Corporate Governance, Agency Costs and Investment Appraisal: An Assessment

Baliira Kalyebara*, Abdullahi D. Ahmed**

Abstract

Undoubtedly, capital markets have an impact on investment appraisal decisions through interest rates (cost of capital) charged and debt covenants stipulated in debt contracts. However, the extent of influence of their interactions in shaping and determining a firm's corporate governance policy, agency costs, investment decisions and firm value has been overlooked or not duly emphasised in the literature to date. This lack of interdisciplinary research in areas such as finance, accounting, capital markets and corporate governance may lead financial managers making wrong interpretation of the current empirical evidence. This may result into suboptimal decisions in capital budgeting decisions. There are various existing studies that have discussed the relation between corporate governance and one or two other business topics this paper is assessing. However, questions have persisted about the role capital markets' interactions play in determining firm's corporate governance, minimizing agency costs, long term investment decisions and firm value. The recent high profile global company collapses mainly due to poor corporate governance mechanisms have rekindled the interest in the role capital market interactions play in formulating firm's corporate governance rules and policies and their impact on agency costs, investment appraisal decisions and firm value. This study intends to assess this issue and critically evaluates these related issues. The impact of multiple objectives on long-term investment decisions is also discussed. We find that capital market interactions have a significant impact in the way firms formulate their corporate governance, identify and control agency costs, optimize multiple objectives, make investment decisions and determine firm value. In a nutshell, there is a consensus among researchers that capital markets impact on capital investment decisions and firm value through interest rates, debt covenants that impact on managers' self-interest behaviour, corporate governance policies and agency costs.

Keywords: Corporate Governance; Capital Markets; Multiple Objectives, Investment Appraisal and Agency Costs

JEL Classification: G29; G31; G32; M14

* School of Commerce and Law Central Queensland University, Rockhampton, Australia

** Corresponsing author, School of Commerce and Law, Central Queensland University, Rockhampton, Australia, Bruce Highway, Rockhampton QLD 4702 Australia Fax: +61749309700 Tel.: +61749232854

E-mail: A.ahmed@cqu.edu.au.

1. Introduction

The role capital markets' interactions play in influencing firm corporate governance mechanisms, agency costs and investment appraisal decision making is currently overlooked in the existing literature. The current status quo may cause a significant challenge to the financial managers in interpreting the current literature. This study critically examines the existing literature on the impact of interdisciplinary interacts of capital markets, corporate governance, agency costs and capital budgeting decisions on firm value. (Shleifer & Vishny 1997) confirm that corporate governance policies impact firm value. This assertion is supported in (Ramly & Rashid 2010) that good corporate governance mitigates managers' self-interest behaviours which in turn improves the firm's quality and flow of information, and firm value. Similarly, (Ruiz-Porras & Lopez-Mateo 2011) and (Tian & Twite 2011) conclude that capital market interactions including interest rates (cost of debt) and debt covenants impact corporate governance mechanisms, agency costs, capital budgeting decisions and hence firm value. The current literature recognizes that firms have two main external sources of capital - equity and debt (Whitehead 2009). The debt capital bears a specified interest rate from day one that determines the primary cost of debt. Thus the cost on debt is

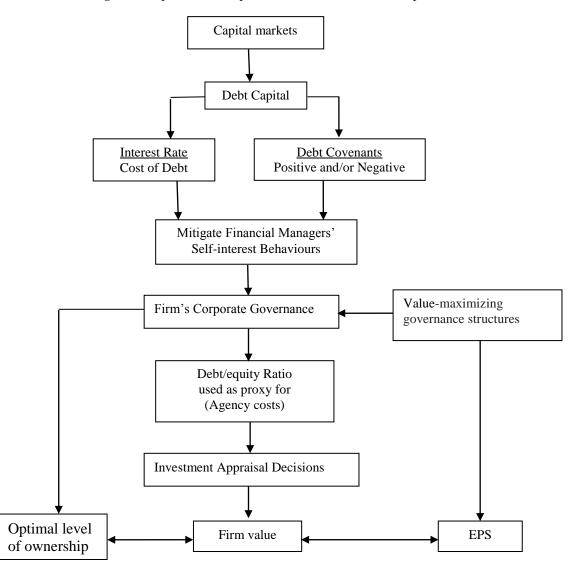


known and factored in the calculation before investment decisions are made.

Nevertheless, the impact on long term investment decisions as a result of minimization of agency costs and the inclusion of debt covenants is not considered. Debt capital is mainly supplied by capital markets including commercial banks and other financial institutions such as insurance companies, superannuation funds, etc. The company (the borrower) and the financial institution (the lender) enter into a contractual relationship that explicitly specifies the conditions of the debt capital that include the interest rate to be charged and other restrictive debt covenants that have to be complied with during the life of the debt. Through the interest charges and specified debt covenants the capital markets influence the firm's corporate governance, managers' behaviour, debt equity ratio, agency costs, capital budgeting decisions and firm value. The capital markets' monitoring of firm performance improves corporate governance, mitigates the managers' selfinterest behaviours and reduces negative earnings management inclination.

However in practice, the impact of various capital markets' interactions are not all incorporated in the investment appraisal decision making techniques such as net present value (NPV) or internal rate of return (IRR). Therefore, making capital budgeting decisions using the traditional capital budgeting techniques of NPV without considering the impact of capital market interactions ignores one of the significant factors that influence investment appraisal decisions and firm value. This oversight provides financial managers with wrong information on which they base their interpretation of the current empirical financial evidence and more often leads to suboptimal decisions in long term investment decision making. Figure 1 illustrates the impact of capital markets interactions through debt capital, corporate agency costs, investment decision governance. making and the firm value.

Figure 1. Impact of debt capital on firm value and ownership structure



VIRTUS

200

2. Objectives and Motivation of the Study

The purpose of this study is to analyse the impact of interdisciplinary interactions and in particular the capital markets interactions on investment appraisal decisions. The study addresses the role capital markets play in determining capital budgeting decisions through determining the level of interest rates and devising debt covenants (positive and negative). It also discusses the impact of debt covenants on formulating the firm's corporate governance policy about capital budgeting decision making. This study intends to add knowledge to the existing theoretical and practical issues in the literature about the impact of capital markets' interactions on long-term investment decisions and help financial managers make optimal investment decisions that maximize firm value.

The conflict of interest that emanates from separation of ownership and control and subsequent agency problems, calls for efficient firm's corporate governance to enhance investors' and shareholders' confidence that management is making optimum investment decisions that maximize firm value (Watts & Zimmerman 1990). The capital markets' covenants and interest rates significantly shape and contribute towards achieving efficient firm's corporate governance that impacts the firm's level of debt equity ratio (Debt equity ratio is calculated by dividing firm's net borrowings by shareholders' funds) which in turn influences the firm's cost of capital and long-term investment decisions. The ratio shows how much of debt capital is used to finance the operations and long term investments of the firm compared to equity capital. The higher the percentage the higher the cost of capital and the more risky the firm is able to meet its debt commitments. There are other financial metrics that impact on the debt equity ratio such as liquidity ratios and the level of net cash flow. General business consensus believes that debt equity ratio of 50% and below is regarded as acceptable considering the nature of business. A firm with debt equity ratio above 100% is regarded highly geared and not financially healthy to the firm. However, some companies in some industries have astronomical high debt equity ratio as shown in Table 1. The magnitude of debt equity ratios of corporations listed on the Australian Stock Exchange (ASX) highlights how much capital markets are prepared to lend to some companies and hence how much influence they have on firm's investment decisions and firm value. For example, the debt equity ratios of listed companies in Australian range between 0.001% and 26,193.9% (http://asxiq.com/index.php. Accessed 14/07/2012). Table 1 below lists the top twenty companies listed on ASX that have the highest debt equity ratios.

Table 1. Debt Equity Ratios of Top Ten Companies Listed on ASX

	Name	Debt Equity Ratios
1	Becton Property Group	26193.9%
2	Redcape Property Group	10683.5%
3	Montec International Limited	7036.9%
4	Redbank Energy Limited	3603.4%
5	RGH Limited	28324.7%
6	World Reach Limited	2334.9%
7	Pearl Healthcare Limited	1630.9%
8	AACL Holdings Limited	1256.0%
9	TZ Limited	1216.9%
10	FirstFolio Limited	1152.0%
11	Central West Gold NL	1105.1%
12	Metroland Australia Limited	929.99%
13	Homeloans Limited	847.2%
14	Oldfields Holdings Limited	819.7%
15	Namoi Cotton Co-operative Ltd	692.7%
16	Prince Hill Wines Limited	690.1%
17	Energy and Minerals Australia Limited	506.8%
18	Farmworks Australia Limited	498.9%
19	Wide Bay Australia Ltd	464.4%
20	FSA Group Limited	441.0%

Source: http://asxiq.com/index.php. Accessed 14/07/2012.

It is clearly important to note from Table 1 that if capital markets are willing to finance the operations of some firms to the extent shown in the Table 1 then they are entitled to safeguard their assets through covenants and interest rates that impact on the firm's corporate governance and long-term investment decisions. Likewise it is in the interests of the borrowers (firms) if they require maintaining a good



financial relationship with their lenders (capital markets) then they is required to comply with the terms and conditions included in the debt agreement and meet their debt commitments promptly. Noncompliance of the terms and conditions in the agreement jeopardises their chances of securing debt capital from capital markets in the future. The compliance of the terms and conditions of the debt agreements clearly impact on the firm's operations, corporate governance, the investment decisions and hence firm value. Therefore, it is necessary to consider the impact of capital markets interactions. This study uses debt equity ratio as a proxy for good corporate governance when making long-term investment decisions. The impact of using debt equity ratio on firm value has not been comprehensively emphasised in the literature.

3. Capital markets

Companies have two main sources of capital, debt and equity. Debt is obtained from capital markets and equity is from shareholders. When companies apply for debt from capital markets, elements in both the capital market and the borrowing firm such as market interest rates, firm's conditions, corporate governance, operation interactions and accounting practices impact on capital market's decisions and hence affect the investment appraisal decisions of the borrowing firm. Before a loan application is approved, it is common practice for capital markets to consider and assess the firm's corporate governance when estimating the firm's potential level of default risk. The higher the estimated default risk, the higher the interest rate charged by the financial institution, which translates into higher cost of capital to the firm (Chen, Chen & Wei 2011), (Schauten & Blom 2006); (Piot & Missonier-Piera 2007). The higher cost of capital leads to reduction in the net cash inflows, which leads to reduced NPV and hence a reduction in the firm's value. One of the ways of assessing the firm's corporate governance is determining whether the firm's accounting practices conform to the national and international accounting standards, since the capital markets' operations are internationalised to allow global competition (Wolk, Dodd & Rozycki 2008).

Capital markets are described as financial institutions that lend the customers' savings (savers) include corporations, households that and governments to the borrowers (corporations, households and governments) for long-term investments at a higher interest rates than those paid to the savers. The long-term investments that are financed by capital markets include investing in equity, corporate debt and government debt (Viney 2011). They are supported by the foreign exchange markets and derivatives markets. They also act as conduits between savers and borrowers that comprise of both domestic and international markets. The

participants in the capital markets encompass stock exchanges, stock brokers, stock dealers, fund managers, interest rates speculators, interest rates hedgers, intermediary investors and service providers (Viney 2011). They are significantly integrated with banks, insurance companies, credit unions and other financial institutions. In a nutshell, their main contribution to the economy is to:

- channel capital to the most efficient long-term investments that yield the highest economic returns;
- provide access to depth and liquidity of the market which allows investors to share and manage risk efficiently; and
- collect and disseminate significant financial information that allows investors make informed decisions in long-term investments.

Capital markets charge interest rates on the debts lent out. The level of interest rates charged depends on the level of default risk the firm borrowing is estimated to have. Also the fact that debt capital is invested in long-term risky projects, it is a normal practice for the capital markets to insert debt covenants in the terms and conditions section of the debt contracts to safeguard their assets and mitigate agency costs. Debt conditions serve the interests of both the lender and the borrower. The nature of debt covenants may be both positive and negative. For example positive covenants may require the borrower to maintain enough liquid assets to cover the debt commitments whereas the negative one also referred to as restrictive, may prevent certain activities such as disposal of an asset unless agreed to by the lender.

According to (Alcock, Finn & Tan 2012) and (Frankel & Litov 2007) capital debt is always provided with restrictive covenants to mitigate debt equity agency costs. From the definitions and descriptions of corporate governance and capital markets, it is evident that firms' corporate governance and capital markets through debt covenants aim at maximizing firm value. There is evidence in the literature that the integration of capital markets principles and corporate governance principles is one of the significant factors contributes to firm value maximization. Debt covenants as determined by capital markets lead to improved corporate governance and better capital budgeting decision making and firm value. However, the impact of the integration of capital markets and corporate governance on long-term investment decisions and firm value has not been widely and emphatically discussed in the literature

4. Corporate governance

Banks (2004, p. 3) defines *corporate governance* as 'the structure and function of a corporation in relation to its stakeholders generally, and its shareholders specifically ...'. In Australia, the (ASX 2007) defines corporate governance as the system used by



management to direct and manage companies to maximise the firm value. The Economist Intelligence Unit, (2002, p.5) defines it as:

• Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By so doing, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance.

The three definitions are similar. The ultimate aim is maximizing firm value. Two of the three definitions above acknowledge that the interests of non-financial stakeholders are as important as the interests of financial shareholders. However, the emphasis is on financial shareholders' interests. In April 2006, the UN launched the Principles for Responsible Investment (PRI) at the New York Stock Exchange. They were launched and endorsed by the UN Secretary-General, Ban Ki-moon. These Principles help in guiding financial managers to make optimal strategic investment decisions to maximize multiple objectives including shareholder wealth thus in turn firm value. The Principles have become a global benchmark for responsible investing. A large number of international institutional investors have become members of PRI by signing and complying with them when making long term investment decisions. The market value of the economy controlled by the signatories of these Principles in the first year of their establishment was said to have been greater than US\$8 trillion (UNEP, Finance & Initiative 2006). As at 25/04/2012 there are a total of 1036 signatories to PRI worldwide including 249 asset owners, 611 investment managers and 176 professional service partners (PRI 2006)¹. The signing of the Principles by high profile international organisations demonstrates support from the top-level decision makers for sustainable investment. The application of the Principles leads to better long-term financial returns and a closer relationship between investors, management and the community. These Principles also have the potential of minimising agency costs too. The extract of the message delivered by the UN Secretary-General when launching the Principles said among other things:

• "By incorporating environmental, social and governance criteria into their investment decision-making and ownership practices, the signatories to the Principles are directly influencing companies to improve performance in these areas (see, UNEP Finance & Initiative 2006, p. 1). This, in turn, is contributing to our efforts to promote good corporate citizenship and to build a more stable, sustainable and inclusive global economy".²

The signatories commit to adopt and implement the six Principles contained in the UN document. Broadly, the members commit to:

- incorporate environmental, social and corporate governance (ESG) issues into analysis and decision-making processes;
- (2) be active owners and incorporate ESG issues into their ownership policies and practices;
- (3) seek appropriate disclosure on ESG issues by the entities in which they invest;
- (4) promote acceptance and implementation of the Principles within the investment industry;
- (5) work together to enhance their effectiveness in implementing the Principles; and
- (6) each report on their activities and progress towards implementing the Principles.

A decade before the UN Principles were launched in 1996, the Australian Stock Exchange (ASX) introduced a requirement that all listed companies should include a statement of corporate governance in their annual reports under the Listing Rule 4.10.3. The ASX Corporate Governance Council lists ten essential corporate governance principles, which include among others that the board should add value to the firm, recognise and manage risk, and encourage enhanced performance (Shailer 2004). These principles are broad allowing firms to pick and choose sections of the Listing Rule that send positive messages or good news to the stakeholders and reflect the company in a good light to the public. However, the intention of introducing the inclusion of corporate government statement in the annual reports is good to maximize firm value.

In the UK, investment management best practices are contained in the Hermes Principles Statement (Pitt-Watson 2002, pp. 6-11). The statement contains ten principles. Principles 2 and 3 are directly related to this paper.

- Principle 2 states that 'Companies should have appropriate measures and systems in place to ensure that they know which activities and competencies contribute most to maximizing shareholder value'.
- Principle 3 states that 'Companies should ensure all investment plans have been honestly and critically tested in terms of their ability to deliver long-term shareholder value'.³

The two principles above summarise the main goal of most capital investment decisions in UK, be it private or public investments. Also good corporate

hermes_principles.pdf, accessed 05/05/2012.



¹ See http://www.unpri.org/signatories., accessed 05/05/2012.

² See http://www.unpri.org/secretary-general-

statement/index.php., accessed 05/05/2012.

³ See http://www.ecgi.org/codes/documents/

governance helps to mitigate tunnelling activities⁴ (Gao & Kling 2008) or negative earnings management. Tunnelling activities include excessive executive compensation, dilutive share prices, asset sales, personal loan guarantees and empire building. These activities are common with investors in emerging markets similar to South Asia countries or developing economies where government and regulatory controls may not be in place or not advanced enough to stop the practice from occurring. A similar theory to tunnelling is the entrenchment management theory.⁵ Management entrenchment is part and parcel of corporate governance. However, it is necessary to distinguish between illegal (negative) and positive management entrenchments. The bad entrenchments such as empire building destroy firm value whereas positive entrenchment may include protecting against a hostile turnover that does not harm the firm value (Lu, Reising & Stohs 2007).

Corporate governance has became a buzz phrase in the modern economic after the collapse of high profile companies in the 1990s, including Arthur Andersen, Global Crossing, Enron, WorldCom in the US, and HIH in Australia, etc. In the same period, WorldCom defaulted on US\$23 billion of debt - the largest default in history (Banks 2004, p. 8). In 2002, 234 companies with US\$178 billion worth of assets filed for bankruptcy (Banks 2004, p. 390). In 2001, 257 public companies with US\$258 billion in assets also filed for bankruptcy in the US. After witnessing the kind of losses and bankruptcies that occurred in the late 1990s and early 2000s, stakeholders including shareholders lost confidence and trust in financial reports, directors' statements and external auditors' reports (Keasey, Thompson & Wright 1997). A loss of trust and confidence in the companies' official documents impacts negatively on the reliability of financial accounting numbers used as inputs in the investment appraisal decision making. The loss of trust and confidence in the company's ability to invest shareholders' money efficiently prevents new investors from buying shares in the company, existing shareholders may divest and new debts are charged at higher interest rates because of the higher investment risk expected. All these factors increase the total cost of running the company including cost of capital, thus reducing the net operating income, net cash flow hence reducing firm value. Surprisingly, from the reviewed literature in capital budgeting (Dean 1951); (Weingartner 1967); (Seitz & Ellison 1999); (Bierman & Smidt 2007), there is evidence that the boards of directors do not significantly pay special attention to long-term investments. Their focus is on short term performance. (Banks 2004) listed and discussed a sample of 339 significant companies that had governance problems ranging from improperly recognising advertising revenues of US\$190 million in 2002. All these 339 companies in the US were forced to restate their revenues and earnings in 2002. This confirms that corporate governance has direct link to the figures reflected in the financial statements. It strengthens the '*moral fibre of the firm*' through emphasising:

- greater leadership by example
- return to basic value systems
- building corporate governance framework for firms
- redefining value creation
- maximizing firm value.

Therefore, there is need for a study like this one to analyse the impact of integrating capital markets interactions, agency costs' minimization and corporate governance principles on capital budgeting decision making decisions and firm value.

5. Investment appraisal

This paper uses the term capital budgeting synonymously with investment decision making and investment appraisal. Making capital budgeting decisions is one of the most important strategic policies a firm makes. There are different definitions of capital budgeting but the main focus of all of them is maximizing firm value. The following are some of the definitions of capital budgeting or how it is described. (Aggarwal 1993) asserts that capital budgeting decisions are important, that individually they are the most crucial decisions a firm makes because of their long-term impacts on the firm's financial position. The effects of capital budgeting decisions extend into the future to encompass the whole organisation, and therefore the firm endures them for a longer period of time, beyond the consequences of operating expenditure. (Seitz & Ellison 1999) briefly define capital budgeting as 'the process of selecting capital investments'. According to (Agarwal & Taffler 2008) capital budgeting decisions possess the distinguishing characteristics of exchange of funds for future benefits, investment of funds in long- term activities and the occurrence of future benefits over a series of years. In a nutshell, capital budgeting process is concerned with the allocation of scarce financial resources to most efficiently managed long-term activities in the hope that the aggregate future benefits will exceed the initial investment with the main goal of maximizing firm value.

The main purpose of preparing a formal capital budgeting process is to be able to identify those investments that have the best chances of generating a rate of return that exceeds the rate of cost of capital.

⁴ Tunnelling may be described as illegal business practices in which a majority shareholder or high-level company management directs company assets to themselves, see http://investopedia.com/terms/t/tunneling.asp., accessed 05/05/2012.

⁵ Managerial entrenchment refers to anti-takeover efforts that are motivated by managers' self-interests in keeping their jobs rather than in the best interests of shareholders.

Heavy operating costs that exceed cash in lows for a long time may render an organisation unsustainable. Again, the fact that the firm needs to raise and commit 'large sums of money' and invest it in long-term capital projects, makes capital budgeting decisions one of the most important strategic decisions, requiring careful planning and implementation (Brealey, Myers & Allen 2011). Therefore, capital budgeting process is one of the crucial strategic company policies in the life of the firm. Unequivocally, it is correct to say that a company's future direction, survival and the pace of future growth start with capital budgeting decisions. There are not many companies that grow without making long-term investments of any kind. Hence, capital budgeting is the most critical decision of any organisation that plans to grow, efficiently compete and thrive for a long time. Sub-optimal capital budgeting decisions don't maximize firm value in the long run. The value of listed companies is often measured in term of share prices or market capitalisation. The rate of return on capital investments can also be measured using extra net cash inflow that is discounted to present value using appropriate determined discount rate. The cash flows are the most important liquid resources for any business because other resources can be bought if the cash inflows exceed cash outflows. Share prices quoted on stock exchanges are next to cash flows in terms of liquidity because they can be converted into cash flows quickly. It is acknowledged that viable capital investments generate net cash flows in excess of its initial cash flow to increase the overall value of the organisation, in other words, a viable investment should have a positive NPV or the NPV should be greater than zero so as to add to firm value.

- The following are some of the reasons that support the assertion that capital budgeting is one of the crucial policies a firm makes.
- Long-term implications: Capital budgeting decisions have an impact on the firm as a whole for a long time span. They affect the firm's future capital structure, cash flows and growth. A wrong decision may damage the firm's long-term growth and survival. However, if a firm does not invest in log-term projects its competitiveness may be weakened and its goal of maximizing firm value may not be achieved. Therefore, capital budgeting decisions determine the future destiny of a firm.
- Large amounts of money involved: Capital budgeting decisions require significant amounts of money as initial capital outlay. This factor emphasizes the need for prudence, expertise in capital budgeting process and well-thought analysis and decisions because a wrong decision may not only result in losses in that selected project but also negatively impact on opportunity costs that are available that could not be undertaken at the time.

- budgeting Irreversible decisions: Capital decisions are often irreversible because they are designed and tailored to suit a particular project and involve investing huge amounts of money in long-term projects that are directly related to that particular firm. These projects are not easily marketable or saleable because they are not suitable for other available projects. The purchase of unwanted long-term capital assets results in wrong capital allocation and heavy operating costs to the firm (Aggarwal 1993). The only alternative available to redress wrong capital purchases is to write-off the value of the capital asset and to make a heavy capital loss.
- *Risk and uncertainty:* Capital budgeting process involves estimating future cash flows and future rate of cost of capital (discount rate) for the whole life of the project. The future is uncertain and full of risks. The longer the period of the project, the higher the risk and the higher the uncertainty may be. All or some of the estimated future cash flows and cost of capital may not come to be correct. This factor suggests that capital budgeting decisions may not be accurate and reliable.
- *Difficult to make:* Capital budgeting decision making is a difficult and complicated management exercise. It requires huge amounts of money, expertise in the area and it requires a lot of time to implement. Also there are not many firms around that can afford the costs involved in the exercise. The process may require a cost benefit analysis before a capital budgeting exercise is undertaken.

Optimal decisions in capital budgeting optimise a firm's main objective of maximizing the firm value and also help the firm to stay competitive as it grows and expands. These decisions are some of the integral parts of overall corporate financial management and corporate governance. A company grows only when it invests in capital projects, such as plant and machinery, to generate future revenues that are worth more than the initial cost (Ross et al. 2011) and (Shapiro 2005).

6. Capital markets and corporate governance

The two main sources of capital for companies are debt and equity. Debt is acquired from capital markets and equity is from shareholders. Sustainable developed economies have developed and efficient capital markets ((Viney 2011); (Ross et al. 2011) and (Hunt & Terry 2011). Capital markets charge interest rates (cost of capital) and insert debt covenants in the debt contracts based on the estimated level of default risk of the borrower in order to safeguard their assets. Companies assessed to have high default risk attract high interest rates and vice versa. High interest rates translate into higher cost of capital to the borrower



(Chen, Chen & Wei 2011); (Schauten & Blom 2006); (Piot & Missonier-Piera 2007).

Capital market lending prerequisites include channelling capital to the most efficient investments that yield the highest economic returns. Therefore, the level of cost of capital that is determined by the capital markets and the type of covenants stipulated in the debt agreements impact on the investment projects the firm selects thus mitigating the managers' selfinterest investment decisions. Collectively, these conditions impact on the firm's corporate governance, agency costs, investment appraisal decisions and firm value (Tian & Twite 2011).

Efficient capital markets play a vital role in the growth and health of the economy through pooling domestic and international savings and channelling them towards the most productive investments (Viney 2011). Furthermore, they collect and disseminate significant financial information to investors that is used by investors to make informed investment decisions. They also provide access to financial depth and liquidity of the capital market that allows investors to share and manage the risk efficiently. In the modern economy, all governments regulate and monitor the financial activities and operations of financial institutions because of the important role they play in influencing the direction of country's economy (Fabozzi, Modigliani & Jones 2009). The level of importance the capital markets have on the economy is reflected in the kind of regulations the government enact to supervise the industry because any operational and strategic economic failure in the capital markets significantly impact negatively on the country's economy. Recently there have been capital markets' failures such as Lehman Brothers that exacerbated the global financial crisis (GFC). This has impacted on the economies of many countries like Portugal, Ireland, Greece and Spain (PIGS) and its impact is still spreading especially in the European Union member states and the world over. The Telegraph of 19/05/2012 reported that the credit rating agency, the Moody's had downgraded the longterm debt and deposit ratings of sixteen Spanish banks. This will negatively impact on the borrowing and lending ability of these banks both in domestic and international capital markets. . In turn it will

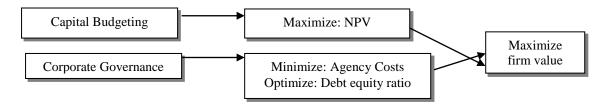
impact on investments in Spain, the Spanish economy and further make the GFC worse.

In summary, the government through physical and monetary policies and the capital markets impact on the whole economy through influencing the interest rates (cost of capital) charged on borrowings by corporations, governments and households to finance capital projects and consumable goods. This helps to manage and control the level of inflation in a desirable range.

7. Corporate governance and investment appraisal

The main goal for firms to formulate company policies that direct and control (corporate governance) its operational and strategic decisions is to maximize firm value (Banks 2004). In order to maximize firm value firms need to invest in long-term capital projects. Similarly, the main goal for capital budgeting decisions is to maximize firm value (Banks 2004). Good corporate governance conforms to the structure and function of a corporation in relation to its stakeholders generally, and its shareholders specifically by aligning conflicting interests such as those which may arise during investing decisions. It instils monitoring and bonding measures, a sense of ethics, encouraging transparency and mitigates managers' self-interest behaviours such as negative earnings management. The benefits of good governance may include accessing reliable flow of funds, improved access to lower interest rate sources of funds, better credit ratings, better reputation and more business opportunities that lead to lower debt funding costs, higher share price, lower agency costs and improved firm value. The lower debt funding costs impact on future cash flows and NPV because the future cash flows are discounted at a lower discount rate (cost of debt). The following studies confirm this assertion that good corporate governance can reduce inter and intra-firm agency problems ((Shleifer & Wolfenzon 2002) and is also associated with higher firm value ((Gompers, Ishii & Metrick 2003). Figure 2 below shows the relationship between capital budgeting and corporate governance.

Figure 2. Relationship between corporate governance and capital budgeting



Since the collapse of high profile companies in the US such as Enron, WorldCom, etc., management decisions both operational and strategic have come under scrutiny. The common factor in these companies is the astronomical executive remuneration and compensations – agency costs. The executives,



whose compensation is based on the annual performance (profits), will want to maximise annual profits in the short term, so that they can receive large amounts of bonuses quickly before their contracts expire. Such executives will be reluctant to make investment appraisal decisions which will bring in profits after their contract period has expired. The minimization of the short-term executive compensation (agency costs) and introducing longterm executive compensation such as share options may persuade executives to invest in profitable longterm capital projects. Therefore, there is a need to integrate corporate governance principles, including minimization of agency costs, to improve management investment appraisal decisions. Table 2 shows selected and recent literature illustrating the link between corporate governance and firm value.

Author(s)	Sample, coverage & year	Focus of the study	Key findings
Ammann, Oesch and Schmid (2012)	Examine whether product market competition as a proxy of corporate governance in 14 countries in European Union impact firm value.		CG impacts firm value
O'Connor (2012)	Used 2784 firms of IFC Emerging Market Database (1980-2000)	CG & firm value	CG impacts firm value
	The study examines the impact of principal-principal agency problems on the quality and effectiveness of corporate governance structures in listed companies from 14 European countries between 1999 and 2003.	CC & firm value	CG impacts firm value
	The research examined the effect of corporate governance on firm value in food industry for companies listed on the Tehran Stock Exchange (TSE) from 2002-2011.		CG impacts firm value
Bayrakdaroglu, Ersoy and Citak (2012)	The research examined the relationship between corporate governance and value-based financial performance measures in Turkey as an emerging market for 1998-2007.		CG impacts firm performance
(2011)	Securities and Exchange Commission's fillings of all US non- financial firms (1996-2008)	CG & firm value	CG impacts firm value
Dharmapala and Khanna (2011)	Used a sequence of reforms in India (Clause 49) enacted in 2000.	CG & firm value	CG impacts firm value
	Used Panel Data of 103 firms in Japan to examine the value differences between Japanese firms selecting one of two legally systems (1999-2007).	CG & firm value	CG impacts firm value
Chung and Zhang (2011)	All stocks listed on the NYSE, AMEX, and NASDAQ (2001-06).	CG & institutional ownership	CG influences share prices and hence firm value
Yang (2011)	The research examined the impact of corporate governance on firm value using panel data from 2004-2008	CG & firm value	CG impacts firm value
Al-Najjar (2010)	All (86) non-financial Jordanian listed firms (1994 -03)	CG & investment decisions	CG impact investment decisions
Chung, Elder & Kim (2010)	Used 24 out of 51 corporate governance standards in Institutional Shareholder Services (ISS) data from <i>Best Practices User Guide and Glossary</i> (2003).		CG impacts on stock liquidity
Toledo, P (2010)	Governance index constructed based on Spanish Code of Best Practices	value	CG impacts on firm value
Schmid (2010)	6,663 firm-year observations from 22 developed economies over the period from 2003 to 2007.	value	CG impacts on firm value
Morrill (2010)	The paper examined whether corporate governance rankings published are reflected in the values investors accord to firms.	value	CG impacts on firm value
Chong and Lopez-De- Silanes (2006)	Used data available on external financing in Mexico to analyse the link between CG and firm performance	CG & firm performance	CG impacts on firm performance
Black et al. (2006)	515 firms, Korea (2001)	CG & firm value	CG impacts on firm value
Kumar (2005)	2,000 Indian firms (1994-00)	CG & firm financing	CG impact firm financing
Drobetz, Schillhofer & Zimmermann. (2004)	91 Germany firms (2002)	CG and share performance	CG impacts on share performance
Klapper and Love (2004)	374 firms from 14 emerging economies (2000)	CG and firm performance	CG impacts on performance and firm valuation
Gompers et al. (2003)	1,500 large firms (S&P) (1990)	CG & equity price	CG impacts on equity prices and firm value
Lemmon and Lins (2003)	800 non-financial firms, East Asian (1997)	CG & firm value	CG impacts on firm value



8. Capital markets, corporate governance, investment appraisal and firm value

- The main goal for firms formulating corporate governance policies and making long-term investments is maximizing the firm value (Banks 2004). Capital budgeting principles aim at sound corporate financial management to maximize the firm value (Seitz & Ellison 1999). Both sets of principles of corporate governance and capital budgeting aim at improving the firm's performance and overall responsibility of the organisation that lead to maximizing firm value (Allen, Carletti & Marquez 2009). Thus capital budgeting and corporate governance are interrelated and complement each other.
- However, the existence of agency problems hinders the achievement of firm value maximization. The agency problems are caused by the separation of ownership and control inherent in many firms. Sometimes management who make investment appraisal decisions, do not pursue the firm's objective of maximizing its value, but seek to maximize their own interests causing the firm agency costs. Agency costs arise because of the conflict of interest that exists between the firm's management and its shareholders. There are steps and decisions the organisation can make to force or incites management to act in its interests; colloquially these decisions are sometimes referred to as the 'stick and carrot'. They can be in the form punishment or incentives or both. These decisions cost money, and they are some of the examples of agency costs.
- As discussed earlier in the paper capital markets charge interest rates (cost of debt capital) and insert debt covenants in the debt contracts to safeguard their assets (money lent to the firm) and mitigate debt agency costs. Corporations with good corporate governance are said to have lower default risk and as a result they are charged lower interest rates thus lowering the cost of debt capital. The level of interest rates charged and the type of debt covenants inserted in the debt agreement influence the extent of achieving the objective of maximizing firm value in the same way as corporate governance and investment appraisal decisions discussed earlier.
- Agency costs are divided into three main categories, bonding costs, monitoring costs and residual loss ((Deegan 2009); (Jensen & Meckling 1976). Monitoring costs include those costs incurred to control the managers' behaviour through the firm's board of directors by watching the decisions management make to ensure that management decisions maximize firm value. Examples of this type of costs may include directors' fees, financial statements

issuance costs, ensuring the agents do their jobs, external audit fees, communicating with the referees, establishing incentives for good performance and employee stock options costs. (Jensen & Meckling 1976) show that bonding costs are incurred by the agent in an effort to ensure the principal that the agent will not take actions that will reduce firm value and that if such actions are taken, the principal should be compensated. Hence bonding costs tend to reduce agency costs. Examples of bonding costs may include annual membership payment to maintain professional registration, offering written guarantee and buying and dressing in acceptable attire. (Jensen & Meckling 1976) define residual loss as the reduction in the firm value due to agency cost. It is caused by the inherent self-interest behaviours of managers of maximizing their own wealth.

- The aggregate impact of agency costs on organisations' survival is financially significantly high because any stakeholders in control of the organisation through making financial decisions (most times management does), try to maximize their own wealth. The high level of agency costs coupled with failure to maximise stakeholder interests, including shareholder wealth, has driven many companies to bankruptcy in recent memory. For example, results in a study conducted the by (Schlingemann 2004) that analysed the value of agency costs of overvalued equity in three days surrounding the announcement of acquisitions in the period of 1998-2001 show that the acquiring firms lost a total of \$240 billions compared to a total loss of \$4.2 billion in the all of the 1980s period.
- In 2001 in Australia, the collapse of Ansett Airlines was caused by a combination of airline industry deregulation, poor management in Air New Zealand, high agency costs, lack of managerial flexibility and the dissatisfaction of its employees (Easdown & Wilms 2003). When the industry was deregulated Ansett Airlines could not compete effectively with the new low cost entrants such as Virgin Blue Airlines and Compass Airlines. The financial situation worsened when it built an unprofitable \$300 billion tourist resort on Hayman Island. This is a type of significantly costly residual loss agency cost – investing in a project that has a negative NPV. The last straw of Ansett's collapse was the prolonged pilots' strike (Easdown & Wilms 2003) that reflected poor management in ignoring the interests of one of the stakeholders.
- This paper has already established that capital markets through interest rates and debt covenants improve corporate governance and mitigate agency costs. As a result of agency costs being reduced, net cash flows improve and

hence firm value increases. Also the paper has already discussed above that the main goal of company policy formulation of corporate governance is maximizing firm value. Since capital markets impact on firm's corporate governance and in turn corporate governance impacts on agency costs, capital budgeting decisions and firm value then it is imperative that a proxy of corporate governance in any form such as debt equity ratio used in this study should be incorporated investment appraisal decisions. The objective of both corporate governance and capital budgeting decisions is to maximize firm value therefore both are important to the performance and growth of a company and form the basis of investors' confidence and trust. Investors' confidence and trust in a company influence the investor decisions - whether to invest or not to invest in the company. Good corporate governance leads to efficient financial management which boosts investors' expectation for better future performance which in turn boosts new capital investments (Ruiz-Porras & Lopez-Mateo 2011). It ultimately results in investors investing more in the organisation. New investments in projects with positive NPV result into maximizing firm value.

9. Conclusion and future research

According to most finance textbooks including (Parrino et al. 2011; Gitman, Juchau & Flanagan 2011; and Ross et al. 2011) the discounted cash flow (DCF) techniques are the most preferred methods used in investment appraisal decision making in both theory and practice. In theory NPV is the most popular of the three DCF methods, but IRR is preferred in practice. However, non-DCF techniques are still used in some countries including Japan and New Zealand. Some of the advantages of NPV include the use of cash flow (being a measure of wealth); considering time value of money (a dollar today has more value than a dollar in the future) and using a risk-adjusted discount rate. However, NPV as a technique has limitations. They include:

- difficulty in accurately forecasting the future cash flows;
- no universal or standard method of determining the discount rate;
- assuming the estimated discount rate will remain the same for the life of the capital project;
- ignoring the impact the different sizes of amounts invested have on the NPV – a capital project that has a high NPV may not necessarily be the best if it requires larger sums of money than other capital projects;
- ignoring the impact of unequal lives of the capital projects on the NPV a capital project that has a longer life may not necessarily be the

best if it requires longer life than other capital projects;

- inability to factor in financial, technological and management flexibility and changes that are common in a modern economy;
- it is a one-off time investment metric economic conditions do not stay the same throughout the life of capital projects;
- it does not handle multi-criteria problems or multiple objectives; and
- it does not factor in agency costs' impact.

Therefore, NPV has many restrictions. The focus of this paper is about the last weakness above - the failure to consider the impact (minimization) of agency costs on capital budgeting decision making. The paper has already discussed the significance of the impact of the minimization of agency costs on capital budgeting decision making. The investment decisions can be appraisal improved by complementing the use of NPV with the minimization of agency costs which in turn should improve firm value. Capital budgeting techniques, both naïve or advanced, have the following common limitations, they both:

- consider each project as an individual undertaking as opposed to considering the project as part of the overall organisation structure; and
- fail to consider the relationship among the new investments and the impact they may have on the firm as a whole.

The assessment above has highlighted the weakness that exists in theory and practice. The review also found that the impact of capital markets' interactions on investment appraisal decisions is significant but is not considered in investment appraisal decisions. Although the use of NPV has been increasing, it is deficient in that it ignores the impact of the capital markets, corporate governance, financial and managerial flexibility, and agency costs on investment appraisal decisions. It must be noted that the studies reviewed in this paper were conducted in different timeframes, in different countries, used different samples, applied different valuation techniques but all endeavoured to identify one capital investment technique that maximizes firm value. The NPV's failure to consider the impact of agency costs, financial and managerial flexibility, capital markets interactions justifies a new study to develop a new integrated approach in the form of multiple objective linear programming (MOLP) model to value longterm capital investments. This suggested new approach is urgently needed for industries that have inherently high information technology (IT) risk and are dominantly IT-based such as the e-commerce sector and the airline industry that use IT as major source of company information. Significant amount of research on capital markets, corporate governance, agency costs, multiple objectives, investment appraisal has been conducted but no one study has



integrated the impact of these disciplines to find their influence on the investment appraisal decisions.

This proposed new integrated approach or framework for investment appraisal decision-making in the area of capital market interactions research in finance will be a significant improvement over the existing models in capital budgeting decisions. To our knowledge, this approach will be the first of its kind to integrate different elements of capital markets such interest rates, debt covenants, corporate as governance, agency costs and multiple objectives in investment appraisal decisions. It will also provide a plausible solution to many existing capital budgeting problems. It can be applied to various real life capital investment projects in general and be able to factor in different individual firm characteristics.

Another area for future research in investment appraisal could look at, is developing an inclusive "Social Welfare Maximisation model" rather than an exclusive "Shareholder Wealth Maximisation Model". In this modern economy that is regarded as one global village, another significant variable that should be considered to improve investment appraisal decisions of multinational companies in modifying and improving existing investment appraisal techniques is the inclusion of political risk of various countries in which the organizations operate.

References

- Abbasi, M, Kalantari, E & Abbasi, H 2012, 'Impact of Corporate Governance Mechanisms on Firm Value: Evidence from the Food Industry of Iran', *Journal of Basic and Applied Scientific Research*, vol. 2, no. 5, pp. 4712-21.
- Agarwal, V & Taffler, R 2008, 'Comparing the performance of market-based and accounting-based bankruptcy prediction models', *Journal of Banking & Finance*, vol. 32, no. 8, pp. 1541-51.
- 3. Aggarwal, R 1993, *Capital budgeting under uncertainty*, Prentice Hall, Sydney.
- 4. Alcock, J, Finn, F & Tan, KJK 2012, 'The determinants of debt maturity in Australian firms', *Accounting and Finance*, vol. 52, pp. 313-41.
- Allen, F, Carletti, E & Marquez, R 2009, 'Stakeholder capitalism, corporate governance and firm value', paper presented to EFA 2009 Ljubljana Meetings paper, ECGI - Finance Working Paper No. 190/2007, Wharton Financial Institutions Center Working Paper #09-28.
- Al-Najjar, B 2010, 'Corporate governance and institutional ownership: evidence from Jordon', *Corporate Governance*, vol. 10, no. 2, pp. 176-90.
- Ammann, M, Oesch, D & Schmid, MM 2010, 'Corporate Governance and Firm Value: International Evidence', Available at SSRN: http://dx.doi.org/10.2139/ssrn.1692222.
- 8. Ammann, M, Oesch, D & Schmid, MM 2012, 'Product Market Competition, Corporate Governance, and Firm Value: Evidence from the EU-Area', *European Financial Management, forthcoming*.
- 9. ASX 2007, *Corporate Governance Principles and Recommendations*, Australian Stock Exchange.

VIRTUS

- 10. Banks, E 2004, *Corporate governance: Financial responsibility, controls and ethics,* Palgrave Macmillan, New York.
- Bayrakdaroglu, A, Ersoy, E & Citak, L 2012, 'In There a Relationship Between Corporate Governance and Value-based Financial Performance Measures? A Study of Turkey as an Emerging Market', *Asia-Pacific Joural of Financial Studies*, vol. 41, pp. 224-39.
- Berthelot, S, Morris, T & Morrill, C 2010, 'Corporate governance rating and financial performance: a Canadian study', *Corporate Governance*, vol. 10, no. 5, pp. 635-46.
- 13. Bierman, H & Smidt, S 2007, *The capital budgeting decision: economic analysis of investment projects*, 9th edn, Routledge, New York.
- 14. Black, BS, Jang, H & Kim, W 2006, 'Does Corporate Governance Predict Firm's Market value?: Evidence from Korea', *Journal of Law, Economics, and Organization*, vol. 22, no. 2, Fall.
- Brealey, RA, Myers, SC & Allen, F 2011, *Principles of Corporate Finance*, Tenth edn, McGraw-Hill, New York.
- Chen, KCW, Chen, Z & Wei, KCJ 2003, 'Disclosure, corporate governance, and the cost of equity capital: Evidence from Asia's emerging markets', *Social Science Research Network*, viewed 29/04/2008, DOI 10.2139/ssrn.422000.
- Chen, KCW, Chen, Z & Wei, KCJ 2011, 'Agency Costs of Free Cash Flow and the Effect of Shareholder Rights on the Implied Cost of Equity Capital', *Journal* of Financial and Quantitative Analysis, vol. 46, no. 1, pp. 171-207.
- Chong, A & Lopez-de-Silanes, F 2006, 'Corporate Governance and Firm Value in Mexico', Available at SSRN: http://dx.doi.org/10.2139/ssrn.1820043.
- Chung, KH, Elder, J & Kim, JC 2010, 'Corporate Governance and Liquidity', *Journal of Financial and Quantitative Analysis*, vol. 45, pp. 265-91.
- 20. Chung, KH & Zhang, H 2011, 'Corporate Governance and Institutional Ownership', *Journal of Financial and Quantitative Analysis*, vol. 46, no. 1, pp. 247-73.
- 21. Dean, J 1951, *Capital Budgeting: Top management policy on plant, equipment, and product development, Columbia Unversity Press, New York.*
- 22. Deegan, CM 2009, *Financial Accounting Theory*, 3rd edn, McGraw-Hill, North Ryde, N.S.W.
- Dharmapala, D & Khanna, VS 2011, 'Corporate Governance, Enforcement, and Firm Value: Evidence from India', paper presented to 3rd Annual Conference on Empirical Legal Studies, Champaign, IL 61820.
- Drobetz, W, Schillhofer, A & Zimmermann, H 2004, 'Corporate Governance and Expected Stock Returns: Evidence from Germany', *European Financial Management*, vol. 10, no. 2, pp. 267-93.
- 25. Easdown, G & Wilms, P 2003, 'ANSETT: the collapse', viewed 15/01/10.
- 26. Eberhart, RN 2011, Corporate Governance Systems and Firm Value: Empirical Evidence from Japan's Natural Experiment, Stanford University, Crown Quadrangle, 559 Nathan Abbott Way.
- 27. Economist, Intelligence & Unit 2002, Corporate governance: The new strategic imperative, London.
- Fabozzi, FJ, Modigliani, F & Jones, FJ 2009, Foundations of Financial Markets and Institutions, 4th edn, Pearson Education, Upper Saddle River, N.J.; London.

- 29. Frankel, RM & Litov, LP 2007, 'Financing Accounting Characteristics abd Debt Covenants', *Available at SSRN: http://dx.doi.org/10.2139/ssrn.978711.*
- Gaeremynck, A & Renders, A 2012, 'Corporate Governance, Principal-Principal Agency Conflicts, and Firm Value in European Listed Companies', *Corporate Governance: An International Review*, vol. 20, no. 2, pp. 125-43.
- Gao, L & Kling, G 2008, 'Corporate governance and tunneling: Empirical evidence from China', *Pacific Finance Journal*, vol. 16, pp. 591-605.
- Gitman, LJ, Juchau, R & Flanagan, AJ 2011, *Principles of Managerial Finance*, 6 edn, Pearson, Frenchs Forest.
- Gompers, P, Ishii, J & Metrick, A 2003, 'Corporate Governance and Equity Prices', *The Quarterly Journal* of *Economics*, vol. 118, no. 1, pp. 107-55.
- 34. Hunt, B & Terry, C 2011, *Financial institutions and markets*, Sixth edn, Cengage Learning, Melbourne.
- Jensen, MC & Meckling, WH 1976, "Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure', *Journal of Financial Economics*, vol. 3, no. 4, pp. 305-60.
- Keasey, K, Thompson, S & Wright, M 1997, *Corporate Governance: Economic, Management, and Financial Issues*, Oxford University Press, Oxford; New York.
- Klapper, LF & Love, I 2004, 'Corporate Governance, Investor Protection, and Performance in Emerging Markets', *Journal of Corporate Finance*, vol. 10, no. 5, pp. 703-28.
- 38. Kumar, J 2005, 'Corporate Governance Mechanisms and Firm Financing in India', paper presented to International Conference on Emerging Securities Market:Challenges and Prospects, The Securities Exchange Board of India (SEBI) and the ICFAI University, Mumbai.
- Lemmon, ML & Karl, VL 2003, 'Ownership structure, corporate governance, and firm value: evidence from the East Asian financial crisis', *The Journal of Finance*, vol. 58, pp. 1445-68.
- 40. Lu, W, Reising, J & Stohs, MH 2007, 'Managerial Turnover and ESOP Performance', *Quarterly Journal* of Business and Economics, vol. 46, no. 1, pp. 3-19.
- Nini, G, Sufi, A & Smith, DC 2011, 'Creditor Control Rights, Corporate Governance, and Firm Value', *Available at SSRN: http://dx.doi.org/10.2139/* ssrn.1344302.
- O'Connor, T 2012, 'Investability, Corporate Governance and Firm Value', *Research in International Business and Finance*, vol. 26, no. 1, pp. 120-36.
- 43. Parrino, R, Kidwell, DS, Yong, HHA, Morkel-Kingsbury, N, Dempsey, M & Murray, J 2011, *Fundamentals of Corporate Finance*, Wiley, Milton.
- 44. Piot, C & Missonier-Piera, F 2007, 'Corporate governance, audit quality and the cost of debt financing of French listed companies', *Social Science Research Network*.
- 45. Pitt-Watson, D 2002, *The Hermes Principles*, The Hermes, London
- 46. Ramly, Z & Rashid, HMA 2010, 'Critical review of literature on corporate governance and the cost of capital: The value creation perspective', *African*

Journal of Business Management, vol. 4, no. 11, pp. 2198-204.

- 47. Ross, S, Christensen, M, Drew, M, Thompson, S, Westerfield, R & Jordon, B 2011, *Fundamentals of Corporate Finance*, Fifth edn, McGraw-Hill, Sydney.
- Ruiz-Porras, A & Lopez-Mateo, C 2011, 'The Separation of Ownership and Control and Investment Decisions in Mexican Manufacturing Firms', *International Business Research*, vol. 4, no. 1.
- 49. Schauten, M & Blom, J 2006, 'Corporate governance and cost of debt', *Social Science Research Network*.
- Schlingemann, FP 2004, 'Financing decisions and bidder gains', *Journal of Corporate Finance*, vol. 10, no. 5, pp. 683-701.
- 51. Seitz, N & Ellison, M 1999, *Capital Budgeting and Long-Term Finance Decisions*, Third edn, Harcourt Brace College, Fort Worth.
- 52. Shailer, G 2004, An introduction to corporate governance in Australia, Pearson Education Australia, Frenchs Forest NSW.
- 53. Shapiro, AC 2005, *Capital budgeting and investment analysis*, 1st edn, Pearson Education, Upper Saddle River, NJ:.
- Shleifer, A & Vishny, RW 1997, 'A Survey of Corporate Governance', *Journal of Finance*, vol. 52, no. 2, pp. 737-83.
- 55. Shleifer, A & Wolfenzon, D 2002, 'Investor protection and equity markets', *Journal of Financial Economics*, vol. 66, no. 1, pp. 3-27.
- 56. Tian, GY & Twite, G 2011, 'Corporate Governance, external market discipline and firm productivity', *Journal of Corporate Finance*, vol. 17, pp. 403-17.
- 57. Toledo, EP 2010, 'The Relationship Between Corporate Governance and Firm Value: A Simultaneous Equation Approach for Analysing the Case of Spain', paper presented to CAAA Annual Conference.
- 58. UNEP, Finance & Initiative 2006, Principles for Responsibility Investment, New York.
- 59. Viney, C 2011, *Financial Market Essentials*, McGraw-Hill, Sydney.
- Watts, RL & Zimmerman, JL 1990, 'Positive Accounting Theory: A Ten Year Perspective', Accounting Review, vol. 65.
- 61. Weingartner, HM 1967, 'Linear Programming and Optimal Bank Asset Management Decisions: Discussion', *The Journal of Finance*, vol. 22, no. 2, pp. 166-8.
- 62. Whitehead, CK 2009, 'The Evolution of Debt: Covenants, the Credit Market, and Corporate Governance', *The Journal of Corporate Law*, vol. 34, no. 3, pp. 641-78.
- 63. Wolk, HI, Dodd, JL & Rozycki, JJ 2008, Accounting theory: Conceptual issues in a political and economic environment, Seventh edn, Sage Publications Ltd, London.
- 64. Yang, J 2011, 'Does Adopting High-Standard Corporate Governance Increase Firm Value? An Empirical Analysis of Canadian Companies', *International Business & Economics Research Journal*, vol. 10, no. 9, pp. 17-28.

