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Dynamic adverse selection and debt

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Abstract

In many long-term relationships, parties may be reluctant to reveal their private information in order to benefit from their informational advantage in the future. We point out that the strategic use of debt by an uninformed party relieves the information revelation problem in dynamic contexts. Our argument is based on the idea that (renegotiable) debt is a credible commitment to end a long-term relationship if information is not revealed. We illustrate our argument by showing how a monopolist that sells a durable good to consumers whose valuation is private information can increase profits by levering up. The strategic value of leverage is shown to increase with good durability and is higher with production to order than with production to market. We briefly address the financing decision of a regulated firm. We also discuss how our basic insight can be extended to other settings which exhibit dynamic adverse selection problems. © 2001 Elsevier Science B.V. All rights reserved.

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1. Introduction

In May 1989 Sealed Air Corporation (SAC) announced a special leveraged dividend of $40 per share, which was almost equal to its stock price. Until this

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announcement SAC had never paid a dividend greater than 18 cents per share. To finance this special dividend, SAC borrowed $307 million (in private and public debt) which was an amount equivalent to 136% of its total assets. Following this leveraged special dividend was a 29% increase in sales, a 20% decrease in inventories and a 64.5% increase in operating profit by 1992. The total value of the firm increased by 80% over the same period. There is no evidence that this spectacular increase in performance can be attributed to exogenous factors.[1]

SAC manufactures protective packaging materials. Many of its products were protected from competition by patents and the firm entertained long-term relationships with most of its clients. It had been run by the same CEO, and had enjoyed spectacular growth since 1971. SAC was already a profitable company before the special dividend.

Some of the spectacular increase in profits which followed the special leverage of 1989 could be attributed to a 'free cash flow' reduction effect (Jensen, 1986). According to Wruck (1994), managers felt that cash exceeded the firm's needs. Nevertheless, although an abundance of cash is necessary for this theory, it is not sufficient. Debt increases performance only when managers divert these cash flows to their own benefit instead of paying them out to shareholders. 'The problem (with free cash flow) is how to motivate managers to disgorge the cash rather than invest it at below the cost of capital or waste it through organizational efficiencies. [...] Such cash flows should be paid out to shareholders' (Jensen, 1988). Wruck (1994) shows that SAC is an example, albeit a rare one, of a firm with almost no conflict between shareholders and managers: 'The evidence for SAC is completely inconsistent with poor performance due to management entrenchment'. Moreover, the very fact that managers decided to pay out this excess cash (the efficient decision), plus a large income financed by debt, contradicts the existence of serious agency problems associated with management.[2] Finally, the efficiency effects of a free cash flow reduction are deemed to be more important for firms operating in a declining industry, which was not the case of SAC.

More generally, there may have been moral hazard issues at different levels of the organization. In the absence of proper monetary incentive schemes, debt may reduce these agency costs. However, there is no evidence of moral hazard

[1] See Wruck (1994). In particular, Wruck did not find any evidence of a takeover threat. She shows that tax shields can only explain a very small percentage of the profit increase. In addition, a signalling argument (Ross, 1977) is not consistent with the absence of abnormal stock price reaction at the time of the announcement of the leveraged special dividend and with the steady improvement in stock performance over the following months.

[2] Zwiebel (1996) shows that, in a dynamic moral hazard framework, self-interested managers may take on debt because they are threatened by takeovers. However, there was no evidence of any takeover threat in the case of SAC.