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Good cop, bad cop: Complementarities between debt and equity in disciplining management ☆

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ABSTRACT

We demonstrate an inherent conflict between ex ante efficient monitoring and liquidation decisions by outside claimholders. We show it can be useful to commit to inefficient liquidation when monitors fail to produce information: this provides stronger incentives to monitor. The implication for firm capital structure is that more information is generated about firm prospects – and hence firm value increases – when a firm's cash flow is split into a 'safe' claim (debt) and a 'risky' claim (equity) compared to when a single claim is sold. We also derive the optimal allocation of control rights between safe and risky claims. This partially resolves the Tirole (2001) puzzle as to why firms issue multiple securities that generate ex post conflicts of interest.

1. Introduction

Most firms issue multiple claims in order to finance their activities. This is puzzling, because multiple claims with differing cash flow and control rights generate costly externalities between

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security-holders. A geared firm, for example, may suffer from asset substitution whereby equity-holders may wish to increase the riskiness of assets in order to transfer wealth from creditors to themselves (Jensen and Meckling, 1976). Similarly, debt overhang may lead to underinvestment by equity-holders (Myers, 1977). Some theories of multiple securities (e.g., Allen and Gale, 1988, Gorton and Pennacchi, 1990, Boot and Thakor, 1993; Fulghieri and Lukin, 2001) show that investor heterogeneity can render multiple claims optimal. Most obviously, trade-off theory says that tax shields provide a rationale for debt but that some equity must also be issued to avoid excessive bankruptcy costs. But all of these theories leave unanswered the corporate governance implications of multiple claims. In particular, as Tirole (2001) argues, if one accepts that the holders of different claims face conflicts of interest with respect to the firm decisions, one might expect firms to try to achieve the best of both worlds by selling a single homogeneous claim to an intermediary which internalizes these conflicts and then achieves the benefits from diverse claims by selling on multiple claims with different cash flows to various different clienteles.

The objective of this paper is to provide a theory of multiple securities based on the corporate governance *benefits* of conflicting interests between multiple claimants. We consider a set-up where the provider or providers of capital have to take two different actions. Firstly, it will be necessary to decide at an interim date whether to liquidate or continue the firm's operations. Secondly, before this interim date arrives, but after the manager has chosen his effort level, it is possible to perform costly monitoring to provide information about the firm's expected value at the interim date, that is, about whether or not liquidation will enhance or destroy value. Intuitively, since there are two different activities for outsiders to perform, it may be useful to have two different outside claimants with different claims. Yet this is not obvious since an aggregate claimant holding all the returns to the firm would have efficient incentives both to collect and to act upon information, and one might expect the benefits to collecting information to be greatest when the informed party has control over decision-making (see, e.g., Aghion and Tirole, 1997). Thus the existence of multiple activities to be carried out by outsiders does not *per se* generate a need for multiple outside claimants. But we show in this paper that it may do so if it is not *ex ante* optimal for the firm to set monitoring and control decisions to the *ex post* optimal levels, because then selling the firm to a single claimant will not achieve the desired outcome.

We demonstrate that there is an inherent tension between providing strong monitoring and liquidation incentives, so that monitoring incentives can be improved by the credible adoption of an *inefficient* liquidation policy. It follows from this that it can be optimal to split the function of exercising control over the firm and monitoring it between two different providers of capital with differing cash flow rights, which provide the right incentives for each of their roles. In other words, the externality which the claim-holder with control over the liquidation decision exerts on the monitoring claim-holder can be seen as part of the corporate design: it may indeed be inefficient to separate claims *ex post*, but it improves efficiency *ex ante*.

Of course, committing to a value-destroying strategy has a cost as well as an increased monitoring benefit, and the cost is that the organisation will typically choose the value-destroying action too often (whenever the monitor is uninformed). Why would one ever wish to impose an ex post inefficient liquidation policy? In our paper, we consider one particular application where this can be useful: the difficulty of inducing managerial effort. Our model thus contains two or potentially three active parties: the manager, the monitor and the party taking the liquidation/continuation decision.

We begin by showing, that, as one would expect, the more informed is the continuation decision, the lower the expected agency rents that must be paid to the manager. Therefore it is useful for the monitor to acquire more information about the future prospects of the firm. We then come to the key point of our paper: we show that the ex post incentive for the monitor to collect information under the efficient continuation policy may be lower than it would be under the inefficient continuation policy. Whether continuation or liquidation is efficient depends on the expected cost of the type I error incurred by liquidating a good firm, relative to that of a type II error made when continuing a bad firm. The monitoring activity allows the probability of either error to be reduced. If monitoring itself is unverifiable, the monitor can only be rewarded according to the final cash flows - which depend on the continuation decision. When the type I error is relatively costly, continuation is efficient, and it eliminates the type I error. Therefore, if continuation is chosen in the absence of information, then the monitor's incentives can stem only from the gains made by reducing the type II error probability.