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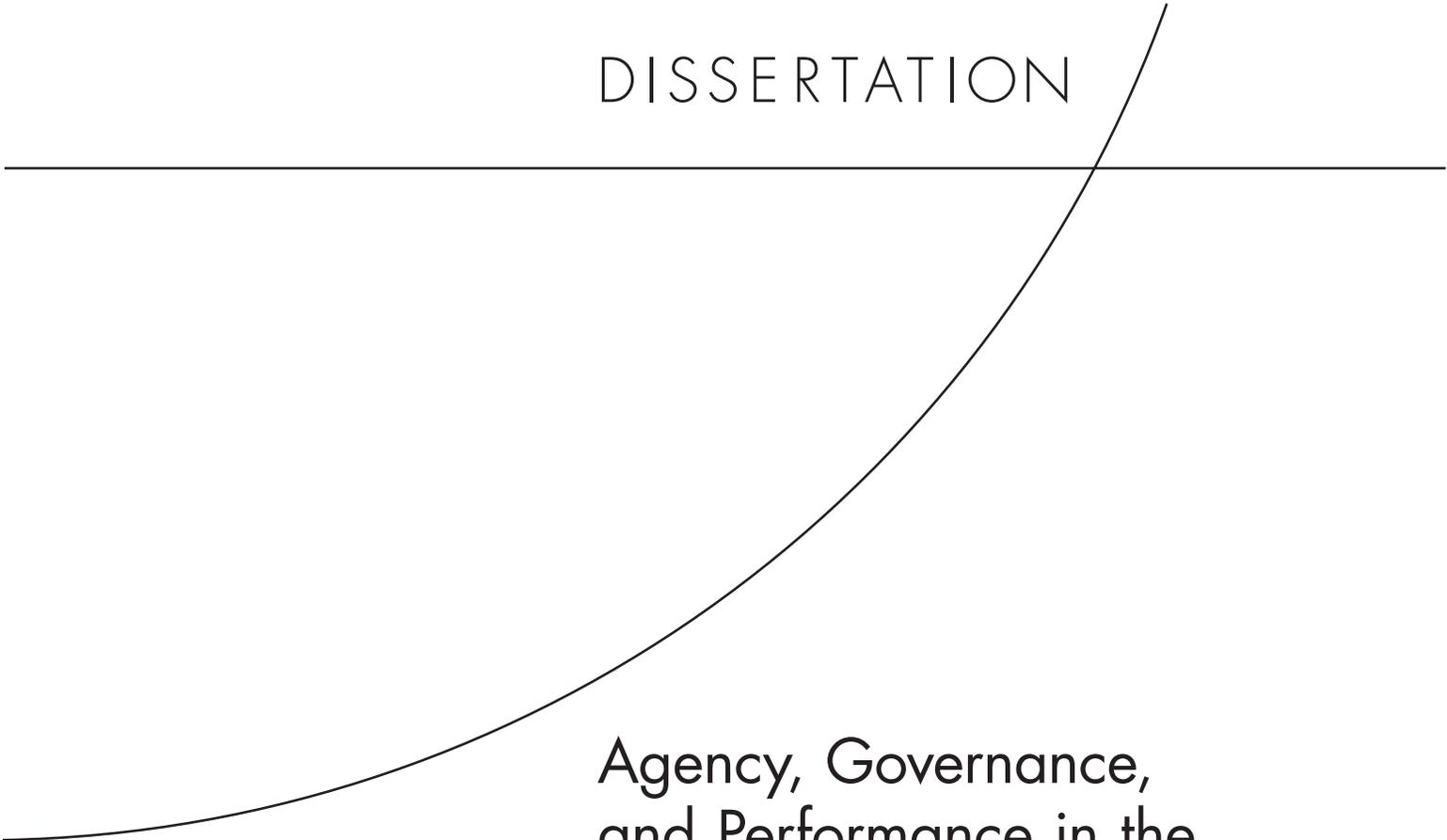
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DISSERTATION

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# Agency, Governance, and Performance in the Securities Industry

Emre Erkut

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## **SUMMARY**

Motivated by a recognition of the importance of financial institutions, a gap in corporate governance literature, and the recent financial crisis, this dissertation examines the economics of financial firms, their governance practices, and governance-performance links in such firms.

The research combines an extensive literature review, microeconomic modeling, secondary data collection, and a set of empirical analyses. It focuses on the board of directors as the key governance mechanism that is subject to policy making by both public and private decision makers. Within the wide range of financial firms, it focuses on firms in the business of managing client assets, where the most obvious gap in governance literature is.

### **Literature review**

The literature review concentrates on the relation between board characteristics and corporate performance. It further examines in detail the governance literature on financial firms (which makes up a small portion of overall governance research). A synthesis of findings from this review motivates and informs the theory, data collection, and empirical analyses.

Corporate board characteristics range from those which are straightforward to measure and observed in disclosures (e.g., board size), to those which are hard to measure and not disclosed (e.g., interaction among directors). For some board characteristics, empirical research consistently suggests a certain

performance effect. These include board size (smaller is better), classification status (not classified is better), multiple directorships (less busy directors are better). For some other board dimensions, despite numerous attempts, the literature so far is inconclusive as to the presence or direction of an effect. These include board independence, CEO/chair duality, and director incentives. Finally, for some other board characteristics, the literature is yet too thin to indicate any pattern. These include, but are not limited to, board activity, board committees, and interlocks, which I have not considered as covariates in my estimations. As the board is not the only governance mechanism, researchers control for others, typically executive incentives and ownership structure.

The literature on governance structures in financial firms asserts the presence of multiple agencies and emphasizes regulation's role. Both of these forces might call for different governance arrangements compared with non-financials. There is some empirical evidence, obtained from the banking sector, that the structure of financial-firm governance is different from that of industrial firms in terms of board size, board independence, CEO/chair duality, blockholder ownership, and executive and director ownership. The direction of these differences overwhelmingly points at weaker governance (e.g., lower executive ownership coupled with higher CEO/chair duality). In line with governance research in general, the existence of multiple governance mechanisms is probed, but findings are inconsistent. Empirical analyses have yet to cover securities firms.

The stream of literature assessing the relationship between governance and firm performance in the financial sector has so far focused on commercial banking with some exploration of funds and insurers. Level of board independence is found to be either negatively related with performance or insignificant. Board size, officer ownership, and blockholdings, to the extent that they are used as explanatory variables, exhibit a similar pattern. Findings on other board or governance variables are too thin to provide any guidance.

Overall, the literature on financial-firm governance is still in its infancy compared with governance research in general, and has concentrated on commercial banking and funds. Mutual and closed-end funds are actually investment instruments (products) offered by securities firms (brokerage and asset-management firms). Securities firms themselves are governed at a different level; therefore, findings from fund-governance research are clearly not applicable to securities firms. So far, no empirical analysis has covered brokerage or asset-management firms.

## **The financial firm as dual agency**

Financial institutions are trusted with the money of their clients, creating an additional agency problem between *clients* and financial-firm management, in addition to that between *stockholders* of the firm and its management (the standard agency problem). Moreover, at the individual-firm level, this additional agency problem might matter more than the standard agency problem, as proxied by the value of *client assets* under management relative to the value of *stockholder assets* under management.

Here, the umbrella term “financial firm” does comprise the various sub-sectors of the vast finance industry (the basic duty of the manager to the client is essentially equivalent across sub-sectors within the broader industry). I use the pure-play asset-management firm for modeling purposes.

Another major difference of financial firms from non-financials is being subject to a regulatory regime that augments the monitoring of the manager by shareholders and clients. Such regulation is provided by dedicated federal and/or state-level agencies for each sub-sector, sometimes complemented by self-regulatory organizations.

Regulation matters because it modifies the behavior of managers in ways believed to be in the interest of various stakeholders and therefore has implications for corporate governance. It is not uncommon for governance researchers to omit regulated industries (typically utilities and financial sectors) from analysis, usually offering no other justification than these industries’ being regulated. I recognize the presence of regulation as a major component of the financial firm’s difference from the non-financial that might affect managerial behavior, and explicitly incorporate it into models.

I first provide visual and informal descriptions of how the economics of financial and non-financial firms diverge. In the manufacturing firm, the manager is the fiduciary of stockholders only. He does interact with customers (and suppliers) in the regular course of business, but he is *not* tasked with maximizing the welfare of customers or any other party other than shareholders. In the financial firm, however, *the business itself* consists of the management of client assets. Thus, the manager is an agent of both the client and the stockholder. He is tasked with both maximizing shareholder value and creating a high positive return on client funds. In fact, the manager creates a profit for the stockholder by means of creating value for the client.

I present four models of managerial utility maximization under moral hazard to formalize the analysis. Moral hazard revolves around the issue that the agent's effort level cannot be observed by the principal (i.e., hidden action problem). I cover the two major problems a principal faces: motivating an agent to work hard (potential shirking), and motivating an agent to work honestly (potential malfeasance). For each type of moral hazard, first the non-financial firm is analysed (the baseline case), and then the model is extended to the financial firm. The extension occurs through the recognition that (1) output for the shareholder is a function of the output for the client, (2) the regulator is present as additional monitor and potential punisher.

Model results provide implications about the effort level of the agent-manager and how he might be incentivized: about productive effort in the shirking scenario, and about destructive effort in the malfeasance scenario.

As concerns shirking, managerial effort is driven not only by the contract between the shareholder and the manager, but also by that between the shareholder principal and the client principal and by the amount of trust placed in the manager by the client. As concerns malfeasance, dishonest managerial effort is discouraged by the differential monitoring scheme that includes not only the stockholder principal as overseer but also the client principal and governmental and sectoral regulators.

Overall, in the financial firm, the existence of a second principal and a third monitor further shape the incentives of managers. Recall that the board of directors exists to bridge the gap between ownership and control, i.e., between the stockholder principal and the manager agent. If the nature of the financial firm with another principal of the same agent and regulatory oversight provides for a better alignment of manager and stockholder interests, then this would suggest a smaller role for and smaller impact by the board. Hence, we could hypothesize that the board has a less important duty in financial firms than in non-financials, and that the performance of financial firms is less sensitive to board oversight compared with non-financials.

## **Empirical analysis**

Keeping with the empirical tradition in governance research, I model firm performance as a linear function of several variables reflecting board structure, other governance mechanisms, and firm-level covariates. The panel nature of my data allows for inclusion of fixed effects for years and firms. Firm

fixed effects would capture unobservable characteristics such as corporate culture. Year fixed effects would capture temporal influences that affect all firms such as a stock-market decline.

As informed by the literature review, I measure corporate performance in terms of firm value and profitability. The proxy for firm value is Tobin's Q, roughly the ratio of the market value of assets to the book value of assets. The measures for accounting profitability include return on assets and return on equity (annual profit scaled by average assets or shareholders' equity, respectively). In terms of board governance, I consider board size, degree of independence, duality of leadership, presence of classification, and multiple directorships. Other governance mechanisms that serve as controls include share ownership by directors, the CEO, and blockholders, as well as incentive compensation for the CEO and directors. I also include firm-level covariates as controls: size, growth opportunities, leverage, diversification, and age.

The starting point for the sample is the universe of public firms filing with the SEC. I identify all U.S. public firms that are commonly referred to as "securities firms": asset-management firms, brokerage firms, and investment banks (underwriters). I choose the period from 1999 through 2007 for sampling because it contains a complete stock market cycle and multiple governance reforms, expected to provide sizeable variation in corporate performance and governance structures, respectively. After eliminations on data availability grounds, the final sample consists of 32 securities firms observed over a period of nine years, yielding a panel of 288 firm-year observations. Sample firms as a whole were managing \$9.5 trillion and had total market capitalization of \$430 billion at the end of 2007. This set of firms provides a well-rounded distribution of firms by size, mitigating possible concerns of small-firm or large-firm bias.

I hand-collect and code variables regarding the board of directors, executive compensation, and stock ownership from proxy statements or annual reports filed by public companies. I develop more accurate measures of board characteristics than existing governance research by considering entire years instead of daily snapshots for directors. I rely on Compustat for financial-statement data and CRSP for market-capitalization data.

Summary statistics suggest that the governance of securities firms does not look particularly strong. The average securities-firm board has nine or ten members, exhibits CEO & chair duality, is not classified, has a clear majority of outside members, but lacks a majority of independent directors. This paints a mixed picture in terms of expected monitoring effectiveness. On the one hand, low occurrence of classification implies accountable directors that stand for re-election each year. On the other hand, an independence

level of only 45%, where independents are outnumbered by insiders and affiliates, suggests low monitoring capability by the board. While executive and director incentives look fine (e.g., variable pay has 77% share in CEO compensation), ownership structures hint at potential dominance by insiders and affiliates (e.g., 13% ownership by CEO versus 9% ownership by independent blockholders). The overall picture might well be a result of the board sharing monitoring duties with clients and regulators.

Out of the five major board dimensions we are considering, financial firms seem to differ from non-financials along two dimensions only: board independence and board classification. The disparity in terms of board independence is striking (around 45% for financials vs. around 70% in non-financials) but not conclusive as there might be some measurement issues. The difference in terms of board classification (around 45% in financials vs. 60% in non-financials) would suggest better governance in financials, but does not seem to matter for performance.

In fact, board governance seems to matter for securities-firm performance only tangentially. Under the comprehensive specifications including allowance for first-order auto-regression over years (GLS estimation), no board characteristic is statistically significant for firm value, and only board size is significant for profitability. Board size does not seem to have much economic importance either. Failing to detect a performance effect for board independence or dual leadership is not surprising as evidence about these is inconclusive in governance research in general. However, board classification and board busyness have been found to negatively affect firm performance in prior research. Lack of sensitivity of both firm value and profitability to these two characteristics, in addition to a small effect size for board size, might well indicate that securities-firm performance is indeed less sensitive to board governance than non-financial firms.