

Corporate innovation behavior and internal governance mechanism*

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Abstract: Innovation is a process results in new products, methods of production and forms of business organization. Innovation can vastly improve the welfare of consumers, investors, firms and the economy. However, there is relatively limited evidence of how corporate governance affects corporate innovation. In this study, the author theoretically demonstrates how internal governance mechanisms interact to affect innovation, such as internal control, monitoring and compensation contracts. Governance mechanisms are determined by firm characteristics. The “best” governance structures that can be adopted universally do not exist. However, innovative firms often share similar characteristics, and they adopt similar governance mechanisms to facilitate innovation. The ultimate purpose of such internal governance mechanism that facilitates innovation is to prevent managers’ myopia, and this paper concludes 5 different roles in internal governance mechanism that facilitate corporate innovation behavior.

Key words: corporate innovation behavior; corporate governance; financial endowments

Innovation is a process results in new products, methods of production and forms of business organization. Innovation can vastly improve the welfare of consumers, investors, firms and the economy. Many literatures show that firms’ innovation is a key driver of economic growth (Aghion & Howitt, 2006). However, there is relatively limited evidence of how corporate governance affects corporate innovation. In this study, the author theoretically demonstrates how internal governance mechanisms interact to affect innovation, such as internal control, monitoring and compensation contracts.

From a theoretical standpoint, the author contributes to the literature that examines the effects of corporate governance mechanisms on innovation. Stein (1988) shows the threat of a takeover induces managers to behave myopically. Manso (2007) shows that the compensation contracts that provide incentives to a CEO to innovate exhibit the twin features of tolerance for failure in the short term, and reward for long-term performance. Aghion, et al (2008) predict and find that higher institutional ownership is positively associated with greater innovation. The existing studies thus examine how innovation is affected by either internal mechanism, such as managerial compensation contracts and large shareholder monitoring, or by external mechanisms, such as takeover pressure. Innovation is potentially driven by the interactions among the market for corporate control, contracts and monitoring.

1. Characteristics of corporate innovation behavior

1.1 What’s innovation behavior

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Innovation is far beyond R&D. Innovation is ultimately the product of new knowledge and arises in response to economic change. Corporate entrepreneurship activities, such as strategic renewal, which enable companies to innovate the way they organized, also facilitate innovation. Innovation could be a new management method, new market, as well as a new product. Innovation requires companies to commit to long-term risky activities and coordinate the activities of employees throughout the organization.

1.2 Risk of innovation

Compared to other types of investment projects taken by corporations, innovation projects tend to be riskier and require long-term commitments (Holmstrom, 1989). Innovation, by definition, involves something new and unknown and therefore requires a firm to undertake R&D or other projects with a high degree of uncertainty regarding their outcomes. Furthermore, substantial long-term investments are so important to successful innovation that unsuccessful innovation may result simply from the failure to commit sufficient assets for a long enough periods. Successful commercialization of particular innovations can be a process lasting several years and may require sacrificing short-term profits to gain from more important sources of company value in the long-term.

2. Determinants of innovation

There are many ways in encouraging corporate innovation behavior. In China, the most common way is government supports. Government supports can be divided into different levels, such as policy supports, tax deduction and direct endowments. However, all of the above are external influence, and eventually will affect the internal governance mechanism of companies, along with companies' financial position and accounting policies. This paper pays more attention to the influence of internal governance structure, and tries to analyze the relationship between innovation and corporate governance. Innovation requires coordination of activities on a company-wide basis. It is affected by corporate governance structures and policies applicable to the entire organization.

There are two unique aspects of corporate entrepreneurship relevant to corporate governance: The role of the board of directors in facilitating organizational change and the role of upper-level managers as entrepreneurial strategists. It should be noted that entrepreneurship is important in large corporations as well as in start-up companies (Kuratko & Morris, 2002). Indeed, large companies may have more resources, managerial skill and distribution networks, thus large corporations are often more effective than small start-ups in exploiting new opportunities.

Entrepreneurial corporations are those that discover, create and exploit economic opportunities. Corporate entrepreneurship requires decision makers to exercise judgment over how corporate resources should be used in the face of uncertainty and how incentives should be structured to make managers and other employees more likely to discover and act upon entrepreneurial opportunities. Corporate entrepreneurship often leads to innovation and requires the corporate entrepreneur to "assess new opportunities" and "align and exploit resources" to further innovation. Innovation and corporate entrepreneurship are encouraged by a corporate culture where top management supports innovative activities, does not micromanage investment projects, makes resources available to manager-entrepreneurs; and tolerates, encourages and rewards risk-taking and failure.

2.1 The role of board of directors

The board of directors is the modern corporation's principal governance mechanism, enabling numerous interests and dispersed information to be coordinated and processed among corporate actors (Bainbridge, 2003).

The three primary functions of a board are to monitor and hold top management accountable, to be indirectly involved in operational decision making (such as providing advice to top managers and setting broad corporate policies) and to provide a network of contacts to the corporation. Directors delegate their decision making authority and control to top managers who, in turn, delegate their own decision making to subordinate managers and employees. Just as all persons “can only gather so much information from so many inputs before being overloaded”, corporate entrepreneurs, in particular, have limited attention spans, they are able to devote to innovation as opposed to maintaining existing production routines (Gifford, 1999). Delegated decision making facilitates innovation by helping to ensure that corporate entrepreneurs can devote sufficient time to innovation projects.

A board is more likely to play a significant role in strategic renewal when a company is undertaking substantial structural changes and is operating in a relatively uncertain economic environment (Hendry & Kiel, 2004). Boards also often engage in strategic monitoring, which includes evaluating management’s strategic choices after they are made and making broad recommendations regarding strategy. Boards rarely exercise a direct role in strategic management. This is likely because outside directors acting in a direct strategic capacity may have harm performance with contributions that are redundant, based on knowledge inferior to that of managers or in interference with the board’s and management’s other functions.

2.2 The role of upper-level managers

Top managers are the decision makers primarily responsible for strategic decision making and entrepreneurship. However, the board of directors also could play a role in strategy through strategic renewal, strategic monitoring and in certain cases, direct involvement in strategic management. Strategic renewal is a process of internal change and reorganization that results in organizational innovation. Organizational innovation is important for established companies because, relative to small or new firms, established firms have well-developed production routines. Innovative public corporations need to be sufficiently flexible to change routines because new technologies or new utilization methods of resources sometimes are based on the organization flexibility.

In particular, commitment by top management is helpful to ensure successful radical innovation because top managers are the principle instigators of long-term, strategic decision-making. In addition, a corporate culture that tolerates failure and rewards long-term success can promote innovation by preventing individuals from abandoning projects before they are completed.

3. Internal governance mechanism furthering innovation

Governance mechanisms are determined by firm characteristics. The “best” governance structures that can be adopted universally do not exist. However, innovative firms often share similar characteristics. They adopt similar governance mechanisms to facilitate innovation. The ultimate purpose of such internal governance mechanism that facilitates innovation is to prevent managers’ myopia. Managers always focus too much on relatively short-term and more readily-quantifiable performance measures and reluctant taking the long-term, risky, dynamic and knowledge-intensive activities that result in innovation.

(1) Role of strategic internal control

A large body of literature analyzing the characteristics of successful innovative firms, two fundamental structures that facilitate innovation can be identified: a. decentralization which facilitates the generation and

communication of knowledge, and affords companies the flexibility required to adapt to change; and b. an emphasis on strategic internal control which promotes long-term risk-taking (Shadab, 2008).

Strategic decision making is an important activity that furthers innovation. Strategic decision making means adopting “commitments, decisions and actions designed and executed to produce a competitive advantage and earn above-average returns” on investment (Hitt, et al., 2001). Routine internal control focuses on more common goals such as monitoring production efficiency. However, strategic internal control focuses on discovering and utilizing new opportunities. The strategy of an innovative corporation is to determine how to invest and develop assets to produce new products and methods to outcompete rivals. To achieve innovation, strategic decisions should also foster long-term commitments.

Strategic internal control should give managers more discretion, which help the organizational flexibility that innovation requires. In adapting to ongoing economic change, managers must be endowed with sufficient elements of discretion in order to organize the coordination of innovative investments. In particular, changing and adapting organizational structures require managers to have control and decision rights over the firm’s assets, including the rights to redefine and reallocate specific use and decision rights. In other words, substantial managerial discretion is helpful to new strategic plans and corporate innovation behavior. In addition, managerial discretion facilitates integration of new products and processes with established routines, especially when major innovations require a company to make a significant change in organizational structure or production.

(2) Role of compensation contracts

In addition to strategic internal control, governance mechanism must encourage long-term risk-taking innovation. The most direct incentives for facilitating long-term innovation activities are compensation contracts. Incentive compensation in the form of stock, stock options, or bonuses tied to longer-term measures of performance can successfully promote long-term risk-taking. However, compensation has some limitations as well. Because innovation is a long-term and organization-wide process which often involves numerous persons, it is difficult to measure an individual’s contribution to innovation, and hence to compensate them appropriately. Furthermore, compensation contracts use financial indicators of success and therefore may lead managers to focus on more predictable and easily measured short-term activities.

(3) Role of financial commitment and control

Financial commitment is also often a precondition to successful completion of a long-term innovation project. Financial commitment allows firms to capture revenues generated by innovation and continue to innovate over time.

By contrast, a relatively high emphasis on financial control undermines innovation, because within the context of quarterly and annual disclosure requirements mandated by federal securities laws, periodically reported financial data are necessarily tied to short-term outcomes. Over-emphasizing financial control may inhibit the communication of tacit and local knowledge that is not subject to straightforward measurement and quantification in financial reports. Of course, companies do and may even need to improve their internal measures of innovation. However, innovation may be undermined if companies increase their measurement of innovation as part of a general shift toward emphasizing short-term.

(4) Role of insiders

Innovation companies seem to benefit from having a relatively high proportion of board members that are also company insiders or employees. Because innovation is dependent upon the proper utilization of knowledge, innovation requires corporate activities to be organized so that knowledge is generated and communicated to the

appropriate decision makers. Companies should thus decrease the costs of generating and communicating knowledge within the firm. Furthermore, governance mechanisms should also create opportunities and incentives to learn, communicate, and allocate decision making to those directors or managers with the relevant knowledge.

As compared with outsiders, insiders of companies better facilitate knowledge generation and communication because of their close contact with management and real-time participation in decision making. They have more knowledge about the company and are able to communicate efficiently. Likewise, insiders have more information to avoid the informational asymmetries, and they can join the projects rather than analyzing the results afterwards.

(5) Role of independent director

In general, greater informational asymmetries between managers and their monitors (e.g., independent directors and investors) increase managerial opportunism. Asymmetries give managers the ability to benefit themselves because in such situations, the costs of monitoring are high, and it is difficult for outside monitors to evaluate management's conduct. Innovation activities are difficult to measure or evaluate in the short-run, in part because they utilize particular knowledge and therefore create information asymmetries between corporate monitors and managers. One big disadvantage of strategic internal control might be that it may not maximize overall value to shareholders. This is because it may increase agency costs from managers opportunistically misusing shareholder funds to obtain private benefits. For example, undertaking R&D allows managers to entrench themselves against newcomers, forego dividend payments to shareholders, and invest in projects that benefit themselves at the expense of the company. To be concluded, the role of outside monitors such as independent directors is still necessary for better governance.

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