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Ownership structure and inventory policy

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Abstract

This paper makes use of a database of Spanish manufacturing firms to explore the effect of a firm's ownership structure on its inventory policy. We have argued that the presence of institutional investors reduces a firm's liquidity needs and prevents overinvestment policies. This, in turn, leads to lower equilibrium inventory levels. Also, we expect, on average, less inventory investment when bank-equity financing is compared with bank-debt financing. Finally, other components of ownership structure like the number of blockholders prevent inventory overinvestment. This may have an impact on the economic cycle as more firms are floated on the stock market hence changing their ownership structure.

Keywords: Inventories; Main blockholders; Financial institutions

1. Introduction

In a modern corporation, inventory investment is well integrated into a firm's overall investment policy. Although the connection between financing and investment decisions is at the very center of corporate finance literature, relatively little attention has been paid to study its relationship with a firm's inventory policy. The main approach relates liquidity constraints to inventory policy (Kashyap et al., 1994; Hendel, 1996; Carpenter et al., 1998). The basic result is that those financing instruments or environments that constrain firms the most have greater impact on inventory investment. However, the connection between a firm's ownership structure and inventory policy has been totally ignored in this literature. This paper is aimed to fill this gap. We think this is a relevant issue because an increasing number of firms are floated on the stock market thereby changing their ownership structure. This, in turn, may affect inventory investment and, in the end, the overall economic cycle.

We identify two channels through which ownership structure can affect a firm's inventory policy: the *liquidity channel* and the *control channel*.

The type of blockholder (banks, corporations, etc.) affects a firm's liquidity constraints. Lenders may be more willing to renew their loans to a firm owned by powerful institutional shareholders. Thus, for a firm, especially a small one with low bargaining power, having institutional investors as blockholders would clearly diminish its liquidity needs. This, in turn, should induce, on average, a lower inventory level as its need to accumulate relatively easy cashable assets like inventories to hedge liquidity shocks is reduced.

The second channel through which blockholders may affect the equilibrium inventory level is the *control channel.* Blockholders, contingent on their

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number and characteristics, may implement certain types of actions against the remaining shareholders' interests. These actions generally involve overinvestment to the advantage of main blockholders that, eventually, may affect the steady-state inventory levels. Under this view, inventory overinvestment is an outcome of a firm's mismanagement (Krautter, 1999). Interestingly, recent literature (Bennedsen and Wolfenzon, 2000) has examined these issues. The basic result is that minority shareholders' interests are better protected when the number of blockholders is high. This is so because the higher their number, the more likely they are to have conflicting views to seek private benefits; and the lesser likelihood of agreement on particular investment policies. This prevents overinvestment actions like those that lead to intensive inventory accumulation.

Also, the control channel justifies lower inventory investment when a firm is financed with banks' equity instead of bank debt. This is so because the control possibilities available to a bank as a shareholder are superior to those as a lender.

Finally, we expect the connection between ownership and the equilibrium inventory level to be especially relevant in a complex corporation. This type of firm requires that operations managers determine inventory level in an integrated way taking into account manufacturing, distribution, engineering, technology deployment, marketing and customer services. This is to coordinate a knowledge supply network (Mak and Ramaprasad, 2003). These additional tasks make control more difficult, especially within complex and diversified firms, and give operations managers wide scope to behave opportunistically. They can implement empire-building policies that generally lead to inventory overinvestment. Consequently, in this type of firm the controlling role of blockholders like banks, which monitor managers efficiently, should be especially visible through the reduction in a firm's steady-state inventory level.

We test these theoretical contentions making use of a yearly panel data sample of Spanish manufacturing firms for the period 1996–2000. Using such a low frequency does not pose a problem; this is because we expect that ownership structure has an impact on the long-term value of a firm's economic variables and, in particular, on the long-term inventory level. This latter steady-state level may be proxied perfectly by the yearly average inventory level. We find that the results fully confirm our theory. First, the presence of institutional investors like banks or other corporations reduces the average inventory level in small firms and/or in firms with certain degree of diversification. Second, the number of blockholders shows a negative relationship with a firm's inventory level. Last, a firm that has banks in its ownership structure shows a lower inventory level than a firm with a significant proportion of bank loans but without such a bank presence in its ownership structure.

The remainder of the paper is organized as follows. Section 2 develops the theoretical underpinnings as well as the hypotheses to be tested. In Section 3, the empirical analysis is carried out. The paper ends with some final remarks.

2. Hypotheses to contrast

We build up our hypotheses relying on two features. First, a firm's financial structure may generate liquidity pressure that a firm anticipates by investing in relatively liquid assets like inventories. This pressure is conditioned by a firm's ownership structure (*liquidity channel*). Second, the type and number of blockholders characterizing a firm's ownership structure prevents overinvestment policies by determining the degree of control over managers. This, in turn, affects inventory accumulation (*control channel*).

2.1. Liquidity channel

Liquidity pressure may generate stock-outs if a firm does not invest sufficiently in inventories (Pirttilä and Virolainen, 1992). Four factors that ownership structure mediates affect this pressure:

First, the structure of product market. A firm with market power is less prone to accumulate inventories in order to avoid stock-outs (Blazenko and Vandezande, 2003). This is so because this firm can modulate demand by changing prices appropriately. In this way, it can afford accumulating lower inventories as a reaction to liquidity pressure. Interestingly, the presence of institutional investors generally increases a firm's market power. This ameliorates the impact of liquidity necessities on inventory investment.

Second, the length of financing. Short-term means higher liquidity pressure. Having blockholder banks reduces liquidity pressure as it facilitates a firm with low bargaining power (e.g. a small one) the renegotiation of its debt. This allows