INSTITUTIONAL CHANGE AND CORPORATE GOVERNANCE REFORM

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Abstract

The global financial crisis has posed challenges to financial institutions governance. Meeting these challenges requires an understanding of governance dynamics in relation to institutions' performance within a changing environment. The nature and scope of institutional response to a changing environment depends upon inherited governance structures, including socioeconomic conventions and rules of behavior at the macro level and time, expertise and common commitment of directors at the micro level. Innovation and learning-by-doing in governance can be an effective reform strategy. Innovation in governance may include the establishment of new norms of economic behavior and the transformation of decision-making process and the reallocation of responsibilities to directors and senior management. This may also inform regulatory approaches in strengthening financial institutions governance, based on improved disclosure, independent and competent boards.

Key words: Corporate Governance, Institutions, Innovation, Crisis

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1. Introduction

The recent global financial crisis has raised serious questions on corporate governance efficiency. Unable to foresee the bursting of the sub-prime bubble, financial institutions sought superior rates of return by embracing aggressive asset allocations, alternative high-risk investments and other complex investment strategies. Few financial institutions were prepared for the collapse of market liquidity, institutional insolvency and the ensuing deepening recession. Most financial institutions have felt constrained by the limits of their expertise. Given the high instability of stressed financial markets, financial institutions struggled to make effective judgments, without being able to respond adequately.

Substantial falls in the value of corporate securities and marked deterioration in the liquidity and solvency of financial institutions have threatened the integrity of the whole financial system. At the same time, public confidence in the market-financed capitalism has been seriously undermined with an increasing number of people facing the consequences of poor returns through hardship in employment. Worldwide, the loss of value of financial institutions was huge. Arguably, the apparent inability of many financial institutions to adequately respond to the sub-prime crisis and global recession points to failures of governance.

Concern over the governance and performance of financial institutions has been on the agenda for about a decade following the corporate scandals in the 90's. There have been several initiatives by governments and international organizations (i.e. OECD, FSB, BIS) to enhance financial institution governance seeking a balance between transparency, accountability and effective financial management. Regulators have encouraged financial institutions to take seriously best practice through regulation and the promulgation of codes of best practices covering a large range of topics, including shareholder rights, board duties, responsibilities and conflicts of interest. Governments have also sought to provide guarantees and compensation schemes for private financial institutions, subject to greater transparency over funding and solvency. Fundamentally, these initiatives were located within a broader context relating to the role of institutions for efficient corporate governance reform. There is widespread agreement that institutions determine economic outcomes, financial market development and the performance of financial institutions.

Based on the need to understand and improve the dynamic evolution of governance practices in a changing market environment, this paper emphasizes the role of institutional innovation in effective risk-taking and corporate governance, provides a simple framework for understanding institutional change in the financial sector, outlines the scope of innovation in financial services, and identifies some limits of current governance practices in the context of the global sub-prime crisis. In what follows, section two analyzes the relationship between institutions, risk-taking and governance in a changing environment; section three considers the various approaches on the relation between institutional innovation and governance of financial institutions, section four describes types of institutional innovation and learning-by-doing as governance strategy and, finally, section five concludes.

2. Institutions, risk-taking and governance

Efficient governance structures of organizations generate the capacity to create financial value from effective actions in a chain of institution-specific tasks and functions, exercised within a given set of institutional arrangements. Understanding governance efficiency in relation to risk-taking requires that, first, governance structure is a finite and measurable attribute associated with planned and expected performance; second, governance structure effectively and consistently determines a financial institution's investment style and strategy, subject to the influence of effective managerial decisions; third, governance structure shapes a financial institution's risk appetite, the latter affecting an institution's planned investment performance and the former reflecting an institution's general corporate goals; and, fourth, governance structure is viewed as an investment in the long-term performance of the institution (Bowles, 2004, 2007; Beinhocker, 2006; Clark and Urwin, 2008b, 2010).

Thus, investment management and financial performance of financial institutions can be effectively understood by reference to their governance structure and risk appetite choices. Governance structure facilitates the management of the investment process and risk appetite determines asset allocation. Governance structure and the risk appetite must be coordinated so as strategic asset allocation and managerial actions can be effectively exercised and assessed within existing institutional arrangements.

The efficiency of governance structure and of the outcome of coordination between governance structure and risk appetite in improving financial performance depends on the inherited forms and functions of financial intermediation and therefore on institutions and their evolution.

Institutions shape economic outcomes and are important determinants of financial market development. However, the channels through which institutions provide incentives for investment and influence corporate behavior are not yet fully understood. Institutions involve both formal constraints based on self-devised and imposed human rules and informal constraints such as conventions and rules of behavior (North, 1990). Understanding the role of informal institutional constraints is a crucial component of predicting the impact of formal institutional change and of making appropriate policy recommendations. It is relatively straight-forward to change formal institutions by altering the legal rules that govern society, but it is much more challenging to change informal institutional constraints that manifest themselves in culture and norms of behavior.

At the macro level, governance structures depend on corporate conventions and rules of behavior; hence, evolution of corporate structures depends to a large extent on the evolution of corporate conventions and rules of behavior. For structural evolution to occur, corporate conventions and rules of behavior must evolve. However, because of powerful path-dependent and other institutional reasons corporate conventions and rules of behavior among different economies might not evolve (Bebchuk and Roe, 1999; Schmidt and Spindler, 2002). Even if state bureaucracies were efficient, a country's corporate conventions and rules of behavior might be path-dependent, as they depend both on the country's initial corporate governance structures, including tradition, interest group politics and foreign influence. The initial pattern of a country's corporate structures has created interest groups and accordingly determined their power to influence the pattern of evolution of corporate rules. If a pattern of ownership and governance creates a group with positional advantage inside the firm and society, that group will often have the motivation and the means to preserve rules that favor itself.

Given that factors determining efficient institutional arrangements change over time, a once efficient arrangement or enforcement mechanism may become inefficient from today's perspective. That is, given that the possible efficiency or welfare gain brought about by changing an institutional arrangement may not be sufficient to cover the costs of adjustment, society might rationally keep the seemingly inefficient institutions.

Consequently, the rules and conventions that a country will have down the road will depend on the type of corporate structures and corporate rules that it began with. Once a country has rules and conventions that favor, for example, powerful professional managers over shareholders or other corporate constituencies, these managers will want to fight off a change in rules and often they will have the resources to do so. Similarly, a country whose rules favor, for example, concentrated shareholders over minority shareholders will have a powerful interest group, namely the concentrated owners, who will want to fight off a change in rules. And similarly, a country whose rules favor stakeholder participation will not easily reverse course.

Moreover, depending on the initial conditions, the efficiency of local governance structures is often path dependent: sunk adaptive costs and network externalities may impede necessary structural change. Furthermore, even inefficient governance structures may tend to persist, owing to an insufficiently high level of transactions activity that could act as a catalyst for structural transformation. Thus, if higher transactions activity in a firm results in a reduction of the company’s controlling shareholder's wealth, then the controlling shareholder might impede the company from further diffusing ownership, even if diffusion would be overall efficient for the company. And management might impede their company from moving to concentrated ownership even if moving there would be overall efficient.

Thus, the question is whether the powerful forces of modern rapidly globalizing product and capital markets do succeed in inducing adequate structural change and convergence in any given corporate governance regime. At the macro level, globalization, competition, and rules reform put pressure on companies to change and adopt more efficient governance practices. But, equally, companies face powerful pressure to stay on their given path, so the resultant speed and direction of corporate governance transformation would then be an empirical question and, given the strength of the forces of persistence, it is doubted whether the result will be complete and rapid convergence will emerge, allowing for a wide variety of different structures to persist.

At the micro level, efficient governance structures require effective and dedicated director involvement. The latter may result from the effective exercise and combination of time, expertise and collective commitment (Clark and Urwin, 2008a, 2008b). These elements need to be properly and deliberately fostered, managed and incentivized.

First, the amount of time devoted to understand, monitor and assess financial performance against benchmarks and prospective market trends is crucial for the performance of financial institutions. Financial investments range from low to high sophistication, compactness and uncertainty. The very fact that financial returns are calculated as discounted projections of future income flows points to the time-dependent nature of financial investment which mandates the continuous and effective engagement of board directors in the investment process and an adequate amount of time set aside for monitoring, reflecting and making judgments on investment policies and risk-taking strategies. Moreover, the time purchased from independent advisors is vital in augmenting directors’ monitoring and reflection on investment policies and strategies.

Second, directors’ expertise in most financial institutions is rather in short supply and expensive. The sub-prime crisis has shown that the expertise of most directors does not extend to deep domain-specific knowledge of investment issues. This is due largely to the lax terms of director appointment and the prevalence of representation bias in selecting directors, especially in state-owned enterprises, where private law institutions are legally required to nominate directors representing broad stakeholder constituencies. Especially in large financial institutions, stakeholder-nominated directors must be selected and remunerated by proper board sub-committees so as to enhance board expertise; all directors be subjected to periodic performance review and appointment procedures be used to promote individual and collective accountability. However, where internal governance remains weak, expert external advisors may therefore be considered, despite any uncertain involvement outcomes, to link inadequate internal governance structures with market agents in order to improve financial management.

Third, collective commitment and responsibility relates to the organizational effectiveness of the board and the degree to which human structures are harnessed to execute agreed tasks. Here, leadership is a crucial mechanism for ensuring that director monitoring, reflection and thought on investment policies and strategies is more than the sum of its parts. The co-existence of very different levels of director knowledge and understanding of financial issues result in a rather rare realization of proper and efficient collegial decision-making and responsibility. Although constituent representation in the board may be justified by a stakeholder view of efficient governance, it is an issue whether the nominated directors chosen to represent stakeholder interests do meet high levels of qualifications for appointment. It seems than an additional test of knowledge and commitment to the each institution's goals and objectives is required to ensure a level of engagement with the institutions investment tasks and functions.

3. Institutional innovation and governance

Institutional innovation may be best understood through a multi-disciplinary approach. The potential success of a financial institution is governed not only by competitive rivalry and the logic of survival of the fittest but also its capacity and speed of adaptation (Lo, 2005). Financial decision-makers operate within a dynamic environment and assume roles and responsibilities shaped in a complex way within the prevailing institutional environment (Beinhocker, 2006).

The dynamic evolution of co-existent but diverse institutions performing certain common tasks and functions and operating within a given environment is reflected by a signal-response interaction representing the link between changes in this environment and subsequent responses by those institutions (Rachlin, 2001). Thus, the evolution along the signal-response interaction of diverse corporate governance structures, which nonetheless perform the same types of tasks and functions, is mediated by the inherited form and character of these structures which is affected by changes in the environment, such as the intensity of competition in product and factor markets. Then the response of these institutions to changes in the operating environment will determine the prevailing type of institution.

The co-existence of different types of institutions in steadily evolving environments is difficult to explain (Arthur, 2005). One explanation may be that different types of institutions serve different constituencies and that by their location in time and space institutions have the advantages of incumbency sufficient to prevent violation. The incentive to break with the past depends on such diverse factors as state bureaucracies, tradition, interest group politics and foreign influence (Bebchuk and Roe, 1999), the cost of acquiring information (Gabaix et al, 2006), the speed of response due to internal coordination problems (Bowles and Gintis, 2007) and the extent and time-horizon of distributing pay-offs to social learning among heterogeneous agents (Young, 2005). Internal efficiency in bringing innovation does also depend on the strength of market competition and discipline, and institutional innovation and reform may be stronger in some highly-competitive segments of market activity and weaker in others less-competitive ones. Institutions may stagnate due to the lack of external incentives to change, reinforced by social systems that react to the prospect of change by invoking the virtues of the status quo.

It is possible that negative feedback loops may dominate positive feedback loops, inhibiting institutional innovation (Bebchuk and Roe, 1999; Beinhocker, 2006). This may result in institutions' inherited forms and functions becoming more and more at odds with market developments, so much so that only a crisis can expose the weaknesses of the whole system of related institutions. Thus, the recent sub-prime crisis seems to have been associated with a lack of effective change mechanisms for driving institutional development and evolution according to required best practice and the most effective forms and functions of governance enforcement. This problem points to an obvious lack of sufficient competitive interaction and incentive provisions among different types of financial institutions governance globally.

This suggests that the challenge in fostering institutional innovation is to account of the past governance practices and behavior and simultaneously put aside the past so as to create and embrace novel institutional arrangements that are more suited to the new environment. The governance of financial institutions has evolved in a slower pace than the sophistication of financial services (Merton, 1995; Merton and Bodie, 2005). Financial institutions often seem unable to deal with the institutional costs of change, are slow to adapt or innovate, and tend to rely on past practices, notwithstanding the uncertainties of global financial markets. Inertia tends to dominate – individually and collectively (Monk, 2008). Inertia is often explained by lock-in effects: past decisions expressed through implicit and explicit contracts dominate decision-making and planning to such an extent that the optimal decision or the proper course of action is by-passed in favor of what is feasible (Arthur, 2005). This may be the result of behavioral predisposition and/or failure of collective action.

Institutional decision-making suggests that bounded rationality is a common and continuous feature of financial decision-making whether because of people's inability to synthesize information or because of status and reward systems that tend to encourage herd behavior (Shiller, 2000, 2002). Prospect theory has shown that some observed economic behavior, like the disposition effect (tendency of investors to sell shares whose price has increased, while keeping assets that have dropped in value) or the reflection effect (reversing of risk aversion/risk seeking in case of gains or losses), are not the result of individual utility maximizing agents. Rationality is a continuous process, affected by both cognitive capacity and the environment such that the quality of decision-making under risk and uncertainty is subject to systematic biases (Kahneman and Tversky 1979; Hilton, 2003; Post et al., 2006; McDermott et al., 2008). Equally, financial decision-making is heavily influenced by past commitments and current relationships. Despite the fact that most investment managers are subject to voluntary contracts, terminations may be difficult to realize when board directors are unable to judge the significance of past performance in relation to future commitments. Ongoing market uncertainty makes the purchase of financial services to be bilateral and relational rather than detached and based on broad efficiency standards. The financial sector is dominated by reciprocal networks of interconnected people and institutions (Abolafia, 1996; Baez and Abofalia, 2002).

The lack of institutional dynamism in governance practices may be explained by the difficulty to understand the nature and repercussions of volatility in financial markets, or to foresee and account for the significant but unexpected costs of an immediate action against the under-performance of management, advisor or service provider, including the risk of penalizing a successful long-term investment strategy. Because markets are prone to unanticipated shifts in underlying causal relationships, it is difficult to foresee whether recent performance outcomes are the result of varying market volatility within expected behavioral patterns or of a shift in overall market behavior. Markets are constructed by market agents' actions shaped through shared expectations of cause and effect. The recent global crisis has shown that inherited theoretical constructs of market behavior are no longer capable of explaining adequately market behavior and governance practice.

An important example of the inability to understand the consequences of market volatility in relation to investment strategy in the modern environment is the widespread failure of internal risk management models and practices of financial and non-financial institutions (OECD, 2009a, 200b; Kirkpatrick, 2009). The corporate governance framework conditioning risk management effectiveness proved weak or failed entirely. In many cases, risk was not managed on an integrated enterprise basis but rather by product or division and then aggregated in a naive way. Risk management was often separated from corporate management and was not regarded as a crucial factor in corporate strategy. Risk managers in some cases lacked status to enforce policy and were not included in top management concerns and decision-making processes. Most importantly, boards of financial institutions were in several cases unable to identify and comprehend the risks facing the company. This may be due to primary board concern with financial results and regulatory capital ratios, neither of which reflected the importance of accumulating leverage on solvency (Ladipo and Nestor, 2009).

Financial risks are classified in different types and prioritized over time, across processes and among institutions in different ways. Different classes of risk correlate in different ways and intensities with each other, exhibiting a varying degree of dependence. Market, exchange, credit and operational risks are central, potentially damaging, elements of the business of financial institutions, supplemented by additional strategic, reputational and compliance risks, all of which require measurement and mitigation.

For non-financial institutions market, credit and liquidity risks are present and important too, but without an equally strong potential impact on solvency due to their lower volatility. However, non-financial institutions may suffer from financial risks indirectly, as they have to mitigate the potential negative impact of an uncertain and volatile international financial environment on their business strategies and investment plans.

Mitigating financial risks is a key policy concern of financial regulators. Financial institutions are involved in and make money through asset: liability maturity transformation (i.e. borrow short, lend long) whereby liquidity risks arise that may cause systemic disruptions. The financial crisis has made clear that management of liquidity risks within the overall corporate governance structure was ineffective, in the sense of misunderstanding and mispricing such risks and therefore relying on false liquidity estimates of their assets/liabilities structure and its evolvement. Closely associated with liquidity risk is reputational risk, which has been effectively kept under control during the crisis only through widespread state-supported guarantees on deposits and institutional funding. From a policy point of view, regulatory concerns over solvency of financial institutions must extend to corporate governance arrangements in the financial sector over and above those pointed to by self-regulatory guidelines and principles.

Corporate governance arrangements of financial institutions are challenged to recognize the potential systemic consequences of executives' risk-taking behavior. To the extent that financial institutions choose to raise finance through the market, where loans are securitized and, given public ratings, sold to many investors including other financial institutions and assessed using approved risk tools that are sensitive to publicly available prices, credit risk that was previously bundled with market and liquidity risks is now separated, priced and traded. This in quiet times improves transparency and tradability, but it also exacerbates systemic illiquidity in noisy times.

If all financial institutions have the same tastes (minimum capital requirements) and the same information (public ratings, approved risk-models, market prices), self-interested individual risk-management behavior will lead the whole system sooner or later to send the herd of institutions off the cliff edge (Persaud, 2000). And no greater sophistication in the modeling of the price of risk will get around this fact. In a world where falling prices generate more sell-orders from more or less similar price-sensitive risk models, markets will not be self-stabilizing but destabilizing and the only way to short-circuit the systemic collapse is for a non-market actor, like the government, to come in and buy up assets to put a floor under their prices (Laganá et al. 2006). But this practice is dangerous: it amounts to an expropriation of gains by financial institutions and a socialization of costs by taxpayers. Paying for a decade of high levels of bank executive compensation can be very expensive for the taxpayer and the opportunities for moral hazard are enormous.

Thus, the liquidity troubles inherent in the asset: liability maturity transformation process of financial institutions, and the globally-induced homogenization of investor reaction to systemic shocks add onto the difficulties encountered in the principal-agent conflict and the signal-noise distinction in market reaction, affecting the risk-taking behavior of financial institutions and therefore their performance. Corporate directors of financial institutions have an extremely difficult task in correctly identifying the meaning of multiple signals from monitored information. Expert judgment is crucial as is the collective capacity of boards to process market information conceptually and empirically. Institutional innovations in market practice and governance behavior have to shoulder the burden of adaptation of financial institutions to the new environment of globally homogenized and sophisticated finance.

4. Institutional innovation and learning-by-doing as a governance strategy

Institutional innovation and learning-by-doing refer to the evolutionary mechanisms of individual, institutional and social change in response to changes in the internal and external environment. These mechanisms refer to complex processes that have their own logic and relationships with one another and moreover represent the nature and scope of change over time and space, over jurisdiction and regulatory setting of institutions (Nelson and Winter, 1983).

Learning involves the absorption of tacit knowledge and therefore can only be achieved by doing. This simple observation has significant implications. Success in learning-by-doing involves investors (who can be private or social) financing a period of possible loss-making. The financing is subject to potential market failures because the success of learning depends on levels of effort and governance that may be difficult to enforce. A number of institutional and political conditions can therefore determine the likely success of catching up processes. Understanding the nature of these market failures is vital for devising appropriate policy responses, aiming at the prevention of those market failures in the future.

The individual, or the institution, or society may alternatively be the active agent in providing the response through learning escalation to the environment according to the specific circumstances prevailing at the time. That is, given the circumstances in which agents find themselves, and given the nature and scope of change in those circumstances, a variety of ways exist by which agents respond.

Innovation and learning-by-doing can be a simple non-reflexive signal: response interaction in which inherited formal and structural constraints limit the shape and scope of response to a changing environment (Rachlin, 2001). This interaction can be forward-looking and fine-tuned in relation to intended present and future outcomes as a strategic response to overcoming existing structural limits on behavior (Lo, 2005). Adaptive agents and institutions can have as their long-term goal the accumulation of the socio-economic structures needed to overcome inherited institutional form and functions in one direction or another (Bowles, 2004).

The evolving dynamic of innovation and learning-by-doing has long been highlighted by social biologists who pointed out the tendency of biological organisms to adjust their physiology and behavior characteristics to the surrounding stable environment (Eldredge, 1995). It has been also highlighted by social economists who argue that innovation and learning-by-doing can be defined as incremental responses of agents to changes in the environment, being subject to the constraints imposed by inherited institutions, modes of behavior and structures used to implement the changes deemed possible and appropriate (Antonelli, 2000). By implication, the scope of innovation and learning-by-doing is set by the inherited formal and informal features that define the institution in relation to its immediate environment.

An important question relates to the conditions under which the response to a changing environment involves the adoption of superior operating procedures. Institutional adaptation requires social learning, evaluation and judgment, regarding the relevance of other forms and functions to the problems faced by incumbent managers and their capacity to respond to the available options. Adoption is a process of learning from others, imitating their actions and/or their modes of organization, while applying judgment regarding the relevance and cost-effectiveness of those institutional features to be adopted (Hurley, 2008). As in innovation and learning-by-doing, there may be limits to adoption, especially if target institutional forms and functions are profoundly at odds with inherited roles and responsibilities. Adoption most often is partial and incomplete, even if valuable, to incumbent managers given the fact that institutions are typically deeply embedded in social structure (Gertler, 2001).

To understand whether institutional innovation and learning-by-doing were indeed practiced by financial institutions as the global financial environment changed, one has to identify the change in the environment that may have prompted an adaptive response and then to assess the consequences of induced innovation and learning-by-doing for the form and functions of financial institutions.

As regards the first issue, it is widely recognized that the modern corporate world has been more and more prone to speculative investment and market abusive practices, as a result of which many governments and international standard setting organizations have sought to promote standards of best practice in corporate governance (Eatwell and Taylor, 2000). These standards have taken different forms ranging from market experts' reports, to codes of best practice, to regulatory measures such as capital and solvency prudential requirements as well as transparency and disclosure requirements of financial and non-financial information, to extensive public awareness programs. The corporate collapses, the loss of market value and the harm on investors experienced over the last decade induced financial regulators and financial institutions to assess the latter's capacities to underwrite financial commitments. The assessment focused largely on the effectiveness of current governance arrangements of financial institutions and on the maintenance of market integrity.

As regards the second issue, three types of adaptive responses to the changing environment seem to be mainly given by financial institutions engaging in financial investments. The responses adopted have re-framed the nature and scope of financial institutions' responsibilities and decision-making (OECD, 2009a, 2009b). First, some boards and executive managers in smaller institutions have adopted governance procedures that were compliant to self-enforced or 'comply or explain' codes of best practice issued by the regulators or other bodies. Lacking the time and expertise to either develop their own internal procedures or perhaps challenge the relevance of these codes of best practice to their own circumstances, compliance has meant adapting to the formal requirements of such codes of best practice even if these were having a voluntary and advisory character. Second, some boards and executive managers in larger financial institutions operating under stricter regulatory environments and subject to more intensive shareholder and stakeholder control showed compliance with regulatory requirements to monitor efficient management. These institutions have taken the opportunity to adapt the form and functions of management actions so as to enhance their governance capacities to manage risk. Innovation and learning-by-doing have taken the form of strengthening institutional decision-making capacity, including the purchase of independent advice. Third, some boards and executive managers in other institutions recognized increasing uncertainty regarding the financial and regulatory costs of existing investment strategies and have responded by closing investment projects to new stakeholders or even restricting the provision of benefits to current shareholders. Finally, most boards in larger and more complex financial institutions engaging in a wide range of financial services and products and enjoying a considerable immunity from their shareholders and stakeholders' direct control due to their sheer size and complex hierarchical structures overcame formal compliance with regulatory requirements and exploited regulatory loopholes and discretion to self-adjust prudential requirements by engineering more and more complex investment strategies. These institutions have used the opportunity to adapt the form and functions of management actions, while drifting along shareholders, so as to evade the boundaries of market integrity and principled investment behavior and take on more risk which was eventually transferred to the wider segments of the market.

Where monitoring, reflection and thought on investment policies and strategies, consistent with the pace of change in financial markets, took place, corporate governance arrangements proved robust. Where materialized, the adoption of innovating corporate governance practices has been encouraged, in part, by the significant reform of company and securities law in many countries over the past decade, and by the attempts made to resolve conflicts of interest internal to corporate boards' responsibilities and functions. The financial crisis has been a cause for extensive reflection on directors' skills and knowledge in relation to needed expertise as well as on the role of regulation given the social costs of bank bailouts and the like. Most governments have started to require non-executive directors to improve their technical skills and devote more time to their responsibilities. If anything, the gap between the skills and commitment of directors will probably widen further as a consequence of the financial crisis. Moreover, the adoption of standards of board and management compensation consistent with best practices is intended to signal to prospective directors the expected level of involvement, responsibility and accountability of being a director. With a highly organized process of recruitment and selection, this model of financial institution governance seeks to affect the structure of boards and the competence of board decision-making.

Innovation and learning-by-doing are distinctive are closely related corporate strategies for catching-up and incentivize the effective adoption of novel governance forms and functions thus allowing for the production of a premium on corporate performance. However, the realization of innovation may be partial and delayed rather than systematic and timely in relation to comprehensive changes needed to overcome inherited forms and functions of financial institutions that were proven inefficient. This is so because of the limits on innovation imposed by statute and government regulation and of the resistance often revealed by corporate directors in view of future changes in the nature and scope of their assumed responsibilities.

The innovating and learning-by-doing process of corporate board decision-making can be seen as a vehicle for institutional response to changes in the environment. Traditional corporate governance arrangements had the director decision-making process to focus mainly on putting issues in assigned order for the board meetings, assign responsibility for their implementation, and review performance against established expectations. innovative corporate governance arrangements should have the director decision-making process to focus on offering ongoing guidance, signaling priorities to be accorded in board meetings agenda items and putting in place sub-committees to speed up and better inform monitoring, reflection and thought on investment policies and strategies, consistent with the pace of change in financial markets.

Moreover, the composition of sub-committees should become a consideration, including the co-option or appointment of independent experts from outside the institution to advise and inform monitoring, reflection and thinking on investment policies and strategies. The priority attributed to an informed and timely process of monitoring, reflection and thinking on investment policies and strategies is matched at the board level with a presumption in favor of sub-committee recommendations.

Further, the adoption of rigorous director selection procedures with market-based compensation and close scrutiny of directors' performance enhances the professional competence of board directors. Recognizing the constraints on the available time, expertise and collective commitment associated with standard director models, the process of director selection enhances the governance structure and also allows for greater clarity about the respective roles and responsibilities of financial institutions' executive management in relation to board chairmen and the boards themselves and, therefore, the introduction of performance-related contracts.

Still further, the innovative governance of financial institutions emphasizes additional features consistent with the principles of best governance practice: strikes a proper balance between board representation and expertise through the appointment of a number of independent experts to the board, allows for the use of relevant performance standards to monitor and evaluate the effectiveness of strategic decision-making and its implementation, rationalizes the allocation of responsibility for making strategic decisions to the board and for dealing with tactical and implementation issues to executive management subject to reporting requirements on both performance and related transactions, ensures collective commitment to the well-defined roles and responsibilities of the board and the senior executives through accepted standing orders and performance-based employment contracts, respectively, distinguishes between the nature and scope of risk management and investment performance, thereby enabling regular distinction between those risks that can be insured in the market and those that cannot; and provides the means for clarifying the role of external advisors in relation to the boards, making advisors responsible to the board for their advice on long-term corporate performance.

Overall, the effect of innovating and learning-by-doing process of corporate board decision-making can, when associated with stronger discipline in the investment process, be genuinely transformative. It can produce greater clarity of an institution's mission and strategic goals, create an appropriate structure for investment decisions, apply held beliefs, allow for the discipline of a risk appetite and a fit-for-purpose restructuring of management actions. By this assessment, best-practice financial institutions have recognized the merits of matching their governance structures with their risk appetites. This has been accomplished in a variety of ways, with rather different models of director responsibilities and board structures conducive to clearly specified responsibilities and accountability.

This decision-making process is innovative because it seeks to resolve the apparent structural problems associated with financial institution governance. It implies a consecutive and interactive change in the level of engagement demanded of directors and senior management on the basis of a clear account of required competencies and due responsibilities.

5. Conclusions

The impact of the recent financial crisis has been dramatic: massive value distraction, collapse of leading banks and corporate conglomerates, government bail-outs, economic depression and high unemployment. This economic disaster calls for a large reform effort, including corporate governance reform. Indeed, many financial organizations proved unable to sufficiently protect the interests of their shareholders: boards proved in many cases unable to understand and control risk-taking, director remuneration in the financial sector did not adequately reflect corporate performance; risk management systems were based on a non-systemic and naïve aggregation of individual risks measured by extrapolating internal risk models, internal supervisory practices downplayed moral hazard risk, and shareholders seemed to enjoy the benefits of short-term value enhancing policies without much concern over their long-term implications.

In an environment of financial deregulation and credit expansion, increasing size, complexity and leverage have made the agency problems of financial institutions more difficult to manage and reinforced moral hazard and adverse selection problems by pushing asset prices up and providing easy money for risky projects. Evidently, the governance of financial institutions was not up to the challenge. In this respect, the financial crisis has provided both a huge natural experiment and an exposure of the weakness and irrelevance of some of the current practices. It will take some time before researchers and market practioners regain their self-confidence in providing insight and engaging in action and in the meantime fruitful new questions can be asked.

The international policy response to the crisis has involved a change in current regulatory practices largely inspired by a principles-based, flexible implementation approach. It is now recognized that financial institutions' corporate governance practices warrant special attention due to the systemic implications of corporate failures in the financial sector, the wider range of risks under management, the special role of stakeholders (i.e. depositors) and the direct/indirect government intervention that affects asset/liability structures and hence risk-taking incentives that affect governance practices.

This makes the fiduciary duties of boards and their effective discharge all the more important issue to focus on. Even if markets are not fully rational and market agents are often incapable of understanding the consequences of their investment choices, financial institutions have nevertheless a duty to their shareholders to honor their long-term performance obligations. Their directors are required to make independent and competent judgments of how and why recommended courses of action may affect their long-term obligations. Many financial institutions seemed that they did not have the governance capacity to understand adequately market volatility in relation to short-term investment behavior and therefore distinguish between short-term financing and trading incentives and long-term commitments. The adherence to existing regulations and 'comply or explain' codes of best practice, however important, did not encourage them to devote time and secure the expertise necessary to develop their own procedures, thus challenging inherited institutional form and functions.

The global financial crisis has shown the significance of innovation in the governance of financial institutions. Being instrumental in improving governance procedures, innovation and learning-by-doing should have figured more prominently in corporate strategies, allowing financial institutions to engage in signal: response interactions for a wider range of market signals as reference points for strategic investment behavior. Financial institutions governance has stayed too long with inherited commitments and practices, which proved inadequate to respond to the new environment.

Financial institutions governance should adopt innovative procedures and structures that allow for timely and proper responses to the new environment. Such innovation and learning-by-doing should focus on intensifying board competence and attention to important corporate matters, devising additional monitoring structures to deal with exceptional circumstances, setting clear responsibilities and priorities on boards and management, using ongoing guidance to properly evaluate important market signals and act upon them, and improving risk management structures and policies.

Given the nature of the global credit crisis and the uncertainties associated with the diffusion and impact of the crisis within and between markets, necessary conditions for endurance include, at the macro level, the establishment of governance structures characterized by efficient corporate conventions and rules of behavior and, at the micro level, of a governance system that makes effective use primarily of time, expertise and collective commitment of corporate directors. In this respect, inherited institutional forms, structures and functions that proved inadequate to deal with the challenges posed by the recent crisis must be eliminated.

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