

Examining Inventory Performance Measured by Days of Supply

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Abstract- The aim of this conceptual paper is to examine the inventory performance focusing on days of supply. Problem focal towards the context of inventory performance further narrow down to the capability of the relevant corporate governance mechanisms in managing inventory. Basically as far as concern to corporate governance study mainly focus on financial aspects and this research explore from the angle of non-financial aspects of the inventory control that's contribute toward 60 to 70% of total manufacturing cost. Two main corporate governance variables were discussed in terms of their relative impact on inventory performance that's include CEO duality, and managerial ownership. As for inventory performance measured by the inventory perspective that's include days of supply and inventory value

Keywords— Inventory, Days of Supply, Board size, Mangerial Ownership

1. Introduction

Inventory is one of the essential inputs in the supply chain activities of firms. Inventory generally classified as raw material, work in progress and finished goods. Managing inventory also addressed as stock management is a process of controlling and handling the stock from the time it arrives in firm until its conversion process (work in progress) or finished product. In accounting point of view, inventory is classified as current assets as firm is able to control the inventory to generate revenue and basically keep the inventory for less than 12 months. Generally inventory has positive relationship with profit [1].

Handling or holding stocks/ inventory which refer as part and parcel of company assets ties up with high monetary value or in other words dip in cash flow and resources. Thus, to avoid additional cost or expenditure in the financial statement is crucial

to manage the inventory effectively and efficiently in aspects of level of stock, storage and handling. Practically, the inventory is kept or stored at warehouse. Several questions been posed such as how many (items) and how long (days/ months) stocks or materials being stored and for how long? The extra days/months and extra items of inventory at warehouse will be additional cost to firms. Hence, an effective inventory management will be an ideal approach to cost and cash flow management where for not keeping or holding inventory for too long in the warehouse. As holding extra or too long the inventory adds on the firm expenditure which resulting to unfavorable firm operating performance. This paper address on days of supply of inventory / stock as part of effective inventory management. Days of supply (DoS) refer to an efficiency ratio that measures the average number of days the company holds its inventory before processing it to work in progress or finished product for manufacturing industries or even selling the inventory (trading industries). Days of supply is one of the area highly concerned is the inventory performance which dealt with large corporate assets directly impact customer service negatively if it has not been monitored and oversee. Thus, for smooth operation of inventory, those charged with governance should play their role effectively in overseeing the firm operation particularly the inventory management as inventory directly influence the operating performance. As a matter of fact for the administration excellence the involvement of corporate governance in firm operating performance leads to organizational efficiency. In placing the important of having efficient production, effective managing stock and on time delivery and accomplishment of order fulfillment in a timing manner in order to manage high labor costs and, meeting the increasing customer order. Basically, the operating

performance of the company depends on the board of management' choices in operations strategies. Thus, there is a necessity to investigate the role of corporate governance in inventory days of supply.

2. Review on Previous Study

2.1 Inventory Performance

The inventory value accounted for almost 70 percent of total manufacturing costs (. In view of this important of the stock at organization level treated the most difficult assets to be controlled. Firms put focus the important on the controlling this value of assets that may detrimental the profit of the firms. However according to [2] that managing stocks or inventory have created value creation as means of flexibility and means of control. According to [3], one of the main function of operations management is to control towards reduction in inventory means to minimize it in order to reduce the total operational costs. Executives increasingly recognize the process of inventory reduction through the effort of lean approach to control and having sufficient stock with better value. [3] lengthened further on the management capability to reduce inventory by decreasing the ordering costs and also implementing discount schemes based on total annual volume rather than individual purchase quantities. The principal challenges faced by the store house managers are to monitor on excess stock without affecting the delivery of goods to customers promptly. As firms require to hold sufficient inventory to manage the operation process. The days of supply reports on the number of days availability of inventory which assist in firm inventory planning for the procurement. With this, no excess inventory hold by the firm that contributes to efficient supply chain management system and reduce the operational risk of firm.

2.2 Corporate Governance Variables

The execution of best practices is the focal role for of board of directors in corporate governance of firms. The corporate governance has influence in the firm inventory decisions [4]. The corporate governance that directly involved in the operational and financial matters of the firms are the CEO and the executive directors. Thus, this paper focused mainly in managerial ownership and CEO duality involvement in managing the inventory days of supply.

2.2.1 Managerial Ownership

The directors such as executive directors directly involved in the operations of the company and

there a some cases whereby the agents (managers) may hold certain number of outstanding share and become part of the ownership. This drives the quality of decision making and better flow of communication may take place. As refer to agency theory when the weightage of ownership is most likely the non-participative will become lesser and proactive to deal for improvement for the sake of the company will become better eventually operations performance will become enhance. Meaning to say behavioral aspect from compromising on non-value becomes lesser [5]. [6] reported that the ownership structure will leads in solving the separation of ownership and issues in who should be in control. Thus, the managerial ownership believe to enhance the firm operating performance particularly the inventory management system.

2.2.2 CEO Duality

The firm has chairman and CEO the same person been called as CEO duality. MCGG wants listed firms to have distinguish role or separation of role between in avoiding the conflict of interest, is good to have balance of power between the Chairman and CEO (Abdullah, 2004). MCGG never enforced the segregation of CEO duality but MCGG do encourage that the positions for CEO and chairman to be separated. In order to promote strong governance especially on despite taking care the interest of shareholder, monitoring mechanisms required to oversee the operations performance especially inventory. As with this in mind MCGG seek transparency when comes to information for public concerning to the elements of independent for the two positions as a measure for strong governance [7]. The CEO duality shall heighten the power of firm operation to manage the effectively and efficiently for example involving in inventory management as part of firm cost saving approach.

3 Conceptual Model

Based on literature reviews, conceptual framework with its related propositions are formed as below

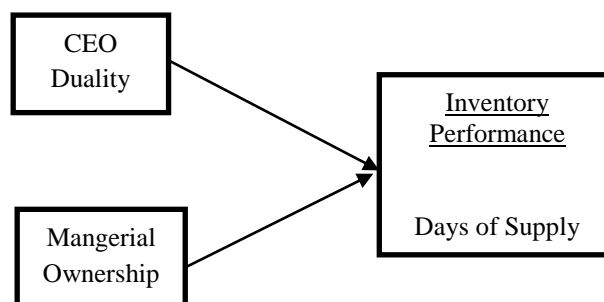


Fig 1 : Conceptual Model

The figure shows the link of the predictable variables call as the independent variable of corporate governance are CEO duality and managerial ownership. The inventory performance which is the dependent variable is represented by inventory value, and days of supply are used to measure the performance.

Table 1 Description of Dependent Variable

	Variable - Description	Sources
Dependent Variable (Inventory Performance)	DoS – Days of supply for company I, in year t. It is calculated by the expression (average inventory value / cost of goods sold) x 365 days	[3]

Table 2 Independent Variables (Corporate Governance)

	Variable - Description	Sources
Independent Variables (Corporate Governance)	CEO Duality (CEOD)- if CEO and Chairman is the same person (no separate position).	[8]
	Managerial Ownership (ManOwn) - Percentage of Directors in managerial capacity (CEO / Executive Chairman, Executive Directors) owns direct ownership	[9]

3. Discussion and Conclusion

The days of supply promotes an effective inventory approach in reducing firm operational risk. The involvement of corporate governance in inventory

management is able to reduce in the additional cost from the wastage of holding extra inventory [10]. The corporate governance particularly the executives director and CEO referred to those charged with governance of firm operation should emphasize on the days of supply measurement as part of inventory management in firms. Several studies have been conducted on the examination of the relationship between firm performance measures and corporate governance mechanisms but the outcomes of these studies more focus on accounting measures. This study has in a way introduced the inventory measures to dictate the measurement of days of supply with corporate governance. This study focuses on some mechanisms of corporate governance that affect the inventory performance and the inventory measures account for the operations performance particularly the days of supply. Efforts should be made to make the corporate governance principles to be explored in a wide range in the manufacturing industry for smooth operating performance as a strategy for firm value creation.

References

- [1] Chandren, S., Nadarajan, S., & Abdullah, Z. (2015). Inventory physical count process: A best practice discourse. *International Journal of Supply Chain Management*, 4(3), 87-93.
- [2] Chikan, A., 2009. An empirical analysis of managerial approaches to the role of inventories. *International Journal of Production Economics* 118 (1), 131–135
- [3] Chopra, S., and P. Meindl. 2003. Gerenciamento da cadeia de suprimentos: Estratégia, planejamento e operação. *São Paulo: Prentice Hall*
- [4] Nadarajan, S., Chandren, S., Bahaudin, A.Y., Mohamed Elais, E., & Mohd Nawi, M.N (2015). Corporate governance and operations performance: inventory study on Malaysian listed firms. *International Journal of Supply Chain Management*, 4(2), 68-71.
- [5] Bowen, R.M., Rajgopal, S., & Venkatachalam, M. (2008). Accounting discretion, corporate governance and firm performance. *Contemporary Accounting Research*, 25, 351- 405.
- [6] Cheng, Q., Warfield, T. D., & Ye, M. (2011). Equity incentives and earnings management. *Journal of Auditing, Accounting and Finance*, 26(2), 317-349.
- [7] Abdullah, S.N. (2004). Board composition, CEO duality and performance among Malaysian listed companies. *Corporate Governance*, 4, 47-61.

- [8] A Ponnu, C.H. (2008). Corporate governance structures and the performance of the Malaysian public listed companies. *International Review of Business Research Papers* 4, 217-230.
- [9] Johari, N. H., Saleh, N.M., & Hassan, M.S. (2008). The influence of board independence, competency and ownership on earnings management in Malaysia. *International Journal of Economics and Management*, 2, 281-306.
- [10] Nadarajan, S. Abdul Rahim, M.K.I., Mohd Nawi, M.N, Chandren, S. (2017). Examining and evaluating days of supply through the influence of corporate governance. *International Journal of Supply Chain Management*, 6(2), 256-258.