Int. J. Production Economics 143 (2013) 207–218

Contents lists available at SciVerse ScienceDirect

Int. J. Production Economics

journal homepage: www.elsevier.com/locate/ijpe

Reinvestigating the relationship between ownership structure and inventory management: A corporate governance perspective

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A R T I C L E I N F O

Article history:
Received 5 February 2012
Accepted 9 January 2013
Available online 18 January 2013

Keywords:
Board of directors
Corporate governance
Institutional ownership
Inventory management
Managerial shareholdings

A B S T R A C T

It is hypothesized in this study that the relationship between institutional ownership and inventory management is more likely to be moderated by other internal corporate governance mechanisms (i.e., managerial ownership, board leadership structure and board size). This is more likely to happen as one weak governance mechanism in one area will be offset by a strong one in another area. Furthermore, the effectiveness of one corporate governance mechanism (i.e., institutional ownership) is more likely to be contingent on some contextual variables. Econometric analysis, using a sample of Egyptian listed firms, provides strong evidence for the applicability of this theme and demonstrates that institutional ownership affects inventory management positively (negatively) when managerial ownership is high (low), CEO duality (non-duality) is in place, or board size is large (small). This conclusion is robust to the use of different control variables and econometric models.

1. Introduction

Inventory represents one of the most important and difficult assets to be managed at firm level as well as at macro economy level. Conventionally, academics and practitioners argued that inventories have a triple role in modern organizations: as contributors to value creation, as means of flexibility and means of control (Chikan, 2009). The underlying interrelationship between corporate strategy and inventory (Hitt and Ireland, 1985; Li, 1992; Tamas, 2000) has induced much of existing research to examine its main usual suspects. Examples of these usual suspects include volume and structure of inventories (Chikan, 1996), incentives for efficient inventory management (Baldenius and Reichelstein, 2005), parameters that impact on inventory policy (Borgonovo, 2008), efficacy of inventory (Barker and Santos, 2010), and determinants of inventory turnover (Gaur et al., 2005; Kolias et al., 2011).

In this context, theoretical and empirical studies are conducted to investigate the relationship between inventory and different managerial and financial issues. Example of these issues include capital structure (Luciano and Peccati, 1999), demand uncertainty (Bo, 2001), risk measure selection (Borgonovo and Peccati, 2009), risk aversion (Chen et al., 2007), liquidity and financial constraints (Carpenter et al., 1998; Corbett et al., 1999; Buzacott and Zhang, 2004), managerial perception (Chikan, 2009), financial performance (Cannon, 2008), transaction costs (Girlich, 2003), organizational design (Vries, 2005), stock market (Lai, 2006; Tribo, 2009), ownership structure (Niehaus, 1989; Dimelis and Lyriotaki, 2007; Tribo, 2007; Ameer, 2010), and corporate social responsibility (Barcos et al., 2012).

Previous studies that examined the relationship between institutional ownership and inventory management and policy, to the best of our knowledge, are limited to the studies of Tribo (2007) and Ameer (2010). Both of these studies have argued for a positive relationship between institutional ownership and inventory management. This positive correlation is justified through two different channels: liquidity channel and control channel. Existing of institutional ownership, according to liquidity channel, increases the ability of the firm to access more cash from creditors. This, in turn, should induce a lower inventory level as its need to accumulate cashable assets like inventories to hedge liquidity shocks is reduced (Tribo, 2007). On the other hand, according to control channel, strong voting power and superior knowledge of institutional shareholders enable them to manipulate decisions of management effectively. Hence, excess inventory as a sign of mismanagement is unlikely to be presented in this situation (Tribo, 2007; Ameer, 2010).

In fact, this conclusion ignores that the effectiveness of one corporate governance mechanism (i.e., institutional ownership) is more likely to be contingent on some contextual variables and that the effect of one mechanism can depend upon others. Put simply, this conclusion disregarded not only the documented relationship between institutional ownership and managerial

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http://dx.doi.org/10.1016/j.ijpe.2013.01.011

shareholding (Bathala et al., 1994; Chen and Steiner, 1999; Crutchley et al., 1999; Joher et al., 2006; Khurshed et al., 2011), but also the interrelationship between institutional ownership and board characteristics (i.e., size and leadership structure) (Huse, 2005; Li et al., 2006; Elsayed, 2007 and 2010; Khurshed et al., 2011). Furthermore, this argument overlooks that the effectiveness of institutional investors is more likely to vary across-nations. This is because national institutions may allocate power within firms in a different way (Aguilera, 2005). For instance, although the USA and the UK have a common law system, each county has decided to address corporate governance initiatives differently (Aguilera, 2005; Huse, 2005).

In fact, to hypothesize that institutional investors are always "*active*" or "*passive*" in their actions towards monitoring and controlling responsibility, and hence, inventory management and to model this case as a linear relationship are considered as idealistic themes. Rather, it is more reasonable to expect that the relationship between institutional investors and inventory management is a nonlinear one that might be moderated by various motivations. This is more likely to happen as institutional investors are generally profit maximizers who will not be engaged in an activity whose costs exceed its benefits (Bainbridge, 2008), will not take their decisions far from considering expected financial returns (Sparkes, 1998; Matterson, 2000), and behave differently across-countries (Seifert et al., 2005).

Moreover, because it is unfeasible to expect which firm will face which problem, institutional investors will be required, as a result of asymmetric information, to monitor all of their portfolio firms. However, increasing cost of monitoring, intervening and reforming do not provoke institutional investors "to be involved in day-to-day corporate matters. Instead, they are likely to step in only where there are serious long-term problems…[and] is likely to focus on crisis management" (Bainbridge, 2008: 13–14). This possibility is more likely to be high with relatively small size investment of long-term institutional investors, information asymmetry, and non-existence of collation among shareholders. The implication of this assertion is that institutional investors are more likely to play an active (passive) role in monitoring management behavior and decisions in contexts that facilitate (hinder) managerial entrenchment. "Managerial entrenchment occurs when managers gain so much power that they are able to use the firm to further their own interests rather than the interests of shareholders" (Weisbach, 1988: 435). Managerial entrenchment varies not only with national cultural and governance systems (Short and Keasey, 1999), but also with managerial ownership, board leadership structure, and board size (Finkelstein and D'Aveni, 1994; Zhou, 2001; Elsayed, 2011).

Thus, this study is designed to add to existing literature by exploring the moderating effect of managerial ownership, board leadership structure, and board size through testing the relationship between institutional ownership and inventory management using a sample of Egyptian listed firms. Doing so not only helps to better understand the comparative corporate governance and inventory debate, but it also can enhance corporate governance and inventory management practices in Egypt as an emerging market. Presenting data from other less developed contexts is more likely to develop the existing theory of corporate governance, as countries' cultural differences will cause directors to have different ethical perceptions and orientations (Aguilera, 2005).

The remainder of this paper is structured as follows. The second section is devoted to discuss different arguments regarding the role of institutional ownership as a corporate governance mechanism. The third section presents some evidence regarding corporate governance and ownership structure in the Egyptian context. The fourth section is designated to develop some testable hypotheses in this study. Sample and variable measurements are found in the fifth section. Empirical findings are presented in the sixth section. The final section is dedicated to portray conclusions, discussion of the main findings, and some directions for future work.

2. Institutional ownership as a corporate governance mechanism

Separation of ownership and management in modern corporations has led to different arguments regarding the relationship between the principal and the agent. Jensen and Meckling (1976) articulated this scenario as an agency relationship and argued that the agent (i.e., executive managers) will be a self-interest optimizer. Therefore, internal and external monitoring mechanisms are required to be executed to diminish disagreement in interests between shareholders and the management (Fama and Jensen, 1983). Scholars have proposed various corporate governance mechanisms to attain such convergence. Some of these mechanisms are the board of directors, managerial shareholdings, institutional ownership, and operation of the market for corporate control.

Indeed, the past few decades have witnessed a noticeable change in corporate ownership structure with an increase in the stakes of institutional investors such as banks, mutual funds, insurance companies and pension funds (Sundaramurthy et al., 2005). "The fact that institutional investors have cross-border portfolios and are becoming increasingly influential must have an impact on the development and adoption of corporate governance in companies across the globe. This in turn will lead to increased transparency and accountability—something that is beneficial to all investors" (Mallin, 2002: 68).

In this context, institutional shareholders are recognized as long-term investors whose investment volume and horizon encourage them to incur a monitoring cost to control the decisions of the management. In other words, complexity of exit without losses and strong voting power enable institutional investors to manipulate decisions of management effectively. Thus, the superior knowledge of institutional investors arises from their ability to hire professionals to monitor and control a firm's performance (Fama and Jensen, 1983; Sundaramurthy et al., 2005; Mahoney and Roberts, 2007).

However, other commentators detracted from the importance of institutional investors as a corporate governance mechanism on the basis that they are passive, allied with management, and short-term oriented (Hansen and Hill, 1991; Bushee, 1998). Furthermore, evaluating and compensating managers of these institutions on the basis of short-term performance cycles discourages institutional investors from incurring monitoring cost to participate in governing firms in their portfolios (Koh, 2003). In this context, institutional investors are less likely to support long-term projects as they mainly prefer near-term earnings (Bushee, 2001).

To accommodate between these two opposing themes, some scholars, such as Zahra et al. (2000), and Huse (2004) argued that there are different types of institutional ownership: pressure-resistant institutions, pressure-indeterminate institutions, and pressure-sensitive institutions. While pressure-resistant institutions have a long-term investment perspective, pressure-indeterminate investors are short-term oriented in their investments. Pressure-resistant investors, such as mutual funds and public pension funds, are more likely to challenge and vote against management discretionary decisions.

Prior studies have focused on institutional ownership as a corporate governance mechanism and tried to establish a link with various organizational and strategic issues such as corporate