

Complexity of Transaction Costs and Evolution of Corporate Governance

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Conflicting agendas in corporate governance show the limits of the transaction costs approach and property rights theory. A top-down approach of control and monitor may have negative effect on the competitiveness of the firm. The mechanic picture of transaction costs and agency costs is rooted in reductionism of firm theory. The Coase world of zero-transaction costs is contrary to the law of thermodynamics and historical trends of industrial economies. Diversified patterns in corporate governance and corporate culture can be better explained by the creative nature of the firm in evolutionary economics. China's experiments under mixed property rights during economic transition shed new light on life cycles in changing ownership and corporate governance. The survival of a firm is more associated with the emergence of selective mechanisms and adapting ability.

Keywords: transaction costs, corporate governance, selective mechanism, life cycles, evolutionary thermodynamics

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1. Introduction

Corporate governance is a complex issue with multi-dimensional goals. Both opportunities and problems may vary with the emergence of separation of ownership and control in large corporations at different stages. Corporate governance involves many parties including owners, managers, workers, suppliers, creditors, communities, and regulators with different interests. Obviously, corporate governance is a typical field of political economy, where changing market and the power balance will shape an evolving organization. It would be very difficult to identify simple rules between governance structure and economic performance. However, financial economics based on the optimization approach has made a series of claims in corporate governance. Their arguments are mainly based on two

influential theories in new institutional economics: the transaction costs approach and the property rights theory (Coase 1937, 1960, Alchian and Demsetz 1973). In fact, these two approaches have raised more problems than solutions in equilibrium thinking of firm and institution. Conflicting ideas among Coase theory, property rights school, and financial economics reveal limitations of equilibrium thinking and the potential for an evolutionary perspective in dealing with economic complexity. Methodologically speaking, the concept of transaction costs and its variation of agency costs is a static approach in closed economies without innovation competition, while an evolutionary perspective is a dynamic approach in open economies with innovation and changes. The emerging science of complexity provides new analytical tools for evolutionary economics in studying economic complexity.

In this short article, we will address corporate governance from the following aspects: First, unsolved issues in corporate governance and basic problems in the transaction costs approach and property rights theory; Second, fundamental flaws in Coase theory of zero-transaction costs; Third, diversified experiences in corporate governance, especially China's experiments in economic transition; Fourth, the alternative life cycle theory of changing property rights based on an evolutionary perspective.

We will see that the top-down approach of control and monitor may have negative effect on the competitiveness of the firm. The mechanic picture of transaction costs or agency costs is rooted in reductionism of firm theory. The Coase world of zero-transaction costs is contrary to the law of thermodynamics and historical trends in industrial economies. Diversified patterns in corporate governance and corporate culture can be better explained by the creative nature of the firm in an evolutionary perspective. The survival of a firm is more associated with the emergence of selective mechanisms and adapting ability.

2. Unsolved Issues in Corporate Governance

The issue of corporate governance has two dimensions. One is political and the other is economic. In the case of diversified ownership, how to divide the pie or so-called profit among shareholders and stakeholders is a political issue in power balance and the rule of the game. We may leave this issue to political economy. Our discussion will mainly focus on the economic dimension: what can we learn about corporate governance from competing economic perspectives.

In the Preamble of OECD Principles of Corporate Governance, it said (2004):

“Corporate governance is a key element in improving economic efficiency and growth as well as enhancing investor confidence. Good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring.As a result, the cost of capital is lower and firms are encouraged to use resources more

efficiently thereby underpinning growth..... The corporate governance framework should promote transparent and efficient markets, be consistent with the rule of law and clearly articulate the division of responsibilities among different supervisory, regulatory and enforcement authorities.”

OECD Principle certainly made a great effort to improve access to the international capital market. However, there is no solid foundation in theory and practice for its claim of “improving economic efficiency and growth.” In fact, its real motive was “enhancing investor confidence”, especially for foreign investors. There are some issues related to questions of efficiency and growth in economic theory.

First, financial economics so far has no objective measurement of market efficiency. According to the efficient market hypothesis (EMH) in finance theory, market efficiency could be judged by its unpredictability if stock markets are dominated by Brownian motion (Fama 1970, 1991). However, EMH was challenged by our discovery of color chaos, which accounts for about 70% of market fluctuations (Chen 1996). It is also found that there are weak microfoundations for business cycles. The major source of market fluctuations is neither from consumers nor producers, but from financial intermediates (Chen 2002). There were a series of financial crisis, such as stock market crash in 1987, Asian financial crisis in 1997 and the Internet Bubble in 2002. Some economists emphasize an internal mechanism caused by a positive feedback trading strategy and corruption, while others concern external shocks such as an international speculative flow. Clearly, financial market is the most complex and regulated market with huge transaction costs and uncertainty, a counter case to the Coase world of zero transaction costs.

Second, there is no consensus on which model of market institution is optimal and whether there is a historical trend in institutional convergence (Hall and Soskice 2001). It is known that American firms are often overpriced while German and Japanese firms are under-priced in the financial market. At the macro level, the United States has persistent trade and budget deficits while Germany and Japan have persistent trade surpluses. Over-consumption and under-saving in the US can be partially contributed to financial innovation in credit expansion and American power in the global financial market. The Anglo-Saxon model of liberal economics emphasized on the shareholder’s value while Germany, Japan and Scandinavian models put more weights on shared interests of stakeholders.

Third, there is no optimal choice of economic efficiency even at the firm level. Beauty is in the eyes of the beholder. Maximizing profit or minimizing costs is more complicated in practice than in theory. For a visionary corporate founder, seeking the status of an industry leader in innovations and products would be his long-term goal, while small shareholders would like higher dividends or returns in medium or even short terms. Managers may manipulate the financial outlook to increase his stock option or social status, but workers may care more about job security and social welfare. The property rights theory implicitly favors single or

large shareholders for corporate control. The contrary policy of protecting minority shareholders is also relevant for increasing confidence in the financial market (Shleifer and Vishny 1997).

Fourth, the appeal of a transparent market ignores fundamental issues of information ambiguity and economic complexity. Market transparency is meaningful only for cooperative games with symmetric information without economic complexity. A non-cooperative game will stimulate motivation for creating false information or protecting strategic information in market competition. Under constant business cycle movements, both information diffusion and information distortion may amplify market sentiment and market instability. The recent collapse of Enron and the sub-prime credit market are good examples of information game and information ambiguity under an ill-regulated financial market. Therefore, the benefits and costs of the so-called transparent market depend on the selective rule (transparent to whom and for whose benefit) of the market institution, which is not equal to all players.

Fifth, the relation between growth and globalization of the financial market is poorly understood. People are puzzled about the real cause of the Asian financial crisis. Some Western observers blamed Asian cronyism and neptunism, which is an issue in corporate governance. However, more economists realized the danger of excess speculation and foreign power enhanced by the IMF policy on financial liberalization. Korea opened its financial market under IMF pressure during the crisis. Foreign stock ownership rose dramatically, including foreign shares of top Korean companies. Clearly, the issue here is not only about economic efficiency, but also a fair international order.

Sixth, corporate governance may have a negative impact on corporate culture and strong leadership. Excess monitoring may destroy mutual trusts within the firm. Short-term efforts of reducing agency costs may end up with long-term effects of increasing coordination costs.

From the above discussion, we can see corporate governance is an important issue in increasing investor confidence under financial globalization, but less clear to its relation with efficiency and growth. To improve our understanding, we need to further examine theoretical foundations in firm theory and organizational development, notably, the transaction costs approach and the property rights theory.

Both property rights theory and theory of agency costs are strongly influenced by the concept of transaction costs (Alchian and Demsetz 1973, Fama and Jensen 1983). Their minor difference is mainly the level and forms of transaction costs inside the firm (Jensen and Meckling 1976). Coase believes that transaction costs are insignificant in the real world, so that the roles of regulation and governments should be minimized, while property rights school concerns impacts of large transaction costs and the important role of legal institution. However, their common ground is the same one-sided view of transaction costs based on cost competition without innovation competition in a closed economy. We will address their fundamental flaws in evolutionary dynamics in open economy.

3. Fundamental Problems in the Coase Approach of Transaction Costs

Coase raised a fundamental question of why firm exists in an exchanged economy (Coase 1937). Williamson found some interesting mechanisms related to vertical integration (Williamson 1979). A firm is an organization embedded in industrial structures with many layers. At least three levels are related to the existence of the firm: market and environment at the macro level above the firm, production units and individuals at the micro level below the firm. However, Coase had neither interest in market and society as Adam Smith and Karl Max did, nor industrial structure like Chandler studied (Chandler 1992). Coase put transaction costs as the basic unit in analyzing economic organizations.

The Coase approach is similar to the Ostwald theory of energism in late 19th century physics. It considered energy transform rather than matter structure (consisting with atoms and molecules) as the fundamental framework in understanding universe (Holt 1970). Ostwald finally gave up his theory after experiment proved the existence of molecule based on Einstein's theory of Brownian motion. The Coase theory is an extreme approach of reductionism, which has no sense of economic complexity and time history. This is the root of all shortcomings in costs-based equilibrium thinking. There are several problems for the transaction costs approach.

First, the issue of firm size is an ecological issue related to three levels, not a static issue of one level. For Coase, the size of the firm is purely determined by internal balance between transaction costs and coordination costs, while both the competitor's behavior and market size have no impact to the firm. This is a simple-minded theory contrary to common sense. It is known in biology that the largest animal living in the oceans (blue whale) is larger than the largest animal on land (elephant) because of their difference in resource limitation (Schmidt-Nielsen 1984, O'Neill 1989). For the same reason, multinational companies today are much larger than the British firms in early industrial revolution. The well-known Smith Theorem states that division of labor is limited by market extent (Stigler 1951). Predators face survival pressure of matching their size or skill to their rivals, so do competitive firms. Variation in organizational size and behavior can be understood by the trade-off between stability and complexity in dynamical systems (May 1974, Chen 2005). In contrast, the inward view of transaction costs only concerns frictions in a market economy, which originated from a mechanical framework in classical economics. Therefore, the transaction costs approach cannot address living features in a market economy, such as large variations in corporation sizes and changing waves of merges and spin-offs. Coase and Williamson claim that a monopoly industry is efficient and competitive. Recent experience shows that even the traditional automobile industry is sourcing out their parts suppliers under intensified innovation competition. Contrary to Williamson's argument, Dell and Lenovo could beat IBM and other giants with vertical integration in the computer industry, mainly because these innovative companies have more

flexibility in adapting to rapidly changing technology. In a limited market with innovative competitors, transaction cost is not a decisive factor. Corporate strategy and corporate culture may be more important than governance structure for corporate survival. Methodologically speaking, the resource-based firm theory is more realistic in modern industry (Penrose 1959). In contrast, the Coase theory of the firm is a self-centered thinking without market environment and competitor challenge.

Second, Coase ignores two-way movements of transaction costs in firm competition, which is contrary to the one-sided view of costs-based reasoning. For a mature market without rapid growth or technology changes, reducing transaction costs by means of direct selling or vertical integration may be a good strategy. However, under an emerging market with fast growth and rapid innovation, increasing advertising or spin-off non-core parts can be a winning strategy even at the cost of increasing transaction costs. Similarly, the agency theory has the same problem when they ignore the positive side of separation of ownership and control under an increasing division of labor. Therefore, cost factor may be an important but not critical for an open economy with the rise and fall of firms. Price/cost competition plays dominant role in neoclassical economics and transaction costs approach, which is only relevant to a traditional market without product innovations (Schumpeter 1934, Chandler 1992). A physician would not judge the sickness of a patient only by measure his excretion without first examine his physical function and structural conditions.

Third, Coase has no historical picture of increasing division of labor and expanding market in industrialization. When extending a market for existing products, transportation and communication costs must increase compared to local markets. Transaction costs are always larger than zero under the law of physics, even though technology progress may reduce unit transaction costs per action. Market expansion and technology innovation has a historical trend of increasing energy consumption along with increasing complexity of division of labor, which is visible from global warming during industrialization. In the marketing game, there exist large amounts of image distortion, information misconception and information noise. Without market regulation, market competition could become a vicious game. There was a solid evidence of increasing transaction costs in the United States, which was about 15% in 1870 to more than 50% in 1970 (Wallis and North 1986). Therefore, the Coase illusion of reducing transaction costs by market competition without regulation has no empirical ground in industrial history.

Fourth, the Coasian world of zero-transaction costs is contrary to basic laws in physics. Coase Theorem claims institutional changes would converge to an optimal system regardless of initial conditions (Coase 1960). His argument was based on a false analogy of a frictionless world in physics (Coase 1988). Inertial movement with zero-friction is a scientific theory with good approximation for planet motion, which is verified by thousands of launches of artificial satellites. But zero-transaction costs do not exist in the real world since minimum energy

costs associated with information transmission is larger than zero according to the uncertainty principle in quantum mechanics. The Coase belief of reducing transaction costs in market economy is also contrary to the second law of thermodynamics. The emergence of life and social organization is a non-equilibrium process (Prigogine 1984). Transaction costs are a disorganized form of energy, which is similar to heat or entropy in physics. The increasing complexity of an industrial society is associated with increasing consumption in energy and raw materials, which implies increasing entropy production. The equilibrium trend of convergence implies heat death in an isolated system, but a non-equilibrium trend of diversity is driven by evolutionary thermodynamics in open systems. In this sense, the Coasian world of zero-transaction costs is essentially a perpetual motion machine in the form of a heat engine without temperature difference and heat dissipation.

Fifth, Coase did not solve the issue of firm boundaries even from an equilibrium perspective (Holmström and Roberts 1998). From the view of evolutionary thermodynamics and complexity science, the emergence of a firm is similar to the origin of life, which is characterized by the emergence of selective boundaries. The role of Maxwell's demon is crucial for life's persistence, i.e. non-equilibrium order created by matter flow, energy flow, and information flow (Prigogine 1984).

In sum, the Coase theory of transaction costs and its variation of agency costs only catch partial static elements but lose the whole dynamic picture of the firm. The inward looking perspective of the firm is rooted in a negative view of human nature under a non-cooperative game and reductionism in firm structure. There is no room in equilibrium economics for entrepreneurship, innovation, strategy, and corporate culture. Coase once criticizes the mainstream economics as "consumers without humanity, firms without organization, and even exchange without markets (Coase 1988, p. 3)." To paraphrase Coase, the transaction costs approach still presents an artificial picture of consumer without curiosity, firms without complexity, and markets without evolution (Nelson and Winter 1982, Cyert and March 1992, Chen 2007). We need a better perspective in understanding diversified patterns in corporate governance.

4. China's Experiences in Corporate Governance

In the early 1990s, Alan Blinder made an interesting observation (Blinder 1990):

"Much has been written about Japan's formidable challenge to American industrial preeminence. But the amazing Japanese economy poses another challenge—one that has barely been noticed. I refer to Japan's challenge to received economic doctrine. Stated briefly and far too boldly, the Japanese have succeeded by doing everything wrong (according to standard economic theory). Studying the Japanese economy has led me to a tentative conclusion: that market capitalism, Japanese style, departs so much from conventional Western economic thought that it deserves to be considered a

different system. (For example, Japanese put producer ahead of consumer and nation-building ahead of profits for share holders. Japanese managers are mainly motivated by long-run goals rather than short-run profits driven by stock prices. Japanese firms are more cooperative in development and research. Japanese foreign trade is not free but managed open. Salary differentials are much less and workers are more stable than American.) ”

Certainly, the confidence in the Japanese model of corporate governance was weakened during 10 years of stagnation in Japan. American style corporate governance was introduced into Japan in 1990s. After a decade of experiment, only 2% of Japanese listed companies adopted the American model of board of directors, while the average number of outside directors per Japanese company is only 0.8. At the same time, rebuilt cross-shareholdings with friendly companies and other measures are developed to counter the rising threat of American style hostile takeovers. Many Japanese firms consider corporate culture rather than corporate governance as the main strength in global competition (Hirota 2007). With the Japanese experience in mind, we will discuss China's recent experiments during transition and see what we can learn from the study of corporate governance.

China experimented with all kinds of governance models before and after the Reform, including a Soviet type of centralized command economy mainly in the defense industry, co-op type state owned enterprises (SOE) and collectives that had small wage differentials between managers and workers, the Yugoslavia model of worker's participation in management, the Hungarian model of profit sharing, the American model of worker flexibility (lay-off workers with little constraints) and managerial incentive including stock option. Coase theory and the theory of property rights became influential in China's reform. One notable application was promoting a "clear delineation of property rights" in SOE reform, which paved the way for encouraging an incentive mechanism under mixed property rights including public, collective, private, and foreign ownership. Surprisingly, all models worked in some aspects or some stages, including the homegrown model of the family contract system, but no single model works all the time and all the regions. Several factors impose significant constraints to governance patterns and organizational forms.

First, large population pressure puts job creation for surplus labor ahead of the efficiency target as a primary goal both in urban and rural reform. This is an ecological constrain in nature to corporate governance. Achieving economic efficiency by large-scale lay-offs is the least acceptable option during economic transition. This is the base of the so-called soft-budget constraints, which still widely exists for privatized firms in China and the former Soviet Union.

Second, huge regional differentiation sets a severe limit to any centralized policies or unified legal regulations. This situation leaves little space for a Western type rule of law but a lot of room for strong leadership in local governments and firms originated from SOE and collectives, even though these leaders have no

clearly defined controlling ownership.

Third, the increasing complexity of economic scale and scope leads the diversified patterns coexisting in corporate governance and property rights. No single pattern can dominate all industries. For example, family companies succeed in small farms and small firms with simple technology, but collective farms and TVE are more competitive in middle size farm and factories because of a scale economy. For large automobile firms with advanced technology, both SOE and joint-stock companies have comparative advantages in human resource, advanced technology, and financial sources. Here, ownership structure is not a critical factor under global competition.

Many American business models were introduced and tested in China's experiment and transition. Positive advances were made with certain limitations. First, breaking state monopoly in the airline and telecommunication industries was an effective policy for advancing competitiveness, but the proper intensity of competition is still an open issue because of network effect and scale economy. Second, productivity was first improved by increasing labor flexibility (i.e. breaking the so-called iron rice bowl or life-time employment); however, a high turnover rate in industries became a new problem for competitiveness. Many firms reconsider German and Japan model to attract highly skilled workers. Third, introducing independent board directors may have a good public image for state firms, but have few impacts for new publicly listed companies since their management position has little correlation with stock price performance. Fourth, MBO (manager buy-out) in SOE restructuring works for small and medium sized SOEs, but faces strong resistance for large SOE because of public dissent. Clearly, corporate governance is not a simple issue of stock performance in the financial market, but a multidimensional issue including ecological, cultural, social and political constraints.

China's learning and experiments in corporate governance provided some new lessons for property rights and corporate governance. The rise of TVE (township and village enterprise) in the 1990s surprised orthodox economists, since TVEs had little access to advanced technology, raw materials, market channels, and bank credit. Its competitive advantage lies in low-cost labor insurance based on collective land and flexibility in marketing strategy. Local governments played an active role in credit enhancing, since newly started TVE often had little collateral, credit history and venture capital, but local officials may have better private information on the ability of TVE leadership.

The rise of global competitive firms is also puzzling, since more advanced firms in East Europe and the former Soviet Union were either taken over by multinational giants or simply closed. China's emerging companies are characterized by strong leadership and corporate culture, with varied ownership structure and corporate governance. Notable examples are: Changhong Co. (长虹) transformed from a military radar company into a color TV firm. Haerbin Airplane (哈飞) was a SOE jumping into the automobile business. Lenovo (联想) was a spin-off company from the non-profit Chinese Academy of Sciences and later bought the

IBM PC division. Haier (海尔) was a collective firm near bankruptcy in 1980s, then emerged in home appliance market. Geely (吉利) automobile is a private company started by a TVE entrepreneur. Chery (奇瑞) automobile was founded by a middle-sized city government in a poor province. Their rapid rise is characterized by (American type) strong leadership combined with (Japanese type) corporate culture. Their common goal was not maximizing shareholder value but industry competitiveness. Their fast progress is not based on owner's control of management, but motivation of fellow managers and workers with shared value and benefits.

Late Chicago financial economist Merton Miller once made a sharp observation when he addressed to a Shanghai Symposium on China's SOE reform (Miller 1995).

“The issue of property rights is certainly important. However, there is no optimal solution for property rights system. The Anglo-Saxon model is characterized by short-term behavior and insufficient investment while the German-Japan model is long-term behavior and over investment.”

It is known by the MM Theorem that corporate value is independent of the debt structure under perfect competition (Modigliani and Miller 1958). It also implies that the corporate value has little correlation with ownership structure. Our observations on China's experiment seem to support Miller's argument rather than the property rights school.

Careful readers may notice that both the MM Theorem and the theory of property rights have common ground of equilibrium perspective. Why they differ sharply in the issue of corporate governance? Obviously, linear approximations are resulted from segments of a nonlinear curve. Non-equilibrium phenomena may use equilibrium approximations under certain conditions. The question is which approximation can better explain empirical evidence. Both the Coase theory of the firm and the theory of property rights are normative theories in nature, since transaction costs and agency costs are hard to define and measure. The condition for the MM theorem is no arbitrage opportunity or linear pricing in competitive financial markets (Ross 1976). Whether or not a nonlinear pricing (i.e. deviation from perfect competition) exists is an empirical issue. In this regard, the MM theorem has more analytical power than the transaction costs approach in understanding the complex nature of corporate governance.

The central idea of corporate governance is a top-down commanding approach in corporate management and control. It soon discovered that financial incentive alone cannot buy loyalty and cooperation from managers and workers. Two Chinese characters have dominated political and business culture in history: leadership and brotherhood, which is a sharp contrast to Western style competition based on individualism and rule-based game. Traditional Confucius value is more compatible with cooperative competition. Therefore, putting the stakeholder value ahead of the shareholder is essential for corporate survival in China's competitive

market.

Western observers may consider the large bad loans of state banks as the main evidence of inefficiency of state ownership or corruption of political system. In fact, China's state banks are not traditional commerce banks at all. In some degree, they also provide large low-interest bank loans to start-up firms at an early stage of Reform, without condition of high-returns as venture capital in Western style. The typical success rate was less than 10% for western venture capital. The average bad loans for the state banks were about 30% in China. Judging from China's 10% growth rate in the past 30 years without a financial crisis, we can fairly say that China's state banks act like state insurance for creative destruction in technology replacement. China's rapid growth and smooth transition has achieved under mixed property rights, while East Europe and former Soviet Union suffered from severe depression, whose output declined more than 40% in ten years (Chen 2006). In the recent boom of China's stock market, the market value of three big state banks is comparable with leading American private banks. This fact indicates that financial investors have higher valuation of China's economic performance than mainstream economists. Clearly, market size and growth prospect (not downsize and recession under premature property rights system) play more important roles in raising China's corporate value.

Based on the above observations, we may develop an alternative theory of evolving property rights in the next section.

5. Life Cycle Theory of Firm Development and Symmetry Breaking in Social Evolution

Marshall pointed out that economics should be more like biology rather than mechanics (Marshall 1920). Consider firms like animals: they have their distinctive lives from infant to old age and death. We may develop a life cycle model of organization changes. Our observation is both empirical and historical. A brief outline is the following.

First, the creation and survival of a firm mainly depends on its ability to create value, not reduce transaction costs. Schumpeter had more insight in firm evolution. The origin of a firm implies symmetry breaking in time and space, which is an irreversible process under non-equilibrium process while the Coase Theorem implies symmetry between consumption and investment (Chen 2007, Cheung 1998).

Second, the precondition of the existence of a firm is the emergence of selective boundaries, which could absorb useful resources and release useless waste. Further differentiation of structure is aimed at adapting to the local environment in its market niche. The selective role of Maxwell's demon can be realized by management and leadership. Ultimately, it is the selective mechanism (not cost structure), which is responsible for a firm's creativity and competitiveness. Contract design is asymmetric for corporate governance and incentive mechanism, mainly for securing company goals but less for worker's protection.

Third, firm's ownership structure or property right is changing at different stages during its life cycle.

Newly started firms may have visionary dreams, but little human and financial resource. Their initial capital mainly comes from family, friends, or even "fools." Idealism, brotherhood, and collective efforts help the small dream grow under tremendous uncertainty. Few private venture capitalists would dare to support such a dream at the initial stage. Therefore, technology transfer from non-profit universities and financial help from state would be crucial for research and development at the early stages. Accordingly, new firms often start without a clear delineation of property rights. Initial capital with soft-budget constraints is common in emerging markets with unknown risk.

Things change during the second stage of take-off. Various ownership structures, such as partnership, cooperative, private or stock-holding company, are developing for the firm's expansion. The choice of organizational form depends on the industry features including technology complexity, the scale of fixed investment, and changing market conditions.

With few competitors and more or less stable technology, vertical integration may be effective for risk management. For industries with many competitors and rapidly changing technology, it would be better to spin off non-essential business and concentrate on core business. Even at a mature stage, calculation of transaction costs is hard to judge compared to other concerns such as risk control and incentive mechanisms (Cheung 1969). Strategic decision-making is hardly based on transaction costs alone.

For a money-losing or dying industry, soft-budget constraints may appear again, since it is hard to decide whether to cut losses or try a second chance. In this regard, indiscriminative credit tightening under the doctrine of "hard-budget constraints" could induce more damage to social stability in macro policy (Chen 2006). A state policy of restructuring would be very critical to an industrial transition. For the firm's survival and long-term development, control of the board must have a well-defined multi-dimensional goal, not a simple-minded short-term maximization of the shareholder's value.

Fourth, the wide spread illusion of fair competition with symmetric information creates a utopia of fair game in market regulation. That is far from reality. Any innovation in the division of labor increases information asymmetry and power asymmetry in human society. This is the root of "creative destruction" including entry barrier, patent protection, state boundaries, culture discrimination and war. The vital challenge is maintaining a difficult balancing between innovation and sustainability. The misleading fantasy in the Coase theorem is his symmetric assumption between polluters and victims and implicit symmetry between consumption and investment (Coase 1960, Cheung 1998). Voluntary exchange may not be reached in dealing with conflicting interests such as pollution, if bargaining positions are excess asymmetric or even hostile (Chen 2007). This is why legal protection of disadvantaged groups is necessary for sustainable market. New institutional economics ignored the basic lesson from political economy that

power is associated with large asymmetry in wealth distribution. Therefore, the equilibrium strategy based on liberalization and privatization without home-grown competition mainly paved the way for foreign financial power in East Europe and the former Soviet Union. The same was true for the Asian financial crisis in 1997.

In sum, changing property rights and organizational structure is an integrated part of evolutionary dynamics driven by a changing macro environment and industrial technologies. Simple-minded profit maximization or costs reduction is not a working strategy in an open economy with the rise and fall of technologies.

6 Conclusion

The issue of corporate governance is mainly based on the American experience of separation of ownership and control in large corporations at a mature stage, which is less relevant for emerging companies at a developing stage. Some measures like accounting standard and independent board directors do have merits for developing a global financial market. But the relation between corporate governance and economic performance is a complex and evolving issue without simple solutions.

The Coase approach of transaction costs and the theory of property rights raise interesting issues on coordination mechanism inside a firm. But the equilibrium perspective based on costs reduction (in the form of transaction costs or agency costs) is not capable of understanding the creative nature of the firm and evolutionary dynamics of organizational changes. The Japan experience in corporate culture and China lesson under mixed property rights shed new light on the selective mechanism for organization development and life cycle in changing ownership structure. An evolutionary perspective may provide a new framework in understanding diversified patterns in corporate governance and the rise and fall of firms and nations (Dopfer 2005, Chen 2005, 2007).

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