

ECONOMICAL preconditions of functioning of independent boards of directors in view of neoclassical economical theory

Andrey, Rudkov

11 March 2011

Online at https://mpra.ub.uni-muenchen.de/32855/ MPRA Paper No. 32855, posted 19 Aug 2011 03:17 UTC

Economical preconditions of functioning of independent boards of directors in view of

neoclassical economical theory

Abstract

The article examines analytically economical preconditions and motivation of economical agents to use independent boards in corporate government of a firm. Behavior of economical agents (shareholders and management of a firm) is analyzed in view of neoclassical economical theory. In survey author analyzes behavior of shareholders and makes conclusion that for shareholder the most efficient way to minimize transactional costs while being invested in stocks of a company is to delegate some functions (related with control and increasing shareholders value) in independent board of directors.

1. Introduction

In this survey we try to find out economical precondition of independent boards in system of corporate government of firms.

Our hypothesis is that a main reason independent board to be created is relatively rational behavior of economical agents who try to minimize their transactional costs.

In our survey we will rank and understand under definition of economical agents following groups of participants of economical relations:

- 1. Shareholders of the firm;
- 2. Top-management of the firm;

We will use as definition of transactional costs hereinafter given by Robins¹ - "those costs associated with an economic exchange that vary independent of competitive market price of goods and or services exchanged. They include all search and information costs, as well as the costs of monitoring and enforcing of contractual performance".

2. Characteristics of economical agents

In our survey we allocated key characteristics of economical agents based on following sings:

- 1. goal of agent;
- 2. opportunities of agent;
- 3. features of economical behavior of agents in view of opportunities to reach goals;
- 4. restrictions in economical behavior.

2.1. Shareholders

- 1. Goals.
- Increasing of wealth;
- Stable investments;
- Maximal profitableness with given level of risk;
- Minimal risk with given level of profitableness.
 - 2. Opportunities.

In this section we would like to divide shareholders on minority shareholders and majority shareholders. The reason is in essential difference in opportunities of this groups of shareholders.

Opportunities of minority shareholders:

- limited influence (or absence of influence) on operational activity of firm;
- limited influence on strategy of a firm;
- access only to public information.

Opportunities of majority shareholders:

- essential influence on operational activity of firm;
- essential influence on strategy of a firm;
- access to public and material non-public information².

3. Features of economical behavior of shareholders in view of opportunities to reach goals.

Main reason and determinant of shareholders behavior is comparison between costs of actions aimed to increase value of shareholder (by increasing value of a firm or by increasing value of paid out dividends) and:

- a) economical benefits(increasing value of a firm or dividends) from consequences of this actions;
- b) opportunity costs missed benefits because of activities not undertaken instead of actions aimed to increase value of shareholder;
- c) transaction costs.

During the process of finding out what kind of activity will bring maximum profit agents also trying to find out probability of getting benefits.

Benefits in process of investing are: increasing of operational efficiency of a firm and as a result – increasing price of shares of a firm.

We suppose that agent arguing in rational manner will find out probability of getting value of shareholder to be appreciated as unequal 1. This assumption will lead total effect from investment activity to depreciate in direct relationship (dependence) with the probability:

P(Inv) = f(P(O) P(S));

If $P(O) \le 1$; $P(S) \le 1$;

So:

P(Inv) < 1.

Where – P (Inv) – probability of receiving effect (benefits) from investment process;

P(S) – probability of increasing value of a stock;

P(O) – probability of increasing operating efficiency.

4. Restrictions related with economical behavior of shareholders.

a) bounded rationality³

Bounded rationality theory first highlighted by Simon is based on assumption that economical agents have listed characteristics:

1. Limitation on the organism's ability to plan long behavior sequences, a limitation imposed by the bounded cognitive ability of the organism as well as the complexity of the environment in which it operates.

2. The tendency to set aspiration levels for each of the multiple goals that the organism faces.

3. The tendency to operate on goals sequentially rather than simultaneously because of the "bottleneck of short-term memory."

4. Satisfying rather than optimizing search behavior.⁴

As a result shareholders are not able to process all available information (news, events, forecasts, financial reports, auditor reports, analytics etc.) concerning shares of a firm. So shareholders are not able create their own opinion about efficiency and quality of activity of a management of a firm.

Typical shareholder is a household which has its own business, its obligations to families, employers (about 62% of heads of households are employed full-time⁵) and government. These factors are used to consume all time of a shareholder-household. A household can also invest its holdings in several firms.

b) Nontransparency of market reactions

Ambiguity and impossibility to predict exactly reactions⁶ of market participants on new information about efficiency of a firm lead to fact that shareholder can't predict quantitative characteristics of outcome of his benefits resulted from his activity aimed to increase value of his investment. In other words shareholder can assume that his activity can increase operating efficiency of a firm (via hiring a good management, motivating it, reviewing operational results and so on) and moreover will increase value of a firm (and value of shareholder), but amplitude of this appreciation is not known.

So the best way to optimize and rationalize the process of appreciating a value of a shareholder in view of listed restrictions is to delegate some functions to independent board.

2.2. Top-management of a firm

Top-management of a firm as shareholders does consider board of directors as an instrument of depreciating its transactional costs. Because of this fact top-management of a firm often tries to delegate in the board its representatives who used to be dependent of top-management. Usually these representatives take positions in a firm, loyal to top-management initiatives and have conflicts of interest (which in general worlds can be characterized as antagonism of purposes of shareholders and purposes of management).

Top-management by delegating affiliated persons in board of a firm becomes able to reduce its transactional costs in the case when his interests differ from interests of shareholders. In this case affiliated board member will protect top-management in eyes of shareholders, legitimate activity of a management. This activity of protecting top-management trough delegating "grey" members to board gives top-management the possibility to concentrate on primary activity and don't spend resources (time, money, reputation) on legitimating its activity.

The more benefits top-management gets from activity which is contrary with interests of shareholders the more incentives top-management has to reduce its transactional costs on legitimating activity by moving in the board its affiliated persons.

So, board in this view represents a two-sided relationships agent-principal. From one hand it is aimed to protect goals rights of shareholders, from the other hand it is used by top-management of a firm to legitimate its activity.

3. Characteristics of transactions in view of interaction economical agents trough independent boards.

There are several classifications⁷⁸ of transactions in neoclassical theory. In our opinion the most suitable classification of transactions while analyzing economical preconditions of independent boards is one given by Commons⁹.

Commons offered following types of transactions:

- Bargaining transactions transactions which include symmetrical legal relations between economical agents concerning allocating of property rights.
- 2. Managerial transactions transactions which include relations superiors and inferiors.
- 3. Rationing transactions transactions which have instead of managing agent have joint body. They involve "the negotiations of reaching an agreement among several participants who have authority to apportion the benefits and burdens to members of a joint enter-prise."

When economical agents try to reach their goals trough creating independent board in corporate structure of a firm they use all listed above types of transactions. Moreover – sometimes these transactions have mixed attributes of two types of transactions.

According to Commons, bargain transaction aimed not just to allocate or reallocate property rights. In also and mainly used to create benefits (profit) for participants. In other worlds while being used of this type of transaction economical agents get economical value added (or economize transactactional costs).

As we mentioned earlier transactions between shareholders and members of independent board are bargain transactions because shareholder while delegates main control functions to the board with high probability slows down his transactional costs.

Managerial transaction can be observed in usual activity of independent board at least two times. First time shareholder elects members of board in order it to realize goals set by shareholder. Usually these goals are typical functions of managing process¹⁰ ¹¹– planning,

organization, motivation, coordination and control. In this case superior ("an individual or hierarchy of individuals giving orders which inferiors must obey¹²") is shareholder, inferiors are members of board.

On strategical degree elected board has management functions by top-management of a firm. According to this type of relationship board is superior ("manager"), top-management is inferior ("subordinate").

Third type of transaction that was discovered us during this survey while we were analyzing functioning of independent boards is rationing transaction. According to Commons this type of transaction includes legal asymmetry (disproportion in legal rights of agents) and in this type of transaction "apportions the burdens and benefits of wealth creation by the dictation of legal superiors¹²". Independent board plays here a role of "a collective superior or its official spokesman" – at the same time it is a superior according to top-management of a firm and an official spokesman of shareholder, who is superior both to board and to top-management.

4. Relationship of necessity of the independent board and main drivers of transactional costs

This part of survey is aimed to find out the strength of economical stimulus in creating boards of directors depending on presence of main drivers of transactional costs.

Neoclassical view of drivers of transaction costs refers to uncertainty, timing (frequency of transaction) and asset specifity as main factors of the level of transaction costs. We added one more factor – share of stocks of a company being held by shareholder.

4.1.Uncertainty

Uncertainty is a "lack of information and/or asymmetric information..the higher the uncertainty, the higher the need of uncertainty reduction, and the higher the transaction costs"¹³.

In our case uncertainty will lead to impossibility to predict payoff of a transaction, to predict behavior of opposite party of transaction because of many external factors that can influence on payoff or opposite party. The more uncertainty has shareholder while he is invested (under investment in this survey we will understand the process of buying, holding and selling shares of a firm aimed to bring two types of gains to shareholder – capital gains and dividend gains; during this process shareholder used to take some actions which potentially could increase his gains) in stock of a firm the more costs he incurs during being invested. As we mentioned earlier non-specialist shareholder (household) usually has constant cash flow from main activities (profits from business, salary from employer etc.).

The process of investing for typical minority shareholder (household) is associated with high level on uncertainty for the following reasons:

a) Internal - lots of financial reports that could not be interoperated carefully and correctly by the typical shareholder because of complexity and time-consuming character;

b) External – a number of factors of macroeconomic environment (world economy cycles, activity of local government, activity of controlling bodies, changes on the key markets, competitors actions, invention of substitutes and compliments, new technologies) cannot be clearly predicted, but can have essential influence on firm performance.

4.2.Frequency of transaction

For this survey we divided the process of investing on two types of transactions:

a) Transactions related with buying or selling shares of a firm:

b) Transactions related with set of actions of shareholder aimed to increase gain (dividend or capital gain) of shareholder.

According to profile of typical investor- household ¹⁴ usually it uses a strategy "Buy and hold" and is a long-term investor. So, it is not "scalper" with tens or hundreds transactions on market per year. So, compared with other business or money transactions (for example buying car, renting a house, paying for child education and so on) buying a stock is infrequent transaction.

Second type of listed transactions theoretically can be used by shareholder much more often, but to use this type of transaction shareholder should incur essential costs (lawyers, auditors, analysts, and advisors) than could in some cases exceed price of a stocks that shareholder owns.

While being owned of a several firms stocks (usually shareholders use essential level of diversification¹⁵) it is more rational from economical view shareholder to delegate to protect his rights and increase value of shareholders holdings to independent board, which is able to analyze and control level of operational efficiency of top-management of a firm.

4.3.Level of specificity of an asset being hold

Specific asset is asset characterized by O. Williamson as "the degree to which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value".¹⁶

Is a share of capital specific asset? Perhaps this question doesn't have answer. The more illiquid shares of a firm, the more specific they are and the more transactional costs shareholder incurs. The reason is that the less illiquid shares the more nonflexible, "sticky" prices on it. So price on such shares is not always a good and operative indicator of performance of a management. If management of such a firm understands this situation it has more incentives to opportunity behavior (in contrast with "liquid" companies).

So, potential loss from opportunity behavior (transactional costs) of top-management of "illiquid" firm increases and the role of qualified control and activity estimation made by the third independent party increases.

4.4.Dependence of economical incentives to elect independent board from share of capital being held by shareholder.

Among all factors which have influence on willingness of shareholder to elect independent board we would like to separate one, which has different consequences for different types of shareholders. This one is share of stocks of a firm that belongs to shareholder.

There is negative correlation between economical stimulus to elect board and share of stocks of a firm that belongs to shareholder.

Explanation of this phenomenon is that the more influence shareholder has on activity of a firm. The less he needs representatives to fight for his rights.

Second reason is that economical benefits from engaging in second type of transactions mentioned in §4.2. (transactions related with set of actions of shareholder aimed to increase gain of shareholder) may exceed transactional costs related with this transactions. For example if I would be a shareholder of Wal-Mart with 100 stocks (0.00000003%) worth \$5700, I would never hire Ernst &Young to provide independent audit in my favor to find out whether management of Wal-Mart operates good. Even if I would know with 100% probability that my actions will increase price of Wal-Mart stock on 50%. The reason is that my benefit would be 0.5*\$5700=\$2850. My transactional cost¹⁷ related with audit fees would be approximate \$18.5 million. But if I would own 50% of stocks (worth approximate \$100 billion), potential benefit could be 0.5*\$100=\$50 billion.

Extreme case of this topic is when shareholder owns 100% of stock of a company. In this case shareholder has all possibilities to influence on all factors of activity of top-management, so, he doesn't need any representatives in the firm.

We should say that all prior conclusions in this paragraph a based on assumption that shareholder owns stocks only in one firm.

If we relax this assumption – the conclusions would be not so clear.

When shareholder owns stocks of different firms main role plays level of alternative costs ¹⁸ ¹⁹ for this shareholder. The more alternative costs of such shareholder (for example – mutual fund will have big alternative costs if he will undertake actions to control top-management of a firm instead of its traditional operating activity – finding instruments to invest in, diversification, rebalancing portfolio) the more economical motivation he has to delegate some functions to independent board.

5. Conclusion

During our survey we came to the following deductions:

- in the process of functioning independent boards main groups of economical agents are shareholders and management of a firm;
- formulated main characteristics of agents, restrictions and factors that have influence on behavior of economical agents;
- found out main factors that can increase or decrease economical stimulus of shareholders to delegate representatives tin independent boards;
- asset specifity in case of stock market is illiquidness of stock, which increases transactional costs of shareholder and increases his stimulus to use independent board to increase wealth;
- found out inverted relationship between level of economical incentives to use independent board and share of stocks of a firm being hold by shareholder.

Andrey V. Rudkov

CFO "Akcia holding company" (Russia, Omsk)

PhD in economics

CFA Program Level I passed

¹ Robins James, 1987. Organizational economics: notes on the use of transaction-cost theory in the study of organizations. *Administrative Science Quarterly*, 32, pp. 68 - 86.

² Holderness Clifford, Sheehan Dennis, 1988. The role of majority shareholders in publicly held corporations: An exploratory analysis. *Journal of Financial Economics*, 20, issue 1-2, pp. 317-346.

³ Simon Herbert, 1997. *Models of bounded rationality, Empirically grounded economic reason, Vol. 3.* The MIT Press.

⁴ Jones Bryan, 1999. Bounded rationality, Department of Political Science. *Washington Annual Review of Political Science*, 2, pp.297-321.

⁵ *Characteristics of Mutual Fund Investors, 2010.* Investment company institute, September 2010, vol. 19, No. 7.

⁶ Yermack David, 2006. Board Members and Company Value. *Financial Markets Portfolio Management*, 20, pp. 33-47.

⁷ Coase Ronald, 1937. The Nature of the Firm, *Economica*, 4 (16), pp. 386–405.

⁸ Dahlman Carl, 1979. The Problem of Externality, *Journal of Law and Economics*, 21 (2), pp. 141–162.

⁹ Commons John, 1931. Institutional Economics, American Economic Review, 21, pp. 648-657.

¹⁰ Taylor Frederick, 1911. *The Principles of Scientific Management*. New York: Harper Bros.

¹¹ Fayol Henri, 1918. *Administration industrielle et générale - prévoyance organization - commandment, coordination – contrôle*, Paris : H. Dunod et E. Pinat, 1966.

¹²Commons John, 1934. *Institutional Economics: Its Place in Political Economy, (1961 reprint)*. Madison: The University of Wisconsin Press.

¹³ Buitelaar Edwin, 2007. *The cost of land use decisions: applying transaction cost economics to planning & development*. Wiley-Blackwell.

¹⁴ Equity ownership in America, 2002, Investment Company Institute, Securities Industry Association.

¹⁵ Equity ownership in America, 2008, Investment Company Institute, The Securities Industry and Financial Markets Association

¹⁶ Williamson Oliver, 1991a. Comparative economic organization: the analysis of discrete structural Alternative. *Administrative Science Quarterly*, 36, p. 281.

¹⁷ Wal-Mart SCHEDULE 14A Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 filed Apr 20, 2009.

¹⁸ Chary S., 2006. *Production and operations management*. Tata McGraw-Hill Education Private Limited.

¹⁹ Polimeni Ralph, Handy Sheila, Cashin James, 1983. *Schaum's outline of theory and problems of cost accounting*. McGraw-Hill Companies.