Shareholders, Creditors, and Directors' Fiduciary Duties: A Law and Finance Approach

Remus D. Valsan & Moin A. Yahya*
Faculty of Law, University of Alberta, Edmonton, AB, Canada, T6G 2H5
myahya@ualberta.ca
(780) 492-4445
remus.valsan@mail.mcgill.ca

Abstract

The debate surrounding fiduciary duties owed to creditors by directors, especially in the vicinity of insolvency, has resurfaced in light of two court decisions in Canada and the United States. In this paper, we contribute to the discussion by looking at the issue from a corporate finance perspective, where we utilize well-established theorems and results. We show that creditors are able to protect themselves by the use of covenants. While this idea has been reported extensively in previous discussions about fiduciary duties, we focus on studies that show the extent to which creditors use covenants to protect themselves against opportunistic behavior by managers and shareholders. Additionally, we show that debt can actually increase the value of the firm and the shares, and therefore, the idea that shareholders use debt for opportunistic behavior is misplaced. If anything, debt is used to align managerial incentives to maximize the value of the firm. The Fisher Separation theorem is also introduced and used to show that all stakeholders in a firm will want the firm to pursue projects with the maximum net present value. Hence, we propose that fiduciary duties should always be owed to the corporation as a whole, where the main focus of the managers is investing in those projects that have the highest expected net present value.

1. Introduction

When a firm is on the verge of bankruptcy and the cash is almost all gone, the directors of the firm may be tempted to gamble the cash on a very risky venture in the hopes of striking it rich. After all, like the characters played by Demi Moore and Woody Harrelson in *Indecent Proposal*, when you are down on your luck, going for broke seems like a good option. If you win, you win big (just as in the movie), but if you lose, you were going to anyway. The directors of a paving company that was about to go bankrupt, in fact, did just that when they withdrew the

* Mr. Valsan is a PhD student at McGill University. He received his JD from Nicolae Titulescu University, Bucharest, Romania, and his LLM from the University of Alberta. Mr. Yahya is an assistant professor at the Faculty of Law, University of Alberta, Edmonton, AB, Canada. He received his BA, and MA in economics from the University of Alberta, his PhD in economics from the University of Toronto, and his JD from George Mason University, where he was Robert A. Levy Fellow in Law and Liberty.

remaining cash from the company's bank account and gambled it all in Las Vegas.[1] They were not as fortunate as Demi Moore or Woody Harrelson (and probably not as good looking), and they were ordered to repay the cash to the creditors. From this extreme scenario, many courts and commentators have expressed concerns that when corporations are the in the vicinity of insolvency, the directors may be tempted to engage in very risky business ventures that put the creditors' assets at risk while fulfilling the shareholders' desire for the one last hurrah.[2]

Several cases in the United States and Canada have sparked a heated debate regarding the fiduciary duties of directors to creditors, especially in the "vicinity of insolvency."[3] The courts' language fuelled a storm of controversy among academics and practitioners alike.[4] The concern regarding directors and creditors is sometimes summarized as follows: since shareholders elect directors, the directors are beholden to the shareholders; when the firm is in the vicinity of insolvency, the shareholders will prefer that directors engage in risky projects that have a large upside potential much to the chagrin of creditors who would rather the directors engage in less risky activities so that they may recover some of their principal. Hence, the courts have expressed concern that directors may sometimes gamble away creditors' money.[5]

In this paper, we argue that that the proper scope of fiduciary duties is the maximization of the firm's value, regardless of the potential conflicts between shareholders and creditors.[6]

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[1] *In re Tri State Paving, Inc.*, 32 B.R. 2 (Bankr., W.D. Penn. 1982). This example was cited in the third edition of ELIZABETH WARREN & JAY LAWRENCE WESTBROOK, THE LAW OF DEBTORS AND CREDITORS: TEXT, CASES, AND PROBLEMS 632 (1996).

[2] See *infra* note 32 and the accompanying text.

[3] Credit Lyonnais Bank N.V. v. Pathé Communications Corp, 1991 WL 277613 (Del. Ch. 1991); *People's Department Stores Ltd. (1992) Inc., Re*, 23 C.B.R. (4th) 200, [1999] R.R.A. 178, J.E. 99-318, REJB 1998-09776 (C.S. Que. Dec 15, 1998).

[4] See *infra* note 34 and note 47 and the accompanying text.

[5] See *infra* note 32 and the accompanying comments.

[6] This paper analyzes only the principal positive obligation imposed on directors by fiduciary duties, namely the obligation to act in the best interests of the corporation. In addition to the obligation to maximize the value of the firm, the obligation to act in the best interests of the corporation imposes on directors a set of negative obligations as well. The directors have the obligation not to compete with the corporation, not to engage in self-dealing, the obligation to avoid conflicts of interests, not to usurp the firm's opportunities and the obligation not to disclose

In order to reach the maximization goal, the directors must undertake the projects that have the highest expected net present value ("NPV"). The insolvency zone, we argue, should not affect the purpose of fiduciary duties and the expectations of corporate constituencies. As a firm nears insolvency, the maximization of the firm's value will continue to serve stakeholders' interests.

Furthermore, we demonstrate that the alleged tension between shareholders and creditors is irrelevant for the purpose of maximizing the firm's value. We base our conclusion on two main corporate finance concepts: the Modigliani-Miller theorem and its progeny, and the Fisher Separation. We utilize the Modigliani-Miller theorem and its progeny to demonstrate that, insofar as there is an optimal debt level, the value of the firm is independent of the financing decision.[7] We also invoke the Fisher Separation theorem, which states that the productive and market transactions a firm engages in are independent of the shareholders' (and creditors') preferences for risk. What the firm must do, the theorem will tell us, is to choose projects that have the highest expected net present value ("NPV").

Additionally, we demonstrate that maximizing the value of the firm effectively serves the interests of all corporate constituencies. Serving the interests of various stakeholders becomes the effect and not the focus of the fiduciary duties.

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confidential information (See e.g EDWARD WELCH & ANDREW TUREZYN, FOLK ON THE DELAWARE GENERAL CORPORATION LAW: FUNDAMENTALS 83-97 (1998); PAUL D. FINN, FIDUCIARY OBLIGATIONS (1977); KEVIN PATRICK MCGUINESS, THE LAW AND PRACTICE OF CANADIAN BUSINESS CORPORATIONS 712-764 (1999). These restrictions imposed on directors by fiduciary duties, which are far less controversial, exceed the purpose of our analysis. Some authors argue that fiduciary duties are composed only of negative obligations. Ribstein & Alces claim that the fiduciary duty "is merely one not to act selfishly or to engage in the sort of egregiously non-maximizing conduct that is caught by the business judgment rule." See Larry E. Ribstein & Kelli Alces, *Directors' Duties in Failing Firms*, *forthcoming* J. BUS. TECH. L. (2006) *available at* http://ssrn.com/abstract =880074. Moreover, these authors argue that "[f]iduciary duties do not tell directors what they 'should' or 'should not' do, but define the limits on judicial action based on director conduct." *Id*). We believe that there is more to fiduciary duties than restrictions. Directors have the positive obligation to promote the best interests of the corporation, as several court decisions held (see *supra*, Section 2).

[7] See *infra* note 85 and the text associated with this note.

Our paper is not meant to rebut the shareholder primacy[8] or even the board of directors primacy[9] theories advanced by many commentators; rather it is meant to shift the focal point of the discussion from stakeholders to the corporation and, in the process, to resolve much of the concerns that have plagued those who advocate that directors may owe fiduciary duties directly to creditors or to shareholders.

The paper will proceed as follows: In Section 2, we briefly present the current status of the legal doctrine and jurisprudence pertaining to directors' fiduciary duties. We conclude that there is a widespread confusion between the intrinsic interests of the corporation and the specific interests of its constituencies. In Section 3 we argue that directors' fiduciary duty to act in the best interests of the corporation require them to maximize the value of the firm, by selecting the highest net present value projects. In the following section we use the Modigliani-Miller theorem and the Fisher Separation theorem to demonstrate that the goal of firm value maximization is largely independent of the conflicts between creditors' and shareholders' interests in the corporation. We thus illustrate that the corporation has a distinct economic interest that can be furthered by directors without investigating stakeholders' particular expectations. In Section 5 we show that maximizing the value of the firm effectively meets the economic interests of corporate constituencies and, therefore, aligns such interests with those of the firm itself.

2. Directors and Stakeholders in and out of Insolvency: A review of Doctrine and Jurisprudence

[8] See *infra* note 52 and the text associated with this note.
[9] See e.g. Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. U. L. Rev. 547 (2002-2003); *Director Primacy and Shareholder Disempowerment*, 119 HARV. L. REV. 1735 (2006).

The discussion about the duties of directors in the vicinity of insolvency has its roots in the various competing theories that undergird the concept of the corporation. These theories have their origins in a debate that started in the 1930s between Adolph Berle and Merrick Dodd. On the one end, Berle, argued that the corporation existed only to make money for its shareholders,[10] while Dodd claimed that the firm has responsibilities towards all its constituencies, not just shareholders.[11]

The Berle-Dodd debate had a material influence over theories on the scope of directors' fiduciary duties. The significance of determining the scope and the recipient of the fiduciary duties was presciently emphasized by Justice Frankfurter:

> [T]o say that a man is a fiduciary only begins the analysis; it gives direction to further inquiry. To whom is he a fiduciary? What obligations does he owe as a fiduciary? In what respect has he failed to discharge these obligations?[12]

On one hand, if the corporation exists for shareholders only, then the directors owe their duties to the shareholders regardless of the insolvency status. On the other hand, if the corporation should serve a broader range of interests, then directors need to be cognizant of these interests and take great care in serving them (especially when the firm approaches insolvency).

Very often, the theories examining the purpose of fiduciary duties either fail to acknowledge a distinct, intrinsic economic interest of the corporate entity, or they intermingle such interest with those of the stakeholders. One of the most recent Delaware cases tackling the

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[10] Adolph A. Berle, *Corporate Powers as Powers in Trust*, 44 HARV. L. REV. 1049, 1049 (1931) (stating that "all powers granted to a corporation or to the management of a corporation, or to any group within the corporation … are at all times exercisable only for the ratable benefit of all the shareholders as their interest appears"); *For Whom Corporate Managers Are Trustees*, 45 HARV. L. REV. 1365, 1367 (1933) (arguing that the shareholders' wealth maximization norm cannot be abandoned until there is a clear and reasonably enforceable scheme of responsibilities towards other constituencies).

[11] Merrick Dodd, *For Whom Are Corporate Managers Trustees*, 45 HARV. L. REV. 1145, 1148 (1932) (advocating "a view of the business corporation as an economic institution which has a social service as well as a profit making function").

[12] Securities and Exchange Commission v. Chenery Corp. 318 U.S. 80, 85-86 (1942).

matter of directors' fiduciary duties is an eloquent example. In *Production Resources*,[13] the Delaware Court of Chancery argued that, even in insolvency, the corporation itself remains the recipient of fiduciary duties. Vice Chancellor Strine pointed out:

> … even in the case of an insolvent firm, poor decisions by directors that lead to a loss of corporate assets and are alleged to be a breaches [sic] of equitable fiduciary duties remain harms *to the corporate entity itself*.[14] (emphasis added)

According to Vice Chancellor Strine's judgment, the only significant shift that occurs in insolvency is the constituency that stands to loose the most in case of breach of fiduciary duties. In financially distressed firms, creditors become the residual claimants. Consequently, directors have the obligation to maximize the value of the firm "on behalf" of the creditors.[15]

Although the reasoning of this decision is based on the premise that the corporation is the beneficiary of directors' fiduciary duties regardless of its solvency, Vice Chancellor Strine failed to distinguish between the interests of the corporation itself and the particular interests of corporate constituencies. He used interchangeably the concepts of fiduciary duties owed to the corporation itself and fiduciary duties owed to the residual risk-bearers (shareholders, when the corporation is solvent, and creditors in insolvency), thus adding to the confusion surrounding the

[13] Production Resources v. NCT Group, 863 A.2d 772 (Del.Ch. 2004). In this case, Production Resources Group ("PRG") brought a claim against its debtor, NCT Group, alleging breach of fiduciary duty by NCT's board, and requesting the appointment of a receiver. PRG invoked NCT's insolvency to argue that it may bring such claims directly (and not derivatively). NCT moved to dismiss the complaint for failure to state a claim upon which relief can be granted. The Court ruled that PRG's claims for breach of fiduciary duty based on "gross negligence or worse" represent claims for breach of duty of care and fall under the exculpatory provisions of NCT' charter. Therefore, the Court held that, in this respect, PRG failed to state a claim for breach of fiduciary duty. However, the amount of the compensations received by NCT's managers and the unusual set of particularized facts were deemed sufficient grounds for a non-exculpated breach of fiduciary duty claim. Therefore, the motion to dismiss PRG's claim for breach of fiduciary duty was granted to the limited extent mentioned above, and was denied in any other respect.

[14] *Id.* at 792.

[15] *Id.* at 791.

matter of directors' duties.[16] For example, at the beginning of his analysis of fiduciary duties, Vice Chancellor Strine acknowledged that

> [O]ur corporate law (and that of most of our nation) expects that the directors of a solvent firm will cause the firm to undertake economic activities that maximize the value of the firm's cash flows *primarily for the benefit of the* ***residual risk-bearers****, the owners of the firm's equity capital*.[17] (emphasis added)

Yet later, he wrote:

> When a firm has reached the point of insolvency, it is settled that under Delaware law, the firm's directors are said to owe fiduciary duties to the company's creditors. This is an uncontroversial proposition... *The directors continue to have the task of attempting to maximize the economic value of the* ***firm****. That much of their job does not change.* But the fact of insolvency does necessarily affect the constituency on whose behalf the directors are pursuing that end. By definition, the fact of insolvency places the creditors in the shoes normally occupied by the shareholders — that of residual risk-bearers.[18] (emphasis added)

In insolvency, he further explained, the creditors acquire the right to sue the directors derivatively, on behalf of the corporation. Insolvency does not make creditors direct beneficiaries of fiduciary duties and, therefore, creditors cannot bring a direct claim against corporate managers, for breach of fiduciary duties. Such claims "…remain derivative, with either shareholders or creditors suing to recover for a harm done to the corporation as an economic entity"[19]. The recovery pursuant to such claim "benefits the derivative plaintiffs indirectly to the extent of their claim on the firm's assets."[20]

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[16] The failure to emphasize that directors' duties run at all times to the corporation (regardless of what particular constituency indirectly benefits the most) renders this decision dangerously ambiguous. Campbell & Frost's analysis of *Production Resources* is a good example to illustrate the potential for confusion or misinterpretation created by this decision. These authors claim that "the duty of corporate managers in the vicinity of insolvency, as Vice Chancellor Strine sees it, continues to be an obligation to act in the best interests of *shareholders*, subject, however, to an expanded right (but no obligation) to transfer wealth from shareholders to creditors. Vice Chancellor Strine's fundamental point – that moving from solvency to the vicinity or zone of insolvency should not change managers' basic fiduciary obligation to act in the best interests of *shareholders* – is in our view sound." Rutherford B. Campbell, Jr. & Cristopher W. Frost, *Managers' Fiduciary Duties in Financially Distressed Corporations: Chaos in Delaware (and Elsewhere)*, *available at* http://ssrn.com/abstract=900904, 19-20 (2006) (emphasis added).
[17] Production Resources v. NCT Group, 863 A.2d 772, 787 (Del.Ch. 2004).
[18] *Id.* at 792.
[19] *Id.* at 792.
[20] *Id.*

So far, it appears that the underlying principle to emerge from Vice Chancellor Strine's judgment is that the corporation, as a distinct entity, is the direct beneficiary of fiduciary duties, regardless of which constituency reaps most of the benefits generated by such duties. In light of this theory, Vice Chancellor's ruling in *Production Resources* is surprising. After arguing that, in insolvency, the corporation remains the beneficiary of fiduciary duties and, therefore, creditors can sue directors only derivatively, Vice Chancellor Strine concluded:

> I will resolve the motion on the established principle that when a firm is insolvent, the directors take on a fiduciary relationship to the company's *creditors*, combining that principle with the conservative assumption that there might, possibly exist circumstances in which the directors display such a marked degree of animus towards a particular creditor with a proven entitlement to payment that they expose themselves to a *direct fiduciary duty claim* by that creditor.[21] (emphasis added)

Later, he added:

> …I am not prepared to rule out the possibility that [the creditor] can prove that the [debtor's] board has engaged in conduct towards [the creditor] that might support a direct claim for breach of fiduciary duty by it as a particular creditor.[22]

The decision in *Production Resources* appears to endorse the theory that, in insolvency, situations may occur, in which creditors could have direct claims against directors for breach of fiduciary duties.[23] The theory advocating fiduciary duties for the benefit of creditors, as the firm becomes insolvent, had already received both doctrinal[24] and jurisprudential[25] endorsements

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[21] *Id.* at 798 (emphasis added).
[22] *Id.* at 800.
[23] The contradictory language of *Production Resources* has generated various interpretations of Vice Chancellor Strine's judgment. Some authors interpreted this decision as simply reinforcing the derivative character of creditors' claims against the directors (Ribstein & Alces, *supra* note 6 at 13). The business judgment rule continues to protect directors' decisions in the proximity of insolvency (*Id.*).
[24] The theory that advocates direct fiduciary duties to creditors was grounded on the trust fund doctrine. According to this doctrine, the directors of insolvent companies are regarded as constructive trustees for the benefit of creditors. Royce de R. Barondes, *Fiduciary Duties of Officers and Directors of Distressed Corporations*, 7 GEO. MASON L. REV. 45 (1998-1999). De R. Barondes claims that "[t]he majority rule, and the law in Delaware, is that, upon insolvency, a board's duties are owed to the creditors of the enterprise" (*Id*. at 63). He further adds that "the 'trust fund' doctrine is the seminal theory" (*Id.* at 64).

prior to *Production Resources*. For example, in *Geyer v. Ingersoll Publications*,[26] Vice Chancellor Chandler argued that the insolvency in fact, and not the initiation of bankruptcy procedures, entitles creditors to become the beneficiaries of directors' fiduciary duties.

> Two factors lead me to conclude that insolvency means insolvency in fact rather than insolvency due to a statutory filing in defining insolvency for purposes of determining when a *fiduciary duty to creditors* arises. The first and more important factor is that Delaware caselaw requires this conclusion…[27] Besides Delaware caselaw, the other factor upon which I rely in holding that the insolvency exception arises upon the fact of insolvency rather than the institution of statutory proceedings is the ordinary meaning of the word insolvency. An entity is insolvent when it is unable to pay its debts as they fall due in the usual course of business… That is, an entity is insolvent when it has liabilities in excess of a reasonable market value of assets.[28] (emphasis added)

In determining the beneficiary of fiduciary duties in insolvency, Vice Chancellor Chandler used a use similar approach to that applied by Vice Chancellor Strine in *Production Resources*. He alternated between referring to creditors' interests and the interests of the corporation, thereby creating potential for confusion between the two types of interests.

> The existence of the fiduciary duties at the moment of insolvency may cause directors to choose a course of action that best serves *the entire corporate enterprise* rather than any single group interested in the corporation at a point in time when shareholders' wishes should not be the directors only concern. Furthermore, the existence of the duties at the moment of insolvency

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[25] *See* Bovay v. H. M. Byllesby & Co., 38 A.2d 808, 813 (Del. 1944) (providing that "[t]he fact which creates the trust [for the benefit of creditors] is the insolvency, and when that fact is established, the trust arises, and the legality of the acts thereafter performed will be decided by very different principles than in the case of solvency."); *Davis v. Woolf*, 147 F.2d 629 (4th Cir.1945) (providing that "when a corporation becomes insolvent or [is] in a failing condition, the officers and directors no longer represent the stockholders, but by the fact of insolvency, become trustees for creditors."). *See also* Bank Leumi-Le-Israel, B.M., Philadelphia Branch v. Sunbelt Industries, Inc., 485 F. Supp. 556, 559 (S.D. Ga 1980) (stating that, in the case of an insolvent firm, the directors and officers are trustees of corporate properties for the primary benefit of creditors); In Re Ben Franklin Retail Stores, Inc., 225 B.R. 646 (Bankr. N.D. Ill. 1998) (stating that creditors replace shareholders as "residual owners" of a corporation during insolvency); In Re Healthco Intern., Inc., 208 B.R. 288, (Bankr. D. Mass. 1997) (providing that, when a transaction renders the corporation insolvent, or brings it to the brink of insolvency, the rights of creditors become paramount); Federal Deposit Ins. v. Sea Pines Co., 692 F.2d 973, 977 (4th Cir. 1982) (providing that "when the corporation becomes insolvent, the fiduciary duty of the directors shifts from the stockholders to the creditors").

[26] 621 A.2d 748 (Del. Ch. 1992). In *Geyer*, Geyer, the plaintiff, was a shareholder and employee of Ingersoll Publications Company ("IPCO"). Ingersoll was the President, Chairman of the Board and controlling shareholder of IPCO. IPCO repurchased Geyer's shares for a price of $2 million, to be paid in increasing amounts. IPCO defaulted on its payments. Geyer brought the action against IPCO and Ingersoll, alleging, *inter alia,* breaches of fiduciary duties. Ingersoll filed a motion to dismiss, arguing that the Court lacked personal jurisdiction over him and that the plaintiff failed to state a claim for which the Court can grant relief. The Court denied Ingersoll's motion to dismiss.

[27] *Id.* at 787.

[28] *Id.* at 789.

> rather than the institution of statutory proceedings prevents creditors from having to prophesy when directors are entering into transactions that would render the entity insolvent and improperly prejudice *creditors' interests*.[29] (emphasis added)

Although the Court's comments regarding the beneficiary of fiduciary duties are dicta,[30] *Geyer v. Ingersoll* is often invoked as an argument for the claim that, when insolvency in fact occurs, creditors become the beneficiaries of fiduciary duties.[31]

Another school of thought believes that the mere threat of insolvency (as opposed to insolvency in fact or initiation of bankruptcy proceedings) is sufficient for a shift in the beneficiary of fiduciary duties to occur. As the firm enters the so-called "vicinity of insolvency", the shareholders cease to be the main beneficiary of such duties, whereas creditors gain a preeminent interest in the firm's business.[32] In the "zone of insolvency", the fiduciary duties require directors to take into account creditors' interests as well as the claims of all other

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[29] *Id.* at 789.
[30] See *supra* note 26.
[31] *See e.g.* Jonathan C. Lipson, *Directors' Duties to Creditors: Power Imbalance and the Financially Distressed Corporation,* 50 UCLA L. REV. 1189, 1191 (2002-2003).
[32] The theory's rationale is that, when the company approaches insolvency, the shareholders retain no interest in the firm, whereas the creditors become the true corporate stakeholders. In such circumstances, the firm is effectively trading with creditors' money. Moreover, it is argued that insolvency creates for shareholders the incentive to engage in overly risky projects. Guarded by the limited liability principle, the shareholders have nothing to loose if a very risky investment goes sour, whereas the creditors bear the entire risk associated with such ventures. See Lynn M. LoPucki & William C. Whitford, *Corporate Governance in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 141 U. PA. L. REV. 669, 683-684 (1993) (providing that, when a marginally solvent company engages in high risk investments, the risks are borne primarily by creditors while the benefits accrue primarily to shareholders); Andrew Keay, *The Director's Duty to Take Into Account the Interests of Company Creditors: When is it Triggered?*, 25 MELB. U. L. REV. 315, 317-318 (2001) (noting that, in the vicinity of insolvency, the company is effectively trading with creditors' money and, therefore, the creditors may be seen as the major stakeholders in the firm); Stephen McDonnell, Geyer v. Ingersoll Publications Co*: Insolvency Shifts Directors' Burden Form Shareholders to Creditors*, 19 DEL. J. CORP. L. 177, 185 (1994) (arguing that "[t]he rationale of the shift upon insolvency is that creditors become the equitable owners of the corporation because they are the only parties with an interest in the corporation's assets"); Brian Morgan & Harry Underwood, *Directors' Liability to Creditors on a Corporation's Insolvency in Light of the* Dylex and Peoples Department Stores *Litigation*, 39 CAN. L. BUS. .J. 336, 338 (2004) (noting that, when a corporation is near insolvency, "it is not contentious to state that the company is effectively subsisting on funding provided (albeit unwillingly) by its creditors"); Stéphane Rousseau, *The Duties of Directors of Financially Distressed Corporations: A Québec Perspective on the Peoples Case*, 39 CAN. L. BUS. J. 368, 382 (2004) (stating that "at the point of insolvency, the shareholders cease to have any material interest in the assets of the corporation, since there is little or no equity remaining. It is therefore in the interests of shareholders to keep the corporation in business and to undertake risky investments as there is no downside risk for them, only upside benefit"). For an opinion claiming that management's risk preference is not a solid ground to justify the shift of fiduciary duties from shareholders to creditors see Edward M. Iacobucci, *Directors' Duties in Insolvency: Clarifying What is at Stake*, 39 CAN. BUS. L. J. 398, 407 (2004).

constituencies that contribute to the firm's wellbeing. Stated differently, on the brink of insolvency directors must maximize the value of all claims against the firm.[33]

The seminal case promoting the "vicinity of insolvency" doctrine is *Credit Lyonnais Bank N.V. v. Pathé Communications Corp*.[34] The decision issued by the Delaware Chancery Court in *Credit Lyonnais* marked a fundamental change in the landscape of director liability, by forcing directors to consider the effects their decisions may have upon non-shareholding constituencies as the firm becomes financially distressed.[35]

For all its novelty, *Credit Lyonnais* addressed the "vicinity of insolvency" concept in a cursory and ambiguous fashion. Chancellor Allen pointed out that:

> At least where a corporation is operating in the vicinity of insolvency, a board of directors is not merely the agent of the residue risk bearers, but owes its duty to the corporate enterprise.[36]

Furthermore, he stated that the board of directors "had an obligation to the community of interest that sustained the corporation, to exercise judgment in an informed, good faith effort to

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[33] See Andrew D. Shaffer, *Corporate Fiduciary-Insolvent: The Fiduciary Relationship Your Corporate Law Professor (Should Have) Warned You About*, 8 AM. BANKR. L. REV. 479, 517-520 (2000) (arguing that the justification for director's fiduciary duties to creditors in the vicinity of insolvency is based on the contingent property interest of the creditors and the threat to the "legal value" of their claims); Steven L. Schwarcz, *Rethinking a Corporation's Obligation to Creditors* 17 CARDOZO L. REV. 647, 667 (1996) (noting that "[c]reditors of an insolvent corporation, however, not only have a senior right to repayment, but they also now have the right, traditionally associated with ownership, to the "upside" in value of the corporate debtor's assets, at least until the corporation regains solvency"); Jacob S. Ziegel, *Creditors as Corporate Stakeholders: The Quiet Revolution – An Anglo-Canadian Perspective*, 43 U. TOR. L.J. 511, 529-531 (1993) (claiming that the protection of creditors' interests by fiduciary duties is justified by the inequality of positions between the corporation and the creditors and by the necessity to balance the advantages conferred to shareholders by limited liability).

[34] 1991 WL 277613 (Del. Ch. 1991). Credit Lyonnais Bank Nederland ("CLBN") was a major lender to MGM-Pathé Communications Co. ("MGM") and to MGM's parent, Pathé Communications Corp. ("PCC"). PCC defaulted on loans from CLBN, which were secured with the shares held by PCC in MGM. Based on a Corporate Governance Agreement, CLBN claimed to be the registered owner of the MGM controlling block of shares, and replaced PCC's directors from MGM's board. Furthermore, CLBN filed a petition in court seeking, inter alia, a judicial validation of the replacement of directors. PCC and its representatives filed a counterclaim arguing, inter alia, that MGM management breached their fiduciary duty to PCC, in its capacity as majority shareholder, by failing to implement a sales transaction that the counterclaimants envisaged in order to regain control over MGM. The Delaware Court concluded that CLBN's action to replace PCC's representatives from MGM's board was valid and effective. Defendants' counterclaim was dismissed as not proven. For other cases upholding the vicinity of insolvency doctrine see also Pereira v. Cogan, 294 B.R. 449 (S.D.N.Y. 2003); In Re Buckhead Am. Corp. 178 B.R. 956 (D. Del. 1994); In Re Ben Franklin Retail Stores, Inc., 225 B.R. 646 (Bankr. N.D. Ill. 1998).

[35] Thomas R. Califano, *A Shift in Fiduciary Duties*, THE NAT'L L. J. (17 September 2001).

[36] *Credit Lyonnais, supra* note 34 at 247.

maximize the corporation's long-term wealth creating capacity."[37] Similar to the previously discussed decisions of the Delaware Court of Chancery, *Credit Lyonnais* referred alternately and interchangeably to the best interests of the corporation and to the interests of various stakeholders.

Chancellor Allen used a numerical example to illustrate the conflicting incentives that shareholders and creditors have when the firm becomes financially troubled,[38] and he concluded that:

> [I]n managing the business affairs of a solvent corporation in the vicinity of insolvency, *circumstances may arise* when the right (both the efficient and the fair) course to follow for the corporation may diverge from the choice that the stockholders (or the creditors, or the employees, or any single group interested in the corporation) would make if given the opportunity to act.[39]

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[37] *Id.* at 248.

[38] Allen uses the following example:

> The possibility of insolvency can do curious things to incentives, exposing creditors to risks of opportunistic behavior and creating complexities for directors. Consider, for example, a solvent corporation having a single asset, a judgment for $51 million against a solvent debtor. The judgment is on appeal and thus subject to modification or reversal. Assume that the only liabilities of the company are to bondholders in the amount of $12 million. Assume that the array of probable outcomes of the appeal is as follows:

	Expected Value
25% chance of affirmance ($51mm)	$12.75
70% chance of modification ($4mm)	$2.8
5% chance of reversal ($0)	$0
Expected Value of Judgment on Appeal	$15.55

> Thus, the best evaluation is that the current value of the equity is $3.55 million. ($15.55 million expected value of judgment on appeal $12 million liability to bondholders). Now assume an offer to settle at $12.5 million (also consider one at $17.5 million). By what standard do the directors of the company evaluate the fairness of these offers? The creditors of this solvent company would be in favor of accepting either a $12.5 million offer or a $17.5 million offer. In either event they will avoid the 75% risk of insolvency and default. The stockholders, however, will plainly be opposed to acceptance of a $12.5 million settlement (under which they get practically nothing). More importantly, they very well may be opposed to acceptance of the $17.5 million offer under which the residual value of the corporation would increase from $3.5 to $5.5 million. This is so because the litigation alternative, with its 25% probability of a $39 million outcome to them ($51 millon -- $12 million $39 million) has an expected value to the residual risk bearer of $9.75 million ($39 million x 25% chance of affirmance), substantially greater than the $5.5 million available to them in the settlement. While in fact the stockholders' preference would reflect their appetite for risk, it is possible (and with diversified shareholders likely) that shareholders would prefer rejection of both settlement offers.
>
> But if we consider the community of interests that the corporation represents it seems apparent that one should in this hypothetical accept the best settlement offer available providing it is greater than $15.55 million, and one below that amount should be rejected. But that result will not be reached by a director who thinks he owes duties directly to shareholders only. It will be reached by directors who are capable of conceiving of the corporation as a legal and economic entity. *Id* at 321-329

[39] *Id.* at 329.

The decision in *Credit Lyonnais* raised more questions than it answered. Firstly, the court did not provide any guidelines for determining the vicinity of insolvency zone.[40] Secondly, it failed to identify clearly the recipient of fiduciary duties, by referring successively to the best interests of the firm and to the interests of all constituencies. Thirdly, no explanations were provided as to what are the best interests of the corporation or the collective interests of stakeholders and how the directors are supposed to further such interests.

Other Court decisions have set forth different criteria for determining when the fiduciary duties shift so as to include creditors. In *Re Healthco Int'l Inc.* the bankruptcy court found that the fiduciary duties could include creditors if a showing was made similar to that required under fraudulent conveyance statutes, *i.e.,* that there was an "unreasonably small capital."[41] In *Geron v. Schulman (In re Manshul Const. Corp.)* the court held that a corporation with "unreasonably small capital" is one that is "technically solvent but doomed to fail."[42]

Despite the pronouncement of these cases, no case exists that actually holds a director liable for a breach of a direct fiduciary duty to creditors. As Ribstein and Alces observed, "[m]any cases have dicta supporting special director duties to creditors … or at least a special

[40] Because "vicinity of insolvency" is a vague concept, it is often argued that it is impossible to determine when the fiduciary duties should shift from shareholders to creditors (or should broaden to include the creditors). See e.g. Stephen M. Bainbridge, *Much Ado About Little? Directors' Fiduciary Duties in the Vicinity of Insolvency*, *forthcoming* J. BUS. TECH. L. (2006), *available at* http://ssrn.com/abstract=832504. In response to this inconvenience, certain guidelines have been advanced to determine whether or not the firm is in the insolvency zone. The shift of fiduciary duties shall occur whenever insolvency in fact is reasonably foreseeable or when directors engage in a transaction that would raise the specter of insolvency in fact. *See* Brad Eric Scheler, *Necessity, the Mother of Invention, Strikes Again: Deepening Insolvency – Dissecting the Decisions of Directors and Officers in the Zone of Insolvency Through a Rearview Looking Glass*, ANN. SURVEY OF BANKRUPTCY LAW 227 (2005). The insolvency in fact can be determined based on two tests: the balance sheet test (when liabilities exceed assets) and the cash-flow test (when the corporation is unable to pay its debts as they fall due in the ordinary course of business). *Id* at 288. *See also* James Sprayregen et al., *The Zone of Insolvency: When Has a Company Entered into It, and Once There, What are the Board's Duties?*, Bankruptcy 2002: Views From The Bench, Washington, D.C., September 20, 2002, *available at* http: //www.kirkland.com/files/tbl _s14 Publications/Document1303.pdf.

[41] 208 B.R. 288, 302 (D. Mass 1997).

[42] 2000 U.S. Dist. LEXIS 12576, 154-55 (S.D.N.Y. Aug. 30, 2000) (enumerating several factors that are used to evaluate the adequacy of firm's capital: debt-to-equity ratio, historical capital cushion and need for working capital).

duty to balance duties to shareholders and creditors."[43] Notwithstanding the lack of legal authority of such decisions, creditors continue to invoke them as a warning against potential managerial liability.[44]

Most scholars have rejected the idea that directors should ever owe creditors direct fiduciary duties. They have done so using various justifications. For example, one theory running counter to the shifting fiduciary duties approach is the stakeholder theory, which claims that the fiduciary duties impose on managers the obligation to attend to the interests of all stakeholders, regardless of whether the firm is solvent or insolvent.[45] An analogous theory holds

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[43] Ribstein & Alces, *supra* note 6 at 2.

[44] *Id.*

[45] The stakeholder approach holds that economic value is created by people who voluntarily come together and cooperate to improve everyone's status. For this reason, regardless of the ultimate goal of the firm, the corporate managers must take into account the legitimate interests of all groups that affect or are affected by the firm's business. Furthermore, it is argued that this theory is consistent with the shareholder wealth maximization norm, since creating value for other stakeholders ultimately creates value for shareholders. See R. EDWARD FREEMAN, STRATEGIC MANAGEMENT: A STAKEHOLDER APPROACH (1984); Frank Easterbrook & Daniel R. Fischel, *The Corporate Contract*, 89 COLUM L. REV. 1416, 1416-1448 (1989). *See also* Bernard Black, *Corporate Law and Residual Claimants*, Berkeley Program in Law & Economics, Working Paper Series, *available at* http://repositories.cdlib.org/blewp/27; Joseph Mahoney et al. *Towards a Property Rights Foundation for a Stakeholder Theory of the Firm*, 9 J. MGMT GOV. 5, 5-32 (2005); Margaret M. Blair & Lynn A. Stout, *Director Accountability and the Mediating Role of the Corporate Board*, 79 WASH. U. L. Q. 403, 403-447 (2001); R. Edward Freeman, *The Politics of Stakeholder Theory*, 4 BUS. ETHICS. Q. 409, 409-421 (1994); R.Edward Freeman & William M. Evan, *Corporate Governance: A Stakeholder Interpretation*, 19 J BEHAVIORAL ECON. 337, 337-359 (1990); R. Edward Freeman et al., *What Stakeholder Theory Is Not*, 13 BUS. ETHICS Q. 479, 479-502 (2003); Thomas Donaldson & Lee E. Preston, *The Stakeholder Theory of the Corporation – Concepts, Evidence and Implication*, 20 ACAD. MANAGEMENT REV. 69, 65-91 (1995).

The idea that the business relies on the inputs of various constituencies, and, therefore, their interests must be equally taken into account, is the core of other theories, very similar with the stakeholder theory: the corporate social responsibility theory, and the team production theory. *See* DAVID VOGEL, THE MARKET FOR VIRTUE: THE POTENTIAL AND LIMITS OF CORPORATE SOCIAL RESPONSIBILITY (2005); David Baron, *Private Politics, Corporate Social Responsibility, and Integrated Strategy*, 10 J. ECON. MGMT. STRAT. 7, 7-45 (2001); Margaret Blair & Lynn Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 248, 248-328 (1999); Allen Kaufman et al., *A Team Production Model of Corporate Governance Revisited*, George Washington University SMPP Working Paper No. 03-03 (2003), *available at* http://ssrn.com/abstract=410080.

The stakeholder doctrine has been criticized for imposing unnecessary complexity on manager' duties, if they were required to serve the interests of all constituencies. In such a scenario, the managers would have to evaluate and balance the claims of all stakeholders before adopting a decision, usually in a very short period of time. This decision-making process could be expected to affect the quality of managerial decisions. Additionally, the stakeholder theory fails to provide guidelines for managers, when they are faced with the task of mediating the conflicting stakeholder interests. See ABA Comm. On Corporate Laws, *Other Constituencies Statutes: Potential for Confusion*, 45 BUS. LAW. 2253 (1990). In the same line of thought, Jensen pointed out that "it is logically impossible to maximize in more than one dimension at the same time unless the dimensions are monotone transformations of one another. The result will be confusion and lack of purpose that will fundamentally handicap

that the fiduciary duties are owed to the corporation itself, regarded as an entity distinct from its constituencies, notwithstanding the firm's solvency status.[46] In promoting the best interests of the

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the firm in its competition for survival." Michael C. Jensen, *Value Maximization, Stakeholder Theory and the Corporate Objective Function*, 14 J. APPL. CORP. FIN. 8, 8-21 (2001).

[46] See Thomas A. Smith, *The Efficient Norm for Corporate Law: A Neotraditional Interpretation of Fiduciary Duty*, 98 MICH. L. REV. 214 (1999). Smith argues that economic efficiency imposes as default rule directors' obligation to maximize the value of the corporation, namely "the sum of the value of financial claims against the corporation." *Id.* at 218. The "neotraditional" approach proposed by Smith envisages a fiduciary duty owed to the corporation itself, but the exercising thereof "would benefit one class of claimants and sometimes another, depending on the circumstances" *Id.* at 218-219. Smith's approach suffers from several shortcomings: (i) It does not explain the concept of "sum of value of all financial claims" – is this notion referring to a distinct element (the maximization of which ensures the maximization of the specific stakeholder interests)? Is it referring to the same stakeholder wealth maximization advocated by the stakeholder theory? Or is it simply referring to making the aggregate financial claims against the firm Kaldor-Hicks superior? It appears that his theory advocates the latter answer. (ii) How are directors supposed to maximize this sum? Can directors pursue the interests of any one constituency, as long as the value of the "sum" is increased? Smith's neotraditional approach resembles our model in that it shifts the focus of the fiduciary duties from the stakeholders to the corporation. Smith's model, however, equates the interests of the corporation with the sum of all financial claims against the firm and thus redirects the analysis towards the corporate constituencies.

Another theory advocating fiduciary duties owed to the corporation is developed by Laura Lin, *Shift of Fiduciary Duty upon Corporate Insolvency: Proper Scope of Directors' Duty to Creditors*, 46 Vand. L. Rev. 1485 (1993). Lin analyzes the scenario in which the directors have the obligation to maximize the company's value even when the firm is in financial distress and even if this action diverges from what shareholders or creditors would have chosen *Id.* at 1487. To this end, the "directors should pursue the projects that have positive net present value to the company as a whole, and not just a positive effect on either debt or equity" *Id.* at 1497. This approach is very similar with the theory developed by this article, but Lin discards this path mainly for unenforceability reasons. Lin points out that "as the company's financial condition becomes more precarious, neither shareholders nor creditors have incentives to ensure that directors are taking actions that promote the firm's long-term profitability. Therefore, a default rule that requires directors to maximize the firm's value is of little benefit if it lacks an effective enforcement mechanism" *Id*. at 1509 (citations omitted). The soundness of this argument is questionable for several reasons: (i) Firstly, it mixes the interests of the corporation with the specific interests of stakeholders. As we will demonstrate in Section 4 here under, the stakeholders' preferences for specific business strategies are not relevant for maximizing the value of the firm; this is true both in and out of insolvency. (ii) Even if we admit that stakeholders' interests are relevant for the business strategy, such interests are essentially heterogeneous, both within the same constituency and among different classes of stakeholders. Therefore, we call in question the accuracy of the conclusion that, near insolvency, none of the constituencies would be interested in positive net present value projects. On the contrary, as we explain in Section 5, the bond covenants usually comprise provisions that thwart shareholders' incentives to underinvest by selecting negative net present value projects. The effect of such provisions is to direct the company towards positive net present value projects. (iii) If maximizing the value of the firm is the default rule imposed by fiduciary duties, the approach of the zone of insolvency signals to the stakeholders the potential occurrence of director misbehavior. Therefore, stakeholders have strong incentives to enforce this fiduciary duty (derivatively), preventing thus the entrance in the insolvency zone. (iv) The enforcement of fiduciary duties is always restricted by the by the business judgment rule, which imposes limitations on judicial scrutiny over managerial decisions. This is not to say, however, that any attempt to develop a legally and economically valid model for fiduciary duties is futile. As we mentioned herein above, a sound analysis of the fiduciary duties must distinguish between the procedural and the substantive aspects thereof.

Lin concludes that, despite its disadvantages, the most efficient rule for fiduciary duties is to impose on directors the obligation "to maximize shareholders' interests regardless of the firm's financial condition", while creditors would contract specifically for directors' obligation to maximize the company's value *Id.* at 1500, 1510. We believe that this approach has a significant potential for confusion, for directors as well as for stakeholders. Such a fiduciary duty would make shareholders the direct beneficiaries of fiduciary duties. Consequently, directors would have to accommodate the various interests of shareholders in order not to breach their fiduciary duties. If the specific

corporation, the directors serve the interests of all constituencies. This opinion was expressed by the Supreme Court of Canada in *Peoples Department Stores v. Wise*. In this case, the Court argued that the concept of "vicinity of insolvency" is impossible to be defined and is void of any legal meaning.[47] Therefore, directors' fiduciary duties do not change when the firm is in the nebulous "vicinity of insolvency."[48] In other words,

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interests of minority shareholders were different from those of the majority, directors could be faced with an inextricable stalemate. Moreover, knowing that directors owe fiduciary duties to shareholders, creditors would charge a higher premium for the increased risk of breach of contract, which won't be economically efficient for the firm.

For other theories endorsing fiduciary duties owed to the corporation see Alon Chaver & Jesse M. Fried *Managers' Fiduciary Duty Upon the Firm's Insolvency: Accounting for Performance Creditors*, 55 VAND. L. REV. 1813, 1817 (2002) (pointing out that "an insolvent firm's managers should have as their objective the maximization of the sum of the values of all claims -both financial and performance- against the firm.") Gregory S. Crespi, *Rethinking Corporate Fiduciary Duties: The Inefficiency of the Shareholder Primacy Norm*, 55 SMU L. REV. 141, 143 (2002) (demonstrating that, for both public and closely-held corporations, economic efficiency would be enhanced if directors' fiduciary duties were construed as running to the corporation, and not solely to its shareholders).

The idea that the corporation is an entity distinct from its constituencies, however, is challenged by the contractarian theory of the firm. According to this theory, the firm is a network of explicit and implicit contracts among various suppliers of inputs acting together to produce goods or to provide services. *see e.g.* STEPHEN M. BAINBRIDGE, CORPORATION LAW AND ECONOMICS 27 (2002). Other authors within this school of thought have referred to the firm as a "black box" or an "empty box", operated so as to maximize profits by meeting the relevant marginal conditions with respect to inputs and outputs. Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 306-307 (1976). In rejecting the reification of the corporation promoted by the traditional corporate law theory, the contractarians point out that the corporation is neither an entity, nor a thing capable of being owned. See also WILLIAM A. KLEIN & JOHN C. COFFEE, JR., BUSINESS ORGANIZATION AND FINANCE: LEGAL AND ECONOMIC PRINCIPLES 117-18 (9th ed 2004) [Klein & Coffee hereinafter]; Smith, *supra* note 46 at 214 (noting that "[t]o economically oriented corporate law professors, distinguishing between directors' fiduciary duty to shareholders and a duty to the corporation itself smacks of reification – treating the fictional corporate entity as if it were a real thing."). Another theory denying the firm's status as a separate legal entity is the "connected contracts" theory. The promoters of this theory claim that "there are no firms, no predetermined hierarchies, no organizations with personalities of their own, and no *a priori* notions of ownership or control; there is no shareholder or managerial primacy and no centralizing 'nexus'". The core element of the connected contracts perspective is the putative bargain over control. The business activity consists of bargains among individuals who agree to undertake a specific project. G. Mitu Gulati, William A. Klein and Eric M. Zolt, *Connected Contracts*, 47 UCLA L. Rev. 887 (2000). *See also* Stephen M. Bainbridge, *The Board of Directors as Nexus of Contracts*, 88 IOWA L. REV. 1 (2002) (developing a corporate model in which the board of directors represents a *sui generis* body, serving as the nexus for the various contracts making up the corporation; in this setting, the board's powers flow from the totality of connected contracts, and not just from shareholders).

[47] *People's Department Stores Ltd. (1992) Inc., Re*, 244 D.L.R. (4th) 564, [2004] 3 S.C.R. 461, 326 N.R. 267 (Fr.), 326 N.R. 267 (Eng.), 2004 SCC 68, affirming *People's Department Stores Ltd. (1992) Inc., Re*, 224 D.L.R. (4th) 509, [2003] R.J.Q. 796, 41 C.B.R. (4th) 225, J.E. 2003-499, [2003] Q.J. No. 505, REJB 2003-37254 (C.A. Que. Feb 05, 2003), reversing *People's Department Stores Ltd. (1992) Inc., Re*, 23 C.B.R. (4th) 200, [1999] R.R.A. 178, J.E. 99-318, [1998] Q.J. No. 3571, REJB 1998-09776 (C.S. Que. Dec 15, 1998). Wise Stores Inc. was a chain of junior department stores. Lionel Wise, Ralph Wise and Harold Wise were majority shareholders, officers and directors of Wise Stores. Through a leveraged buyout, Wise Stores acquired Peoples Department Stores Inc. from its parent, Marks & Spencer Canada Inc. The bulk of the sell price was to be paid in installments, over a period of eight years. Following the acquisition, the Wise Brothers were appointed directors of Peoples. They implemented a joint

> [t]he various shifts in interests that naturally occur as the corporation's fortunes rise and fall do not, however, affect the content of the fiduciary duty... At all times, directors and officers owe their fiduciary obligation to the corporation. The interests of the corporation are not to be confused with the interests of the creditors or those of any other stakeholders.[49]

The directors continue to have the obligation to act in the best interests of the corporation by maximizing the value of the firm.[50] To this end, they could be required to consider, *inter alia*, the interests of shareholders, employees, suppliers, creditors, consumers, governments and the environment.[51]

Both the theory promoting the shift of fiduciary duties and the stakeholder theory have been regarded by many scholars as unpersuasive attempts to depart from the traditional shareholder wealth maximization norm. According to such authors, the long-established American corporate law tradition imposed on directors the obligation to maximize shareholder wealth.[52] As Robert Clark wrote, "…from the *traditional legal viewpoint*, a corporation's

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inventory procurement policy, which led to Peoples extending a significant trade credit to Wise Stores and incurring huge losses. As a consequence, Marks & Spencer sought and obtained a court order appointing an interim trustee to control Peoples' assets. In response, Peoples and Wise Stores sought protection under the bankruptcy regulations. Both Wise and Peoples were declared bankrupt a short while after. Following the bankruptcy, Peoples' trustee filed with the Quebec Superior Court a petition against the Wise Brothers, claiming that, by implementing a procurement policy that favored the interests of Wise Stores over those of Peoples, the Wise Brothers breached their fiduciary duties towards Peoples' creditors. The trial judge decided that the Wise Brothers breached their fiduciary duties owed to the company's creditors. The Wise Brothers appealed and the decision of the trial court was reversed. The Court of Appeal ruled that the Wise Brothers acted in good faith, with a view to further the interests of the company, and, therefore, they did not breach the fiduciary duties. The Supreme Court of Canada upheld the Court of Appeal's decision.

[48] *Id*.

[49] *Id.* at para. 43.

[50] *Id.* at para. 42.

[51] *Id.*

[52] This theory claims that the primary purpose of a corporation is to make profit for its shareholders. The most important arguments invoked in support of this norm are: the residual claimants argument, the agency costs argument and the hypothetical bargain argument.

The residual claimants argument states that fiduciary duties should be owed exclusively to shareholders because, in their capacity as residual claimants, they have the best incentives to maximize the value of the firm. *See* FRANK R. EASTERBROOK & DANIEL FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW, 63, 67 (1996) ("[W]hy do shareholders alone have voting rights? […] The reason is that shareholders are the residual claimants to the firm's income."); *Voting in Corporate Law*, 26 J.L. ECON. 395, 403 (1983) (noting that "[a]s the residual claimants, the shareholders are the group with the appropriate incentives […] to make discretionary decisions."; "The shareholders receive most of the marginal gains and incur most of the marginal cost. They therefore have the

right incentives to exercise discretion"); See also Robert L. Lipper, *Agency Conflicts, Managerial Compensation, and Firm Variance*, 9 J. FIN. STRAT. DECISIONS 39, 39-47 (1996).

Several authors, however, consider that the changing nature of the firm in the contemporary business world renders tenuous the conventional idea that shareholders are the sole residual claimants. These authors point out that other groups of claimants, such as employees, creditors, option holders, customers and even the state, stand to gain when the firm is prosperous and suffer when business does badly. Therefore, they are corporate residual claimants, alongside with the shareholders. *See* Black, *Corporate Law and Residual Claimants*, *supra* note 45; Joseph Mahoney et al., *Towards a Property Rights Foundation*, *supra* note 45; Blair & Stout, *Director Accountability*, *supra* note 45.

Other authors argue that the purpose of fiduciary duties is to protect shareholders against the agency costs generated by the separation between ownership and control, specific to public corporations. In 1932, Adolf Berle and Gardiner Means articulated the concept of separation between ownership and control, in their landmark book THE MODERN CORPORATION AND PRIVATE PROPERTY (1993). The premise for the separation of the two prerogatives is that one party, who owns property (in the sense of controlling and deriving the residual benefit from such property), but who lacks the necessary skill and information to manage its property, delegates open-ended management power to another person. In such a legal relationship, the controllers have the incentive to use their powers for their own benefit rather than to enrich the owners. In those situations where it would be costly or impracticable for the owner to monitor and effectively discipline the controller's performance, the rights of the owner must be protected by the statutory fiduciary duties owed by the controller. In the corporate context, the separation between ownership and control implies an open-ended delegation of powers from shareholders to the board of directors. In large public corporations, such separation results in acquiring by the management of a largely autonomous position in relation to shareholders. This conclusion has as premise the fact that the shareholders of a public company are widely dispersed and no single shareholder owns a controlling percentage of the share capital. Because of collective action problems and rational apathy, the isolated shareholders are unable to coordinate their activities, and effective control of the corporation ends up in the hands of management. This situation justifies the protection of shareholders by fiduciary duties. For a detailed analysis of separation between ownership and control, see Larry E. Ribstein, *The Structure of the Fiduciary Relationship* U. Illinois Law & Economics Research Paper 7, *available* at http://ssrn.com/abstract=397641 (2003). *See also* Robert Cooter & Bradley J. Freeman, *The Fiduciary Relationship: Its Economic Character and Legal Consequences,* 66 N.Y.U. L. REV. 1045 (1991); J.C. Shepherd, *Towards a Unified Concept of Fiduciary* Relationships, 97 L.Q. REV. 51 (1981).

Another theory states that the fiduciary duty for the benefit of shareholders is a bargained-for contractual term in the nexus of contracts setting that represents the corporation. The contractarian theory (or the nexus of contracts theory) views the firm as a network of explicit and implicit contracts among various suppliers of inputs, acting together to produce goods or to provide services. In this framework, the shareholder wealth maximization is a bargained-for obligation of the board-shareholder contract. Stated differently, in a hypothetical bargain setting, the shareholders would negotiate for contractual terms imposing on directors fiduciary duties that incorporate the shareholder wealth maximization norm. The shareholders' position within the contractual framework renders them more exposed to director misbehavior, as compared to other corporate constituencies, and, therefore, justifies fiduciary duties for the benefit of shareholders. The increased vulnerability of shareholders is generated by the specificity of their equity investment and by the "indefinite relationship" with the directors, which is rarely the outcome of detailed negotiations. Creditors, on the other hand, have the possibility to fashion tailor-made terms and conditions in the debt contract, in accordance with their attitude towards risk. Creditors, therefore, have the ability to insure themselves against the risk of default, by including an adequate risk premium in the amount of the interest or the price they charge. See generally Bainbridge, *Much Ado About Little?*, *supra* note 32 at 28;

Some authors questioned the soundness of the conventional arguments for shareholder wealth maximization norm. *See generally* Lynn A. Stout, *Bad and Not-So-Bad Arguments for Shareholder Primacy*, 75 S. CAL. L. REV. 1189 (2002) (claiming that the ownership and sole residual claimants arguments are bad "in the sense that they are built on empirical claims that are demonstrably false" (*Id.* at 1208); a "much more reasonable" justification for shareholder primacy is given by the existence of agency costs (*Id.*). The author further argues that all stakeholders are made better off by a rule that prevents directors from shirking, stealing or engaging in other self-interested activities that would have a negative effect on the price of the shares).

Sundaram and Inkpen offer a different classification of arguments for shareholder wealth maximization. Their reasons are: (i) The goal of maximizing shareholder value is pro-stakeholder (in the sense that shareholders, as residual claimants have incentives to maximize the total value of the firm, which benefits the fixed claimants as well); (ii) Maximizing shareholder value creates proper incentives for managers to assume entrepreneurial risks (as

directors and officers have a fiduciary duty to maximize shareholder wealth, subject to numerous duties to meet specific obligations to other groups affected by the corporation." (emphasis added)[53]

The most influential case endorsing the shareholder wealth maximization norm is, arguably, *Dodge v. Ford Motor Co.*[54] In *Dodge v. Ford* the court was confronted with two opposing assertions regarding the purpose of the corporation: increasing the shareholder wealth versus benefiting the pool of stakeholders contributing to the firm. In response to Henry Ford's allegations, claiming that the corporation had an obligation to benefit the public, the employees

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opposed to managing on behalf of fixed claimants, which exacerbates the incentives for entrepreneurial risk aversion); (iii) It is impossible to manage the business on behalf of multiple constituencies when their goals are in conflict (as opposed to promoting shareholder value, which is an observable and measurable metric); (iv) It is easier for other constituencies to become shareholders than vice versa (claiming that other constituencies can easily become shareholders if they become concerned about managerial abuse); (v) In case of contractual breach, the other constituencies have contractual and judicial remedies (non-share owning stakeholders have judicial recourse through invocation of contractual and tort laws that shareholders typically do not). See Anant K. Sundaram & Andrew K. Inkpen, *The Corporate Objective Revisited*, 15 ORG. SCI. 350, 350-363 (2004). For a spirited critique of Sundaram & Inkpen's arguments see R. Edward Freeman et al., *Stakeholder Theory and 'The Corporate Objective Revisited'*, 15 ORG. SCI. 364, 364-369 (2004).

For an analysis of the fundaments and developments of shareholder wealth maximization norm see also Milton Friedman, *The Social Responsibility of Business is to Increase its Profits,* 33 N.Y. TIMES MAGAZINE 122-126 (1970) (noting that "the key point is that, in his capacity as a corporate executive, the manager is the agent of the individuals who own the corporation or establish the eleemosynary institution, and his primary responsibility is to them"); Stephen M. Bainbridge, *In Defense of the Shareholder Wealth Maximization Norm: A Reply to Professor Green*, 50 WASH. LEE L. REV. 1423 (1993) (pointing out that that the principle of shareholder wealth maximization is both a valid positive account of corporate law and a legitimate normative proposition); Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. U. L. REV. 547 (2003) (arguing that director primacy can be reconciled with the board's obligation to maximize the value of the shareholders' residual claims); D. Gordon Smith, *The Shareholder Primacy Norm*, 23 J. CORP. L. 277 (1998) (affirming that the shareholder primacy norm finds its most direct expression within the law relating to fiduciary duties); Henry Hansmann & Reinier Kraakman, *The End of History for Corporate Law*, 89 GEO. L.J. 439 (2001) (arguing that there is a widespread normative consensus that corporate managers should act exclusively in the interests of shareholders); Wayne D. Gray, *Peoples v. Wise and Dylex: Identifying Stakeholder Interests Upon or Near Corporate Insolvency – Stasis or Pragmatism?*, 39 CAN. BUS. L.J. 242, 242 (2003) ("ordinarily the best interests of the corporation mean the economic interests of its shareholders as a whole"). *See also* STEPHEN A. ROSS ET AL., FUNDAMENTALS OF CORPORATE FINANCE 8-10 (7th ed. 2006) (the goal of corporate management is "to make money or add value for the owners" (i.e. the shareholders), by maximizing the market value of owners' equity); EUGENE F. BRIGHAM & JOEL F. HOUSTON, FUNDAMENTALS OF FINANCIAL MANAGEMENT 15-17 (10th ed. 2004); LAWRENCE J. GITMAN & SEAN M. HENNESSEY, PRINCIPLES OF MANAGERIAL FINANCE 18 (2004); HAIM LEVY & MARSHALL SARNAT, CAPITAL INVESTMENT & FINANCIAL DECISION, 9-11 (4th ed. 1990).

[53] ROBERT CLARK, CORPORATE LAW 678 (1986).

[54] 170 N.W. 668 (Mich. 1919). The Dodge Brothers were minority shareholders of Ford Motor Co. Ford Motor announced that it intends to cease the dividend payments and retain the earnings for the purpose of expanding the business. In response, the Dodge Brothers sued, requesting the court to compel Ford Motor to resume the payment of dividends and to enjoin the envisaged expansion of business. The appellate court affirmed the lower court's order that the company declare a dividend and reversed the lower court's injunction that halted company expansion.

and the customers, the court ruled that "[a] business corporation is organized and carried on primarily for the profit of the stockholders. The powers of the directors are to be employed for that end."[55] Moreover, the court stated that "it is not within the lawful powers of a board of directors to shape and conduct the affairs of the corporation for the merely incidental benefit of the shareholders and for the primary purpose of benefiting others."[56]

The shareholder wealth maximization norm was recently reinforced in *Katz v. Oak*.[57] The Delaware Court of Chancery found that directors' attempt to maximize the long-run interests of the shareholders at the expense of other constituencies does not amount to a "cognizable legal wrong"[58] and does not constitute a breach of duty, despite the corporation's declining financial condition. In substantiating this argument, Chancellor Allen opined that creditors are protected by "thoroughly negotiated and massively documented" contracts that spell out the rights and the obligations of the parties.[59] Therefore, "[t]he terms of the contractual relationship agreed to and not broad concepts such as fairness define the corporation's obligation to its bondholders."[60]

Other Delaware cases make a less trenchant stand when tackling shareholder primacy, but, regrettably, are also somewhat ambiguous. In *Loft v. Guth*, the Court held that "[w]hile technically not trustees, [corporate managers] stand in a fiduciary relation to the *corporation and its stockholders*."[61]

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[55] *Id.* at 684.
[56] *Id.*
[57] Katz v. Oak Industries Inc., 508 A.2d 873 (Del. Ch. 1986)
[58] *Id.* at 879.
[59] *Id.*
[60] *Id.*
[61] Loft, Inc. v. Guth, 2 A.2d 225 (Del. Ch. 1938) at 510 (emphasis added), *aff'd*, 5 A.2d 503 (Del. 1939). For other cases providng for directors' obligation to increase the shareholder wealth see Long v. Norwood Hills Corp., 380 S.W.2d 451 (Mo. Ct. App. 1964) ("[The] plaintiff in his brief constantly states that the purpose of defendant corporation is to earn money for the benefit of its stockholders. No doubt, this is true, as we have said, in the ordinary trading corporation."); Simons v. Buckhead, 549 A.2d 300, 304 (Del. 1988) ("a convertible debenture represents a contractual entitlement to the repayment of a debt and does not represent an equitable interest in the issuing corporation necessary for the imposition of a trust relationship with concomitant fiduciary duties"); Revlon, Inc. v. MacAndrews & Forbes Holdings, Inc., 506 A.2d 173, 182 (Del. 1986) ("In discharging this function the

The best interests of the corporation and the shareholders' interests are commonly linked by the legal scholars in order to define the purpose of directors' fiduciary duties. The American Law Institute, for example, defines the objective of the corporation as "the conduct of business activities with a view to enhancing corporate profit and shareholder gain."[62] Despite commonly using this association, the doctrine and the jurisprudence fell short of substantiating the rationale for using this apparently double standard. If shareholders interests coincide with those of the firm, what is the purpose of mentioning both? If the interests of the corporation, regarded as a separate legal entity, differ from the shareholders', then how are directors supposed to accommodate them? The tentative answer provided by the American Bar Association only amplifies the incertitude:

> ["Best interests of the corporation"] is an expression of … the corporate director's primary allegiance. As the shareholders' designee, the corporate director is in a position of stewardship for the owners of the enterprise, whose interests are interchangeably merged with the interests of the corporate entity.[63]

In an attempt to sidestep the debate over the purpose of fiduciary duties, some have argued that the business judgment rule[64] would insulate directors' decisions from judicial review,

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directors owe fiduciary duties of care and loyalty to the corporation and its shareholders"); Columbia Forest Products v. Firestone Plywood Corp., 5 Misc. 3d 1018 (NY. Sup. 2004) ("[T]he Court has been unable to locate any cases where a director or officer of a New York Corporation has been held to have a fiduciary duty to corporate creditors.").

[62] THE AMERICAN LAW INSTITUTE, 2 PRINCIPLES OF CORPORATE GOVERNANCE: ANALYSIS AND RECOMMENDATIONS 55 (1994).

[63] American Bar Association, "Corporate Director's Guidebook" (1978), 33 Bus. Law. 1601

[64] The business judgment rule is connected to corporate managers' duty of care. The duty of care requires directors and officers to exercise a proper business judgment, namely to act on an informed basis, in good faith and in the honest belief that their decision is in the best interests of the corporation A director is considered to act on an informed basis when he gathers sufficient information about the facts known to him in order to make a reasonably prudent decision. The directors are not required to possess exhaustive knowledge nor they are expected to reach the most reasonable decision that a person might have reached; in order to be protected by the business judgment rule, the decision must be a prudent one. In assessing whether a decision should be protected by the business judgment rule, the courts must inquire if the directors followed adequate procedures in reaching it (*i.e.* if the directors properly informed themselves in advance). As the Delaware Supreme Court stated, "due care in the decision making context in *process due care* only" Brehm v. Eisner*,* 746 A.2d 244, 264 (Del. Supr. 2000) (emphasis added). The business judgment rule prevents the courts from questioning a business decision legitimately reached by the board, even if, ultimately, the decision proved to be wrong. The rationale of this decision is that the judges are ill fitted to evaluate

regardless of whose interests they pursue.[65] Stated differently, since directors cannot be held liable in court for their decisions as long as they observe the business judgment rule, it is useless to attempt to identify the appropriate beneficiary of fiduciary duties. Even if, in theory, a particular beneficiary of the fiduciary duties could be identified, such stakeholder could not challenge in court a decision that breached his rights, as long as the decision complies with the business judgment rule. Ribstein and Alces believe that this limited court authority over the managerial decisions protecting one constituency or another "is not … only one of the reasons for the absence of a special duty to creditors, but the only reason."[66]

Our approach does not quibble with this answer. Rather, we view this response as procedural and not substantive in nature. The business judgment rule is a procedural requirement regarding directors' decisions, whereas the fiduciary duties controversy concerns the substance of directors' rights and obligations.

The analysis of the jurisprudential and the doctrinal position regarding the purpose of fiduciary duties imposes one conclusion: there is yet no clear distinction between the interests of the corporation, regarded as a separate entity, and the interests of various constituencies. Whether stipulating directors' obligation to take into account the interests of a particular group of stakeholders, or requiring them to maximize all claims against the firm, all theories focus on the constituencies, and not on the corporation.

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managerial decisions, given their lack of business expertise. Moreover, judicial "second guessing" of business decisions would make the directors risk averse, to the detriment of the company and of the shareholders, and would discourage people to undertake the task of acting as director or officer. See generally EDWARD WELCH & ANDREW TUREZYN, FOLK ON THE DELAWARE GENERAL CORPORATION LAW: FUNDAMENTALS (1998); Klein & Coffee, *supra* note 46, at 155.

[65] See Bainbridge, *Much Ado About Little?*, *supra* note 32; Ribstein & Alces, *supra* note 6 (claiming that the business judgment rule gives directors broad discretional powers to decide whose interests to pursue); Iacobucci, *supra* note 32 at 402-405 (pointing out that directors' decisions are protected by business judgment rule; however, the author claims that the analysis of the shift of fiduciary duties may be relevant from the prospect of allocating the incentives to sue). *See also* Filippo Rossi, *Making Sense of the Delaware Supreme Court's Triad of Fiduciary Duties, available at* http://ssrn.com/abstract=755784 (2005) (claiming that directors' duty of good faith is a general and broad duty, which applies where the duty of care and the duty of loyalty do not apply).

[66] Ribstein & Alces, *supra* note 6 at 9.

Our approach will direct the focal point of fiduciary duties toward the firm. In the following chapters we will show that there is a cause-effect relationship between promoting the best interests of the corporation and meeting the stakeholders' and the creditors' expectations. Directors do not have to assess and balance the interests of all groups that contribute to the firm's wellbeing, as suggested by some court decisions previously analyzed. Such a task would render managers' task overwhelmingly complex and, eventually, would impair the quality of their decisions. We demonstrate that the goal of firm value maximization can be achieved by pursuing the projects having the highest expected net present value, which does not require the managers to evaluate the expectations of different corporate constituencies. The result of this policy serves the interests of both fixed and residual claimants.

3. The Obligation to Maximize the Value of the Firm

Credit Lyonnais, *Production Resource* and *Peoples Department Stores* predicate fiduciary duties owed the corporation itself. Regrettably, some of these decisions are plagued by an ominous confusion between the interests of the corporation and the interests of stakeholders. Arguably, the main cause of this confusion is the absence of a valid model to illustrate the distinctness of these economic interests. Using several well-established finance concepts, we will demonstrate that the corporation has a specific economic interest, which should be served by directors' fiduciary duties.

In order to highlight the separation between the interests of the firm and those of stakeholders, the firm shall be regarded as an independent legal entity, distinct from its constituencies. Although a good part of the legal doctrine is inclined to reject any theoretical

construction that "smacks of reification",[67] reification is unavoidable for a proper analysis of fiduciary duties. Several vital legal principles having great relevance in the area of fiduciary duties (such as the individuality of firm's patrimony, the value of the firm, shareholders' limited liability, etc.) are grounded on the principle of the firm's separate legal capacity. The reification is also justified economically by the concepts we use to develop our model (e.g. the Fisher Separation theorem).

Besides the finance arguments, once we regard the corporation as a distinct entity, it is highly intuitive to affirm that directors must defend the best interests of the corporation they are managing. In this light, the claim that a director should be the guardian of the interests of other firms, in their capacity as shareholders or creditors, appears as irrational. Such entities would have their own managers to watch after their welfare, by enforcing the contractual or legal remedies granted to shareholders or creditors. The same intuition applies to individual shareholders and creditors as well: while the managers' task is to enhance the value of the firm, individual debt or equity investors should turn to the available contractual or legal safeguards, in order to ensure that their legitimate interests are not jeopardized in the process.[68]

The idea that fiduciary duties are owed to the corporation hs been expressed by many legal authors. Ribstein and Alces, for example, note that "corporate fiduciaries do not have a special duty to a particular corporate constituency, including creditors. Rather, they have

[67] Smith, *supra* note 46 at 1.

[68] One might argue that, in the pursuit of firm value maximization, fairness ought not to be the tradeoff for efficiency. While this may be a legitimate and equitable point, we believe that it would be hazardous to impose fairness at the foundation of managers' fiduciary duties. Apart from the genuine complexity of this concept, which renders it almost impossible to define or quantify, fairness is much akin to equality, justice, morality or charity. Hence, identifying the role of fairness in the corporate world appears more as the privilege of the legal philosopher rather than the task of the law maker. Of course, shareholders, like creditors or any other constituency, have the right to seek relief if they consider that their legitimate interests have been unfairly disregarded by corporate managers. But, since the analysis of fairness is inexorably fact-oriented, it is up to the courts to decide what is fair and what is not in a particular case. Otherwise, the mercantile world would struggle with vague philosophical concepts as basic guidelines. For an interesting essay on fairness versus efficiency in the environmental law background, see Shi Ling-Hsu, *Fairness Versus Efficiency in Environmental Law*, 33 ECO. L. Q. 303 (2004). See also Ian B. Lee, *Efficiency and Ethics in the Debate about Shareholder Primacy,* 31 DEL. J. CORP. L. 533 (2006).

fiduciary ad care duties to their principal, the corporation."[69] But affirming that directors have the obligation to act in the best interests of the corporation, by maximizing its value, only begins the scrutiny of fiduciary duties. The really sensitive question is: Is it possible for managers to determine which projects would maximize the value of the firm, if they do not refer to the precise interests of a particular constituency? We believe it is possible.[70]

Economic theory offers the answer to this question. The corporate finance distinguishes between the economic profit and the accounting profit of a firm. While the accounting definition of profit refers to the net income of the corporation,[71] the economists use the word "profit" to illustrate the rates of return exceeding the opportunity cost for funds employed in a certain project.[72] In order to estimate the economic profit, the managers must determine the time pattern of cash flows generated by the projects.[73] Moreover, managers need to calculate the *present* value of future cash flow streams associated with various projects, to be able to determine ex ante the most valuable project. This result can be achieved by the method commonly referred to as the "discounted cash flow (DCF) valuation."[74] The discounted stream of cash flows is considered by finance scholars as the appropriate benchmark to be used by managers, when making investment decisions.[75]

From this viewpoint, the value of a firm is determined by the value of the cash flows it is able to generate.[76] Coming back to the purpose of fiduciary duties, the goal of firm value maximization can be expressed as the obligation of corporate directors to select from among the

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[69] Ribstein & Alces, *supra* note 6 at 8.
[70] Some authors claim that, absent the shareholder wealth maximization norm, the board would lack a determinate metric to assess options. Bainbridge, *Corporation Law and Economics*, *supra* note 46 at 421.
[71] THOMAS E. COPELAND ET AL., FINANCIAL THEORY AND CORPORATE POLICY 22 (4th ed. 2005).
[72] *Id*.
[73] *Id.*
[74] Ross at al, *supra* note 52 at 134.
[75] *Id.*
[76] Brigham*, supra* note 52 at 44.

available projects those that generate the highest present value of cash flow streams.[77] Stated differently directors' fiduciary duties would require them o select the projects with the highest expected net present value ("NPV").[78]

Cash flow measures are of vital importance not only for corporate managers, but for shareholders and creditors as well. Equity and debt investors tend to focus on firm's ability to generate cash to pay off dividends, loans or commodities, rather than on accounting earnings.[79] The reason for this is obvious, once we refer to the cash flow identity formula. This formula equates the cash flow generated by the firm's assets with the cash flow paid to suppliers of debt and equity capital.[80] Stated differently, this equation illustrates that the cash flow generated by the firm's various activities is either used to pay creditors, or paid out to company's shareholders.[81]

The value of the cash flows generated by the firm is a common denominator for the interests of the corporation on one hand, and the interest of equity and debt investors on the other. This shows that the economic interests of various stakeholders are in fact aligned with the best interests of the firm. Although stakeholders may have contradictory preferences as to the optimal risk level of the projects to be selected by the corporation, we will demonstrate below that this heterogeneity is not relevant for the purpose of firm value maximization. Moreover, we will show that maximizing the value of the corporation by selecting the projects with the highest net present value equally serves stakeholders' expectations. Serving the interests of corporate

[77] It is worth mentioning that, in the context of financial distress, selecting among a variety of available projects is largely a theoretical issue. As the firm nears insolvency, the financial distress costs increase. Loosing trading partners is one of the most important such costs. Therefore, the firm might not have a diversified selection of available projects, since risk adverse economic agents will prefer to look for safer investments. Moreover, the available projects might not be too profitable for the firm, as trading partners or investors would include an increased risk premium in the price of goods or services they provide.
[78] Ross et al., *supra* note 52 at 262-264.
[79] *Id.*
[80] Ross et al., *supra* note 52 at 32.
[81] *Id.*

constituencies is, however, the effect of fiduciary duties, not their object. Limiting the scope of fiduciary duties to maximizing the value of the firm is a simple and efficient way to circumvent the daunting task of assessing ex ante the effects the business decisions have on each constituency, without jeopardizing such interests.

4. The Irrelevance of the Shareholders' and Creditors' Specific Incentives for the Purpose of Firm Value Maximization

In this section we will demonstrate that directors can attain the firm value maximization objective irrespective of shareholders' and creditors' divergent incentives in the vicinity of insolvency.

As we mentioned above,[82] various legal scholars claim that, as the corporation nears insolvency, there is a growing conflict between the interests of shareholders and those of other corporate constituencies, especially creditors. In this scenario, the pursuit by corporate managers of the interests of one group of stakeholders is invariably construed as negatively affecting the interests of the rival constituency.

From an economic theory angle, determining which constituency should be looked after by directors in the vicinity of insolvency is equivalent to identifying the type of business financing that should be protected by fiduciary duties under financial distress: equity

[82] See *supra*, Section 2.

(shareholders' investments) or debt (financing by creditors, i.e. holders of debt securities[83] and trade creditors).[84]

If fiduciary duties are regard as requiring directors to maximize the value of the firm, by using the Modigliani-Miller theorem we can demonstrate that, above the optimal level of debt, the value of the firm cannot be increased by altering the debt-equity ratio. In other words, as long as debt is maintained at the optimal level, there is no justification for promoting shareholders' or creditors' specific interests for the purpose of firm value maximization.

In the real world however, the actual benefits of debt exceed the tax advantages illustrated by the MM theorem. Equally, the shortcomings of debt are not limited to bankruptcy costs. As we will point out, the insight of the MM theorem is not invalidated by the additional features of debt: Again an optimal level of debt can be found that trades off its real-world benefits and costs.

Originally, the Modigliani-Miller theorem ("MM theorem") hypothesized that, under certain explicit and implicit assumptions (such as perfect capital markets, perfect information, the absence of bankruptcy costs, of personal taxes and of agency costs), the value of the firm is independent of its capital structure.[85] In other words, the value of a corporation depends on its profitability and not on how the firm is financed the value of the firm was invariant to its capital

[83] There are three types of debt securities: bonds (unsecured long-term instruments), debentures (secured long-term instruments) and notes (short-term instruments, usually unsecured). Bainbridge, *Corporation Law and Economics*, *supra* note 46 at 68.

[84] In many corporate finance textbooks, only long-term financing is taken into account for the purpose of analyzing the capital structure of the firm. *See e.g.* LAWRENCE J. GITMAN & SEAN M. HENNESSEY, PRINCIPLES OF MANAGERIAL FINANCE, *supra* note 52 at 474. A source of financing is considered to have a long term if it has a maturity greater than one year. Ross et al, *supra* note 52 at 528; Gitman & Hennessey, *supra* note 52 at 257. Short-term debt is not relevant for the structure of firm's capital, since it is excluded from the calculation of capital structure weights. Ross *et al*, *supra* note 52 at 476. We consider such a distinction inopportune in the context of fiduciary duties. Our analysis also includes trade credit, for example, among other forms of business financing.

[85] Franco Modigliani & Merton Miller, *The Cost of Capital, Corporate Finance, and the Theory of Investment*, 48 AM. ECON. REV. 267 (1958); *Corporate Income Taxes and the Cost of Capital: A Correction*, 53 AM. ECON. REV. 433 (1963).

structure. Other scholars have modified this result by looking at special cases where the assumptions behind the MM theorem do not hold.

The basic MM theorem can be seen as follows. Suppose there is a firm that lives for one period. The firm has a cash flow x that has an expected value of E[x]. The face value of debt is D and the shareholders are the residual claimants. The shareholders will receive the maximum of x-D or \$0. The debtholders have first claim on the cash flow if the firm can not pay them D. Hence, the debtholders will receive the minimum of D or x. The value of equity, therefore, is E[max [0,x-D]], while the value of debt is E[min [x, D]]. The value of the firm is the value of equity plus the value of debt, which is equal to E[max [0,x-D]]+E[min [x,D]]=E[x]. The value of the firm is independent of capital structure as only the expected value of x determines the value.

When corporate taxes are taken into account, the analysis gets complicated. Suppose interest payments are tax deductible, then the value of equity is E[max [0,x-(1-t)D]], where t is the corporate tax rate, the value of debt is E[min [x,D]], and the value of the firm is E[x]+E[tD | x>D]. Now the value of the firm is increasing in the amount of debt and this suggests that the firm should be fully leveraged. This is never observed, nor would anyone believe this to be a reasonable strategy.

Various authors have sought to explain what could be constraining the leverage decisions of a firm, with a view to determining the optimal debt level. For example, a group of scholars argued that as the firm borrows more, there is a higher risk of bankruptcy costs. These costs can be direct, such as the expenses that need to be paid to lawyers when liquidating the assets of a firm. They can also be indirect, such as lost profits, the disruption of supplies, managers demanding higher compensation for potential unemployment and other such costs that may result if the firm declared bankruptcy. In fact, bankruptcy costs can be taken to be a metaphor for all

such disadvantages that a highly leveraged firm may signal to market participants.[86] If taxes and bankruptcy costs were the only costs and benefits to debt and equity, the discussion would be trivial. Debt, in fact, has many other advantages beyond tax deductions.

Agency costs, those costs that arise from the inability of shareholders to perfectly monitor the firm's managers, are one such advantage of debt. This insight to finance literature was introduced in a seminal article by Jensen and Meckling.[87] In this article they identified two sources of conflicts: one between the shareholders and the managers and the second between the shareholders and creditor.[88] Increasing the ratio of debt to equity can solve both of these conflicts, Jensen and Meckling argued.[89] More debt means that managers now have a higher percentage of ownership in the firm, thereby increasing their incentives to act in the best interests of the remaining shareholders.[90] More debt also means that more cash flow is needed to service the interest payments, and this forces the managers to focus on increasing cash flows by seeking higher net present value projects.[91]

The more debt the firm accumulates, however, the higher the potential for shareholders to wish that the managers (who now also own an increasing share of the firm) to go for broke by investing riskier projects. Creditors who anticipate this behavior will either saddle the debt with

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[86] Merton Miller argued that tax considerations may not explain the decision to leverage since the interest payments, while tax deductible at the firm level, will be taxed at the personal level. Equity is taxed, usually, as a capital gains which can be postponed indefinitely and hence is taxed at a lower expected rate, suggesting that the advantages to debt from the tax treatment may not as high as suggested. Merton Miller, *Debt and Taxes*, 32 J. FIN. 261 (1977).

[87] Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305 (1976). For a detailed survey of the theories of capital structure, see Milton Harris & Arthur Raviv, *The Theory of Capital Structure*, 46 J. FIN. 305 (1991).

[88] Managers, who do not own 100% of the shares, will not reap the entire benefit of their actions, and hence they may exert less than their best efforts when deciding on what projects to invest in. Managers in debtless firms may only fear unemployment rather than lower bonuses, and this may also contribute to the lack of effort on their part. Managers may be more interested in perks and other non-pecuniary benefits of the job, and may not focus on maximizing cash flow for the firm. Anyone who read *Barbarians at the Gate* will find this familiar. BRYAN BURROUGH & JOHN HELYAR, BARBARIANS AT THE GATE: THE FALL OF RJR NABISCO (1993).

[89] Jensen & Meckling, *supra* note 87.

[90] *Id.*

[91] *Id.*

restrictive covenants such as the ones we say earlier or increase the interest rate charged, thereby making debt costly. At some point, there is an optimal debt equity ratio that balances the benefits and costs of debt. Just like the tradeoff between taxes and bankruptcy costs, there is a tradeoff between controlling managers and being controlled by weary creditors.

The level of debt can be related to other conflicts between managers and shareholders as well. Managers may actually want the firm to continue its operations, since this guarantees them employment, while the shareholders may prefer the firm wind up and liquidate allowing them to salvage some value.[92] If there is little or no debt, the managers may be able to prolong the life of the firm beyond its optimal life, as the shareholders would desire. Hence, by the firm taking on some debt, managers may have no choice but to liquidate especially if the creditors force the firm into insolvency. This generates valuable information for the investors in both the good and bad financial times. When the firm is able to pay its interest payments, shareholders are assured of the quality of the firm's investments, and if the firm must go bankrupt, the information generated in the liquidation proceedings allow the shareholders (and creditors) to investigate the options available. Had there been no debt, the managers may not have wound up the firm until there was absolutely no value left to salvage.

An increased level of debt is associated with the perspective of a costly winding up and liquidation process (i.e. with bankruptcy costs). A high debt-equity ratio may also trigger managers' incentive to underinvest in profitable projects. The underinvestment incentive is the mirror image of the "going for broke" scenario. Managers may have less of an incentive to invest in profitable projects due to the higher possibility of bankruptcy, which will mean that the

[92] Milton Harris & Arthur Raviv, *Capital Structure and the Informational Role of Debt*, 45 J. FIN. 321 (1990); Rene Stulz, *Managerial Discretion and Optimal Financing Policies*, 26 FIN. ECON. 3 (1990).

managers will not reap much benefit from those projects. Again an optimal level of debt can be found that trades off these benefits and costs.

Much of these concerns regarding shareholders, managers, and creditors come from the fact that the shareholders and creditors have a hard time monitoring the managers. Asymmetric information prevents the various parties from being honest players in the market, and hence the need to resort to covenants by creditors and debt by shareholders. One way to alleviate the concerns regarding the lack of information is to enhance ones' reputation.[93] Several studies have suggested that reputation can overcome many of the concerns that creditors may have regarding the temptation to undertake risky projects.[94] Older firms with reputations for investing in safe and less risky projects will be able to attract more debt financing at lower rates, while newer firms will struggle to raise debt without incurring higher interest rates reflecting creditors' fears regarding the "going for broke" strategy. Additionally, managers themselves may wish to have a reputation for undertaking safe projects as this will enhance their personal reputations in the event that they are fired from their current firm due to insolvency or other reasons. Mangers will be, therefore, more conservative in their investment strategies as the market for managers will evaluate them on how successful their projects are, as opposed to shareholders who might only be concerned with the expected payoff only.

In fact, risk aversion by managers can defeat any desires by the shareholders for the pursuit of riskier projects. Since managers are risk-averse, they will want to signal to the market the quality of their investment projects by taking on more debt and having more of a share in the

[93] Benjamin Klein & Keith B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. POL. ECON. 615 (1981).
[94] Douglas W. Diamond, *Reputation Acquisition in Debt Markets*, 97 J. POL. ECON. 928 (1989); David Hirshleifer & Anjan V. Thakor, *Managerial Conservatism, Project Choice, and Debt*, 5 REV. FIN. STUD. 437 (1992).

firm's equity.[95] Although the higher debt will mean more risk for the manager, the positive signal this (and the managers' ownership in the firm) sends the market allows for cheaper credit and a higher valuation of the remaining equity. This compensates the manager and alleviates the concerns from any risk-aversion.

Managers can also overcome the market's concerns regarding asymmetric information by using a "pecking order" when financing the firm.[96] Many times when managers wish to finance a project, if they simply attempted to raise the cash by (the board of directors) issuing more equity, investors may not respond so enthusiastically. Even though the project may have a large expected payoff, investors will assign some probability that the project truly has a large expected payoff and some other probability that the project is not as great as the managers claim it is. The result is that it may be hard for the managers to raise the extra cash, and the project may have to be foregone. Hence, managers will finance their project first out of retained earnings. If the cash on hand is insufficient, then debt will be preferred over new equity as this signals to the creditors that the project is truly worthy and the managers have no fear of default. Finally, equity will be a last resort if debt and retained earnings are insufficient. Debt, therefore, raises the value of the firm since the shareholders who do not wish to infuse more equity in the company do not suffer a dilution in the value of their shares each time the firm decides to finance a new project.

Other reasons for having debt may include the need to signal a commitment to pursuing an aggressive marketing policy. Firms that wish to signal to their competitors that are serious about expanding their output (in the hopes that these signals deter the competitors from

[95] Hayne Leland & David Pyle, *Information Asymmetries, Financial Structure, and Financial Intermediation*, 32 J. FIN. 371 (1977).
[96] This theory was developed by Stewart C. Myers & Nicholas S. Majluf, *Corporate Financing and Investment Decisions when Firms have Information that Investors do not have*, 13 J. FIN. ECON. 187 (1984).

following suit) will take on larger debt levels than a less aggressive firm.[97] Debt may also allow the firm to have a stronger bargaining position with its suppliers or unions.[98] This is because the threat of bankruptcy allows the firm to negotiate more aggressively concessions from the suppliers (who may lose a valuable client) and unions (who may lose any wage gains in the bankruptcy proceedings). On the other hand, aggressive debt levels that lead to bankruptcy may cause concerns among the firm's customers, especially if the firm's product is unique, since a bankrupt firm will not be available to service the product and supply parts and services.[99] An optimal debt level, therefore, can be achieved balancing all the costs and benefits previously identified.[100]

The irrelevance of capital structure for firm value maximization can also be derived from the Fisher Separation theorem.[101] The Fisher Separation theorem was introduced by the eminent economist Irving Fisher in the 1930s,[102] and was developed further by Jack Hirshleifer[103] and others in subsequent years. The basic result of the theorem is that production and financial decisions concerning the firm can be separated. The firm's managers do not need to inquire into the financial preferences of the shareholders. All that the manager has to do is invest in those projects that have the highest net present value (NPV). If the corporation is pictured as a pie, one

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[97] James A. Brander & Tracy R. Lewis, *Oligopoly and Financial Structure: The Limited Liability Effect*, 76 AM. ECON. REV. 956 (1986).
[98] Oded Sarig, *The Effect of Leverage on Bargaining with a Corporation*, 33 FIN. REV. 1 (1998).
[99] Sheridan Titman, *The Effect of Capital Structure on a Firm's Liquidation Decision*, 13 J. FIN. ECON. 137 (1984).
[100] For a complete survey of these theories, see Harris & Raviv, *supra* note 87; Tom Franck & Nancy Huyghebaert, *On the Interactions between Capital Structure and Product Markets: a Survey of the Literature*, 49 TIJDSCHRIFT VOOR ECONOMIE EN MANAGEMENT 727 (2004).
[101] The Fisher Separation theorem has been seldom invoked in the legal literature, and when it is, it is usually in passing. *See e.g.* Ian Ayres, *Back to Basics: Regulating how Corporations Speak to the Market*, 77 VA. L. REV. 945, 952 (1991); Roberta Romano, *Corporate Governance in the Aftermath of the Insurance Crisis*, 39 EMORY L.J. 1155, 1164 (1990).
[102] IRVING FISHER, THE THEORY OF INTEREST (1930).
[103] JACK HIRSHLEIFER, TIME, UNCERTAINTY, AND INFORMATION (1989); *Investment Decision Under Uncertainty: Choice-Theoretic Approaches*, 79 Q. J. ECON. 509 (1965); *Investment Decision Under Uncertainty: Applications of the State-Preference Approach*, 80 Q. J. ECON. 252 (1966); *Risk, the Discount Rate and Investment Decisions*, 51 AM. ECON. REV. 112 (1961); *Efficient Allocation of Capital in an Uncertain World*, 54 AM. ECON. REV. 77 (1964).

way of expressing the Fisher Separation is to say that the firm's managers should maximize the size of the pie, thereby allowing the shareholders the maximum flexibility to decide on how to spend the earnings from their share of the pie.

The significance of this theorem with respect to the issue at hand is subtle. Consumer's preferences regarding savings, consumption, and financial investments are all intertwined. Shareholders are also consumers. A shareholder who invests capital in a firm is ultimately interested in how much cash will return in order for the shareholder qua consumer to decide on how much of the cash to spend on consumption and how much to save. Some shareholders will have a higher preference for immediate consumption, while others may be more patient. Some shareholders may be more risk averse and would prefer that the firm invest in safe projects, while others may be more risk-loving who would rather the firm take more risks. Note that the risk-loving shareholders may also be the same shareholders who would prefer that the firm's managers take on more risky projects when the firm nears insolvency. Shareholders qua consumers also care about whether they should consume today versus save for tomorrow. A firm whose management is able to achieve high rates of return, for example, may induce many of the shareholders to demand more investments at the expense of current consumption. Such shareholders may prefer fewer dividends and more investments. They may want the firm to engage in riskier projects that yield higher rates of return. On the other hand, if the shareholders are extremely risk-averse, they may not care too much about the high rates of return, and rather they would care more about a constant stream of dividends. Risk-averse consumers, generally speaking, are characterized by having a high preference for consumption smoothing. This means that they prefer to consume at a steady rate over time, and are not swayed by potentially future

high rates of return to forego present consumption (i.e. more current investment) for future returns.

The problem this poses for management, therefore, is whose wishes to follow? If management were to consult the shareholders, it would find that they consist of a mix ranging from extremely risk-loving consumers to somewhat risk-averse consumers (who also presumably hold well-diversified portfolios). Management would have to poll the shareholders on every project it chooses to undertake with regards to its potential risk and rate of return. Management may have to consult the shareholders as to whether they wish to have dividends declared or whether the shareholders would rather see the dividends re-invested. In fact, management may to have to consult whether the firm should borrow more money; for the extra debt may increase the risk of the firm's investments and thereby negatively affect those risk-averse shareholders. The Fisher Separation theorem, it turns out, states that, in fact, management need not do any of the above. Rather, all that management has to do is invest in those productive activities that yield the highest NPV for the firm. The shareholders personal preferences are irrelevant for how management should conduct itself.

The exact proof of this theorem is beyond the scope of this paper, but a basic outline is instructive. Suppose the firm is owned by two shareholders, A and B. At any period, the firm will have some capital on hand Y_0. The firm could declare the entire capital as a dividend, invest the entire amount, or declare some of it as a dividend and invest the rest in a productive project. We assume that the project lasts one period, so that it yields a return in the second period. In this simple story, we assume that there is no risk, so that the return on the project is certain. In figure 1, we can see the possibilities that face the firm. The firm can pay out all of Y_0 in dividends for today's consumption by the shareholders and leave nothing for tomorrow's consumption. On the

other hand, it can invest I_0 in a project thereby leaving (Y_0-I_0) for today's consumption. The project generates income of Y_1 in the next period, which is then available for tomorrow's consumption.[104] The tradeoff between today and tomorrow's consumption can be seen on the figure labeled PPF (production possibilities frontier) in figure 1. If the firm consumes all of Y_0, then tomorrow's consumption will be zero. For any level less than Y_0 consumed, i.e. a positive investment, the firm will be left with a corresponding amount of return from the project which allows consumption tomorrow. The slope of the PPF represents the rate of return on the project invested in. As the amount invested goes up, the project's rate of return declines. So point 1, for example, represents a small amount of investment but a high rate of return, while point 2 represent a large amount of investment but a lower rate of return.[105]

Suppose shareholder consumer A was in charge of the firm. Shareholder A may have a preference for current consumption, which means that he will want very little invested today but obviously much less consumption tomorrow. We can denote shareholder A's preferences by point *a* on Figure 1. Shareholder B, on the other hand, may wish to invest more in the project, and hence consuming less today, which yields more returns tomorrow. This is labeled point *b* on Figure 1. If management had to reconcile these two views, it may have a difficult task on hand. What saves management, however, from the conundrum is the fact that the shareholders are not exclusively dependant on the firm's investment project for their wealth. The shareholders also have the ability to access the market for loans to finance their consumption/investment decisions. In fact, since there is no uncertainty in this model, the firm must invest so that the rate of return is equal to the risk-free interest rate. If the firm's project yielded less than that, the shareholders would simply lend all their money in the loan market. If the firm's project yielded more than the

[104] In this simple example, there are only two periods. In a more realistic model, the firm repeats the consumption / investment decision using Y_1 as its new initial capital.
[105] The reasons for this are beyond the scope of the paper, but relate to the concept of diminishing marginal returns.

interest rate, the shareholders would want the firm to invest more in the project, which would mean that the rate of return will ultimately fall down back to equal the interest rate. Hence the amount the firm invests will be such that the project's rate of return equals the interest rate. But this is equivalent to saying the firm picks a project with the maximum NPV. The project's NPV is $-(Y_0 - I_0) + \frac{Y_1}{(1+r)}$, where r is the risk-free rate, which can be shown mathematically maximized when the firm chooses a project whose rate of return is r.[106] This point is represented on Figure 1, as point Y^*, which is where the line -(1+ r) is tangent to the PPF.

This line also represents the financial value of the investment project. Any shareholder can now borrow against next period's return for consumption in this period. The shareholders can access the market for loans are able to follow their personal preferences without imposing their will on management. Shareholder A borrows money against the fact that the firm will have Y^* tomorrow, and hence will be able to consume at point *a'* on Figure 1. Notice that the shareholder is now able to consume even more today than in the previous scenario where he could only consume at point *a*. In fact, shareholder A is consuming more than the firm's available initial capital Y_0. Shareholder B, on the other hand, can now lend more money to firm at an interest rate r, which allows it to reap a higher level of consumption tomorrow than if the firm were managed according to the previous scenario. Shareholder B's consumption is at point *b'*, which is higher than point *b*. This means that he consumes even less today but more tomorrow. Shareholder B is essentially a creditor, while shareholder A is a shareholder who is able to finance his lack of investment in the firm using his shares as collateral.

[106] The basic proof can be seen by taking the differentiating and setting equal to zero the NPV. Details can be found in Hirshleifer *supra* note 103.

The Fisher separation theorem conveys two results: 1) The management decision on what to invest in is driven by choosing the maximum NPV project and not the shareholders' (or, similarly, creditors') preferences; and 2) The method of financing the firm is also irrelevant.

The results are the same when there is uncertainty in the model as concerns the ex post value of projects. Now the firm simply picks the project that yields the maximum *expected* NPV, and the expected rate of return of the project is set to be equal to the risk-free rate of return.[107]

5. The Effects of Firm Value Maximization on Shareholders' and Creditors' Claims

In the previous section we used the MM theorem and the Fisher Separation to demonstrate that maximizing the value of the firm by selecting the highest NPV projects does not require directors to investigate the particular expectations or incentives of shareholders and creditors. In this section we will show that the effect of firm value maximization complies with stakeholders' claims towards the corporation. Firstly we will demonstrate that maximizing the value of the firm is functionally equivalent with maximizing shareholder value. Subsequently, we will examine the customary provisions of bond covenants, in order to demonstrate that the firm value maximization objective ensures the firm's compliance with the specific restrictions imposed by the bond agreements to protect the creditors. Moreover, bond covenants increase the value of the firm by reducing the costs associated with the conflicts between shareholders and creditors. This additional increase in the value of the firm benefits both shareholders and creditors, as we demonstrate here under.

[107] Even if assumptions not robust, these results still hold. Avraham Kamara, *Production Flexibility, Stochastic Separation, Hedging, and Futures Prices*, 6 REV. FIN. STUD. 935 (1993).

A. The Equivalence between the Firm Value Maximization and the Shareholder Value Maximization

Using some basic concepts from finance, we will demonstrate that maximizing the value of the firm is functionally equivalent with maximizing shareholder value.[108] Imagine that an entrepreneur has just incorporated a firm and he needs to raise an amount of capital, say $100 million, using either equity or debt. Suppose the entrepreneur gets one share regardless of what method he uses, which denotes some residual ownership. Now, he can raise the entire amount using only equity, only debt, or some mix of the two. Let us suppose at this stage that there are no tax (or other) advantages or disadvantages (such as bankruptcy costs) to issuing debt. Assume that the firm will exist for only time period during which it will engage in some productive activity. The activity will yield some revenue in the next time period. The revenue could be either high or low with some probability objectively known beforehand. Let us assume that the revenues could either be zero with probability 10% or $120 million with a 90% probability. Finally assume the risk-free interest rate is (for the sake of simplicity) 0%.

Now suppose the firm finances itself using only equity. This means that it will raise $100 million from the shareholders, and in the next period their expected revenues are $108 million.[109] The value of the firm here is equal to the value of the shares which is namely $108 million.

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[108] For a different opinion, see Henry T.C. Hu, *Risk, Time and Fiduciary Principles in Corporate Investment*, 38 UCLA L. REV. 277 (1990-1991). Hu argues that "the financial well-being of the corporation is distinct form the well-being of the shareholder in the publicly held corporation. Specifically, a diversified shareholder would *not* want the managers of a publicly held corporation to act in a way intended to ensure the well-being of the corporation." *Id.* at 299 (citations omitted). He also points out that "because of a failure to recognize clearly a fundamental difference between the financial well-being of the corporation and that of shareholders, classic fiduciary principles call for behavior that we now know to be much too risk-averse from the viewpoint of shareholder optimality." *Id.* at 295.

[109] 0.1 x 0 + 0.9 x 120 = 108.

If, the firm borrows the entire amount and if there were no risk of the firm's project yielding a low return (namely \$0), then the creditors would charge the risk-free interest rate of 0%, and hence the firm would have to pay \$100 million in the next period. But now since there is a 10% chance of insolvency, the creditors will want to adjust the interest rate they charge so that the rate is adjusted so that the expected interest rate is equal to the risk-free rate. In other words, the creditors will want a payment of k interest rate, so that 0.1 x \$0 + 0.9 x (\$100 million)x(1+k) = \$100 million x (1+0.0). The calculation yield a risk-adjusted rate of k =11.11%. Hence, the creditor will now receive in the event of solvency \$111.11 million (leaving \$8.89 million for the entrepreneur), and \$0 in the event of insolvency, which is an expected payment of \$100 million. The value of the equity is 0.1 x \$0 + 0.9 x \$8.89 = \$8 million. The value of the firm now is equal to the value of the debt plus the value of the one share, which is equal to \$100 + \$8 = \$108 million. This is the exact same value of the firm when the firm used all equity for financing.

Varying the amount of the debt that is used will always yield the same result: no matter what debt equity ratio is employed the firm will always have the same value. This is a very simplified version of the MM theorem. The issue, now, becomes whether shareholder value maximization is equivalent to firm value maximization. Suppose now, the entrepreneur was faced with two projects that had the same expected value, but one of which was riskier than the other. The first project, for example, is the project just discussed, while the second project is one where there is a 28% chance of an outcome of \$0 and a 72% chance of an outcome of \$150 million. The expected value of the project is still \$108 million, but now there is higher chance of the \$0 outcome, but a higher payoff in the event of a non-zero outcome.

In the second example, if the firm was financed entirely by equity, then the value of the shares and the firm will also be $108 million. If the project is financed exclusively by debt, then the creditor will want to charge an interest rate that will compensate for the extra risk. The new risk-adjusted rate *k'* will be set so that 0.28 x $0 + 0.72 x ($100 million)x(1+*k'*) = $100 million, or *k'* = 38.89%. The creditor will receive in the event of solvency $138.89 million (leaving $11.11 million for the entrepreneur), and $0 in the event of insolvency, which amounts to an expected payment of $100 million. The value of the equity is 0.28 x $0 + 0.72 x $11.11 = $8 million. The value of the firm now is equal to the value of the debt plus the value of the one share, which is equal to $100 + $8 = $108 million. In addition to this being the same value of the firm when the firm used all equity for financing, it is also the exact same value of the firm when the less risky project was chosen.

The value of equity is also invariant to the amount of debt used and the risky nature of project picked by the entrepreneur. This can be generalized to the statement that the value of equity = value of the firm (or the expected value of the project) – the risk-free interest plus principal on the debt.[110] In other words, the value of equity is also invariant to the nature of risky project. The reason is obvious and has already been alluded to by many commentators: creditors can adjust the interest rate they charge in response to the risk associated with the projects that management and the board of directors undertake.

Ah but – the refrain goes – what if, after borrowing the money for project one (the less risky project) the shareholder-entrepreneur decides to undertake the second project? Suppose the

[110] A very simple proof is as follows. Suppose the firm has two states of the world: one whjere there are zero pre-interest revenues, and a second where there is sufficient revenues to cover the interest payments, which we denote *X*. The probability of the zero event is *p*. A firm that finances with debt will have to set the interest rate such that (1-*p*)(1+*k*)*B*+*p*x0=(1+*r*)*B*. The shareholders' payoff is (1-*p*)(*X*-(1+*k*)*B*)= (1-*p*)*X*- (1-*p*)(1+*k*)*B*=(1-*p*)*X*- (1+*r*)*B*. Hence, the shareholders' expected payoff is a function only of the risk-free rate and the principal of the debt. The amount and risk does not affect it, i.e. *p* does not enter into the payoff.

firm is financed exclusively by debt, then the shareholder pays only a rate of 11.11%, while the project yields either $0 or $150 leaving the shareholder $38.89 million. This increases the value of equity to $28 million, but decreases the value of debt to 0.28 x $0 + 0.72 x $111.11 million = $80 million. The total value of the firm is still equal to $108 million, but the value of equity is now increased at the expense of debt. If directors owed fiduciary duties to creditors (ever or in the vicinity of insolvency), this example would be one where those duties were breached. This example is analogous to Chancellor Allen's example from *Credit Lyonnais*[111].

There are two problems with this model of shareholder behavior. The first is that it is not an equilibrium in the economic sense, and more specifically it is not a rational expectations equilibrium.[112] Rational expectations is an economic modeling concept that is used most often in the macroeconomics literature, but also in game theoretic settings. It can basically be summed up (especially in the context of our example) as follows: Given that those specifying the model (such as ourselves, Chancellor Allen etc.) of the entrepreneur's behavior anticipated that he would choose the riskier project after representing to the creditor that the first project would be chosen, the creditor would also anticipate this behavior. To say that the entrepreneur could fool the creditor would not be rational, and furthermore, any model that specifies such a model of behavior does not describe an economic equilibrium. Hence, the creditor will automatically assume that the shareholder will choose the riskier project and adjust the interest rate to be 39%, forcing the entrepreneur always to choose the riskier project.[113]

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[111] See *supra* note 38.

[112] Rational expectations is an analytical tool developed by macroeconomists to describe the reaction of individuals to central bank's attempts at increasing employment by increasing inflation. STEVEN M. SHEFFRIN & JOHN PENCAVEL, RATIONAL EXPECTATIONS (CAMBRIDGE SURVEYS OF ECONOMIC LITERATURE) (2nd ed. 1993).

[113] In our two examples, we held the expected return of the two projects constant at $108 million, but the results are the same even if the second project had a higher return and higher variance.

The second problem is that, from the prospect of shareholders' interest, the best thing is not to invest in a risky project at all; rather, the best and safest course of action would be to finance exclusively with debt, declare the cash from the debt as a one-time dividend, and then declare bankruptcy leaving the creditor with no return. Again, a creditor would anticipate this behavior would then not lend any money at all, thereby breaking down the corporate credit market. For this reason, creditors have developed a set of contracts that prevent debtors from engaging in risky or fraudulent activities at creditors' expense, and that allow the shareholders to have access to credit capital.

An entrepreneur who genuinely wished to only undertake the less risky project, therefore, would have to design a debt contract in such a way whereby he credibly committed that only the less risky project would be undertaken. Similarly the creditor could finance the less risky project at the lower interest rate, by designing the debt contract so that the entrepreneur would only choose the less risky project. Such contracts may specify a huge penalty for choosing the riskier project. They may also require the maintenance of certain financial ratios or even specify the nature of projects undertaken. This ability by creditors to specify restrictions on the firm's behavior is the reason why the commentators have resisted adding fiduciary duties to creditors as another layer of protection.

B. The Firm Value Maximization Goal and the Compliance with the Debt Covenants

Debt covenants have existed for hundreds of years.[114] It would seem odd, therefore, to suddenly discover that shareholders might try to oppress creditors when, in fact by now, creditors should have probably learnt best how to protect themselves. In a seminal article examining the subject of covenants, Smith and Warner showed that debt contracts solve the bondholder-shareholder conflict, by providing specific covenants that give shareholders the incentives to follow a strategy that maximizes the value of the firm.[115] The conflict between bondholders and shareholders occurs in firms that have issued risky bonds.[116] In such firms, the management, acting in the shareholders' interest, may have an incentive to design the firm's operating strategy and financial structure so as to benefit the shareholders at the bondholder's expense.[117] The main sources of this conflict are: dividend payment,[118] claim dilution,[119] asset substitution,[120] and the incentive for underinvestment.[121]

Rational bondholders anticipate shareholders' incentives, and, therefore, include restrictive covenants in the bond indentures. Although restrictive covenants involve costs, they

[114] Clifford W. Smith & Jerold B. Warner, *On financial contracting: An Analysis of Bond Covenants*, 7 J. FIN. ECON. 117, 122 (1979) (citing Churchill Rodgers, *The Corporate Trust Indenture Project*, 20 BUS. LAWYER 551 (1965)) [Smith & Warner hereinafter]. For legal analysis of business covenants see also David Simpson, *The Drafting of Loan Agreements: A Borrower's Viewpoint*, 28 BUS. LAWYER 1161 (1973); Morey W. McDaniel, *Are Negative Pledge Clauses in Public Debt Issues Obsolete?*, 39 BUS. LAWYER 867 (1983); Robert M. Lloyd, *Financial Covenants in Commercial Loan Documentation: Uses and Limitations*, 58 TENN. L. REV. 335 (1991).

[115] In order to focus on the contract between the bondholders and the firm, Smith and Warner assume that the costs of enforcing other contracts forming the nexus are zero (e.g. the contracts between stockholders and managers costlessly induce the managers to act as if they own the firm's equity).

[116] Smith & Warner, *supra* note 114 at 118.

[117] *Id.*

[118] The managers can decrease the value of the bonds by raising the dividend rate and financing such increase by reducing the investment (at the limit, managers can sell all corporate assets and distribute liquidating dividends, leaving the bondholders with worthless claims) *Id.*

[119] Bondholders' claims can be diluted if the firm issues additional debt of the same or higher priority. *Id.*

[120] If the value of the bonds is related to low variance projects, the shareholders will have incentives to increase the firm's variance rate by purchasing projects with negative net present values; although such projects reduce the total value of the firm, they increase the value of equity while reducing the value of bondholders' claims. This kind of shareholder incentives can be reduced by the inclusion in the debt contract of a convertibility provision. *Id.* at 119.

[121] The shareholders have incentives to reject the projects with a positive net present value, if the benefits deriving from such projects accrue to bondholders. *Id.*

can increase the value of the firm by reducing the opportunity loss caused by stockholders' incentive to pursue projects which do not maximize the value of the firm.[122]

Smith and Warner looked at covenants and classified them into four broad categories: 1) production/investment covenants, 2) dividend covenants, 3) financing covenants, and 4) bonding covenants.[123] By using one or more of the four covenants, even if not all are used, bondholders can effectively control shareholder and managerial opportunism.[124] These covenants usually have acceleration clauses that state that the debt payments can be accelerated upon the occurrence of certain events or a violation of the terms of the covenant.

The production/investment covenants usually specify restrictions on the firm's purchasing of other financial assets, the firm's disposition of assets, or restrictions on the firm's merger activities.[125] The restrictions on the purchase of other financial assets is seen as an attempt to prevent asset substitution, i.e. the transformation of the cash raised by debt into another asset thereby leaving the creditor at the mercy of new asset's uncertain value. Similarly, the restriction on the firm's disposition of assets protects the creditor against an opportunistic sale of collateral (if the debt is secured) or potential assets to seize in the event of insolvency (if the debt is unsecured). The restriction on merger activities achieves the same goals as the prohibition on asset disposition; mergers usually open up the potential for mixing of secure or liquid assets with other assets making the creditors' job of finding his security much harder than before the merger. Other covenants in this category can also require the maintenance of certain assets or restrict what can be done with them. All of these restrictions are imposed with an eye

[122] *Id.* at 121. This is referred to as the Costly Contracting Hypothesis. The opposing theory (i.e. the Irrelevance Hypothesis) claims that the manner of controlling the bondholder-stockholder conflict does not affect the value of the firm. *Id.* at 120.
[123] *Id.* at 124.
[124] *Id.*
[125] *Id.*

to protecting the firm's assets from waste or opportunistic liquidation. The effect of all of these restrictions is to keep the firm from liquidating assets and declaring them as dividends, or the prevention of undertaking risky projects that will put the assets at risk.

The dividend covenants restrict payments of dividends,[126] by defining an inventory of funds available for dividend payments over the life of the bonds.[127] These covenants do not restrict payment of dividends per se, but the distribution of dividends financed by issuing debt or by sale of the firm's existing assets (either of which would reduce the value of the debt).[128] The dividend restrictions are typically related to the borrower's profitability.[129] Bank loans usually comprise more refined dividend covenants, specifying the maximum value of dividends for given periods, limiting the frequency of dividend payments or conditioning the payments on various tests, such as credit ratings or financial ratios.[130] Creditors also use dividend covenants to address indirectly shareholders' underinvestment incentives.[131] In financially distressed firms, shareholders have the incentives to forego the projects the benefits of which accrue entirely to creditors.[132] If the project yields no net gains to shareholders, form their point of view such investment is worthless. Underinvestment is prejudicial for creditors, because of the heightened default risk and, to the extent that no other firm can pursue the project, society as a whole looses as well.[133] A covenant blocking dividend payments addresses this problem indirectly, by forcing the firm to reinvest its free liquid assets or, if there are no profitable projects available, to repay

[126] The restrictions refer to cash dividends as well as to other forms of distributions on account of, or in respect of, capital stock, such as redemptions, purchases, retirements, liquidations, capital reductions, etc. *Id.*
[127] *Id.*
[128] *Id.* at 132.
[129] William W. Bratton, *Bond Covenants and Creditor Protection: Economics and Law, Theory and Practice, Substance and Process*, forthcoming European Business Organization Law Review, *available at* http://ssrn.com/abstract=902910 at 12.
[130] Michael Bradley & Michael Roberts, *The Structure and Pricing of Corporate Debt Covenants*, *available at* http://ssrn.com/abstract=466240 at 12.
[131] Bratton *supra* note 129 at 7.
[132] *Id.*
[133] *Id.*

the loan's principal amount.[134] The dividend covenants have some disadvantages. An outright prohibition or a tight restriction on dividends increases the firm's incentives to engage in asset substitution and claim dilution.[135] Furthermore, when the firm is doing poorly, the dividend constraint is not capable to control indirectly the investment/financing policy.[136]

The bond covenants restricting subsequent financing policy impose on the firm limitations on debt[137] and restrictions regarding rentals, lease and sale-leasebacks.[138] The financing covenants increase the coverage on the debt and reduce the firm's default risk. Moreover, the limitations on debt decrease the costs associated with the stockholder-bondholder conflict of interests, by establishing an optimal level of debt.[139] A prohibition on all debt issues, however, would reduce the value of the firm, because the corporation would be able to engage only in a limited number of positive net present value projects.[140] In addition to the restrictions on debt, creditors protect themselves against claim dilution by covenants restricting mortgages and liens.[141] These covenants can impose a direct and sweeping prohibition on prior claims or can ban the creation of a lien or mortgage unless these also secure the debt benefited by the provision.[142] While the direct prohibition is more likely to be used in private placements or bank term loans,[143] the latter approach is specific for public bond issues.[144]

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[134] *Id.* at 7, 13.
[135] Smith & Warner, *supra* note 114 at 136.
[136] *Id.*
[137] *Id.* Generally, limitations on debt are expressed either through a simple prohibition against issuing debt with a higher priority, or through a restriction on creation of a claim with higher priority unless the exiting bonds are upgraded to have equal priority. Debt restrictions can sometimes forbid the issuance of any additional debt, or require the company to be free of debt for a limited period of time, or limit the undertaking of other debt-like obligations (such as assumptions or guarantees of indebtedness for other parties). *Id.*.
[138] *Id.* at 138. Leasing and renting can be controlled also through debt covenants, by capitalizing the lease liability and including it in both the long-term debt definition and the asset definition. *Id.* at 139.
[139] *Id.* at 154. As the firm's debt/equity ratio increases, so do stockholders' benefits from asset substitution, claim dilution, underinvestment and increase of dividend payments. *Id.* at 153.
[140] *Id.* at 137.
[141] Bratton, *supra* note 129 at 11.
[142] *Id*.
[143] *Id.*

The debt contract can also include covenants specifying bonding activities by the firm.[145] The costs estimated by bondholders with monitoring the firm's policy influence the price of the bonds and the value of the firm at the time of bond issuance.[146] Therefore, the inclusion in the bond indentures of covenants that lower the costs of monitoring equally serves the interests of shareholders and bondholders.[147] The bonding covenants increase the market value of the firm by reducing the agency costs between bondholders and stockholders, as well as between managers and stockholders.[148]

The efficiency of bond covenants is ensured by the default remedies available to bondholders. In case of default, bondholders can seize the collateral, trigger the acceleration of debt maturity or commence bankruptcy proceedings.[149] But, since such actions are costly, the debt contract is usually renegotiated to eliminate the default.[150]

The bond covenants increase the value of the firm by reducing the costs associated with the conflict of interests between stockholders and bondholders. Such costs are reduced by decreasing the agency costs associated with risky debt, as well as by establishing an optimal amount of debt that reduces the benefits of wealth transfer from bondholders to stockholders. The benefits of bond covenants, however, are impaired by the direct and opportunity costs of complying with the contractual restrictions.

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[144] *See* Carl S. Bjerre, *Secured Transactions Inside Out: Negative Pledge Covenants, Property, and Perfection*, 84 CORNELL L. REV. 305 (1999).
[145] Such as: provision of audited financial statements, specification of accounting techniques, required purchase of insurance, periodic provision of statements indicating compliance with the covenants. Smith & Warner, *supra* note 114 at 125.
[146] *Id.* at 143.
[147] *Id.*
[148] *Id.* at 146.
[149] *Id.* at 151. Acceleration of debt often forces the borrower to make a defensive bankruptcy filling. Bankruptcy proceedings involve deadweight costs as well as uncertainty regarding the funds available to unsecured lenders. For these reasons, the value of acceleration clauses and of other covenants early signaling the financial distress resides more in negotiation opportunities than in their actual enforcement (W. Bratton, *supra* note 129 at 15; See also Lawrence A. Weiss, *Bankruptcy Resolution: Direct Costs and Violation of Priority Claims*, 27 J. FIN. ECON. 285 (1990); Jerold Warner, *Bankruptcy Costs: Some Evidence*, 32 J. FIN. 337 (1977).
[150] Smith & Warner, *supra* note 114 at 151.

Recently, another comprehensive study of covenants was conducted examining the relationship between covenants' and firms' financial goals.[151] The authors investigated the use of covenants by firms by looking at over 15,000 debt issues between 1960 and 2003. They found that lower priority, lower rated, and shorter maturity debt had more covenant protections. Such debt, no doubt, is the most vulnerable when compared to higher priority and higher rated debt. They found that debt issued by regulated firms (and hence whose investment activities are limited in scope) have less covenant protections. Firms with more leverage and more growth opportunities (and hence the potential for riskier investment projects) had more covenant protections, but firms with growth opportunities that had covenant protections had higher debt levels. In other words, because of the covenant protections, creditors were willing to lend more to firms that had high payoff (but high risk) investment opportunities if they felt protected. This, of course, is good news for shareholders who can see higher value to their shares from the higher growth opportunities. Where firms did not use long-term debt laden with covenants, they used short-term debt that acted as a substitute for covenant protected long-term debt. Hence, firms with higher growth opportunities were also found to use more short-term debt. They also found that if the debt is convertible, there are less covenant restrictions. The convertibility allows the creditors to stave off the potential conflict with the shareholders by converting the debt to shares if the high payoffs are realized.

In this section we have analyzed the effects on shareholders and creditors of a fiduciary duty imposing the obligation to maximize the value of the firm. We have demonstrated that

[151] Matthew T. Billett et. al., *Growth Opportunities and the Choice of Leverage, Debt Maturity, and Covenants*, forthcoming J. FIN. *available at* http://www.afajof.org/afa/forthcoming/2392.pdf

maximizing the value of the firm responds to the expectations that shareholders and creditors have towards the firm.[152]

[152] The same conclusion can be reached by applying the hypothetical bargain theory to fiduciary duties and by analyzing the structure of the firm's capital using the portfolio theory and the Capital Asset Pricing Model ("CAPM").

The result of the hypothetical bargain between the directors, on one hand, and shareholders or creditors on the other illustrates what would the parties have agreed to, had they been able to contract regarding the purpose of fiduciary duties. Why is the hypothetical bargain setting necessary? To answer this question, we shall appeal to the Coase theorem. Coase demonstrated that, in a world of zero transaction costs, private bargaining is the best means to allocate the resources efficiently. Ronald H. Coase, *The Problem of Social Cost*, 3 J. L. ECON. 1 (1960). *See also* Robert Cooter & Thomas Ulen, *Law and Economics* 82 (2nd ed. 1997). When transaction costs, however, are high enough to prevent private bargaining, the law should ensure the efficient use of resources by assigning the property rights. *Id.*

In the case of fiduciary duties, the increased transaction costs preclude the parties to conclude a complete contract that would address every contingency that may occur and every action that may be feasible in any possible situation. Stated differently, the high transaction costs and the bounded rationality of the parties cause the contracts between the firm and stakeholders to be incomplete. Therefore, according to the Coaseian theorems, the law must fill in the contractual gaps generated by high transaction costs.

The purpose of the hypothetical bargain setting is to demonstrate that corporate constituencies would not choose stakeholder wealth maximization as the gap-filling rule, even when the corporation is on the verge of financial distress, since the only acceptable option in terms of economic efficiency is the maximization of firm's value.

Shareholders are residual claimants. One of the outcomes of this status is the fact that their claims on the firm's cash flow are variable (as opposed to creditors, who have a fixed claim). Consequently, from the shareholders' viewpoint, maximizing their residual claims would be the bargained-for purpose of directors' fiduciary duties. In theory, this goal would give directors two options for performing their duties: to maximize the value of the firm or to maximize residual claims at the expense of creditors. At a deeper analysis, however, it is easy to observe that only the first option meets the maximization requirement. If directors sacrifice creditors' interests to increase the return on equity, it would be only a matter of time until the firm would face the impossibility of financing its business through debt. No debt investor would agree to finance the company, or the cost of debt would increase significantly, to the point where it would become unfeasible. Nevertheless, if directors managed to borrow more debt and to increase shareholders' wealth while disregarding creditors' rights, the bankruptcy risks would grow exponentially, and the firm would soon go bankrupt. Consequently, the effective outcome of scarifying creditors' interests is setting a narrow time-horizon for shareholders' claims, which is the opposite effect of maximization. By contrast, maximizing the value of the firm results in maximizing shareholders' claims, while avoiding the aforementioned inconveniences. This option ensures effective maximization of equity claims, since there are no obvious limits value-wise or time-wise for the returns on equity. Therefore, the only economic-efficient option for shareholders is to bargain for directors' obligation to maximize the value of the firm.

Creditors, as opposed to shareholders, have fixed claims against firm's cash flows. It follows that creditors could bargain ex ante for two obligations incumbent on managers: to preserve the value of their claims and to alleviate the enforcement thereof. If we picture the corporation as a pie divided between shareholders and creditors, we can observe that there is only one practical way to achieve both objectives envisaged by creditors: by increasing the size of the pie. Maximizing the pie without affecting the value of debt claims effectively means reducing the percentage of creditors' slice relative to the whole pie, while preserving its face value. Thereby, the enforcement of creditors' receivables becomes less burdening.

The same conclusion regarding the outcome of the hypothetical bargain between the firm and financial investors can be reached by appealing to the portfolio theory.

The finance literature distinguishes between two types of risk associated with an investment: the systematic risk and the unsystematic risk. The systematic risk is caused by market factors that affect all firms, such as war, inflation, political events, etc. Gitman, *supra* note 44 at 322. The unsystematic risk is caused by firm-specific, random events, such as lawsuits, strikes, loss of a key account, etc. *Id.*. The relevance of the distinction resides in the possibility of risk elimination through diversification. The unsystematic risk can be eliminated by spreading the

6. Conclusion

Instead of joining the doctrinal debate over the purpose of fiduciary duties, we have demonstrated that there is a valid model that reconciles the supposedly contradictory currents of thought from this field.

Our model builds on the essence of two important North-American court decisions regarding the fiduciary duties: *Credit Lyonnais* and *Peoples Department Stores*. Although both court decisions emphasized directors' obligation to maximize the value of the firm, they did not address several concepts that are vital for an accurate understanding of the fiduciary duty model they advocate: the concept of firm's value and the legal means the directors can use in order to maximize this value. Arguably, such an analysis would have exceeded the competence of the courts, due to their lack of business expertise. Given their incompleteness and their ambiguity, these court decisions have generated a wave of criticism from the legal scholars.

This paper provides a legally and economically valid model that answers many of the queries related to the aforementioned court rulings. Our model is built around one main insight: the positive net present value projects align the best interests of the corporation, regarded as a separate legal entity, with the economic interests of shareholders and creditors.

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investment across many assets (diversifiable risk). The systematic risk affects almost all assets to some degree, and, therefore, cannot be eliminated by diversification (non-diversifiable risk). Ross et al, *supra* note 52 at 408.

According to the portfolio theory and the Capital Asset Pricing Model ("CAPM"), rational investors will diversify away the specific risk associated with their investment (the unsystematic risk), by buying a variety of different capital assets, including both corporate stocks and bonds. The specific risks associated with each of the various securities composing a portfolio will cancel each other out, leaving the portfolio owner better off as compared to holding only one type of securities. The CAPM assumes that the rational investor would optimize his portfolio, up to the point where it displays the lowest possible risk for its level of return.

Rational diversified investors would not agree *ex ante* to the maximization of the value of their shares if that meant reducing the value of their bonds (or other capital assets) with more than the increase in the share value. For these reasons, rational investors would not choose shareholder wealth maximization or other asset value maximization as gap-filling rule. Instead they would bargain ex ante for the maximization of firm's value, which would increase the value of the variety of capital assets composing their portfolio.

Our analysis started by addressing one fundamental question: how is the value of a firm gauged? In order to articulate the answer, we appealed to the corporate finance literature. We observed that the value of a firm is given by its ability to generate cash. Creditors and shareholders tend to focus on the firm's cash flow streams, since the return on their investments (i.e. interests, dividends) are inexorably cash-linked.

Furthermore, we showed that directors' obligation to maximize the value of the firm can be construed as the obligation to select the projects that generate the highest discounted value of future cash flow streams (the projects that have the highest expected net present value).

This understanding of fiduciary duties accommodates the interests of the corporation with those of its constituencies. We have demonstrated this by using two corporate finance concepts: the MM theorem and the Fisher Separation. Both these theories show that, beyond an optimum level of debt, managers' decisions regarding the maximization of firm's value are independent of the specific interests of creditors and shareholders. In terms of fiduciary duties, this shows that the firm value maximization goal requires directors to pursue the best interests of the corporation, without investigating the stakeholders' particular expectations.

By employing several fundamental concepts of corporate finance, this paper substantiates the purpose of directors' fiduciary duties, with a view to consolidate the feeble framework drawn by recent North-American court decisions.

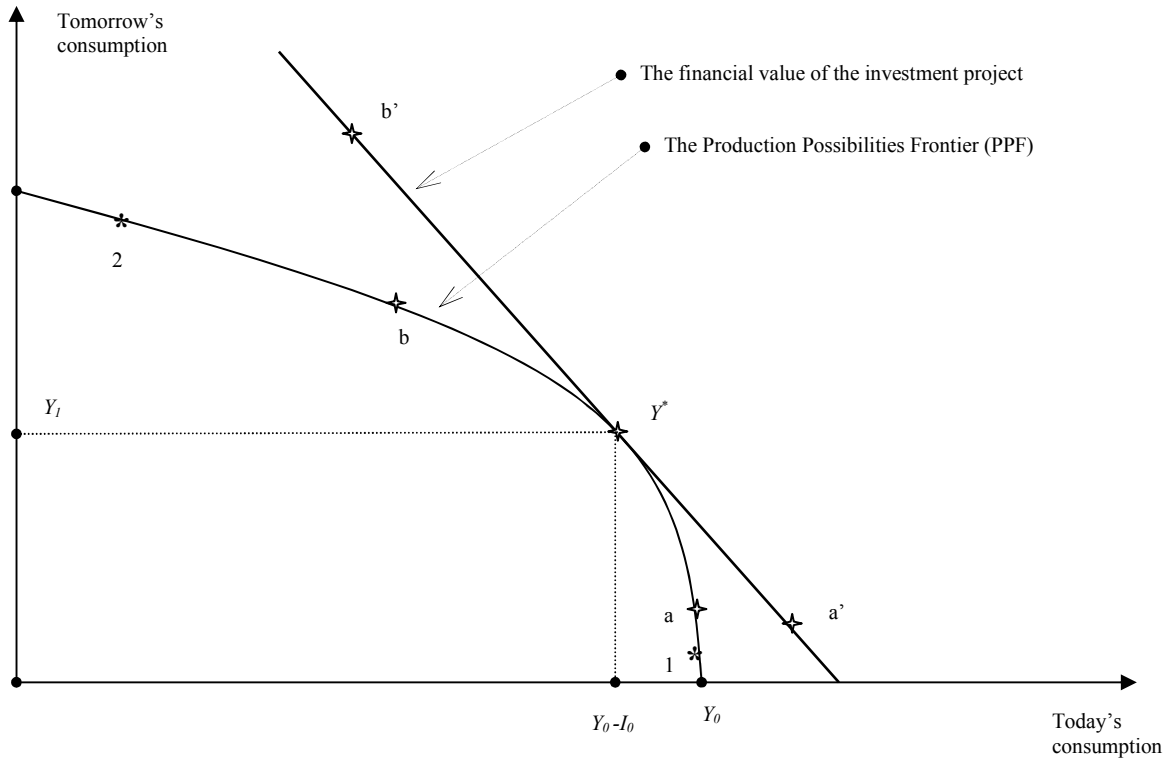

Figure 1

The separation between shareholders' consumption preferences and managers' investment decisions