

**РАЗДЕЛ 2
КОРПОРАТИВНОЕ
УПРАВЛЕНИЕ В БАНКАХ**

**SECTION 2
CORPORATE
GOVERNANCE IN BANKING**



CORPORATE CONTROL AND GOVERNANCE IN BANKING

*M. Kabir Hassan, David R. Wolfe, Neal C. Maroney**

Abstract

Banking firms face an industry specific set of agency problems. The heavily regulated nature of the industry alters the shareholder/manger relationship. The scope of market discipline in the industry is severely limited due to regulatory oversight. This article surveys the state of the corporate governance literature with an emphasis on reviewing the agency problems unique to the banking industry.

Keywords: governance, banking, control, ownership, agency, board of directors, compensation

1. Introduction

“Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment” (Shleifer and Vishny, 1997). Michael Jensen and William Meckling (1976) who studied the agency problem inside the firm stimulated interest in corporate governance research. Managers are the agents who make decisions on behalf of the shareholders (the principals) who supply the capital. Conflicts can arise when agent incentives are not aligned with those of the principals. Jensen and Meckling concluded that a potential cost of agency arises when the manager owns less than 100% of the firm’s residual cash flow. Their paper sparked a flood of research attempting to understand the nature of the agency problem to design a more efficient institutional framework that minimizes agency cost. The banking

industry presents a unique set of agency problems to consider. The industry is heavily levered and is subject to a great degree of regulatory oversight. The added role of the regulator modifies the traditional manager/stockholder relationship. The regulator acts as the agent of depositors to ensure the safety and stability of the banking system which is not always compatible with shareholder or manager objectives. Market discipline, considered the universal solution to the agency problem has limited scope in banking firms where their assets are insured, any transfer of ownership must be approved by the regulatory body, and many of the largest firms are considered to “big-to-fail”. The re-regulation of the global banking industry recognizes effective corporate governance is essential to future health of the enterprise.

* All authors: Department of Economics and Finance, University of New Orleans, 2000 Lakeshore Drive, New Orleans, LA 70148. Corresponding author – M. Kabir Hassan. Tel.: 504-280-6163, E-mail address: mhassan@uno.edu

The paper is divided into eight sections. Following introduction, we explain the term *corporate governance* in section 2. Section 3 deals with issues specific to banking industry. Section 4 analyzes various mechanisms of corporate governance. Section 5 examines the differences between bank holding and manufacturing companies boards. Section 6 analyzes regulatory changes and global banking issues. Section 7 discusses Basel II and corporate governance in banking. Section 8 concludes the paper.

2. Corporate governance fundamentals

The agency problem arises when shareholder objectives and managerial incentives do not coincide. Shareholders desire positive valuation gains in their stock holdings. Managers work for the shareholders to achieve maximum shareholder value. Managers, who control the assets of the firm, may choose to satisfy their personal ambitions rather than that of shareholders; imposing costs on shareholders. Denis (2001) provided simple examples of agency cost that includes managers engaging in activities that directly benefit themselves such as managerial shirking (golf games) and managerial consumption of perquisites (plush offices, expense account meals, corporate jets, etc.). These actions may also benefit shareholders; but if they do not, the cost is borne by shareholders'. Shareholders, anticipating such problems will the discount the price of shares. In this manner, agency costs are borne by the original shareholders. These activities may be easily observed, however there are many cases where the actions of management are more damaging to shareholder wealth.

2.1. Agency costs

Jensen and Meckling point out three areas of agency costs that create conflict between shareholders and management: manager desire to remain in power, managerial risk aversion, and managerial use of free-cash flow.

2.1.1. Management entrenchment

Denis (2001) points out when shareholders perceive a management team is performing adequately, shareholders will retain the management team to continue overseeing the day-to-day operation of the firm. Management is seen operating the firm in a proper manner where no conflicts of interest are relevant. When shareholders perceive management is not operating the firm in a proper manner, it may be determined by the shareholders that a new management team could operate the firm in a manner that would maximize its value. In order to maximize the value of the firm at all times, a proper management team should control the assets of the firm to avoid conflicts of interest between management and shareholders.

2.1.2. Managerial risk aversion

Managers and shareholders experience different levels of risk within the firm. Shareholders place a capital outlay into a firm but in most cases will have capital outflows from more than one firm. Assuming shareholders have well diversified portfolios, the shareholder has very little risk in any one firm. This diversification shields the investor from potentially devastating performance of a firm in its portfolio which has little impact on overall wealth. Denis (2001) writes that management has a significant amount of human capital invested in the firm and possibly even financial capital. Thus, management suffers more than shareholders if the firms' projects are unsuccessful. This can create conflicts between the managers and the shareholders in both project selection and investment. Well-diversified shareholders prefer a simple investment policy: invest in all positive net present value (NPV) projects. Managers may not always follow this strategy since they have more to lose when a project fails. Therefore, when the risk is high enough, management may not invest in projects that are worthwhile to shareholders.

2.1.3. Using free-cash flow

Jensen (1986) defines free-cash flow as cash flow generated by the firm that is in excess of the amount required to fund all available positive NPV projects. Free-cash flow can cause potentially serious conflicts of interest between management and shareholders. Management can inevitably do three things with free-cash flow: pay it out to the firm's investors in the form of dividends, reinvest it into new or existing projects, or keep it as retained earnings. Free-cash flow will also be used when a firm has outstanding debt holders. Debt contracts are contractual obligations that require principal and interest payment to be made to the holders at specific times. In theory, any remaining free-cash flow rightfully belongs to the shareholders as written in their equity contracts.

Management should reinvest in projects available to them that are positive NPV. In this case free-cash flows are not free and should be allotted as investment capital. When positive NPV projects are not available, shareholders prefer the firm to retain the cash, or pay it out to shareholders instead of investing in inferior projects. Paying the "excess" cash out to shareholders would prevent management from investing the free-cash flow on inferior projects and alleviate the potential agency related issues. Management may prefer hold on to the free-cash flow or "take a chance" and invest in negative NPV projects. This may be inadvertent as management may not have sufficient information to decide which projects are positive NPV and which are negative NPV. Management may wish to have a larger asset base under control within the firm. Managers seek power and prestige enhanced by managing a larger firm

(i.e., one with higher sales). In many cases, executive compensation is tied directly to firm sales, so inferior investments will increase sales, firm size and management compensation.

3. Issues specific to the banking industry

3.1 Control issues in banking

Hughes et al. (2003) show U.S. commercial banks experience different control issues in comparison to manufacturing or other industries due to the presence of heavy regulation and the federally backed “no-fail” initiatives that act as a safety net. Notable control issues in the banking sector include: the direct or indirect insurance of bank deposits and varied bank debt which reduces or virtually eliminates the incentives for debtholders to monitor activities of bank managers placing emphasis on the monitoring function provided by the regulatory bodies. Other examples of this include: strict restrictions placed on banks over bank merger activity, a probation period required for ownership of financial institutions by non-financial firms; and requiring regulatory approval of all acquisition activity. Prowse (1997) and Mester (1989) note that these restrictions on potential buyers reduced the disciplinary role played by takeovers and have increased the importance of regulatory supervision as a disciplinary mechanism. DeYoung, Spong, and Sullivan (2001) finds that bank supervision has focused on preventing imprudent managerial risk-taking while not necessarily discouraging managerial inefficiency that compromises stakeholders’ wealth. Anderson and Fraser, 2000; Gorton and Rosen, 1995; Houston and James, 1995; Saunders et al., 1990 show how research has branched into many different areas of control including how ownership structure and managerial compensation can have influence over risk-taking. This literature investigates the impact of ownership structure, how market discipline influences market value, compensation and evidence of managerial entrenchment. Hubbard and Palia (1995) find a positive relationship between pay and performance, which was stronger in banking markets where interstate entry was permitted. Also, CEO turnover increases after interstate branching deregulation. Brook et al. (1998) and Hughes et al. (2003) examine the effects on value of the passage of the Interstate Banking and Branching Efficiency Act of 1994 (Riegle–Neal Act), which eliminated most restrictions on interstate market entry and branching by 1997, and find that banks had large, statistically significant abnormal announcement returns during the legislation’s passage. Hughes et al. (2003) believe it is possible for management to observe market discipline where they can just as easily consume agency goods. Agency goods encompasses a wide range of areas including; risk aversion, minimal effort, empire creation, increase the control of management, consumption of free-cash flow, and reducing the probability of a

takeover. Agency goods can be compliments or substitutes in a managers preference ordering. One example of managements’ consumption of agency goods is the avoidance of risk to protect the managements’ human capital that is invested in the firm. Consumption of agency goods will reduce the firms overall performance and can be carried out until the manager can no longer resist market disciplines.

Evanoff and Ors (2001) examine the effect of liberalizing interstate entry laws and the effect of market entry on incumbent banks’ cost efficiency. They find that both types of events are associated with an improvement in cost efficiency in the three years that follow liberalization. Hadlock et al. (1999) confirm that banks with higher levels of managerial ownership are less likely to be acquired while Brook et al. (2000) find that higher levels of outside blockholder ownership and a more independent board increase the probability that a bank will be acquired. These various studies provide strong evidence that banking regulations, such as interstate branching restrictions, have limited market discipline and suggest that managerial objectives other than value maximization may play an important role in bank consolidation. This is consistent with the expectation that a more active takeover market will raise a banks’ value. Hughes et al. (2003) also found that the value of poorly performing banks react more positively, while banks with higher insider ownership, lower levels of outside blockholder ownership, and less independent boards obtain lower returns. This suggests that management whom observes market discipline will reduce the benefits in an active takeover market.

3.2. Mergers in banking

Rhodes (2000) showed bank consolidation is not limited to the U.S. but is explosive around the globe. In the U.S., over 8000 bank mergers took place between 1980 to 1998. The largest number of the acquisitions, nearly half, occurred during a period between 1995 to 1998. Banking Institutions in Europe and elsewhere have experienced a surge in consolidation activity as well. A study produced by the Group of Ten (2001) found a high level of merger and acquisition activity in the 1990s among financial firms in 13 countries studied (Australia, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden, Switzerland, UK, and the U.S.), with a noticeable acceleration in consolidation activity from 1997 through 1999. Hughes et al. (2003) studied the features of the 7304 financial mergers that were documented and found nearly 61% involved banks. This consolidation activity created a number of large, complex financial institutions, and the number of banking firms declined in almost every country during the decade.

Stiroh (2000), Hughes et al. (2000), and Hughes et al. (2001) have shown that strong scale economies appear following consolidation by enhancing the

value of banks in the industry. A second factor driving the value-enhancing consolidation is the possible economies of scope that develop between institutions' various product lines. Proponents of bank mergers criticize bank management for building larger institutions at the expense of firm value. In some instances, bank mergers have not produced the anticipated cost saving or increased revenues that were prescribed as the motivating factor for the merger. Peristiani (1997) conducted research to support this theory in certain instances. However, Shaffer (1993) did not find increased efficiency from bank mergers and finds profits after bank acquisitions and market value after a merger have mostly negative affect of shareholders. Acquisitions among industrial firms and acquisitions in the banking industry are generally targeted for takeover gains. Houston and Ryngaert (1994) use a sample of 153 bank acquisitions between 1985 and 1991 and finds that target banks on average earn positive abnormal returns of 14.4%. However, it is also found that the bidder shareholders suffer average negative abnormal returns of -2.3%. Although the target shareholders realize gains, the target bank's managers are generally unemployed after being acquired while the bidding bank's managers will preside over the newly formed institution. Hadlock et al. (1999) find that more than one-half of the top executives in their sample of target banks are not employed by the buying bank two years after the acquisition. Brook et al. (2000) find that only the target bank shareholders directly benefit from mergers. Also, the target banks' market-adjusted announcement returns average 18.4% and a median of 16.0%. In contrast, the bidder announcement returns average -2.1% and a median of -2.2% in their sample. These returns are consistent with the 20% average announcement return found by Houston and Ryngaert (1994). Brook et al. (2000) also show the bidder and target returns statistically differ from zero and from each other. Takeovers clearly benefit target shareholders however the managers of target firms may not benefit. Brook et al. (2000) conducted an examination of bidding bank proxy statements one year following takeovers. This revealed that target top managers retain a high-level position in the bidding bank after takeovers. Only 5% of target CEOs held positions in the bidding bank that have positions high enough to warrant mention in the bidder's proxy statement. Board representation is somewhat higher (16%), but it is clear that many, if not most, target CEOs do not maintain their status after an acquisition. The chairmen of target banks' boards fare similarly while only 23% retain a board seat after the merger.

3.3 Special problems of banks

Many issues in corporate governance transcend industries irrespective of product or regulation. However, the banking sector is unique in many facets. The purpose of this section is to discuss corporate

governance issues that directly impact the banking sector or are unique to the banking sector. Special corporate governance problems are observed in the banking industry. In the banking industry shareholders are not the exclusive beneficiaries of the institutions productivity.

3.3.1. Banks as creators of liquidity

Diamond and Dyvbig (1986) showed that banks are distinguished from other firms in their capital structure in two ways. The first is banks tend to have seemingly little equity relative to other firms. In general, manufacturing firms use more equity financing than debt financing. In comparison banks have a capital structure that features 90% or more of debt financing. A second defining feature of banks is that most liabilities are in the form of deposits. Deposits are available to their creditors/depositors on demand, while assets often take the form of loans that have longer maturities (although increasingly refined secondary markets have mitigated to some extent the mismatch in the term structure of banks' assets and liabilities). Banks as financial intermediaries are special in their production of liquidity. By holding illiquid assets and issuing liquid liabilities, banks create liquidity for the economy. Macey and O'Hara (2003) reveal a collective-action problem with the liquidity production function can arise with depositors since the bank only keeps a proportion of its deposits at any given time. A depositor demanding the return of their deposits simultaneously cannot be fulfilled since the bank does not keep sufficient funds to secure all deposits on hand. A mismatch between deposits and liabilities creates a problem in the form of a "bank run" which is a collective-action problem for the depositors. When large and unanticipated withdrawals start to take place at a bank, depositors may observe this trend and rationally conclude they must withdraw their assets from the bank before they are lost after a run on the bank. This logic has provide the framework for deposit insurance which is often justified on the basis that it dissipates this problem by deterring the rationale for any single depositor to demand repayment of his deposits at a sporadic moment.

3.3.2. Creation of deposit insurance

Congress passed the Banking Act of 1933 in response to the mass failures of depository institutions in the U.S. This legislation created the Federal Deposit Insurance Corporation (FDIC) which gave the federal government the power to insure consumer deposits in qualified banks. It is widely believed that the creation of federal deposit insurance is a significant factor in effectively preventing bank runs. Friedman and Schwartz (1963) believe that deposit insurance has succeeded in achieving what had been a major objective of banking reform for at least a century, namely the prevention of banking panics.

Hanc (1999) and Macey and O'Hara (2003) find despite the positive effect of FDIC insurance on preventing bank runs, the implementation of deposit insurance poses a regulatory cost of its own; it gives the shareholders and managers of insured banks incentives to engage in excessive risk-taking. This moral hazard occurs for two reasons. One, the bank shareholders are able to transfer some of their losses onto innocent third parties. These third parties are the healthy banks whose contributions to the FDIC pay off depositors of failed banks. This ultimately impacts the federal taxpayers whose funds replenish the federal insurance funds when they are depleted. A second moral hazard is also present because deposit insurance premiums have been unrelated to, or have not fully compensated the FDIC for increased risk posed by any particular bank. Hanck (1999) and Macey and O'Hara (2003) also show when a bank is at or near insolvency moral hazard problems will surface. In this situation the shareholders have incentives to increase their risk-taking since they can allocate their losses to depositors other than themselves while still receiving any benefits realized that may result from the risky behavior. Industrial companies that are close to insolvency have incentives to take added risks but their actions may be impeded by normal market forces or contractual obligations. Insolvent companies also suffer significant liquidity problems. However, when banks are near insolvency they continue to attract liquidity in the form of deposits which are federally insured. The federal deposits insurance acts as a buffer against the market forces that cause liquidity problems for non-financial firms. The federal government has instituted capital requirements in an effort to replace the market forces. Initiating a high capital requirement will force shareholders to place more money at risk, therefore reducing the moral hazard.

3.3.3. *Disputes between debtholders and shareholders*

Conflicts of interests between debtholders and the interests of shareholders exist in every firm. This is attributed to the fact that any investment strategy that increases the riskiness of the firm transfers the wealth of the firm from the fixed claimants to the residual claimants. This problem is of a particular concern in banking because of the high debt-to-equity ratios of the institutions and the federal backed deposit insurance. Macey and O'Hara (2003) show in the publicly held corporation, the problem of excessive risk-taking is mitigated by two factors. First, various mechanisms serve to protect fixed claimants against excessive risk-taking. Corporate lenders typically demand protection against actions by corporate managers that will jeopardize their fixed claims. Second, risk-taking is reduced by some extent because managers are not perfect agents of risk-preferring shareholders. Managers are fixed claimants so that the portion of their compensation is

designated as salary. Managerial incentives for risk-taking are reduced as managers have invested their human capital in their jobs. Another risk-reducing element is the fact managers are generally more risk adverse than shareholders.

3.3.4. *Negative impact of deposit insurance*

The creation of deposit insurance has reduced monitoring by interested parties and increased the receptivity to fraudulent activity. Macey and O'Hara (2003) find that fraud and self-dealing transactions were "apparent" in as many as one-third of bank failures during the 1980s. A similar statistic shows that between 1990 and 1991, insider lending contributed to 175 of 286 bank failures. Although this type of activity can be prevalent in any firm, these types of problems are more likely to arise within financial institutions where the majority of the firms' assets are highly liquid. While the creation of deposit insurance reduces the level of monitoring, shareholders continue to have an incentive to monitor the institution for instances of fraud and self-dealing. However, many individual shareholders do not have the incentive to monitor one firm that is placed in a well diversified portfolio. Some believe that the FDIC deposit insurance transfers the risk of the creditors from the depositor to state and federal regulators. It is widely believed that regulators are more informed and financially more sophisticated in bank monitoring fraud. Reporting requirements placed on financial institutions by regulators and their right to on-site inspections support for this view. Additionally, when fraudulent activity is discovered or the regulators suspect the bank is participating in activity that is unsafe or unsound, the federal regulating body can order the activity to cease.

4. Mechanisms of corporate governance

Shleifer and Vishny (1997) point out that the majority of the evidence finds that managers do not always act in the best interest of their shareholders. This conclusion follows from research in this area using the event study methodology. Researchers evaluate the abnormal stock return reaction to the announcement of a particular event. "If the reaction is, on average, significantly negative, as it is for bidders when they announce an acquisition, then this suggests that the particular action is generally not in the shareholders' interest (and vice versa) (Denis 2001)." This demonstrates the need for a series of measures to close the gap between the interest of shareholders and management. The mechanisms evaluated in this section were first presented by Michael Jensen (1993).

4.1. Legal and regulatory mechanisms

The most fundamental corporate governance mechanisms actually are external to the firm. This is the

system of laws that govern corporate activity. However, U.S. courts are generally hesitant to question a management team within a firm unless there is strong evidence management is making decisions in bad faith. This allows a management team to a fairly open degree of liberty in overseeing the activities of the firm. Regulatory frameworks are created by political institutions which may create the potential for conflicts of interest. This can have influence over decisions and create agency problems between management and shareholders as well as regulators and politicians. Research on the influence of the law on corporate governance is gaining prominence since the recent wave of corporate failures. La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998, 2000) demonstrate that both the applicable laws and the degree of enforcement of those laws make

U.S. investors among the most protected in the world. La Porta et al. (1998, 2000) find that cross-country differences in ownership structure, capital markets, financing, and dividend policies are all related to the degree to which investors are legally protected from expropriation by managers and controlling shareholders. They document an inverse relationship between the degree of protection in a country and the degree of ownership concentration in firms in that country. Shleifer and Vishny (1997) argue that within the large corporations of various countries the fundamental agency problem is not between managers and shareholders because control is the decision primarily of the large shareholders.

Denis (2001) states that regulators have a major role in the monitoring of bank managers' actions. This directly impacts the interests of management and shareholders irrespective of the board's independence. Banks are governed by a regulatory structure that focuses on reducing negative cashflows associated with bank failure and fair lending practices. Banks offer their customers deposit insurance which protects the depositors where regulation that promotes issues such as consumer protection and fair lending practices.

Flannery (1994) noted that the existing structure in the banking industry and the excessively high degree of leverage at which banks operate impacts the managerial actions while shareholder wealth is magnified. It is commonly argued that deposit insurance is not priced to fully reflect the risk of the institution and provides owners and managers incentives to enhance risk-taking behavior. Saunders et al. (1990) found evidence that ownership structure affects the amount of risk-taking in banking firms. This suggests an increased need for the monitoring of management to insure that decisions are consistent with shareholder wealth maximization. Furthermore, the lack of hostile takeovers in the banking industry suggests this discipline has impact on the matching of the incentives between management and the shareholders. In the 1990s, bank regulators were awarded the responsibility of intervening at the first sign of financial or managerial weakness within an institu-

tion. This meant heavy monitoring of management actions that impact the safety and soundness of a bank. Booth, Cornet and Tehranian (2002) believe the extent that management monitoring by regulators limits the amount of managerial discretion, and thus its effects on shareholder wealth, monitoring by outside directors, inside stockholders, or a separate CEO and board chair becomes less important. The monitoring by regulators and the threat of actions taken by regulators as they follow prompt corrective action mandates provides the incentive of managers to operate soundly. The role of the regulator is to limit the amount managerial discretion in the decision making process. Regulators are not necessarily concerned with shareholder wealth or firm valuation maximization.

4.2. Internal control mechanisms

The primary mechanisms within a firm that influence the degree to which management represents shareholders' interests are the board of directors. The board decides issues such as compensation plans for management and the firm's ownership and debt structures. The function of the board has been of great interest and has sparked much academic research.

4.2.1. Board of directors

Every corporation in the U.S. is required by law to have a board of directors. Both the number of directors on the board and their composition are choices that appear to influence the effectiveness of the board but are not determined by law. The shareholders of a firm elect a board to hire/fire management, set compensation levels and to advise top management on behalf of the shareholders. Theoretically the board of directors monitors the firm for the small stockholders; however it can be questionable at best whether the board members have the proper incentives to complete the task. Additionally, management may influence who is placed on the firms' board of directors. Denis (2001) commented that board size and the relative independence of the members themselves are the two characteristics of the board of directors that stand out in the literature. It has been observed that smaller boards are more effective because they can hold more candid discussions and make decisions quickly. Smaller boards are also less influenced by management than a large, cumbersome group of directors. The variable of greatest interest with respect to board composition is the proportion of outside directors on the board. The general consensus is that directors who are members of the firms' management or who are affiliated with the management (generally termed inside directors and affiliated/grey directors, respectively) are less effective as monitors of management than are members who have no family or business ties to firm management. Hermalin and Weisbach (2001) find nu-

merous characteristics of boards including; smaller boards with a greater proportion of outside directors appear to lead management teams and take actions that are more parallel with the shareholder interests in some situations; firms with a greater proportion of outsiders on the board appear to make better acquisition-related decisions; firms with smaller boards also set CEO compensation plans that are more plausible to CEO performance. Weisbach (1988) find a significant relationship between firm performance and CEO turnover when at least 60% of the board is comprised of outside directors. Rosenstein and Wyatt (1990) show a positive stock price response to the announcement of 1251 outside director appointments from a period of 1980-1985. Byrd and Hickman (1992) use 128 tender offers between 1980-1987 to show bidding firms with a majority of outsiders on their boards have significantly less negative abnormal returns around the announcement of a takeover when compared to firms without outside-dominated boards.

4.2.2. *Executive compensation*

It is the responsibility of the board of directors to determine the level and structure for the compensation for the top executives within the firm. This determination has sparked an exuberant amount of research in the past few decades. Existing research on executive compensation zooms in on two overriding issues: the compensation package of the executives and the sensitivity of performance pay plans. Murphy (1999) showed that the constant dollar median cash compensation for the CEOs of the S&P 500 firms have more than doubled in the past 30 years. When considering executive stock options the average salary has roughly quadrupled over the same period. Managers are risk adverse and have a large amount of human capital involved in the firm. This can create resistance on the part of the manager to accept a major portion of compensation directly linked to stock performance and therefore prefer cash compensation in order to maintain a well diversified personal investment portfolio. Under risk aversion, managers will value stock or stock options in their own firm to be cost less than the cost to the firm that provides it to them. However equity based compensation creates is more expensive to the firm than cash compensation. Recent research by Core et al. (2001) and Murphy (1999) reveal the following about stock-based compensation: the sensitivity regarding executive compensation linked to firm performance is increasing over time; the majority of the sensitivity comes from executive ownership or option based around common stock; stock options compensation is the fastest growing element of CEO compensation packages. Increases in executive's holdings with a firm of stock and stock options will increase the sensitivity of the executive's wealth to firm performance. Murphy (1999) reports that this sensitivity has increased more than threefold over the

last 20 years. Core et al. (2001) interpreted the evidence which suggests that, on average; firms base their equity incentives on systematic and theoretically sensible economic factors.

Ang, Lauterbach and Schreiber (2002) examined the compensation practices of 166 U.S. banks that provided compensation information for the CEO, the compensation of non-CEO top executives, and compensation in varied bank sizes. Their research shows that compensation comparisons analyzing top executive teams (less the CEO) have been overlooked. Notable exceptions are two studies of pay structures among management teams. Murphy (1986) in a study of a broad sample of U.S. corporations in the period 1964–1981 does not find any significant difference in pay to performance sensitivity between CEOs and their lower rank top executives.

4.2.3 *Impacting executive compensation*

Ang et al. (2002) found a sizable gap compensation between the CEO and the second highest paid executive and a much narrower difference between the second highest paid and the remaining executives using the data from 166 banks. The compensation package of the number 3–5 rank executives appear to be similar. This presents a three-tier structure compensation structure for other top management. This structure of executive compensation relatively coincides with the models derived in the labor economics literature.

Ang et al. (2002) show that the level of each compensation component is monotonically increasing with bank size. In each case, the dollar amounts are larger for medium (over small) and large (over medium) banks. Similarly, the level of each compensation component increases with executive rank from executive #4 to the CEO. One exception occurred in small banks where the average option granted to the third highest ranking executives were slightly lower than those of the fourth highest ranking executives. The weight of base salary as percentage of total pay was decreasing with bank size. Base salary accounts for 62.3% (33.0%) of CEO compensation in small (large) banks, respectively. For executive #4, base salary comprises 70.9% of total compensation in small banks and 41.2% in large banks. "It appears that large banks offer higher performance pay to their executives in both absolute (dollar level) and relative (percentage of total pay) terms (Ang et al 2002)." This would suggest that the compensation that a top bank executive can expect to receive is based upon the rank of the executive and the performance of the institution.

Hughes, Lang, Mester, Moon and Pagano (2003) studied the option based compensation packages for bank executives. They show the mean response of the shortfall ratio to a proportional change in the fraction of outstanding common shares granted as options to insiders. The effect of options on the shortfall ratio is similar to that of ownership in most

of the sub-samples. Hughes et al. (2003) find that options are positively correlated with the shortfall ratio within banks with the highest investment opportunities in the upper two-thirds of the sample. Options are negatively correlated with the shortfall ratio within banks in the lower third of the sample evaluating investment opportunities. Hughes et al. (2003) suggest that an increase in options granted to insiders reduces agency conflicts between insiders and outsiders among banks with lower investment opportunities and among banks that are relatively efficient, while it worsens performance at relatively inefficient banks, at banks with better investment opportunities, and at smaller banks. The similarity in effect between ownership and options suggests that a high proportion of options during this time period may have been in the money.

4.2.4. *Inside ownership*

Reviews of the evidence on inside ownership are found in Murphy (1999) and Core et al. (2001), as well as in Holderness (2001). The evidence on the relation between inside ownership and firm performance is mixed. Denis (2001) summarizes the aforementioned research and finds there exists evidence that firm performance first increases and then decreases with percentage ownership, suggesting that the incentive alignment effect of increased ownership is more important at lower levels of managerial ownership while the entrenchment effect dominates at somewhat higher levels. Increases in insider ownership will influence the insider's consumption of agency goods in several ways. First noticed is a price effect or the increase in insider ownership will increase as the opportunity cost of agency goods increases. Every dollar consumed by management of agency goods will reduce the value of insider's stake in the firm by the larger ownership proportion (Jensen and Meckling, 1976). Second is an income effect which shows increases in insider ownership will increase the insider's claim on the potential or future value of the firm. Insiders who consume agency goods will produce value for both themselves and outsiders. The third is a control effect, or the increase in insider ownership will increase as the insider's control over the firm's assets and the ability to consume agency goods within the firm.

Hughes et al. (2003) find that the effects of an increase in insider ownership have two basic effects: an alignment-of-interests effect and a contrasting entrenchment effect. While an increase in insider ownership will better align the incentives of outside and inside owners which reduce manager's incentive to consume agency goods. This also confers more control on insiders and awards them better ability to resist market discipline, therefore consume agency goods. These effects of proportionality increase as insider ownership on the shortfall ratio strongly suggests that managers are entrenched within banks where they hold at least 25% of common shares out-

standing. This holds true when the investment opportunities are in the upper two-thirds of the sample banks and in the three-fifths range of the sample with the smallest total assets banks. However it is not as apparent to how managerial ownership through stock and stock options improves firm performance. Inside equity ownership presents a unique set of circumstances. In one perspective, inside ownership better aligns the financial incentives of management with shareholders. On the other side, managers may want to consume benefits of the firm at the expense of the shareholders. When management has a greater proportion of ownership, the fear of stockholder retribution may become a diluted threat.

4.2.5. *Impact of debt*

What impact does debt have over corporate governance? Are there conflicts of interest that arise between managers and shareholders over debt related issues? When free-cash flow exists, management may choose to return a portion of the cash to equity investors via dividends or share repurchases. However, management also has an obligation to return specified amounts of cash to debtholders during specified times or the potential exists where management can lose of some or all of its control rights. Having the ability to make consistent cash payments presents management with greater incentives to operate efficiently and produce greater cash flow.

Sinkey and Carter (2000) conducted research examining banks that use derivatives compared to banks that do not. While the concentration of derivatives use in the largest banks is well documented, less is known about other factors that underlie a bank's decision to use derivatives.

After controlling for variable such as bank size and dealer activities, they find that banks that use derivatives in comparison to banks that do not use derivatives are associated with riskier capital structures. The risky capital structure is generally comprised of less equity capital but more frequent use of notes and debentures. Banks that do not use derivatives were found to have larger maturity mismatches among on-balance sheet assets and liabilities, greater loan charge-offs and smaller net interest margins. One interesting relationship not supported by Sinkey and Carter (2000) is a regulatory hypothesis in which banks must have stronger capital positions to engage in derivative activities. Because thousands of banks are not using derivatives, it is unlikely for them to have duration matched balance sheets. These banks as well as the taxpayer-backed FDIC are highly exposed to interest-rate risk. This can be potentially bad news. The positive side is that banks that do not use derivatives generally have financial profiles that suggest less on-balance sheet risk-taking. Sinkey and Carter (2000) conclude that the institutions stakeholders should provide a proper incentive to encourage management to hedge both interest-rate exposure and credit risk.

4.3. Mechanisms of external control

Outside interests may find opportunities to earn a profit when legal, regulatory and internal control mechanisms do not warrant management to maximize the value of the firm. Outside interests can gain control of a firm through purchases of common stock, improve upon the operation of the firm and realize profit from increases in the stock price by raising the value of the share acquired if the effort is successful.

4.3.1. Non-executive ownership

Brook, Henderson and Lee (2000) find outside director ownership in the banking industry is strongly correlated with becoming a target is consistent with substantial equity ownership giving outside directors an incentive to carefully monitor managers. It is also consistent with substantial equity ownership giving outside directors the ability to insist that corporate decision-making maximize shareholder wealth. These two effects are related but there is minimal incentive for outside directors to monitor managers without the power to discipline.

Brook et al. (2000) show optimal corporate governance characteristics have merit if the outside directors' financial incentive is important. This importance through outside director ownership likely depends on both the outside and inside director ownership structure. Directors that own 10% of a bank's stock are unlikely to yield much influence if inside directors own 35% or more of the bank's stock. One interesting note is that higher inside director ownership has no correlation with a bank becoming a target. However it is unlikely that manager and shareholder interests can be perfectly aligned. Insider ownership makes managers shareholders which should have an impact on managerial incentives. Brook et al. (2000) contend it is possible that managerial ownership's importance is not captured in their linear regression specification.

4.3.2. Blockholders

Blockholders or investors with more than a 5% holding of a firm's common stock are not uncommon with one study showing at least half the manufacturing firms with at least one blockholder. Additionally, block ownership is reasonably stable and firms that had a blockholder in the past are more likely to continue to have one in the future. Denis (2001) pointed out that evidence suggests that blockholders seek both to increase firm value (shared benefits of control) and to enjoy benefits that are not available to other shareholders (private benefits of control). These private benefits may come at the expense of the other shareholders although not a necessity.

Hughes et al. (2003) showed the mean response of performance to proportional changes in the fraction of outstanding shares held by outside blockhold-

ers. Their regression results indicated that blockholder ownership does not indicate a significant pattern of influence with respect to bank performance. This relationship holds true whether measured by the shortfall ratio or by using a Tobin's q ratio. The lack of significance is surprising given the apparent importance of blockholders is shown in their univariate comparisons.

4.3.3. Banks as large shareholders

Gordon and Schmid (2000) show that in stock market based economies, corporate governance occurs by encouraging institutional investment through shareholder blocks in an effort to take over or influence manager decisions which makes this type of intervention valuable. A second type of economy exists where the stock market is highly illiquid and corporate listings may be scarce. In this scenario a new branch of research has evolved focusing on bank-based economies. In a bank-based economy, there is no market for corporate control although the banking sector is heavily involved in corporate governance. Dow and Gorton (1997) argue that bank-based economies can be equally as efficient as stock market economies and bank as institutional investors will improve the overall position of the firm.

Bhide (1993) shows when stock markets are illiquid, bank blockholders can only sell their stake in a firm at a loss. This will create incentives for the bank to create and maintain close relationships with firms held in the banks' portfolio. While this argument holds true for any blockholder, it is more so for bank blockholders since banks have the ability to impact a firm performance to a greater degree than non-bank blockholders. One explanation for this is banks cannot feasibly sell their blocks due to illiquid capital markets and firms have no outside option for financing, therefore firms rely on blockholding institutions for bank capital. The lack of a liquid stock market joins banks and firms into a quasi partnership which can substitute for disciplining via takeovers. A second explanation is the bank may be superior as a monitor compared to other blockholders. Banks may have access to better information and better resources to disseminate the information from the firm.

One explanation how banks can improve a firm performance is the positive correlation between a bank's control rights through equity ownership and the bank's ownership of the cash-flow rights. Jensen and Meckling (1976) and LaPorta et al. (1998) show that banks have a financial incentive to improve the performance of the firm when cash flow rights are held by the bank. Bank holding control rights and cash-flow rights can be positively correlated despite institutional pressures to disengage them such as: pyramiding, voting restrictions, cross-shareholdings, codetermination and stocks with multiple votes. Banks obtain their cash-flow rights in the form of loans which might be important in this regard.

A vast majority of the research studying bank-based economies focus on Germany. Gordon and Schmid (2000) provide evidence that supports the notion that banks are valuable contributors to the corporate governance mechanism in Germany. They show that firm performance is measured by the market-to-book value of equity and will improve to the extent that banks have control rights through equity ownership. Furthermore, they show that banks will not extract private value to the detriment of firm performance, no conflicts of interest between banks and shareholders are apparent, and banks will not use proxy voting to further their own private interests. Elston (2004) investigates the bank's influence on firm performance in Germany and finds that the closeness of the relationship between the bank, the firm and concentration of ownership can reduce agency problems and improve the monitoring of the firm. Elston (2004) concludes this will increase the performance of the firm while increasing the life of the firm. Edwards and Nibler (2000) consequently finds no evidence that German banks play a corporate governance role in large firms differently than any other large shareholder. However they do show that minority shareholders experienced gains when banks are majority shareholders. Additionally, they find no evidence that support the results presented in the Gordon and Schmid (2000) paper that large bank ownership has more of an impact on the book-to-market ratio in comparison to other types of large shareholders. There overall conclusion is that German banks do not play a significantly different role in the governance of large firms as any other large shareholder would. While the current research is indecisive on the impact of the bank as a large shareholder, it is apparent that further research is needed to grasp an understanding of bank-based economies and the role the bank partakes.

5. Bank holding company boards v. manufacturing company boards

Jensen and Meckling (1976) and Adams and Mehran (2003) argue that board structure, ownership structure, and compensation structure are determined by one another as well as by a range of variables, such as risk, real and financial assets, cash flow, firm size, and regulation. They suggest that these variables also influence a firm's conduct and performance. The purpose of this section is to overview the current literature by providing an overview to the corporate governance practices of bank holding companies (BHC) and explore differences in corporate governance in the manufacturing sector.

Current research shows that BHCs have larger boards and more outside directors compared to those in manufacturing firms, although they have been declining in size over time (Wu 2000).

These differences could be accounted to the size of the BHCs, their organizational structure, the regulatory framework, and constraining abilities of BHCs

to partake in hostile acquisitions. Thus, normative statements about either board size or board composition that do not take into account banking industry differences are potentially misleading. Adams and Mehran (2002) show that in contrast to the findings for non-financial firms, larger BHC boards on average are not value decreasing, and that board composition is unrelated to BHC performance. The fact that board composition is not positively correlated with performance seems surprising, since bank supervisors share examination results with the boards of their respective holding companies. This is parallel to the theory that regulatory requirements are prevalent; directors will not emphasize the value maximization beyond the safety and soundness of the institution. In order to understand how performance impacts the governance of a BHC, it is important to understand the expectations from the outside directors and its regulatory oversight. Adams and Mehran (2003) showed that BHC boards will be comprised of more committees and will meet more frequently than the boards of manufacturing firms. Hayes, Mehran and Schaefer (2000) believe it is hard to define the associated costs and benefits of BHC boards having more committees. Adams and Mehran (2003) argue that regulations on the number of meetings may influence the bank's choice of directors; thus, regulations can potentially affect the quality of directors willing to serve on these boards. Other characteristics of BHC boards include; less emphasis on long-term incentive-based compensation packages and CEO ownership percentages in BHCs are less than ownership percentages in manufacturing, fewer institutional investor holding shares and percentage ownership of BHCs. Consequently, it is unknown whether institutional investors actively participate in the governance of BHCs. Two prevalent theories are that investor's resolve governance issues privately or investors rely on outside regulators for governance issues. The current research suggests that governance practices are industry specific. Some believe these differences are due to different investment opportunities each type of firm faces. Others believe that the difference in governance is accounted for by the presence of regulation.

6. Regulatory changes and global banking¹

Regulatory changes according to the Basel II is based on three mutually reinforcing pillars: capital requirements, supervisory review, and market discipline. The risk-based capital requirements are the major focus of the accord. The accord was designed to allow some banks to determine capital costs by using their internal risk-management models. How-

¹ This section is based on "The New Basel Capital Accord" Basel Committee on Banking Supervision Consultative Document, July 2003, and "A New Capital Adequacy Framework," Basel Committee on Banking Supervision Consultative Document, March 2003.

ever, it was believed that the option could turn into a regulatory nightmare, even in industrialized countries. Though the accord had its advantages it wasn't without flaw. It is desired by most national regulatory regimes that there is system that relies more on a competition approach. If the national governments with deposit insurance schemes want to institute minimum capital standards, a simple capital leverage rule with no risk weights would be sufficient if there exists no market discipline through a subordinated-debt requirement and disclosure. However, countries that are without a public deposit insurance system should move toward a system of financial *laissez-faire*. It is believed that important public policy benefits can be obtained by improving the capital adequacy framework along two important dimensions. First step the Committee has developed a strategy by developing capital regulation that will encompass not only the minimum capital requirements, but will deal with the supervisory review and market discipline. The second step is to increasing the risk sensitivity of the minimum capital requirements. The Committee aims to foster emphasis on risk management and also to encourage ongoing improvements in banks' risk assessment capabilities. The Committee has made efforts to revise the Basel Accord through extensive dialogue with industry participants and with supervisors from outside member countries. As a result of these consultations, the Committee believes the new framework with its various options will be suitable for countries around the world to apply to their banking systems.

6.1. Minimum capital requirement

The first pillar of the Basel II is that of minimum capital requirements. In looking at this pillar one has to observe how the minimum capital requirements are calculated. As such there are three fundamental elements that compose the minimum capital requirements. These are a definition of regulatory capital, risk weighted assets and the minimum ratio of capital to risk weighted assets. It is imperative to know how the minimum ratio of capital works. Based on research from the Bank for International Settlements in calculating the capital ratio, "the denominator or total risk weighted assets will be determined by multiplying the capital requirements for market risk and operational risk by 12.5 (i.e. the reciprocal of the minimum capital ratio of 8%) and adding the resulting figures to the sum of risk-weighted assets compiled for credit risk. The ratio will be calculated in relation to the denominator, using regulatory capital as the numerator. The ratio must be no lower than 8% for total capital." (Basel, 2000). However it is believed by the Committee that this ratio should be applicable to all calculations in measuring the risks involved. The new approaches for calculating risk-weighted assets are intended to provide improved bank assessments of risk and thus to make the resulting capital ratios more meaningful.

The current Accord explicitly covers only two types of risks in the definition of risk weighted assets: (1) credit risk and (2) market risk. Other risks are presumed to be covered implicitly through the treatments of these two major risks. The treatment of market risk arising from trading activities was the subject of the Basel Committee's 1996 Amendment to the Capital Accord. The proposed New Accord envisions this treatment remaining unchanged.

The pillar one proposals to modify the definition of risk-weighted assets in the New Accord have two primary elements: (1) substantive changes to the treatment of credit risk relative to the current Accord; and (2) the introduction of an explicit treatment of operational risk that will result in a measure of operational risk being included in the denominator of a bank's capital ratio. In both cases, a major innovation of the proposed New Accord is the introduction of three distinct options for the calculation of credit risk and three others for operational risk. The Committee believes that it is not feasible or desirable to insist upon a one-size-fits-all approach to the measurement of either risk. Instead, for both credit and operational risk, there are three approaches of increasing risk sensitivity to allow banks and supervisors to select the approach or approaches that they believe are most appropriate to the stage of development of banks' operations and of the financial market infrastructure.

6.2. Supervisory review

A series of guiding principles is the basis for the second pillar of the New Accord. These principles look at the need for banks to assess their capital adequacy positions that are relative to their overall risks. These principles also allow supervisors to review and take appropriate actions in response to the assessments. These elements are critical in the effective management of banking organizations and for effective banking supervision. Based on research from the industry and the Committee's own work, this has shown the importance of the supervisory review process. Whether a bank complies with minimum capital requirements or not, the judgments of risk and capital adequacy are expected to be more of a substantial evidence than the assessment. Thus the benefit of having supervisory review has emphasis on the need for strong risk assessment capabilities by banks and supervisors alike. Also, capital adequacy framework will lag to some extent behind the changing risk profiles of complex banking organizations, particularly as they take advantage of newly available business opportunities. This proves the need for supervisory review.

6.3. Market discipline

The purpose of pillar three is to complement the minimum capital requirements of pillar one and the supervisory review process addressed in pillar two.

This can be done by seeking to encourage market discipline by developing a set of disclosure requirements that allow market participants to assess key information about a bank's risk profile and level of capitalization. It is believed that public disclosure is particularly important with respect to the New Accord where reliance on internal methodologies will provide banks with greater discretion in determining their capital needs. By bringing greater market discipline to bear through enhanced disclosures, pillar three of the new capital framework can produce significant benefits in helping banks and supervisors to manage risk and improve stability. Considerable efforts have been made to ensure that the disclosure requirements of the New Accord focus on bank capital adequacy and do not conflict with broader accounting disclosure standards with which banks must comply. This has been accomplished through a strong and co-operative dialogue with accounting authorities.

7. Basel II and corporate governance in banking²

Corporate governance is concerned with organizational structures and processes for decision making, accountability, control and behavior displayed by the board of directors and senior management. The best practice in corporate governance focuses on the structure and effective function of the board of directors. Boards are responsible for conformance with the company's policies and procedures and the legal and ethical aspects within which the company operates. Additionally, the boards are accountable for the company's performance, rewards and sanctions.

The Basel II specifies the following core principles for banks to improve their corporate governance. Banking supervisors are charged with the responsibility of realizing the firm's goals and objectives, which include good corporate governance.

(1) The absence of established strategic objectives and corporate values. Without these the supervisors' performance is impeded and the success rate is limited considerably. Consequently, it is imperative that the board of directors provides the mission and objectives of defining corporate values for itself, senior management and other employees. Support of its senior management is also important to the effectiveness of the process.

(2) The absence of reporting structure, responsibility and accountability. This absence is counterproductive to effective corporate governance and the onus is on the board of directors to design a clear and unambiguous organizational structure for its senior management. Similarly, senior management must be cognizant of its role to effectively manage the bank's business and create structures of responsibility and accountability.

(3) Unqualified and inept Board of Directors and Senior Managers. Structurally, the board of directors is at the helm of the organization. This group should be comprised of qualified individuals with vision and skills to lead the organization. Qualified external directors can also become significant sources of management expertise in times of corporate stress. The board of directors and its senior management team should be able to add value to the banking organization. They can add value only if they are committed, and have the requisite skills and qualification to make that difference within the organization. The formation and effectiveness of functional committees, such as Risk Management, Audit, Compensation and Nominations, can be beneficial to the management process and to enhance corporate governance. Additionally, they demonstrate openness and transparency.

(4) Senior management - Checks and balances. The senior management group is comprised of the Bank's Divisional Heads, Chief Financial Officer and Chief Audit Officer. These incumbents should be suitably qualified personnel with requisite management skills to effectively manage those employees who report to them. Effective management implies that there should be adequate and appropriate checks and balances within the banking system so employees can be held accountable for their actions.

(5) Responsiveness to the findings of Internal and External Auditors. Internal and external auditors play a major role in ensuring there are appropriate checks and balances within the banking system and these serve to enhance the corporate governance process and the people therein. The document also speaks of the need for the board and senior management to act expeditiously to findings of the auditors. It is important that the board recognizes and utilizes the contribution of the auditors as independent checks on the information received from management on the operations and performance of the bank.

(6) Linking of senior management's compensation to business strategies. If the bank fails to link compensation to business strategies then some managers can manipulate the system for their own personal gains and at the expense of not enhancing good corporate governance. To eradicate weaknesses within the compensation system, the banking supervisors have suggested that the board should ensure that its management team is short and long term oriented. As such, it is recommended that the board should approve the compensation of senior management and key employees, and ensure that such compensation is consistent with the culture, objectives, strategy and control environment of the bank.

(7) Transparency and Accountability. The lack of transparency is no longer acceptable as management can only be held accountable if there is transparency. Transparency can reinforce sound corporate governance; therefore, public disclosure is desirable at all organizational levels.

² This section is based on Basel Committee on Banking Supervision Document on "Enhancing Corporate Governance for Banking Organizations," September 1999.

8. Conclusion

The term corporate governance refers to the complex interrelationships among management, board of directors, shareholders, depositors and the government in the banking industry. This provides a framework where corporate objectives are set and performance is evaluated. The boards of directors in the banking sector face scrutiny from the regulators, whose primary objective is to ensure the safety and soundness of the financial system. Banks perform three distinct roles: provider of liquidity, access to a nation's payment system and maintenance of federally insured deposits. The Federal Deposit Insurance Corporation Improvement Act of 1991 and the Gramm-Leach-Bliley Act of 1999 strengthened bank boards by holding them accountable for performance. Consolidation has made effective governance more imperative both within and across national boundaries.

Corporate governance structure in the financial services industry remains elusive. It is not possible to examine the weakness and strength of an organization's governance by examining only a subset of factors affecting the governance structure. The complex interactions between firm specific assets, size, industry and regulations influence the ultimate governance structure in any industry. Corporate governance is considered generally weak in the corporations of most developing countries. Institutions in these countries are not well developed. Information asymmetries are more severe, market participants less experienced, and regulations, even if they exist, are not enforced effectively and impartially because of political corruption and the general weakness of judicial systems. Disclosures are also not adequate and accounting practices are not well developed. Consequently, corporations of less developed countries suffer from inefficiencies that adversely affect all stakeholders. The adverse effects of ineffective corporate governance can be more serious in the case of financial institutions because the number of their stakeholders is much larger and the systemic risks are much greater. Corporate governance is about authority, transparency, accountability, stewardship, leadership, direction and control.

References

- Adams, R., Mehran, H., 2002. "Board Structure and Banking Firm Performance." Unpublished paper, Federal Reserve Bank of New York.
- Adams, R., Mehran, H., 2003. "Is Corporate Governance Different for Bank Holding Companies?." *Economic Policy Review*, April 2003.
- Anderson, R.C., Fraser, D., 2000. Corporate control, bank risk taking, and the health of the banking industry. *Journal of Banking and Finance*, 24, 1383-1398.
- Ang, J., Lauterbach, B., Schreiber, B.Z., 2002. Pay at the executive suite: How do US banks compensate their top management teams?. *Journal of Banking and Finance*, 26, 1143-1163.
- Basel Committee on Banking Supervision – Enhancing Corporate Governance for Banking Organizations, September 1999.
- Basel Committee on Banking Supervision – A New Capital Adequacy Framework, March 2000.
- Bhide, A., 1993. Hidden cost of stock market liquidity, *Journal of Financial Economics* 34.
- Booth, J.R., Cornett, M.M., Tehranian, H., 2002. Board of directors, ownership, and regulation. *Journal of Banking and Finance*, 26.
- Brook, Y., Hendershott, R., Lee, D., 1998. The gains from takeover deregulation: Evidence from the end of interstate banking restrictions. *Journal of Finance* 53, 2185-2204.
- Brook, Y., Hendershott, R., Lee, D., 2000. Corporate governance and recent consolidation in the banking industry. *Journal of Corporate Finance* 6, 141-164.
- Byrd, J., Hickman, K., 1992. Do outside directors monitor managers? Evidence from tender offer bids. *Journal of Financial Economics* 32.
- Core, J.E., Guay, W., & Larcker, D.F., 2001. Executive equity compensation and incentives: a survey. Working paper, University of Pennsylvania.
- Denis, D., 2001. Twenty-Five years of corporate governance research... and counting. *Review of Financial Economics*, 10, 191-212.
- DeYoung, R., Hughes, J.P., Moon, C.-G., 2000. Efficient risk-taking and regulatory covenant enforcement in a deregulated banking industry. *Journal of Economics and Business* 53.
- Diamond, D., Dybig, P., 1986. Bank Runs, Deposit insurance and liquidity. *Journal of Political Economy* 91.
- Dow, J., Gorton, G., 1997. Stock market efficiency and economic efficiency: is there a connection? *Journal of Finance* 52, 1087-1129.
- Edwards, J., Nibler, M., 2000. Corporate governance in Germany: the role of banks and ownership concentration. *Economic Policy* October 2002, 239-267.
- Elston, J., 2003. Bank influence, firm performance and survival: empirical evidence from Germany 1970-1986. *Journal of Corporate Ownership and Control*, Forthcoming.
- Evanoff, D.D., Ors, E., 2001. Local market consolidation and bank productive efficiency. Working Paper, FRB of Chicago.
- Flannery, M., 1994. Debt maturity and the deadweight cost of leverage: Optimally financing banking firms. *American Economic Review* 84, 320-331.
- Friedman, M., Schwartz, A., 1963. A Monetary History of the United States, 1867-1960.
- Gorton, G., Rosen, R., 1995. Corporate control, portfolio choice, and the decline of banking. *Journal of Finance* 50, 1377-1420.

23. Gorton, G., Schmid, F., 2000. Universal banking and the performance of German firms. *Journal of Financial Economics* 58, 29-80.
24. Group of Ten Report, January 2001, Consolidation in the Financial Sector.
25. Hadlock, C., Houston, J., Ryngaert, M., 1999. The role of managerial incentives in bank acquisitions. *Journal of Banking and Finance* 23.
26. Hanck, George. 1999. Deposit Insurance Reform: State of the Debate. *FDIC Banking Review* 12, no. 3.
27. Hermalin, B.E., Weisbach, M.S., 2001. Boards of directors as an endogenously determined institution: a survey of the economic literature. *Economic Policy Review* (forthcoming).
28. Holderness, C.G., 2001. A survey of blockholders and corporate control. *Economic Policy Review* (forthcoming).
29. Houston, J.F., James, C., 1995. CEO compensation and bank risk: Is compensation in banking structured to promote risk-taking? *Journal of Monetary Economics* 36, 405-431.
30. Houston, J., Ryngaert, M., 1994. The overall gains from large bank mergers. *Journal of Banking and Finance* 18, 1155-1176.
31. Hubbard, R.G., Palia, D., 1995. Executive pay and performance: Evidence from the US banking industry. *Journal of Financial Economics* 39.
32. Hughes, J.P., Lang, W., Mester, L.J., Moon, C.-G., 2000. Recovering risky technologies using the almost ideal demand system: An application to US banking. *Journal of Financial Services Research* 18, 5-27.
33. Hughes, J.P., Lang, W., Mester, L., Moon, C.-G., Pagano, M., 2003. Do bankers sacrifice value to build empires? Managerial incentives, industry consolidation, and financial performance. *Journal of Banking and Finance* 27.
34. Hughes, J.P., Mester, L.J., Moon, C.-G., 2001. Are scale economies in banking elusive or illusive? Incorporating capital structure and risk into models of bank production. *Journal of Banking and Finance* 25, 2169-2208.
35. Jensen, M., & Meckling, W., 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
36. Jensen, M. C., 1986. Agency costs of free-cash flow, corporate finance, and takeovers. *American Economic Review*, 6, 323-329.
37. Jensen, M. C., 1993. The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48, 831-880.
38. John, K., and Qian, Y., 2003. "Incentives features in CEO compensation in the banking industry." *Economic Policy Review*, April 2003, 123-142.
39. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R., 1998. Law and finance. *Journal of Political Economy*, 106, 1113-1155.
40. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R., 2000. Investor protection and corporate governance. Working paper, Harvard University.
41. Macy, J.R., O'Hara, M., 2003. The corporate governance of banks, *Economics Policy Review*, April 2003, 91-107.
42. Mester, L.J., 1989. Owners versus managers: Who controls the bank? *Business Review* (May/June), 13-23, Federal Reserve Bank of Philadelphia.
43. Murphy, K., 1986. Incentives, learning, and compensation: A theoretical and empirical investigation of managerial labor contracts. *Rand Journal of Economics* 17, 59-76.
44. Murphy, K., 1999. Executive compensation. In: O. Ashenfelter, & D. Card (Eds.), *Handbook of labor economics*, (vol. 3). Amsterdam: North-Holland.
45. Pecchenino, R., 1998. Risk averse bank managers: exogenous shocks, portfolio reallocations and market spillovers. *Journal of Banking and Finance*, 22, 161-174.
46. Peristiani, S., 1997. Do mergers improve the x-efficiency and scale efficiency of US banks? Evidence from the 1980s. *Journal of Money, Credit, and Banking* 29, 326-337.
47. Prowse, S., 1997. Alternative methods of corporate control in commercial banks. *Journal of Financial Research* 20, 509-527.
48. Rhoades, S.A., 2000. Bank mergers and banking structure in the US, 1980-98. Board of Governors of the Federal Reserve System, Sta. Study 174.
49. Rosenstein, S., Wyatt, J.G., 1990. Outside directors, board independence, and shareholder wealth. *Journal of Financial Economics* 26, 175-191.
50. Saunders, A., Strock, E., Travlos, N.G., 1990. Ownership structure, deregulation, and bank risk taking. *Journal of Finance* 45, 643-654.
51. Shaffer, S., 1993. Can megamergers improve bank efficiency? *Journal of Banking and Finance* 17, 423-436.
52. Shleifer, A., & Vishny, R. W., 1997. A survey of corporate governance. *Journal of Finance*, 52, 737-783.
53. Sinkey, J.F., Carter, D.A., 2000. Evidence on the financial characteristics of banks that do and do not use derivatives. *The Quarterly Review of Economics and Finance*, 40, 431-449.
54. Stiroh, K.J., 2000. How did bank holding companies prosper in the 1990s? *Journal of Banking and Finance* 24, 1703-1745.
55. Weisbach, M.S., 1988. Outside directors and CEO turnover. *Journal of Financial Economics* 20, 431-460.
56. Wu, Y., 2000. "Honey, CalPERS Shrank the Board." Unpublished paper, University of Chicago Graduate School of Business.