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Full Length Research Paper

Exploring agency problems in corporate governance from the perspective of economic ethics of the capitalist market

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Moral hazard is reflected in the information asymmetry between the agent and the principal, as well as under the assumption that humans are egotistic with limited rationality, often risk-averse and antagonistic towards each other's goals. The agent could thus hide the truth from the principal, not abide by their mutual agreement, and tamper with the investment objectives and plans. From the perspective of Taiwan's external market mechanisms to corporate governance, shareholders (principals) can exploit situations such as poor sales of company products or corporate managers failing to yield satisfactory performance, etc., to monitor and keep the managerial hierarchy (agents) in check through capital market and corporate control market. A practical way to avoid such moral hazard is for the agents to follow the Golden Rule advocated by Hans Küng "Do unto others as you would have others do unto you", and to live up to the ethical principle of "commitment to a culture of tolerance and a life of truthfulness". Relatively, the agency costs required by other methods to reduce information asymmetry and moral hazard problems seem comparatively higher than the former.

Key words: Agency problem, corporate governance, business ethics, moral hazard information asymmetry, economic ethics of the capitalist market.

INTRODUCTION

Transaction costs in market activities can be divided into search and information costs, negotiating and contracting costs, enforcement and monitoring costs. If the transaction information of both parties appears unequal and asymmetric, that is, one party has more information or information of higher value, whereas the other party is unable to obtain information of the same quality and quantity, the implication is that the search and information costs of the transaction costs are too high, or that one transaction party has valuable private information, this is known as information asymmetry (Kuo, 1996).

If one party of the transaction is the principal and the other the agent, after the negotiating and contracting costs are processed and the contract is signed, yet after the signing, the agent exhibits dereliction of his administrative duties, which results in an increased risk and subsequently an increase in enforcement and monitoring costs, this is called "moral hazard". Moral hazard will also be reflected in the information asymmetry between the agent and the principal, as well as under the assumption that humans are egotistic with limited rationality, often risk-averse and antagonistic towards each other's goals, the agent could thus hide the truth from the principal, not abide by their mutual agreement, and tamper with the investment objectives and plans; or the agent has access to information that is prone to internal and external changes, and this information would compromise the

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interests of the principal who is obviously disadvantaged (without this information). Accordingly, since the agent's self-interest is placed above the interests of the principal, and the agent also will not advise the principal, thus leaving the interests of the principal damaged. Although principals and agents appear to be in cooperative relationship, their conflicting interests may cause a number of problems such as moral hazard, adverse selection, and risk aversion. Therefore, the occurrence of moral hazard could result in information asymmetry, and it is the main cause of the agency problems. The following chapter will further discuss issues of transaction costs, information asymmetry and agency problems, and their intricate relationship.

Transaction costs, information asymmetry and agency problems

The traditional neoclassical theory of the firm does not consider the existence of market transaction costs. So, under such framework, the information costs market participants face not only equate to zero, but the opportunities to access the same information are also equal, and there is no moral hazard or agency problems caused by the prior or subsequent information asymmetry. However, the reality of the economic world is closer to that of Coase's transaction cost theory of the firm, in which transaction costs in market activities are everywhere. Founder of the New Institutional Economics, and also the 1993 Nobel Laureate in Economics, D.C. North (1990, 3-16), recognized the profound influence of Coase's two papers "Problem of Social Cost" and "The Nature of the Firm" in his exploration of institutional factors of the economic development process. As previously discussed in the first chapter. Coase clarified the basis of how firms exist, and Adam Smith emphasized that the omnipotent yet invisible hand of the market would automatically reach a market equilibrium, but it does not consider transaction costs in the actual economic activities, making market participants often use organizations such as a firm rather than rely on market mechanisms. After Coase examined the system and the organizational factors of economic activities, he believed that when market transaction costs become too high, the establishment of firms can minimize parts of the transaction costs, thus justifying the existence of firms. So Coase believed that the existence of firms is to avoid some of the transaction costs. This belief further inspired him to propose the institution model that would reduce the transaction costs.

The core of information economics lies in incomplete information and information asymmetry (Wang and Chen, 2003), and both are reasons in the increased transaction costs. The issues of profits, risks and uncertainties discussed by Knight (1985) are in fact closely related to the abovementioned incomplete information and information

asymmetry, and inevitably made a profound impact on the later development of information economics. In the case of information asymmetry, the buyer wants to know the seller's thought, and the seller would also like to know the buyer's upper limit. So the Game Theory developed by Von Neumann and O. Morgenstern is widely applied in information economics. In information asymmetry, when the principal entrusts the agent with a task, moral hazard may occur when the agent lacks strong ethical and moral self-control. This occurrence is what Arrow (1984) referred to as "hidden action" and "hidden information". When a firm is established, all the activities in this organization are a series of principal and agent relationship, this is where the Agency Theory is developed, which focuses on dealing with the relations of division of labor and contract (Perrow, 1986; Eisenhardt, 1989).

The rise and development of the Agent theory is closely related to the studies of economics system. So Coase's Theory of the firm did affect the economists of The Institutional School, such as the 1986 Nobel Laureate in Economics, Buchanan (1983), who was the first to explicitly consider politics a concept of transactions, as well as use the 'economic man' model to observe political exchange and the institutional structure derived from transactions, and was the man behind expanding the domain of Constitutional Economics and Public Choice Theory (Buchanan, 1983; Gan and Huang, 1994). G. Tullock shared equal fame with Buchanan in the Public Choice Theory, but his untimely death failed to garner him the Nobel Prize in Economics. They both were deeply influenced by the transaction Cost Theory of Coase. especially his paper "The Nature of the Firm", which led the economists to think about the role firms play in market activities, and prompted Buchanan and Tullock to reconsider the function of the government in the political market, they even regarded the government as a super company (Buchanan, 1983; Gan and Huang, 1994). North (1990) developed transaction costs from the political process to accentuate a close relationship between the merit and defect of the system and the economic growth. Gilpin (1987), on the other hand, noted that the New Institutionalism and the Hegemonic Stability Theory of the international political economics and were all inspired by the exposition of the transaction cost theory.

When Williamson (1975, 1986, 1996) examined the relation between the issues of transaction costs and information asymmetry, he also proposed six factors that would affect transaction costs: bounded rationality, opportunism, uncertainty (arisen from risks), small-number bargaining, information impactedness and atmosphere. He also divided transaction costs into seven categories: searching (information) costs. negotiating contracting costs, monitoring costs, enforcement costs, inspection costs and service costs. Consequently, information asymmetry in transactions inspired him to develop the concept of moral hazard. Williamson (1975) further combined the concept of moral hazard with Simon's

(1964) bounded rationality of the Economic Man Theory and advocated that information asymmetry causes behaviors such as negotiating, uncertainty, opportunism and others, which disrupt market operations, and these behaviors can be used to explore the fragility, unreliability and its derived agency problem in the contracts of market transactions.

In fact, agency problems were first identified by Berle and Means (1932) when they observed modern corporations separating the ownership from the managerial authority, and concluded that agency problems were inevitable between the shareholders and the managers. Jensen and Meckling (1976) also observed that when a principal employs an agent through contract to perform certain task on his (the principal's) behalf, the principalagent relationship thus exists, and agency problems will inevitably occur. This theory emphasizes that the principal and the agent have their own rationalized self-interest and preferences, so both are inclined to maximize their personal interests, but, when conflicts of interest between both of them occurs, especially in the situation of information asymmetry, then the possibility of the agent deceiving the principal or not performing his commissioned duty would arise. This refers to the so-called agent cost, and the agent cost is deemed the major cause of the agency problem noted in this research.

In addition, the 1982 Nobel Laureate in Economics, Stigler (1988) first proposed the Coase Theorem in his autobiography (Memoirs of an unregulated economist), a term he used to express his admiration towards Coase's works. However, Stigler also noted that Coase's two papers, "The Problem of Social Cost" and "The Federal Communications Commission", relate that information is a commodity, a valuable product that can be purchased. Stigler further added that market transaction costs can be lowered without the existence of a single owner. However, in the situation of a single owner, the information is no longer regarded as valuable commodity, thus problems like information asymmetry, moral hazard and agency problems will not occur. The 2001 Nobel Laureate in Economics Akerlof's "Lemons" model states that information asymmetry arises because experienced sellers of the used car market in the U.S. want so desperately to sell their used cars to used car buyers that they conceal the condition of the vehicle, thus resulting in moral hazard (Akerlof, 1970). Similarly, if stock market investors are clueless about high-risk or low risk listed companies and cannot distinguish between mines stocks and blue chip stocks, then this stock market is volatile and unbalanced. Thus, the above discussion reveals that in market transactions, the party with more information should be honest and open with full disclosure of information to eliminate any information asymmetry, which means, he should possess ethical values of honesty and transparency so that markets can achieve equilibrium.

Rasmusen (1989) broadly defined agency problems as principal-agent problems, so adverse selection and moral

hazard are a kind of agency problems. He believed that information asymmetry can cause three agency problems, namely hidden action, hidden information, and adverse selection, all these three agency problems jeopardize the principal's interests. Therefore, the imperfection in markets impedes the formation of an optimal contract the principal and agent, thus causing an incomplete contract drawn between the two, this means, that although both parties agree to abide by the rights and obligations in a market contract, in an incomplete contract, the agent's hidden action or hidden information inevitably leads to deception. This is the main cause in the outbreak of the Enron accounting fraud scandal at the end of 2001, and also the dilemma that corporate governance wishes to overcome.

Ethical considerations and agency problems

As mentioned earlier, the main reason in agency problems arises from moral hazard that is caused by information asymmetry between the principal and the agent. Eisenhardt (1989), who had conducted in-depth discussions on agency problems and their implications, particularly talked about the agents' tendency towards selfish motives and risk aversion in his assumptions of human behavior, and also noted that the occurrence of moral hazard is expected because the objectives between principals and agents are in conflict, and their risk preferences not aligned. For a detailed discussion, please see Table 1.

Therefore, minimizing agency problems and moral hazard is closely related to the compliance of corporate ethics. Barnea et al. (1981) divided the sources of agency problems into three types namely information asymmetry, debt financing and minority shares held by internal stakeholders. One of the aforementioned sources, debt financing, is what the academia called the debt agency problem. The third source, minority shares held by internal stakeholders, is referred to as equity agency problem. Fama (1978), Smith and Warner (1979), Stulz and Johnson (1985) all noted that when corporate creditors face information asymmetry and shareholders and corporate managers lacking in capability and integrity, they are unable to get access to the necessary knowledge, thus resulting in agency problems between corporate shareholders and creditors. This debt agency problem can be further divided into four sub-problems, namely asset substitution, claim dilution, perquisite consumption, and underinvestment. The following is a detailed explanation:

1. Asset substitution problem occurs when firms borrow money from creditors, corporate managers often engage in high-risk investment plans to pay off the debts and the interest due, which may cause the creditors to lose everything, resulting in their interests being compromised.

Table 1. Theoretical implications of agency problems.

Main ideas	Determine the most efficient information organization and risk-sharing costs Specify the agency relationship between principals and agents
Unit of analysis	The contract signed by principals and agents
Assumptions on human behavior	Selfish motives Bounded rationality Risk aversion
Assumptions on organizations	Conflict of objective between the organization members Information asymmetry problem between principals and agents Efficiency is the indicator of measuring organizational effectiveness
Assumptions on information	Information is a commodity
Contracting problems	Moral hazard Adverse selection Risk sharing
Scope of the problem	Agency problems arise when there is a conflict of objectives between principals and agents, as well as an increase in costs required to monitor the behavior of the agents
	The risk preferences of principals and agents are not aligned, thus resulting in risk preference problem

Source: Eisenhardt (1989) cited in Feyjin (1996).

- 2. Claim dilution problem occurs when there is no increase in corporate assets; corporate debtors face both unresolved and new debts, resulting in corporate creditors' claims being diluted.
- 3. Perquisite consumption problem occurs when corporate debtors, under unchanged corporate assets, reduce company's savings and increase consumption of non-durable goods, thus resulting in a diminution of creditors' future protection.
- 4. Underinvestment problem occurs in loan contracts, when the benefits are credited to the creditors in limited investment plans or projects, companies would deliberately give up investment cases with positive cash flow, as to refute the validity of the aforementioned loan contract.

The other type of agency problems between share-holders and corporate managers is the equity agency problem, of which the main cause is still moral hazard. Contrary to the scenario painted by the traditional Neo-Classical Theory of the firm, which describes that firms are the major pursuer of corporate profits and they will pursue and maximize their own benefits, when a company's ownership and its managerial authority are separated, the corporate and managerial hierarchy loses their shares in the remaining claims, as well as in business risk, inevitably resulting in moral hazard, and

consequently agency problems (Fama and Jenen, 1983). Lambert (1983) also pointed out that there are three types of moral hazard caused by conflicts of interest between corporate shareholders and corporate managers:

- 1. Corporate and managerial hierarchy pursuing privileges and non-monetary benefits instead, such as purchasing luxury cars as the company's official cars for their own use, at the expense of shareholders.
- 2. Corporate shareholders and managerial hierarchy have different attitudes when facing risk, so the business decisions taken by the managerial hierarchy would help consolidate its own position and status, but also compromise corporate shareholders' interests.
- 3. Corporate shareholders and managerial hierarchy have different views on company's long-term decisions, so managerial hierarchy would carry out short-term investments for its own benefit, thereby affecting corporate shareholders' interests.

Agency problems and control mechanisms

The previous four debt agency problems namely asset substitution, claim dilution, perquisite consumption and underinvestment, all arise from subsequent information

Table 2. Control mechanisms to debt agency problem.

Authors	Control mechanisms
Barnea et al. (1981)	Apart from employing capital market functions, complex contracts are also necessary to control the agency problems
	Merge both the interests of shareholders and creditors: Each shareholder buys some corporate bonds, and each bondholder buys company stocks
	Perform informal restructuring: When a breach of contract is imminent, the administration authority can issue shares or bonds through the existing capital market to conduct an informal corporate restructuring, thus avoiding the related agent costs. If the administration authority is powerless, external investors could take over the company and conduct informal restructuring to gain arbitrage
	Issuance of environment-dependent securities: Issuing warrants or convertible securities to ensure the company perform its planned investment strategy and maximize the value of corporate securities, thus avoiding agent costs
Berkovitch and Kim (1990)	Proposed: Drawing up financial contracts, minimizing debt agency problem
	Design debt covenant in advance, including secured debt terms, rental terms, restrictive dividend payout terms, asset-backed terms
	Design different methods to allow the company to first settle old debts before making new investment plans
	When drawing up new contracts, refer to the original/old contracts to mitigate conflicts

Source: Feyjin (1996).

asymmetry that leads to moral hazard. This moral hazard jeopardizes the interests of creditors because corporate shareholders who only consider their own welfare take advantage of the information asymmetry between themselves and the creditors, resulting in creditors unable to acknowledge the situation and therefore intervene. Barnea et al. (1981), and Berkovitch and Kim (1990) have advocated drawing up a more complex and updated contract to avoid the debt agency problem, but such proposal would involve an increase in the debt agency cost, which is not a good approach after all. A detailed description on control mechanisms to debt agency problem is listed in Table 2.

In the equity agency problem, Dewing (1953), Lewellen (1971), Mork et al. (1988), Oviatt (1988) and Williamson (1983), have all talked about the board monitoring functions. However, in recent years, several failed cases of corporate governance in prominent asset stripping scandals in Taiwan, such as the former chairwoman and general manager Sophie Yeh of PROCOMP Informatics and former director and executive vice president Hongjo Hu of Pacific Electric Wire and Cable, both were corporate board of directors as well as senior administrative authorities. Therefore, not only are the corporate ownership and its managerial authority in the modern corporate

structure not separated, the senior managerial authorities who possess corporate ownership even go so far as to control the board, resulting in the board completely failing to fulfill its monitoring functions. Consequently, even the control mechanisms to equity agency problem proposed by Dewing et al. (1953) are unable to solve this agency problem.

Moyer and Sisneros (1989) stated that securities analysts can play the role of external monitoring. However, in many cases, even certified public accountants (CPAs) were prosecuted, including the world-renowned Arthur and Andersen which was involved in its non-independent audits of Enron's financial statements and subsequently dissolved. In addition, the constant outbreak of corporate scandals seems to fully demonstrate the disappearance of market efficiency. Therefore, while Fama (1980) believed that using market mechanisms to solve equity agency problems seems to have limited effect; Oviatt (1988) claimed that agents' values and ethics are an effective tool in solving the equity agency problems. A detailed description is listed in Table 3.

Conclusion

This paper explores the theoretical implications of the

Table 3. Control mechanisms to equity agency problem.

Authors	Control mechanisms
Dewing et al.(1953)	Proposed: The possibility of administrative authority being dismissed or replaced by shareholders
Lewellen(1971)	Proposed: Design management compensation contracts Merge the interests of managers and shareholders, such as giving the administrative authority performance shares, stock options
(Fama, 1980)	Proposed: Create an integral system by administrating labor market mechanisms In this market, the current and future wage standards of administrators will be determined by their performance, so administrators will actively take action to satisfy the interests of shareholders in order to improve their personal wealth management
Hart (1993)	Proposed: Performance through product market competition The outcome of product market competition will affect company's stock price, so administrative authority is committed to enhancing efficiency and reducing idleness at work
Williamson (1983)	Proposed: The substitution hypothesis between the board of directors and the alternative external governance Emphasize on the substitution effects between the board and the external governance mechanisms. Stronger mechanisms for the board appear in periods or regions where capital and labor markets are dysfunctional and ill-operated. The higher the ownership percentage held by external directors, the lower the agency problems
Morck et al. (1988)	Proposed: The board managerial and monitoring functions The main function of the board is to monitor the opportunistic behavior of the administrative management, any incompetent managers will be replaced by the board.
(Oviatt, 1988)	Proposed ten approaches to to achieve alignment of the interests of shareholders and managers: capital market incentives management compensation incentives stock options incentives threat of replacement mutual monitoring among managers monitoring of institutional investors monitoring of divisional structure monitoring of the board various kinds of market competition agents' values and ethics
(Moyer and Sisneros,1989)	Proposed: the function of securities analysts Securities analysts play the role of external monitoring for the company, and their monitoring activities are related to the ownership percentage held by managers, corporate lifecycle and corporate debt ratios

Source: Modified by Feyjin (1996).

agency problem, such as the analytical units, assumptions on human behavior, assumptions organizations, assumptions on information, issues of drawing up contracts, control mechanisms to agency problems, and their relationship with the ethical factors of markets. It also examines market transaction costs, where principals

and agents hold discrepant internal corporate information, thus resulting in information asymmetry. It finally looks into the market agency problem, which arises when the interests of the principals and agents are not aligned and the agents often work to maximize for their own benefit. This paper illustrates the agency problem through

two important cases of economic crime in Taiwan, PROCOMP Informatics and Pacific Electric Wire and Cable. The main cause of the crime arose when their company leaders Yeh and Hu compromised their corporate values and ethics, thus resulting in agency problems. A lesson to learn from this is that, in market transactions the party with more information should be honest and open with full disclosure of information in order to eliminate information asymmetry, which means, he should hold ethical values of corporate honesty and transparency so that markets can attain equilibrium.

On the other hand, apart from corporate ethics, this paper also explores the possibility of an alternative solution to reduce market transaction costs and information asymmetry problem. Although the agents may face the control mechanisms of the equity agency problem, moral hazard may still occur when they hide their action and information. A practical way to avoid such moral hazard is for the agents to follow the Golden Rule advocated by Hans Küng "Do unto others as you would have others do unto you", and to live up to the ethical principle of "commitment to a culture of tolerance and a life of truthfulness". Relatively, the agency costs required by other methods to reduce information asymmetry and moral hazard problems seem comparatively higher than the former.

From the perspective of Taiwan's external market mechanisms to corporate governance, shareholders (principals) can exploit situations such as poor sales of company products or corporate managers failing to yield satisfactory performance, etc., to monitor and keep the managerial hierarchy (agents) in check through capital market and corporate control market. However, under the hypothesis that the market system is built on information transparency, so, if the agents use information asymmetry to manufacture false financial and accounting information and subsequently hire non-independent accountants to audit and endorse the financial statements, thus resulting in market failure, this is considered one of the mains reasons in corporate governance failure. On the other hand, Taiwan's internal control mechanisms to corporate governance can be divided into soft control and hard control. If the purposes of these two controls are mutually exclusive, that is, if the power of the soft control which governs the managerial conduct and behavior, ethical values, management style and administrative philosophy within the corporate internal control system, is greater than the power of the hard control that is positively guided by legal norms, corporate rules and regulations, etc., then it will lead to embezzle-ment of the agency problems, which is also another important reason in corporate governance failure.

In theory, corporate governance belongs to the equity agency problem, and equity agency problem has its root in the modern corporate structure where ownership and managerial authority are separated. In this structure, the interests and objectives of the corporate owners (principals) and the corporate managers (agents) are often not

aligned. Furthermore, the assumptions of humans in the agency problem theory also claim that both principals and agents have their own self-interests and motives, as well as their own risk aversion, even members of the same organization can have opposing goals. Coupled with information asymmetry, there exists a severe moral hazard between principals and agents. In addition to the agents exerting their ethical spirit of completing the task entrusted by the principals, the principals may also need to spend more on monitoring costs, especially the aforementioned hard control costs, in order to lower moral hazard and equity agency problem.

REFERENCES

Akerlof G (1970). The Market for "Lemons". J. Econ., 84: 175-187.

Arrow KJ (1984). The Economics of Information, Cambridge, Belknap Press, pp. 106-117.

Berle A, Means G (1932). The Modern Corporation and Private Property, New York, Macmillan Inc.

Barnea A, Haugen RA, Senbet LW (1981). Market Imperfections, Agency Problems, and Capital Structure: A Review. Finan. Manage., Summer: 7-21.

Berkovitch E, Kim H (1990). Financial Contracting and Leverage Induced Over-and-Under-Investment Incentives. J. Finan., July: 765-794.

Buchanan JM (1983). The Public Choice Perspective, Economia delle Scelte Publiche. January: 7-15.

Coase R (1937). The Nature of Firm. Econ., 4(16): 386-405.

Dewing K, Lehn AS (1953). Foundations of Finance, New York, Basic, pp. 42-47.

Eisenhardt KM (1989). Agency Theory: An Assessment and Review. Acad. Manage. Rev., 14 (1): 38, 57-74.

Fama EF (1978). The Effects of Firm's Investment and Finan Decisions on the Welfare of its Securityholders. Am. Econ. Rev., June: 272-284.

Fama EF (1980). Agency Problems and Theory of the Firm. J. Polit. Econ., 88 (2): 288-307.

Fama EF, Jensen MC (1983). Agency Problems and Residual Claims. J. Law Econ., 26(June): 327-349.

Gan S, Huang C (1994). Principles of Economics - Prosperity and progress, Taipei, Shinlou, pp. 472-536.

Gilpin R (1987). The Political Economy of International Relations, New Jersey, Princeton UP, pp. 65-117.

Jensen MC, Meckling WH (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. J. Finan. Econ., 3: 305-360.

Knight FH (1985). Risk, Uncertainty, and Profit, Chicago, University of Chicago Press. pp. 68-83.

Kuo M (1996). The Impact of Information Asymmetry on Cost of Debt
 Capital – An Empirical Study using Bank Loan, Taipei, National
 Chengchi University – Department of Business Administration, PhD
 Dissertation, p. 18.

Lambert RA (1983). Long-Term Contracts and Moral Hazard. Bell J. Econ., 14 (Autumn): 441-452.

Lewellen W(1971). The Ownership Income of Manage, New York, NBER, pp. 35-50.

Mork R, Shleifer A, Vishny RW (1988). Manage Ownership and Markets Valuation: An Empirical Analysis. J. Finan. Econ., January/March: 293-316.

Moyer RC, Chatfield RE, Sisneros PM (1989). Security Analysts Monitoring Activity: Agency Costs and Information Demands. J. Bus. Finan. Account., Summer: 385-398.

North DC (1990). Institutions, Institutional Change and Econ Performance, Cambridge, Cambridge UP, pp. 3-16, 85-96.

Oviatt BM (1988). Agency and Transaction Cost Perspectives on the Manager-Shareholder Relationship. Acad. Manage. Rev., 13(78): 214-225.

Perrow C (1986). Complex Organizations: A Critical Essay, 3rd ed, New

- York, McGraw- Hill, pp.105-110.
- Rasmusen E (1989). Games and Information: An Introduction to Game Theory. Acad. Manage. Rev., 25(1): 77-87.
- Simon. HA (1964). Administrative Behavior, 2 ed, New York, Macmillan, pp.55-60.
- Stigler GJ (1988). Memoirs of an Unregulated Economist, New York, Basic Books, pp. 84-87.
- Smith CW, Warner JB (1979). On Financial Contracting: An Analysis of Bond Covenant. J. Finan. Econ., 7: 117-161.
- Stulz RM, Johnson H (1985). An Analysis of Secured Debt. J. Finan. Econ., 14: 501-521.
- Tsen F (1996). A Study of Control Tools of Agency Problems and Business Performance- Listed Companies in Taiwan, Taipei, National Chengchi University Department of Business Administration, MD Dissertation.

- Wang C, Chen S (2003). The Economics of Information, Taipei, National Open UP, p. 3.
- Williamson OE (1975). Market and Hierarchies, New York, Free Press, pp. 55-61.
- Williamson OE (1983). Credible Commitments: Using Hostages to Support Exchange. Am. Econ. Rev., 73(4): 32-38.
- Williamson OE (1986). The Economic institutions of Capitalism, New York, Free Press, pp. 115-120.
- Williamson OE (1996). The Mechanisms of Governance, Oxford, New York, Oxford University Press, pp. 95-111.