage (FLV).

Table 7. R Square of Financial Leverage

Model	*Financial Leverage (FLV)*
R Square	0.211
Sig. F Change	0.000

The autocorrelation was examined to check the normality of data by using the Durbin Watson (DW) test. In this regard, the Durbin Watson value of 1.515 is a good and acceptable value since it falls between the range of 1.5 and 2.5 as suggested by Knoke (2003). Accordingly, the results revealed there is no autocorrelation problem in the data.

In the current study, the first objective was to investigate the relationship between the corporate governance mechanisms of the board size (BOS), board independence (IND), and CEO-duality and financial leverage (FLV) in industrial and service companies listed at the ASE. The results of the analysis show a significant negative relationship between the board size (BOS) and financial leverage (FLV) with the following equation ($\beta = -.442$, $p < 0.01$.). This is consistent with the hypothesis proposed in the current study, which implies that companies with a larger board size have lower levels of financial leverage, and vice versa. In other words, the result indicates that there is a significant positive relationship between a larger board size and a firm's financial performance (FFP). This means the larger the number of directors appointed to a board; the higher is the financial performance of the Jordanian non-financial companies and vice versa. This result reveals that a board of directors in numbers used robust practices of corporate governance which indicates the managers have less tendency to employ financial leverage, thus the financial performance of these companies is higher. Accordingly, from the observations of the current study a negative association was found to exist between the board size and financial leverage and this result was consistent with the findings of the study of Berger *et al.* (1997). More specifically in the Jordanian context, a study undertaken by Alqisie (2014) revealed evidence that illustrates the presence of a negative relationship between the board size and financial leverage for the Jordanian companies listed at the ASE.

The second corporate governance mechanism tested in this study was the independency of the members of board. The result shows that there is an insignificant relationship between the independence of the board and financial leverage with the following equation ($\beta = .019$, $p > 0.1$). However, these results are not in line with the proposed hypothesis of the study in that there is a negative relationship between board independency and financial leverage. One probable reason for this result is that it is expected that the independent board members will bring a diversity of expertise and skills to the board. However, in the Jordanian listed companies in the non-financial sector, as mentioned by Vo and Nguyen (2014), it appears the outside (independent non-executive) directors have suffered from a lack of the skills and expertise, rendering their effect on the firm's financial leverage as nil. This result is in line with some empirical studies (Chaghadari, 2011; Mehran, 1995; Yermack, 1996) that found that board independence is not considered to be a significant factor that affects the level of a firm's performance.

The third mechanism used in the current study is the independent variable of CEO-duality. Recently the importance of separating the position of the CEO from the board chairman has come into consideration as an important role in alleviating agency costs (Booth, Cornett & Tehranian, 2002). This mechanism is seen as one of the useful mechanisms in alleviating agency problems within a company (Dalton *et al.*, 1998). CEO-duality is a mechanism that influences the overall performance of a company. The current study tested this mechanism and the results showed that the relationship between CEO-duality and a firm's financial performance (FFP) is insignificant ($\beta = .005$, $p > .1$). Hence, this result does not confirm the hypothesis of the current study that there is a negative relationship between companies that do not have CEO-duality and a company's financial performance. This reveals that this is not an important mechanism that can significantly affect the financial performance of firms in Jordanian non-financial companies. This result is consistent with Alqisie (2014) via a sample of Jordanian industrial companies listed on the ASE.

11.3.2 The Moderating Effect of Executive Turnover on the Relationship between CGM and FLV

Apart from a direct examination of the relationship between the mechanisms of corporate governance and a firm's financial performance, the study investigated the role of executive turnover as a moderating variable on such a relationship in the context of Jordanian non-financial listed companies.

For the fourth hypothesis, the study argues that a negative relationship exists between the size of the board of directors (BOS) and financial leverage (FLV) and is stronger when executive turnover (EXE) exists. In accordance with what the study has proposed, the statistical results show that there is a negative and significant relationship between BOS and FLV when EXE exists ($\beta = -1.633$, $p < 0.01$). This reveals that the relationship between BOS and FLV is stronger when there is moderating effect represented by executive turnover (EXE). This result is in line with the objective of the study that shows there is a negative relationship between the board size and financial leverage and it is stronger when executive turnover exists. Hence, it can be inferred that the existence of executive turnover strengthens the negative relationship significantly between the size of the board and financial leverage. Consequently, it can be observed that there is lower level of financial leverage when the executive turnover exists in Jordanian companies which have higher numbers of directors appointed to the board leading to higher levels of financial performance. Hence, this reveals that executive turnover is an important moderating variable to strengthen the negative relationship between the board size and financial leverage.

Fifthly, the current study examined the moderating effect of executive turnover (EXE) on the relationship between the independence of the board (IND) and financial leverage (FLV). The study revealed that there is a positive relationship between IND and FLV when EXE exists ($\beta = .598$, $p < .05$). This shows that when executive turnover exists, independent boards have a positive impact on financial leverage. This finding is at odds with the proposed hypothesis. In general, firms tend to have large numbers of independent members appointed to acquire more expertise and to broaden the knowledge to provide guidance to the mangers and to enhance the performance of companies. Nevertheless, in the context of Jordan, increased numbers of board members negatively affects the performance of the companies. This is due to number of reasons. Firstly, Dr. Henry Azzam Tawfiq, the Chairman of the Board of Directors in Jordan Investment Trust Co. Plc indicated that most of the independent members in Jordanian companies are government retirees. Secondly, since in the main they have previously been in roles managing the public sector (non-profit), they lack the skills required to manage the private sector, which is the profit sector (Tawfiq). Thirdly, since they are independent, they have no direct material interest. Fourthly, the non-executive is appointed by the board of directors and the board of directors has a close relationship with the executive team and through this relationship the executive team can establish a good relationship with non-executive one. This situation enables executive managers to have discretion and therefore they are able to manipulate the discretion of the independent board (non-executive) members who are less aware of the operations of the company. Fifthly, initially companies tend to appoint non-executives to build the image of their respective company due to an increased level of public confidence when there are more independent members appointed to the board of directors. Sixthly, as a consequence of the boost in image, a company is able to use this to advantage and borrow more.

The interaction result of the current study is inconsistent with the result of the direct relationship between the independence of the board (IND) members and financial leverage (FLV). The result revealed a negative relationship between them, while the interaction was insignificant. A possible explanation for this result is that the direct relationship was negative because the executives that have shares in the company and are sufficiently experienced and even though they are non-independent there is no direct material interest. Thus, they pursue a goal to work alongside with the independent board members to enhance the performance of their company. Adnan, Htay, Rashid and Meera (2011) showed that under the perspective of the agency theory, an independent board is a very effective mechanism to monitor the managers and alleviate the agency costs. On the other hand, they mentioned that executive directors have their own skills and valuable knowledge regarding the activities of the company. This reveals that in the current study the rationale behind the insignificant relationship between independent board (non-executive directors) and financial leverage with turnover existence, the skills and knowledge of executive directors in the Jordanian listed companies in the non-financial sector simply does not affect the independent directors' expertise in the way that leads these directors to have such an impact in the companies.

For the sixth hypothesis, the moderating effect of executive turnover (EXE) on the relationship between CEO-duality and financial leverage (FLV) was analyzed. This study found that there is a negative relationship between the companies that do not have CEO-duality and FLV when EXE exists ($\beta = .336$, $p < .10$). This reveals that in firms without executive turnover, CEO-duality has a negative (non-duality has positive) impact on a company's financial leverage. Alternatively, in companies with executive turnover, CEO-duality has a positive (non-duality has negative) impact on financial leverage. Thus, it can be observed that there is a lower level of financial leverage when executive turnover exists in companies without duality. This establishes that the occurrence of executive turnover improves the mechanisms of corporate governance as the managers' efforts had become effective towards the enhancing the shareholders' requirements, which leads to lower levels of financial leverage and, therefore, higher levels of performance of a company. This is in line with the agency theory perspective concerning the ownership structure. This means that the mechanism of executive turnover has an important role in enhancing a company's performance. Furthermore, the relationship between financial leverage (FLV) and CEO-duality is found at best to have a weak effect or no effect in most cases, as mentioned by many of previous studies in developed and developing counties (Heracleous, 2001; Mashayekhi & Bazaz, 2008). However, this study found that the existence of executive turnover improves the relationship between these variables. Therefore, it is strongly argued that the structure of dual leadership affects the degree of financial leverage when executive turnover exists. Furthermore, this study found that there is no relationship in the direct model but there is strong relationship in the interaction.

12. IMPLICATIONS

In this section, the implications of this study are presented in the following sub-sections. These implications are discussed from theoretical, methodological and practical perspectives.

12.1. Theoretical and methodological implications

This study utilized the agency theory to underpin the examination of the relationship between the mechanisms of corporate governance and the financial performance of companies in the Jordanian context in the non-financial listed companies in the ASE. The agency theory refers to a theory that deals with the relationship existing between two parties: the owners (principals) on the one hand and the management (agent) from the other (Jensen & Meckling, 1976). In the current study, the agency theory is used to explain the effect of the corporate governance mechanisms on the firms' financial performance. From the theoretical perspective, the basic assumption is to rely on agency theory which deals with the relationship between the principals (shareholders) and the agent (management) in relation to the problem that appears due to the separation between ownership and management (Jensen & Meckling, 1976). Management seeks to maximize their own benefit even if it does not account to the requirement of the shareholders. In this instance, some sort of conflict of interest can arise since both the principal and agent seek to maximize their own objectives, and it is likely that they will have different objectives. Therefore, it is prudent to introduce certain corporate governance mechanisms to reduce the opportunities of conflict. Promoting the financial and overall performance of a company is the aim that shareholders seek to achieve, and this is dependent upon the precision of the relationship between the principals and the agent. Roberts, Sanderson, Barker and Hendry (2006) argued that corporate governance appeared and was affected by the agency theory and its hypotheses. Therefore, one of the main targets of corporate governance is to solve the problems and conflicts that arise between the management team and shareholders because such conflicts could lead to lower levels of a company's performance.

This study provides several theoretical implications. Firstly, in relation to the dependent variable of a firm's financial performance (FFP), the current study takes into consideration important matters such as the choice of the measurement of the dependent variable. It chooses financial leverage to avoid the behavior of income smoothing, which is criteria that is easily able to be examined in the Jordanian context due to the available data. In doing so, this study can be considered as a response to calls for new research into the area of corporate governance and its mechanisms and the performance of companies because as admitted by Marr and Schiuma (2003) the discipline of the measurement of the performance of firms needs further deliberations and contributions to recover and overcome the lack of available studies examining the performance's measurements of firms. Thus, the present study globally contributes to the discipline of the performance of firms by choosing a suitable indicator to measure a firm's financial performance (FFP) and that is by way of financial leverage (FLV).

Secondly, in relation to financial leverage, from the developed and developing countries' perspective, this study uniquely contributes to the literature examining corporate governance (CG) and the performance of firms through the introduction of financial leverage (FLV) as a measurement to represent a firm's financial performance. Accordingly, the current study is one of the first studies to test financial leverage as a new indicator to measure a firm's financial performance (FFP) whereby to the best of the researchers' knowledge, no prior work has chosen a new way to measure financial leverage to eliminate income smoothing to measure a firm's financial performance in both developed and developing economies including Jordan. Moreover, the present study has a methodological implication in that it focuses not only on the importance of the measurement of financial leverage but also the way it is calculated or computed. Thus, the use of financial leverage to measure a firm's financial performance in the presence of the mechanisms of corporate governance in the Jordanian industrial and service firms is considered to provide a unique contribution to the existing literature. Thus, this study has introduced a new way of calculating financial leverage, which is considered as a methodological contribution to the existing body of literature. The majority of previous studies calculated financial leverage (FLV) using the following equation, which can be exposed to the problem of income smoothing:

$$FLV = \frac{Total\ Debt}{Total\ Assets}$$

Instead of using the above equation, this study used the following equation to avoid the problem of income smoothing:

$$FLV = \frac{Total\ Debt}{Capital}$$

The difference between the total assets and capital is that in total assets the amount of net income is implicitly included, whereas capital is used in this study as it is free from the net income. In addressing the weakness in the measurement of a firm's financial performance, whereby in the majority of previous studies no mention or consideration was placed on computing financial performance; in that the net income might be smoothed by the management team and it might lead to misleading results. The current study contributes in that it highlights the importance of the problem of income smoothing and through the choice of financial leverage as a measurement to compute a firm's financial performance it seeks to eliminate income smoothing. In so doing, the current study avoids making potential misleading mistakes that can affect the validity of the results.

Thirdly, this study utilized executive turnover as a moderating variable, which is a powerful tool that can be used by the board of directors to reduce the agency problems and reduce the conflict between the shareholders and the managers. The existence of executive turnover in a company influences the behavior of the management team. Accordingly, the managers are likely to act to align their interests to that of the shareholders as the managers will take into consideration the inherent risk turnover creates. Therefore, to maintain and protect their positions, they tend to follow the instructions given by the board of directors related to corporate governance processes and procedures. In doing so, this will enhance the welfare of the shareholders and promote the firm's performance; both financially and overall. Importantly, the use of such an instrument in monitoring the activities of the management team has not been given special attention in previous studies. Accordingly, this study is the first that uses executive turnover as a moderator to examine the relationship between the mechanisms of corporate governance and the performance of companies. Moreover, this variable has not been used as a moderator in the field of examination of the corporate governance area or any other areas relating to the study of management, accounting and finance. Thus, this study fills an international gap with respect to what has been examined in the previous literature and selecting such a variable has never been chosen before in previous studies. Crucially, this choice has neither been investigated in developed countries in general, nor in developing ones including in Jordan in particular. In so doing, the contribution of this study will add to the international literature and the literature examining corporate governance by enriching and expanding such literature and the knowledge of corporate governance and the performance of firms.

In general, the current study uniquely enriches the literature that examines corporate governance and the performance of firms especially through its measurement that represents a firm's financial performance by way of financial leverage and through investigating executive turnover as a moderating variable on this relationship, which no previous study has done.

12.2. Practical Implications

This study has several practical implications for Jordanian non-financial companies. However, before a discussion is presented about the practical implications, some important business issues are recapped. Firstly, although the Jordanian government issued regulations, such as privatization, since 1996 traditional business practices still dominates the majority of Jordanian businesses as stated by Rajoub (2013). This situation has led the country to not being able to attract foreign investments as had been anticipated. The current study found that foreign ownership does not positively contribute to the performance of companies, and this implies that foreign investors are still in the minority as Jordanian businesses are not sufficiently attractive due to the volatile return and high rate of risk. To tackle this serious problem, the government ought to formulate special programs such as introducing and implementing policies to attract foreign investors.

Secondly, there is a failure of Jordanian firms to disclose their information in a transparent way. This indicates that the practices of corporate governance are weak and need strengthening.

Thirdly, there is a very strong group of speculators who control the market for the interest of big shareholders.

Fourthly, the Jordanian businesses are not sufficiently mature and they differ from businesses in developed countries. Thus, the practices of corporate governance are not as strong as those in businesses in developed countries. However, there is a strong willingness from the business community in Jordan. Moreover, the government strives to achieve strong practices of corporate governance in Jordanian businesses since 1996 when the government initiated its first program of privatization.

Fifthly, due to the conflicts within the neighboring countries such as Syria, there are a huge number of refugees entering Jordan seeking refuge and humanitarian aid. Due to the influx of a huge number of refugees, there is a strong presence of informal businesses, which are in the main operated by refugees. According to the former Deputy Prime Minister and economic expert Dr. Jawad Anani, approximately 30 percent of Jordan's economy is "underground" due to the huge immigration activities in the country (Anani, 2014).

Importantly, as this study found that the mechanisms of corporate governance significantly affect the performance of Jordan's non-financial companies listed in the ASE, this study implies that when the mechanisms of corporate governance are properly implemented, the financial performance of companies will be improved. Thus, this improved performance will lead to an overall improvement in the economy of the country in the long-term.

Furthermore, this study implies that the presence in companies of executive turnover can be an important control instrument used by the board of directors to monitor the actions of the management team, as the study found that executive turnover can significantly moderate the relationship between the mechanisms of corporate governance and the financial performance of companies.

This study implies that the board of directors ought to use such a mechanism as a tool to provide incentive to the management team. Such types of incentives can help shareholders to maximize their wealth.

This study surprisingly finds the implementation of the mechanisms such as executive turnover and CEO-duality mechanism has not been considered previously in the Jordanian context as a powerful tool to monitor the behavior of the management team. This means, within Jordanian companies, it is the substantial shareholder who is likely to be a person appointed as both board chairman and CEO, so it does make sense if the two roles can be separated in this context.

The overall results reveal that the Jordanian non-financial companies are performing well as indicated by the financial leverage, in that a well-performing company has a financial leverage of less than one. In the case of Jordan, the mean of the value of financial leverage of the non-financial companies is less than the value of 1 and equated to 0.71. This is a good indicator for the financial performance of these companies and the rationale for this is that Jordan is an Islamic country and has certain ways in which the financial industry is governed. In accordance with the principles of *Shariah* and Islamic banking, for these companies the charging of interest is prohibited, and this is an important and sensitive matter in such companies to have compliance with the principles of *Shariah*. Therefore, the managers and investors in Jordanian companies do their best to avoid dealing with an interest rate as mentioned by Musa and Obadi (2009). The trend of financial leverage to be less than the value of 1 indicates that there is an enhancement of the financial performance of companies and thus it gives an impression of a good position of the non-financial Jordanian companies within the financial market.

The results of the present study indicate that executive turnover as an instrument of pressure is one of the drivers that can have a significant effect on the financial performance of companies. This implies that board of directors of Jordanian non-financial companies ought to consider directing their management team to initiate and implement a policy of executive turnover which can assist in spreading the concept of enhancing the wealth of shareholders leading to the ultimate goal of enhancing a company's performance.

This study has practical implications whereby shareholders can monitor the actions of the management team through the instrument of executive turnover. This instrument can assist shareholders reduce the conflict of interest between the shareholders themselves and the management team, which in turn might improve the wealth of the shareholders. Instead of using an income-based measurement, this study recommends for shareholders to use the new measurements, which are expected to be free from the manipulation of management. This could help shareholders to assess the performance of their companies in a different manner.

This study focuses on the mechanisms of corporate governance and its impact on the financial performance of Jordan's non-financial listed companies listed in the ASE in the 2011 fiscal year. This study gives a clear picture and better understanding of the mechanisms of corporate governance for managers to achieve the ultimate goal of maximizing the wealth of the shareholders. The mechanism of executive turnover, which might dominate the thoughts on a manager's mind and instead of it being a risk it can be used as an instrument to encourage them to enhance the performance of their respective company. The current study can assist policy-makers in developed and developing countries in general, and Jordan in particular to set wise and deliberate policies related to executive turnover to promote the managers' commitment toward applying the corporate governance system, which ultimately will enhance the practices of corporate governance and the performance of companies. With an improvement in the financial performance of Jordan's companies, this can ultimately lead to enhancing the economy of the country.

13. CONCLUSION

The aim of this study was to examine the effect of the mechanisms of corporate governance on the financial performance of Jordan's non-financial companies listed in the ASE by using the panel data technique. After analysis the study found the following key issues:

1. There is a negative relationship between the board size, independency of the board, and the CEO-duality with financial leverage. This implies that there is a positive relationship between such mechanisms and a firm's/company's financial performance.
2. There is a negative and significant effect of the interacting role of executive turnover with the board of directors towards financial leverage, whereas the interacting role with the independency of the board is positive and significant with financial leverage.
3. The study revealed that no interacting role in the case of CEO-duality in relation to a firm's financial performance.

This research endeavor contributes to the existing body of literature in many different ways. Firstly, it analyzes the relationship between the mechanisms of corporate governance represented by the board size, independency of the board, and CEO-duality as independent variables and a firm's performance in Jordan's non-financial companies listed in the ASE.

Secondly, the findings of this study have introduced a new perspective on the role that financial leverage plays in the discipline of performance and introduces financial leverage as a new measurement tool to examine the financial performance of companies/firms. Thirdly, for the non-financial Jordanian companies the current study indicates that the agency theory can be used to explain the role of executive turnover as a new perspective as a moderator in the relationship between the mechanisms of corporate governance and the financial performance of firms/companies in balancing the conflicts of interest between the shareholder and the management team.

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