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Banking on the Lawyers

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BANKING ON THE LAWYERS

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ABSTRACT

This Article is the first to analyze an unexplored but critical change in how modern banks are governed: the rise of lawyers as bank directors. That rise has been precipitous, raising the question of why lawyer-directors now sit on most bank boards.

Using novel empirical evidence, we show that lawyer-directors at banks are associated with efficient changes in risk management and significant increases in bank value. In particular, banks with lawyer-directors assume more risk in ordinary (non-crisis) circumstances and less risk when a crisis arises, in each case in a way that makes banks more valuable. Lawyer-directors do this by drawing on advocacy skills to critically analyze opposing points of view, an essential quality in managing the risks banks face today. They are also more likely to make complex information, sourced from multiple experts, more accessible to a bank's board as part of its decision-making process. Finally, lawyer-directors are skilled at assessing litigation and regulatory risks, which have grown significantly in recent years.

Risk management failures were a primary cause of the 2008 financial crisis, prompting two principal regulatory responses: stricter capital requirements and enhanced governance. Their effectiveness remains hotly debated. Our findings have two important implications. First, we challenge the notion that stricter regulation is sufficient for efficient risk management. Rather, to manage a bank, directors must have the skills to think critically about risk. Second, we underscore the value of director expertise, showing that more is needed than simply the director's independence now mandated by law.

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INTRODUCTION

“The word ‘risk’ derives from the early Italian risicare, which means ‘to dare.’ In this sense, risk is a choice rather than a fate.”

— Peter L. Bernstein¹

Over a decade has passed since the 2008 financial crisis. An outpouring of analyses followed, aimed at identifying the crisis’s causes and minimizing the likelihood of a recurrence.² One thing on which commentators agreed was that the financial crisis was not a “freak event;” it was man-made, predictable, and largely avoidable.³ For the story of the crisis was very much a story of *excessive* risk-taking that could have been reined in if banks⁴ had adopted safer risk management processes and regulators had designed better prudential rules.⁵

It is, therefore, unsurprising that improving how banks manage risk has been a primary focus of post-crisis regulation. What is surprising is that this effort has largely focused on minimizing “bad risk”—the probability of a loss that hurts bank value and the cost a bank should incur to manage that risk.⁶ Yet, risk management involves more than curbing downsides and assessing the likelihood and related costs of potential losses. It also identifies “good risk”—opportunities that are uncertain but may still be profitable in the future.⁷ Accordingly, to manage risk efficiently, a bank must be able to gauge its optimal risk-and-return tradeoff.⁸

To illustrate, recall the story of the three little pigs. The first two pigs built houses of straw and sticks, spending the extra time to play and relax. The wolf arrived, huffed and puffed, and blew the houses in, and both pigs ran to the third pig’s house for safety. The third pig used bricks, which required a great deal of time, effort, and expense. The wolf huffed and puffed again, but the brick house remained standing; all three pigs were saved. The moral of the story—to work hard and prepare for the worst—is familiar to most of us.

¹ AGAINST THE GODS: THE REMARKABLE STORY OF RISK 8 (1996).

² The post-crisis literature is too vast to be cited in its entirety. For some notable contributions, see, e.g., DARREL DUFFIE, HOW BIG BANKS FAIL AND WHAT TO DO ABOUT IT (2011); SIMON JOHNSON & JAMES KWAK, 13 BANKERS: THE WALL STREET TAKEOVER AND THE NEXT FINANCIAL MELTDOWN (2011); RAGHURAM G. RAJAN, FAULT LINES: HOW HIDDEN FRACTURES STILL THREATEN THE WORLD ECONOMY (2010); JOSEPH E. STIGLITZ, FREEFALL: AMERICA, FREE MARKETS, AND THE SINKING OF THE WORLD ECONOMY (2010). For a review of some of the most important studies on the crisis, see also Andrew W. Lo, *Reading about the Financial Crisis: A Twenty-One-Book Review*, 50 J. ECON. LIT. 151 (2012).

³ See THE FINANCIAL CRISIS INQUIRY REPORT xvii [hereafter, FINANCIAL CRISIS REPORT], available at https://cybercemetery.unt.edu/archive/fcic/20110310173545/http://c0182732.cdn1.cloudfiles.rackspacecloud.com/fcic_final_report_full.pdf (“The crisis was the result of human action and inaction, not of Mother Nature or computer models gone haywire.”).

⁴ The terms “bank” and “banks” in this Article refer to institutions that are identified as financial institutions within Standard Industrial Classification (SIC) codes 6000-6999, including commercial banks, investment banks, and insurance companies. See U.S. Securities & Exchange Commission, Division of Corporation Finance: Standard Industrial Classification (SIC) Code List, <https://www.sec.gov/info/edgar/siccodes.htm> (providing SIC codes that appear in a company’s EDGAR filings).

⁵ See FINANCIAL CRISIS REPORT, *supra* note 3, at xvii.

⁶ See René M. Stulz, *Risk Management, Governance, Culture, and Risk Taking in Banks*, FRBNY ECON. POL’Y REV., Aug. 2016, at 43.

⁷ See *id.*

⁸ See Charles K. Whitehead, *Destructive Coordination*, 96 CORNELL L. REV. 323, 336-40 (2011) (noting that risk managers seek to minimize risk relative to return).

Note the story’s focus on “bad risk,” the losses the two pigs suffered due to the wolf. It implies that their only alternative was to build with bricks. What the story fails to ask is what would have happened *if the wolf never showed up*? In that case, instead of a story about hard work, it might have been a story of waste. The first two pigs would have been smart to build only with straw and sticks, spending the extra time and money to pursue something more valuable. Bricks would have been unnecessary, and without a wolf, the third pig’s efforts simply could have been wasteful. The story never tells us how much the pigs knew about the wolf or whether they built houses with wolf-risk in mind. However, even if the pigs were aware of the wolf, the likelihood of it appearing would have been difficult for them to gauge. That difficulty would have been costly—the cost of under-anticipating risk and perhaps later being eaten, or over-anticipating risk and spending too much time, effort, and expense to build an unnecessary brick house.

For these reasons, the ability to assess and respond to risk is valuable. If the three pigs could accurately gauge wolf-risk, they might have found a different, optimal risk-and-return tradeoff. For example, they might have used a mixture of straw, sticks, and bricks to build all three houses—sturdier than straw and sticks alone, but less expensive than using only bricks. The result: In ordinary, “no-wolf” times, the brick-house pig would have been better off than before, spending less on building his house; and in turbulent, “wolf” times, the straw- and stick-pigs would have been better off as well, being more prepared for the wolf’s visit. That ability to balance risk and return is at the heart of an effective risk management process.

Yet, effectively managing risk is difficult. For bank regulators, it requires striking a balance between mandating compliance with rules designed to constrain excessive risk-taking (a mandatory “brick-only” policy) and leaving bank managers the flexibility they need to efficiently manage and pursue potentially valuable risk on their own (such as mixing straw, sticks, and bricks).⁹ That difficulty is compounded in two ways. First, banks are affected by a much broader range of risks than most non-bank businesses.¹⁰ That range makes it more difficult for a bank’s board to manage the risks banks face today. Second, due to the scope of the risks to which banks are subject, virtually *any* action by a bank’s managers can be reduced to a risk decision that increases or decreases bank value.¹¹ In other words, project management and risk management tend to coincide in banks more than in non-bank businesses.¹²

The complexity of bank risk explains part of the heated debate over recent regulatory reforms.¹³ This Article contributes to that debate by analyzing an unexplored change in how today’s banks are governed—namely, the increasingly frequent election of lawyer-directors to bank boards.¹⁴ No one else has identified this change. Yet, the rise of lawyer-directors in banks over the past two decades (1999-2017) is striking. In 1999, only about 40 percent of banks had a lawyer on the board. Today, that percentage has risen to more than 70 percent, a staggering

⁹ See *id.* at 44 (arguing that “when risk management becomes too inflexible, it destroys value because the institution no longer has the ability to invest in valuable opportunities when they become available, and it also becomes less effective in making sure that the firm has the right amount of risk”).

¹⁰ See *infra* Part I.A.

¹¹ See *infra* Part I.B.

¹² See *infra* note 95 and accompanying text.

¹³ See *infra* text accompanying notes 112-116 and 128-135.

¹⁴ Two of us previously analyzed the rise of lawyer-directors in non-financial companies. See Lubomir P. Litov, Simone M. Sepe & Charles K. Whitehead, *Lawyers and Fools: Lawyer-Directors in Public Corporations*, 102 GEO. L. J. 413 (2014). See also M. Todd Henderson *et al.*, *Lawyer CEOs* (unpublished manuscript) (Feb. 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2923136 (examining the value of CEOs with law degrees and their effect on corporate litigation).

73 percent increase in lawyer-directors since 1999.¹⁵ That rise is too precipitous to be a coincidence. What explains this shared choice among banks?

We answer that question in two steps. First, we begin with a theory of lawyer-directors that analyzes bank risk and post-crisis risk management reforms to understand whether lawyer-directors manage risk in ways that so far have escaped attention. Next, we rely on novel empirical evidence of lawyer-directors in banks to perform several tests that verify our theory. As we explain, a likely rationale for this sea change in bank governance is that lawyers' unique skills promote efficient risk management, complementing regulatory reforms and adding significant value to banks.

Two sets of reforms are center stage in the post-crisis banking world: heightened capital requirements and enhanced corporate governance. Requiring higher levels of capital is designed to curb a bank's risk-taking by making it more costly to invest in riskier assets.¹⁶ Yet, critics often claim that these requirements can be too strict, preventing "bad risks" while limiting a bank's ability to pursue "good risks."¹⁷ In addition, post-crisis regulatory changes have expanded the risk-management responsibilities of a bank's board, including new independence requirements to ensure directors fulfill their enhanced oversight role.¹⁸ Those reforms, however, rely on traditional corporate law principles that are well-understood to be ill-suited to managing the complexities of bank risk¹⁹ and place too much emphasis on director independence, potentially at the expense of director expertise.²⁰ Consequently, while new regulations are designed to address the shortcomings that led to the 2008 financial crisis, they may also introduce new weaknesses of their own.

Lawyer-directors at banks can help address those concerns. The focus on independence appears to be less important with lawyer-directors, who we show are as likely to be inside, as they are to be independent, directors.²¹ This suggests that director expertise can be as important to a bank as independence. It also suggests that a lawyer's skills—beyond relying only on strict regulation—can be valuable in managing bank risk. Lawyer-directors, we argue, have skills that assist in identifying and efficiently managing risk. First, lawyers are advocates—or, more prosaically, they are trained to be contrarian thinkers—who promote the gathering of risk-related information, minimize the likelihood of "group thinking" by the board, and support unbiased decision-making.²² Second, lawyers are facilitators who know how to decompose complex expert knowledge so that it is more usable by non-expert directors.²³ Making that knowledge more accessible is essential for sound decision-making. Third, experienced lawyers have unique skills in assessing litigation and regulatory risks. In recent years, those risks have become major components of a bank's overall risk exposure.²⁴

Our arguments are supported by novel empirical evidence. We show that a lawyer-director is more likely to be elected to a bank's board when the bank has higher litigation and regulatory risks, when it is performing poorly or in the midst of a financial crisis, or when the

¹⁵ See *infra* Figure 1.

¹⁶ See *infra* notes 101-102.

¹⁷ See *infra* note 113.

¹⁸ See *infra* notes 122-123,125 and accompanying text.

¹⁹ See *infra* note 128.

²⁰ See *infra* note 129.

²¹ See *infra* Table 1.

²² See *infra* Part III.C.1.

²³ See *infra* Part III.C.2.

²⁴ See *infra* Part III.C.3.

CEO is also a director and, hence, may distort the board's decision-making process.²⁵ Next—and more importantly—we show that having a lawyer-director corresponds to changes in risk management that significantly increase bank value. Banks with lawyer-directors take more risk in ordinary (non-crisis) circumstances and less risk when a crisis arises—braking and accelerating a bank's risk-taking in ways that make banks more valuable.²⁶ We also find that the benefits of having a lawyer-director are higher in banks with greater exposure to litigation or regulatory risk, areas which lawyer-directors are particularly skilled at assessing.²⁷ Finally, we find the value of having a lawyer-director is greater in banks with directors who have specialized educational and professional skills—that is, banks with expert and non-expert directors who may not be able to effectively communicate valuable information to each other when making decisions.²⁸ Lawyers, we argue, have skills that facilitate the ability to bridge the information gap among directors, enhancing the board's decision-making process.

Our findings on bank lawyer-directors have two major implications. First, they challenge the view that efficient risk management is simply a product of tougher regulation. A bank must also have directors—including lawyer-directors—who can think critically about the multiple categories of risk that affect modern banks.²⁹ Second, our findings underscore the need to focus on director expertise, in addition to independence, in determining a bank board's composition. At the same time, our study raises questions about the kinds of expertise bank directors need in the face of the complex risks banks face today.³⁰

Could the value-enhancing results we find be replicated by a lawyer who advises, rather than joins, a bank's board? We think not. A lawyer-director is more likely than outside counsel to attend board meetings and have access to information needed to properly advise the board.³¹ She may also become aware of new information at an earlier stage, enabling her to flag concerns as they arise.³² In particular, she can assist her colleagues to better understand legal and regulatory problems and, as necessary, act as a bridge between experts and non-experts to resolve them.³³ Directors and managers are also more inclined to follow the advice of a colleague who shares equal responsibility for its outcome.³⁴ That may be particularly true of lawyer-directors in light of the higher standards to which the courts have held them.³⁵

The Article proceeds as follows. In Part I, we discuss several types of risk that affect banks and the value of risk management. In Part II, we describe two principal post-crisis reforms that have been introduced to enhance bank risk management: stricter capital requirements and enhanced governance rules. Against this background, in Part III, we investigate the overlooked, but increasingly frequent, election of lawyers to bank boards—introducing our data, discussing the rise of lawyer-directors in banks, and articulating our working hypothesis

²⁵ See *infra* Part IV.A.

²⁶ See *infra* Part IV.B.

²⁷ See *infra* Part IV.C.1.

²⁸ See *infra* Part IV.C.2.

²⁹ See *infra* Part V.A.

³⁰ See *infra* Part V.B..

³¹ See Symposium, *Should Counsel Also Serve on the Board?*, 33 BUS. LAW. 1511, 1514 (1974); Micalyn S. Harris & Karen L. Valihura, *Outside Counsel as Director: The Pros and Potential Pitfalls of Dual Service*, 53 BUS. LAW. 479, 483 (1998).

³² See Harris & Valihura, *supra*, at 482-83.

³³ See Constance E. Bagley, *Winning Legally: The Value of Legal Astuteness*, 33 ACAD. MGMT. REV. 378, 381-83 (2008).

³⁴ See Craig C. Albert, *The Lawyer-Director: An Oxymoron?*, 9 GEO. J. LEGAL ETHICS 413, 417-18 (1996).

³⁵ See Robert H. Mundheim, *Should Code of Professional Responsibility Forbid Lawyers to Serve on Boards of Corporations For Which They Act as Counsel?*, 33 BUS. LAW. 1507, 1508 (1978).

that lawyers' training and skills add unique value to a bank's ability to manage risk. In Part IV, we empirically show that the election of a lawyer-director to a bank corresponds to changes in risk management that are associated with greater value. This value increases in banks that are more exposed to litigation and regulatory risks and where lawyer-directors' skills are combined with those of other experts. Part V discusses the policy implications of our analysis, focusing on the dichotomy between independence and expertise, and offering a regulatory proposal to more effectively manage bank risk.

I. RISK AND VALUE IN BANKS

Managing risk is at the heart of a bank's business.³⁶ One can see the need to manage risk in how commercial banks traditionally operate. A bank relies on depositors for funds it uses to extend credit to borrowers. Doing so requires the bank to balance the short-term interests of its depositors, who may wish to withdraw money at any time, with the interests of its borrowers, who seek a stable, medium- and long-term source of credit. Banks, as intermediaries, must balance those competing interests.³⁷ That includes monitoring the credit risk of their borrowers, as well as ensuring enough money is available for depositors who wish to withdraw funds. One can also see the value of risk management in what occurred during the lead-up to the 2008 financial crisis. Many U.S. banks invested in what they thought were highly-profitable subprime mortgages, while disregarding (or simply not understanding) the enormous risks associated with those investments.³⁸ The result, during the 2008 financial crisis, was substantial losses.³⁹

Recall, however, risk is not simply the probability of a bad outcome, such as a loss of bank value. Rather, risk is the dispersion of possible future events, both bad and good.⁴⁰ Excessive risk-taking can destroy a business by increasing the probability of bad events, but too little risk can also damage a business if it foregoes valuable opportunities. Accordingly, to be effective, risk management should focus not only on minimizing risk; it must also assist the bank in determining the optimal level of risk to assume.⁴¹ As this Part explains, finding that balance can be especially challenging for banks for two reasons. First, banks are affected by several types of risk that, in scope and degree, are more extensive than for non-bank businesses.

³⁶ See Charles K. Whitehead, *Reframing Financial Regulation*, 90 B.U. L. REV. 1, 9, 10-14 (2010) (describing the risks that arise when banks intermediate between suppliers and consumers of capital); Harry DeAngelo & René M. Stultz, *Liquid-Claim Production, Risk Management, and Capital Structure: Why High Leverage is Optimal for Banks*, 116 J. FIN. ECON. 219, 219 (2015) (arguing that risk management is intrinsic to a bank's business model).

³⁷ See Douglas W. Diamond & Raghuram G. Rajan, *Liquidity Risk, Liquidity Creation and Financial Fragility: A Theory of Banking*, 109 J. POL'Y ECON. 287, 287-88 (2001) (arguing that the goal of mediating liquidity needs between depositors and borrowers helps explain why these two functions are combined in a bank).

³⁸ See Charles K. Whitehead, *Size Matters: Commercial Banks and the Capital Markets*, 76 OHIO ST. L.J. 765, 788-91 (2015) (describing the new and different risks that investment banks assumed, and may not have completely understood, leading up to the 2008 financial crisis); Bernard S. Black *et al.*, *The Nonprime Mortgage Crisis and Positive Feedback Lending*, 3 J. L. FIN. & ACCT'G 1, 7-8 (2018) (arguing that banking professionals were "willfully blind" to risks prior to the 2008 financial crisis).

³⁹ See Simone M. Sepe, *Regulating Risk and Governance in Banks: A Contractarian Perspective*, 62 EMORY L. J. 327, 330 (2012) (describing excessive risk-taking as the immediate cause of the 2008 financial crisis).

⁴⁰ See *supra* notes 6-8 and accompanying text.

⁴¹ See Whitehead, *supra* note 8, at 336 ("A risk manager is understood to . . . seek strategies that minimize risk (relative to return) . . ."); Stulz, *supra* note 6, at 47 ("There is, for each bank, a level of risk such that the value of the bank is maximized for shareholders. This level of risk is not zero. Good governance should ensure that the firm chooses this level of risk.").

Second, due to the many risks affecting banks, virtually any management action will affect risk in a way that increases or decreases bank value.

A. *Types of Bank Risk*

A key feature of banks is their ability to transform short-term liabilities into medium- and long-term sources of capital, which makes banks essential to a well-functioning, modern economy.⁴² Commercial banks, for example, rely on deposits to extend loans and make investments,⁴³ and broker-dealers regularly rely on overnight repurchase transactions (“repo”)—equivalent to short-term, secured borrowings—to fund their securities holdings.⁴⁴ This ability of banks, however, also creates unique risks that, if poorly managed, can cause the bank to lose value.⁴⁵

Since banks rely on short-term liabilities for funding, they are highly leveraged by design. Greater leverage, in turn, increases a bank’s incentives to assume risk. Economically, those incentives arise from differences in creditor and shareholder payouts. Creditors have fixed claims over a bank’s assets, which make them indifferent to returns on those assets so long as their value exceeds what the creditors are owed. Shareholders, as residual claimants, are sensitive to increases in asset value, since much of that gain is theirs, while their liability is limited to the capital they invested in the bank. Losses exceeding that capital amount are borne by the creditors.⁴⁶

Thus, once a bank incurs debt (for example, deposits or repo), the bank’s shareholders have an incentive to engage in what economists refer to as “asset substitution”—substituting riskier assets for safer ones.⁴⁷ Under those circumstances, shareholders can receive a huge upside (if the assets appreciate) and limited downside (due to their limited liability), while creditors receive only limited upside (capped at the amounts they are owed) and significant downside (the loss of asset value in excess of shareholder capital). The result effectively is a transfer of wealth from the bank’s creditors to its shareholders. This tendency can be exacerbated by equity-based compensation that attempts to align a bank manager’s preferences with those of the bank’s shareholders.⁴⁸

⁴² Banks can maintain the mismatch between liquid liabilities and illiquid assets due to their superior ability to generate private information about specific borrowers and diversify risk across a portfolio of borrowers. See Douglas W. Diamond, *Financial Intermediation and Delegated Monitoring*, 51 REV. ECON. STUD. 393, 393 (1984) (developing a formal analysis of the informational advantages of financial intermediaries); Whitehead, *supra* note 36, at 8-10 (describing the benefits of intermediation).

⁴³ See Whitehead, *supra*, at 8, 21-22.

⁴⁴ See *id.* at 8, 22-23. Under a repo agreement, one party (for example, a bank) sells securities to another party (the repo holder) and agrees to buy back the securities in the near term at a higher price, in substance using the securities as collateral for a short-term borrowing. See Gary Gorton & Andrew Metrick, *Securitized Banking and the Run on Repo*, 104 J. FIN. ECON. 425, 425 (2012).

⁴⁵ See Whitehead, *supra* note 8, at 21-25.

⁴⁶ See *id.* at 11. In economic terms, debtholders have a “concave” payoff structure, while shareholders have a “convex” one, which graphically explains the tension between them with respect to risk decisions. See Sepe, *supra* note 39, at 338.

⁴⁷ The pioneering study of asset substitution is Clifford W. Smith, Jr. & Jerold B. Warner, *On Financial Contracting: An Analysis of Bond Covenants*, 7 J. FIN. ECON. 117, 118-19 (1979). For a discussion of asset substitution in banks, see Sepe, *supra* note 39, at 338-42.

⁴⁸ See Lucian A. Bebchuk & Jesse M. Fried, *Paying for Long-Term Performance*, 158 U. PA. L. REV. 1915, 1916-17 (2010) (describing managerial risk-taking in banks as a major cause of the 2008 financial crisis); Douglas W. Diamond & Raghuram G. Rajan, *The Credit Crisis: Conjectures About Causes and Remedies*, 99 AM. ECON. REV. (PAPERS & PROC.) 606, 607-08 (2009) (describing a “culture of excessive risk taking that had overtaken banks” and relating this culture to the distorted incentives of top bank executives); Sepe, *supra* note 39, at 343-46

In theory, in a commercial bank, depositors can temper a bank's risk-taking incentives by threatening to withdraw funds if they believe the bank has become too risky. Likewise, a broker-dealer's repo counterparties can refuse to transact with the bank or increase the amount of collateral they require. Yet, practically speaking, depositors and repo counterparties have limited access to information and cannot closely monitor a bank's risk-taking.⁴⁹ Moreover, in the case of commercial banks, the threat to withdraw funds must be coordinated across thousands of dispersed depositors, which is difficult to do. In addition, deposit insurance (and other safety nets), by limiting the losses a depositor can incur, weaken the depositors' interest in disciplining a bank's risk-taking.⁵⁰ In the case of broker-dealers, repo counterparties must be able to gauge the value of the collateral they receive and their ability to sell that collateral in the event of a default by the bank in repaying what it owes. In addition, for a change in repo terms to discipline a broker-dealer, that change must be reflected across a number of repo counterparties from whom the broker-dealer receives funds. Thus, in both cases, market-based incentives for creditors to curb risk may be weak or ineffective. The result is a range of risks that differs in kind and scope from what non-bank businesses normally manage.

This section provides an overview of some of the significant risks affecting banks, especially commercial banks, including (i) liquidity risk, (ii) credit risk, (iii) strategic risk, (iv) operational risk, and (v) regulatory risk. For convenience, we discuss each risk separately even though the circumstances affecting one risk are likely to affect others.

1. Liquidity Risk

In general, liquidity risk is the probability that counterparties (such as a bank's borrowers) will fail to pay their obligations (such as loans or other investments), resulting in the bank not having sufficient funds to pay its own creditors (such as depositors or other short-term lenders).⁵¹ More particularly, banks can be subject to both *funding* and *market* liquidity risk.⁵² Funding liquidity involves raising cash by borrowing funds, such as when a bank issues deposits or repos.⁵³ Market liquidity involves generating cash by selling assets, such as when a bank sells Treasury bills or other easily tradable instruments it holds.⁵⁴ Accordingly, a bank's liquidity risk can begin to materialize as the bank becomes unable to borrow funds (low funding liquidity) or sell assets (low market liquidity).⁵⁵

(providing an illustration of how pay-for-performance transfers asset substitution incentives from bank shareholders to bank managers).

⁴⁹ See Whitehead, *supra* note 36, at 13.

⁵⁰ See Sepe, *supra* note 39, at 375-77.

⁵¹ See Jean Tirole, *Illiquidity and All Its Friends*, 49 J. ECON. LIT. 287, 288-90 (2011) (arguing that, while "liquidity cannot easily be apprehended through a single statistic[.]" in general it can be defined as capital that is available for investment and takes the form of either stores of value (such as cash) or real claims (such as credit)).

⁵² See Markus K. Brunnermeier & Lasse Heje Pedersen, *Market Liquidity and Funding Liquidity*, 22 REV. FIN. STUD. 2201, 2201 (2009) (introducing the distinction between funding and market liquidity risk in the capital markets). See also Philip Strahan, *Liquidity Production in 21st Century Banking 3* (Nat'l Bureau of Econ. Res., Working Paper No. 13798, 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1092846 (arguing that banks have an advantage in the production of funding liquidity but not the production of market liquidity).

⁵³ See Strahan, *supra*, at 1.

⁵⁴ See *id.*

⁵⁵ See MARKUS BRUNNERMEIER *ET AL.*, INT'L CTR. FOR MONETARY & BANKING STUDIES, *THE FUNDAMENTAL PRINCIPLES OF FINANCIAL REGULATION* 13-14 (2009).

Notably, asset transformation significantly increases the potential losses a bank can suffer from liquidity risk, whether arising from funding or market liquidity. That is because the bank's structural imbalance, between liquid liabilities and illiquid assets, means that no bank can satisfy all of its creditors if they demand repayment *en masse*.⁵⁶ This circumstance can then have dramatic consequences in the event of rumors of a bank's financial instability or a sudden decline in the value of its assets.⁵⁷ Anticipating the worst, depositors and other creditors may rush to withdraw funds from a healthy bank—known, in the case of commercial banks, as a “bank run”—turning rumors of a problem into a self-fulfilling prophecy and forcing even a solvent bank into bankruptcy.⁵⁸

As banks have grown, so have the potential losses arising from liquidity risk. Today, there are more interbank transactions, banks increasingly invest in similar assets, and they rely on similar means to fund their businesses,⁵⁹ making it more likely that investors will interpret a crisis at one bank to be a signal that other banks face the same problem.⁶⁰ This increases the likelihood of contagion among banks, with a run on one bank inducing investors to reduce their credit exposure to other banks so that the problem ripples across the entire banking sector.⁶¹ In response, banks may halt making new loans or providing other liquidity, such as occurred during the 2008 financial crisis.⁶²

2. Credit Risk

The Basel Committee on Banking Supervision (the “Basel Committee”)⁶³ defines “credit risk” to be the probability a commercial bank's borrower or other counterparty will fail

⁵⁶ The seminal model of financial intermediation and bank runs was developed in Douglas W. Diamond & Philip H. Dybvig, *Bank Runs, Deposit Insurance, and Liquidity*, 91 J. POL. ECON. 401, 402-03 (1983).

⁵⁷ See *id.* See also Whitehead, *supra* note 36, at 21-25.

⁵⁸ See Diamond & Dybvig, *supra* note 56, at 402 (“[B]ank runs cause real economic problems because even ‘healthy’ banks can fail . . .”).

⁵⁹ See Whitehead, *supra* note 38, at 798. See Jean-Charles Rochet & Jean Tirole, *Interbank Lending and Systemic Risk*, 28 J. MONEY, CREDIT & BANKING 733, 733 (1996) (discussing interbank transactions and the risks arising therefrom); Sepe, *supra* note 39, at 346-49 (providing an illustration of the increased incentives for excessive risk-taking arising out of interbank correlation).

⁶⁰ The likelihood of a “fire sale,” in particular, poses severe concerns when banks are highly correlated. The term “fire sale” is used to refer to what occurs when a bank is forced to sell a large portion of its assets at deeply discounted prices to achieve a quicker sale and promptly satisfy its creditors' requests. See Andrei Shleifer & Robert Vishny, *Fire Sales in Finance and Macroeconomics*, J. ECON. PERSP., Winter 2011, at 29, 31-32. When asset correlation is high, price drops of this type are likely to induce creditors of other banks holding similar assets to take similar actions. See KENNETH R. FRENCH ET AL., THE SQUAM LAKE REPORT: FIXING THE FINANCIAL SYSTEM 46 (2010). This, in turn, results in a larger number of banks attempting to sell assets at the same time, which “magnif[ies] the original . . . price drop and force[s] more sales” in a perverse spiral. *Id.* See also Whitehead, *supra* note 8, at 346-52.

⁶¹ See Marc J. Flannery, *Using Market Information in Prudential Bank Supervision: A Review of the U.S. Empirical Evidence*, 30 J. MONEY, CREDIT & BANKING 273, 278 n.11 (1998) (arguing that increased bank risk-taking can create significant negative externalities and systemic risk due to interbank correlation). See also Viral V. Acharya, *A Theory of Systemic Risk and Design of Prudential Bank Regulation*, 5 J. FIN. STABILITY 224, 224 (2009) (“The limited liability of banks and the presence of a negative externality of one bank's failure on the health of other banks give rise to a systemic risk-shifting incentive where all banks undertake correlated investments, thereby increasing economy-wide aggregate risk.”).

⁶² See also Whitehead, *supra* note 8, at 351.

⁶³ The Basel Committee is a committee of commercial bank supervisory authorities established within the Bank for International Settlements, whose mission is to promote the international harmonization of commercial bank regulations and, in particular, commercial bank capital regulation. See BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS, ABOUT THE BASEL COMMITTEE, available at <http://www.bis.org/bcbs/about.htm>.

to meet its payment obligations when due.⁶⁴ Traditionally, extending loans was a commercial bank's main source of credit risk, although other sources sprung up as banks expanded their businesses to include interbank transactions, trade financing, and buying and selling various types of financial instruments.⁶⁵

"Bad" credit risk can be a major cause of financial loss, as shown by the 2008 financial crisis when banks suffered billions of dollars in losses due to the failure of high-risk borrowers to repay their subprime mortgages. Nevertheless, a bank's business model is partly premised on its ability to manage credit risk better than the creditors from whom it receives funds. For example, a commercial bank typically is more capable than its depositors in assessing the credit quality of its borrowers, because the bank's relationships with those borrowers permits it to monitor them at lower cost than if a depositor did so directly.⁶⁶ In that respect, credit risk provides one example of the role of risk management in setting an optimal risk-and-return balance based on the bank's circumstances, rather than just reducing risk. A bank that can effectively monitor its borrowers may decide, based on its greater access to information, to lend to riskier borrowers. Extending loans to a portfolio of risky borrowers, but at high interest rates, can result in the bank benefiting from higher-than-average returns on its investments.⁶⁷

Credit risk also illustrates why risk cannot be managed in isolation.⁶⁸ A bank cannot focus on the credit risk of an individual transaction; instead, it needs to consider the effect of that risk on its entire portfolio. For example, a bank can manage its credit risk through a diversified portfolio of loans and other assets, with losses on some assets being offset by gains on others. In that respect, aggregate risk is more important than the credit risk of an individual investment. Credit risk also illustrates why a bank need to consider the correlation between one type of risk and other risks affecting the bank's business. For example, a bank that manages credit risk poorly increases the probability that it will have problems repaying its creditors, increasing its liquidity risk and the possibility of a bank run. Poor credit risk management may also implicate other risks, which are described below, such as strategic risk and regulatory risk.

3. Strategic Risk

In the corporate context, "strategy" typically refers to a firm's long-term objectives and the means by which it plans to achieve them.⁶⁹ Properly managed, a bank can pursue a risky

⁶⁴ BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS: PRINCIPLES FOR THE MANAGEMENT OF CREDIT RISK 1, available at <https://www.bis.org/publ/bcbs75.htm>.

⁶⁵ See Charles K. Whitehead, *The Evolution of Debt: Covenants, the Credit Market and Corporate Governance*, 34 J. CORP. L. 641, 650 (2009) ("[T]he business of lending has evolved, resulting in change in credit risk management and the creation of an increasingly liquid credit market.").

⁶⁶ See *supra* note 42.

⁶⁷ See Whitehead, *supra* note 65, at 655.

⁶⁸ See Stulz, *supra* note 6, at 44 ("[R]isk-taking decisions cannot be evaluated in isolation but must be assessed in terms of their impact on the overall risk of the bank.").

⁶⁹ Alfred Chandler, one of the founders of modern management theory, defined strategy as "the setting of long-term goals and objectives, the determination of course of action, and the allocation of resources to achieve the objectives." ALFRED CHANDLER, STRATEGY AND STRUCTURE: CHAPTERS IN THE HISTORY OF INDUSTRIAL ENTERPRISE 13 (1962).

business strategy that enhances its value.⁷⁰ This would still be known as a “strategic risk,” but with a value-enhancing outcome.

Today, however, strategic risk for banks more often refers to the probability a bank will choose a “bad” objective that can disrupt its business or fail in its attempt to achieve a “good” outcome.⁷¹ This is a result of the 2008 financial crisis, when concerns over poorly-managed strategic risk arose as it became clear that many banks had failed to assess the long-term implications of their business strategies,⁷² ignoring (or simply being unaware of) changes in the financial markets that heightened their risk of loss.⁷³

In particular, a bank’s incentive to substitute riskier assets for safer ones has important implications for strategic risk. As noted before, a bank’s leveraged capital structure is likely to distort the risk preferences of a bank’s shareholders and managers.⁷⁴ This may result in managers having incentives to alter business objectives from the outset or distort how strategies are executed along the way. For non-bank businesses, market discipline can help constrain the risk of asset substitution⁷⁵—since creditors are likely to demand an increase in their cost of capital—but for commercial banks, the existence of deposit insurance and other safety nets that protect depositors make those depositors, as the bank’s principal creditors, less sensitive to such problems.⁷⁶ Moreover, because bank assets often are comprised of financial instruments, a bank may keep its balance sheet confidential to prevent outsiders from buying or selling the same assets, and affecting their price, potentially at the bank’s expense.⁷⁷ Even if the balance sheet is public, the ability to buy and sell financial assets easily makes it difficult for creditors

⁷⁰ On strategic risk in banks, see Patrick J. McConnell, *The Governance of Strategic Risks in Systemically Important Banks*, 5 J. RISK MANAGEMENT IN FIN. INST. 128, 128 (2012); Patrick J. McConnell, *Strategic Risk Management: The Failure of Hbos and its Regulators*, 9 J. RISK MANAG. IN FIN. INST. 147, 147 (2016); Arun Chockalingam *et al.*, *Strategic Risk, Banks, and Basel III: Estimating Economic Capital Requirements*, 19 J. RISK FIN. 225, 225 (2018). See also BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT’L SETTLEMENTS: GUIDELINES FOR IDENTIFYING AND DEALING WITH WEAK BANKS, available at <https://www.bis.org/bcbs/publ/d330.pdf> (“Apart from credit and liquidity risk, a bank’s weaknesses may stem from market risk, operational risk, interest rate risk or strategic risk.”).

⁷¹ See Adrian Slywotzky & John Drzik, *Countering the Biggest Risk of All*, HARV. BUS. REV. (2005), available at <https://hbr.org/2005/04/countering-the-biggest-risk-of-all>.

⁷² As former Federal Reserve Bank Governor Randall Kroszner noted, bank “boards of directors and senior management, . . . , must not only address current difficulties, but must also establish a framework for the inevitable uncertainty that lies ahead.” See Press Release, Bd. of Governors of the Fed. Reserve Sys. (Oct. 20, 2008), *Strategic Risk Management in an Interconnected World*, available at <https://www.federalreserve.gov/newsevents/speech/kroszner20081020a.htm>.

⁷³ See *supra* note 38 and accompanying text. The failures of Bear Stearns and Lehman Brothers provide paradigmatic examples of the consequences of poorly-managed strategic risk. Prior to the 2008 financial crisis, Bear Stearns and Lehman Brothers made significant investments in mortgage-backed securities backed by subprime assets, relying heavily on repo to fund their investments. Repo and other forms of short-term lending enabled banks to rapidly grow their balance sheets. However, the greater reliance on short-term lending also increased the potential losses that would result if the banks’ creditors suddenly decided to limit or halt their repo financing. This risk materialized as repo lenders became concerned with the potential for subprime mortgage-backed securities to default, causing the lenders to require more collateral and eventually to stop making loans. The result was the failure of both Bear Stearns and Lehman Brothers. See DUFFIE, *supra* note 2, at 13-19 (discussing the dynamics underlying the failure of Bear Stearns); DAVID SKEEL, *THE NEW FINANCIAL DEAL: UNDERSTANDING THE DODD-FRANK ACT AND ITS (UNINTENDED) CONSEQUENCES* 28 (2011) (discussing the failure of Lehman Brothers).

⁷⁴ See *supra* notes 42-48 and accompanying text.

⁷⁵ See Sepe, *supra* note 39, at 362-66.

⁷⁶ See *id.* at 375-78.

⁷⁷ See Gerard Caprio, Jr. & Ross Levine, *Corporate Governance in Finance: Concepts and International Observations*, in *FINANCIAL SECTOR GOVERNANCE: THE ROLES OF THE PUBLIC AND PRIVATE SECTORS* 17, 29-35 (2002) (discussing the opacity problem in banks).

to determine precisely what assets a bank holds at a particular time.⁷⁸ Consequently, creditor discipline is less likely to be an effective constraint. The result is a greater probability that a bank's business strategy will favor riskier returns that benefit its shareholders at the expense of its creditors.

4. Regulatory Risk

Regulatory risk is the probability that new or changed regulation will affect a bank's operations or business results. This risk has always weighed heavily on banks as regulated entities, but it has grown in the wake of new regulation introduced after the 2008 financial crisis.⁷⁹

Today's regulatory "to-do" list for banks is imposing. Large banks must balance the regulatory requirements of jurisdictions around the world against timetables for when new regulations will go into effect, while also taking into account increased penalties for non-compliance.⁸⁰ Commercial banks must also implement effective governance structures, aligning their risk management functions with regulatory directives, and enforce plans and reporting structures aimed at curbing financial crimes.⁸¹

Regulatory risk has grown as new regulations have become more complex, to the point where the cost of complying with regulation is now a primary consideration in setting a bank's strategic direction.⁸² In some instances, a bank may decide that the cost of compliance will make entering into a new business line, or continuing an old one, prohibitively expensive relative to regulations imposed on economically similar activities by less-regulated entities.⁸³ For that reason, assessing and implementing compliance with regulation have become an integral part of a bank's business model and operations.⁸⁴

⁷⁸ See Luc Laeven, *Corporate Governance: What's Special About Banks*, 5 ANN. REV. FIN. ECON. 63, 67 (2013) ("Trading activities may also make banks more opaque than nonfinancial companies without such activities ... because trading positions and associated risk profiles can be easily changed in real time.").

⁷⁹ See Steve Culp, *Managing Regulatory Risk a Major Hurdle for Banks*, FORBES (May 8, 2012), <https://www.forbes.com/sites/steveculp/2012/05/08/managing-regulatory-risk-a-major-hurdle-for-banks/#480ebc8a131c>.

⁸⁰ See Gillian Tett, *Regulatory Revenge Risk Scaring Investors Away*, FIN. TIMES. (Aug. 28, 2014), <https://www.ft.com/content/c24e1ffa-2d35-11e4-aca0-00144feabdc0> (noting the increasing post-crisis regulatory penalties faced by banks worldwide).

⁸¹ See *The Past Decade has Brought a Compliance Boom in Banking*, THE ECONOMIST (May 2, 2019), <https://www.economist.com/finance-and-economics/2019/05/02/the-past-decade-has-brought-a-compliance-boom-in-banking>.

⁸² See *infra* notes 176-177 and accompanying text.

⁸³ See Whitehead, *supra* note 36, at 36-37.

⁸⁴ See EY/Institute of International Finance (IFF), *Remaking Financial Services: Risk Management Five Years After the Crisis – A Survey of Major Financial Institutions 5*, [https://www.ey.com/Publication/vwLUAssets/Remaking_financial_services_-_risk_management_five_years_after_the_crisis_-_Complete/\\$FILE/EY-Remaking_financial_services_risk_management_five_years_after_the_crisis.pdf](https://www.ey.com/Publication/vwLUAssets/Remaking_financial_services_-_risk_management_five_years_after_the_crisis_-_Complete/$FILE/EY-Remaking_financial_services_risk_management_five_years_after_the_crisis.pdf) (last visited Jan. 31, 2020) ("One of the bigger challenges is the increased cost of regulation, both in terms of increased capital requirements, as well as the internal costs to keep up with regulation. The challenge is to adhere to the regulatory changes, to incur the costs ..., and still turn out a profit").

5. Operational Risk

The Basel Committee defines operational risk as the probability of losses resulting from inadequate processes, errors by people or systems, or external events.⁸⁵ Due to its breadth, operational risk is difficult to manage or quantify. This may partly explain why banks continue to struggle with operational risk even after the financial crisis. According to a recent study, banks lost about \$210 billion from operational risk between 2011 and 2016, mostly from errors in client interactions and business practices, as well as in process management.⁸⁶

Litigation risk—the probability of a civil, criminal, or administrative claim or investigation being brought against a bank—is prominent among the types of operational risk.⁸⁷ Multiple causes of operational risk, including fraudulent banking practices, failed client interactions, and lax execution or procedural faults, may well, and often do, lead to litigation. Consequently, “aggressive banking strategies and aggressive litigation strategies often accompany one another, . . . [so that] [b]anks engaging in these strategies would have legal expense significantly higher than peer banks.”⁸⁸ Litigation can also be triggered by a failure to comply with bank regulation. It is, therefore, unsurprising that litigation risk has increased in line with new post-crisis banking reforms since the 2008 financial crisis.⁸⁹ This risk cannot easily be transferred to others, unlike other forms of risk,⁹⁰ and because litigation can be prolonged, a bank’s potential liabilities can extend for a protracted period of time.⁹¹ As a result, improperly

⁸⁵ See BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT’L SETTLEMENTS, BASEL II: INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENTS AND CAPITAL STANDARDS: A REVISED FRAMEWORK 144, available at <https://www.bis.org/publ/bcbs128.pdf>. See also Douglas Robertson, *So That’s Operational Risk!* 1 (Mar. 2011) (Economics Working Paper 2011-1, Office of the Comptroller of the Currency), available at <https://ots.gov/publications/publications-by-type/occ-working-papers/2012-2009/working-paper-2011-1.html> (defining operational risk as “the risk of loss from inadequate or failed internal processes, people, and systems, or from external events”); Imad A. Moosa, *Operational Risk: A Survey*, 16 FIN. MARKETS, INST. & INSTR. 167, 167 (2007) (emphasizing that operational risk has increased dramatically in recent years due to rapid technological change).

⁸⁶ See Jan-Alexander Huber & Daniele Funaro, *How Banks Can Manage Operational Risk* (Jul. 10, 2018), <https://www.bain.com/insights/how-banks-can-manage-operational-risk/>. An example of losses due to operational risk is the fake account scandal at Wells Fargo Co., where from 2011 to 2015, employees opened roughly 1.5 million new bank accounts and applied for over half a million credit cards without being authorized by customers to do so in order to meet their daily cross-selling quotas. The scandal resulted in Wells Fargo being penalized with total fines of \$185 million for fraudulent activity, the firing of about 5,300 employees for fraudulent sales practices, and the resignation of the bank’s CEO. See generally Brian Tayan, *The Wells-Fargo Cross-Selling Scandal*, Stanford University Graduate School of Business Research Paper No. 17-1, available at <https://ssrn.com/abstract=2879102> (examining the tension between corporate culture, financial incentives, and employee conduct as illustrated by the Wells Fargo cross-selling scandal).

⁸⁷ See TIMOTHY W. KOCH & S. SCOTT MACDONALD, *BANK MANAGEMENT* 556-58 (7th ed., 2010).

⁸⁸ James E. McNulty & Aigbe Akhigbe, *Bank Litigation, Bank Performance and Operational Risk: Evidence from the Financial Crisis 4* (unpublished manuscript) (Jul. 7, 2014), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2463373.

⁸⁹ See *supra* text accompanying notes 79-84.

⁹⁰ See Jonathan T. Molot, *A Market in Litigation Risk*, 76 U. CHI. L. REV. 367, 369-70 (2009) (describing lawyers as managers of their clients’ legal risks, but noticing that, unlike for other forms of risk, very few risk-transferring mechanisms exist for legal risk).

⁹¹ See McNulty & Akhigbe, *supra* note 88, at 4-5. For example, banks continue to pursue, or be the targets of, residential mortgage-related lawsuits; in fact, many banks are still not clear of the lawsuits arising out of the 2008 financial crisis. See Philip R. Stein, *A Decade on Crisis Era Litigation Still Bedevils Banks*, AMERICAN BANKER (Apr. 4, 2018), available at <https://www.americanbanker.com/opinion/a-decade-on-crisis-era-litigation-still-bedevils-banks>.

managed litigation risk can be significant and costly. For example, the legal bills alone paid by banks for their part in the 2008 financial crisis are estimated to total about \$250 billion.⁹²

B. The Value of Bank Risk Management

Banks are exposed to several types of risk. Managed effectively, those risks can enhance bank value; managed poorly, they can result in substantial losses. Risk management, therefore, is not simply a function of constraining risk. The goal is to ensure that a bank assumes the optimal amount of risk.⁹³

As noted before, risk cannot be managed in isolation. Decisions about risk ripple through the bank, affecting the bank's operations and its overall exposure to risk.⁹⁴ For example, a bank may decide to change its business focus (strategic risk) due to rising competition or new regulation (regulatory risk). As a result, to remain as profitable as before, it may move to a new business line (operational risk) that invests in riskier assets (credit risk). Consequently, to determine a proper balance that maximizes value, banks must be skilled in managing risks holistically.

Risk is also dynamic. A bank's exposures change every day. For example, having moved to a new business line, a bank must be able to manage the new risks it assumes. It may have difficulty doing so if the business is new for the bank (operational risk) and exposes it to lower-quality investments or counterparties (credit risk), causing the bank to violate applicable regulation (regulatory risk). At an extreme, if questions arise about the bank's ability to manage new risks, nervous depositors (and other creditors) may seek to quickly withdraw funds and move them elsewhere (liquidity risk). This means that what is optimal for a bank today may not be optimal tomorrow. To be effective, risk management must monitor risk on a continuous basis and adjust risk strategies to reflect the changing circumstances.

In effect, more so than for other businesses, virtually any bank decision can be reduced to a risk decision that increases or decreases bank value. That is because, in the most basic terms, a profit-maximizing bank can seek to enhance profits by lowering the cost of the funds it borrows (such as deposits) or increasing the returns on the assets in which it invests (such as loans). Any change in the bank's operations—how it borrows or invests—will entail new risks. The level of risk, and how the bank chooses to manage it, will affect bank value.⁹⁵

⁹² See Tracey Samuelson, *Following the Money: What Happened to a Nearly \$17 Billion Bank Settlement?* MARKETPLACE (Sept. 19, 2018), available at <https://www.marketplace.org/2018/09/19/17-billion-bank-settlement-where-did-money-go/>. See also *infra* notes 174-175 and accompanying text.

⁹³ See Stulz, *supra* note 6, at 44.

⁹⁴ See *id.* (“... [R]isk-taking decisions are made all the time throughout the bank and each decision affects the bank's probability of financial distress to some degree. As a result, risk-taking decisions cannot be evaluated in isolation but must be assessed in terms of their impact on the overall risk of the bank.”).

⁹⁵ Corporate finance supports this conclusion. The starting point is the mean-variance model, which serves to weigh risk, expressed as variance (the volatility of returns produced by an asset), against expected returns. See RICHARD BREALEY, STEWART MYERS & FRANKLIN ALLEN, *PRINCIPLES OF CORPORATE FINANCE* 174 (13th ed. 2020). In brief, the mean-variance model helps investors to identify the largest returns given a certain level of risk or the least risk at a given level of return, facilitating the design of efficient investment portfolios. The mean-variance model is designed for financial markets and securities portfolios, but also relates to how banks create value through investing in portfolios of financial assets, such as loans. Under this model, the value of a bank can be expressed as $V(R, \sigma)$, meaning that bank value is a function of return (R) and variance (σ , sigma, representing standard deviation, which is the square root of variance). Note that, in light of the several types of risks that affect banks and the need for a comprehensive approach to these risks, “risk” in this context is better interpreted as a bank's risk management function. This application of the mean-variance model to banks does more than tell us

Of course, non-banks also make decisions that affect risk. But, as we have described, banks are special. A bank's principal business is investing in financial assets, which it can manage more efficiently than a non-bank that primarily invests in real assets. At the same time, the relative ease with which a bank can adjust its investment portfolio also exposes it to special risks. Due to their unique business model, and the assets in which they invest, banks are exposed to severe liquidity and credit risks. Greater leverage also exposes banks to higher strategic risk than other businesses. Moreover, few industries are as heavily regulated as the banking industry.⁹⁶ Thus, while managing risk is valuable for most businesses, it has a particular value for banks.⁹⁷

II. BANK RISK GOVERNANCE

Following the 2008 financial crisis, regulators around the world enacted reforms to improve bank risk management.⁹⁸ This Part describes two post-crisis corrective measures—enhanced bank capital requirements and new bank governance rules. Against this background, in Part III, we will turn to the rise of lawyer-directors in banks, explaining the implications of that rise for bank risk management. As we discuss, one possibility is that the rise of lawyer-directors responds to shortcomings in existing law, moving beyond what is mandated by strict regulation to provide substantive skills that are necessary for today's banks to properly manage their risks.⁹⁹

A. Regulatory Capital

Since 1988, regulators around the world have created a series of Basel Capital Accords that establish a common approach to creating and enforcing commercial bank capital requirements.¹⁰⁰ Capital requirements increase the cost to a commercial bank of borrowing relative to the riskiness of the assets in which it invests. The rationale is rather intuitive: Requiring a portion of a bank's portfolio to be funded by equity and similar capital, rather than by deposits

that bank value depends on the expected returns from a bank's assets and the bank's ability to manage its overall risk. Under the model, we know that returns are an inverse function of risk, so that if investors are willing to accept more risk, they can invest in projects with higher returns (and vice versa). Accordingly, we can write R as $R(\sigma)$, since return is a function of risk under this recharacterization, and we can then rewrite bank value as follow: $V(R(\sigma), \sigma)$. This means, for banks, that any management decision affecting value (V) is ultimately a risk decision, whether indirectly through the choice of bank projects $R(\sigma)$ or directly through risk management choices (σ).

⁹⁶ See Whitehead, *supra* note 36, at 15-16 (describing the special regulations to which banks are subject, "restrict[ing] the amounts and types of risk-bearing that [a financial] intermediary can assume, directly through requirements that circumscribe the riskiness of an intermediary's portfolio assets and its capital structure, and indirectly through rules regarding the intermediary's net worth, capital, or surplus that effectively cap its risk-taking activities") (footnotes omitted).

⁹⁷ See DeAngelo & Stulz, *supra* note 36, at 220-21 (arguing that a bank's ability to issue claims that are valued because of their liquidity depends on its risk, so that risk management is central to a bank's business model in a way it is not for nonfinancial firms).

⁹⁸ For an overview of post-crisis reforms, see International Monetary Fund, *Regulatory Reform 10 Years after the Global Financial Crisis: Looking Back, Looking Forward*, in GLOBAL FINANCIAL STABILITY REPORT (Oct. 2018), available at <https://www.elibrary.imf.org/view/IMF082/25319-9781484375594/25319-9781484375594/ch02.xml?lang=en>. For a recent critical assessment, see Darrell Duffie, *Financial Regulatory Reform After the Crisis: An Assessment*, 64 MANAG. SCIENCE 1 (2016).

⁹⁹ See *infra* Part III.C.

¹⁰⁰ See BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS, HISTORY OF THE BASEL COMMITTEE, <https://www.bis.org/bcbs/history.htm> (summarizing the history of the Basel rule-making process and the rationales for introducing the Basel I, Basel II, and Basel III Capital Accords).

or other credit, decreases a bank's leverage and increases the risks borne by the bank's shareholders to the extent the bank invests in risky assets.¹⁰¹ The requirements also mandate commercial banks to have a capital cushion to sustain operations and meet their obligations to depositors who withdraw funds.¹⁰²

Capital regulation was revised after the 2008 financial crisis when it became clear that loopholes in then-existing requirements had weakened their effectiveness.¹⁰³ The Basel III Accord in 2009 focused on increasing the amount of common equity on which commercial banks must rely, so that in the event of an economic downturn, more equity would be available to repay depositors.¹⁰⁴ Among other measures, Basel III introduced a new category of bank capital¹⁰⁵—known as Common Equity Tier 1 (CET1)—comprised of common equity,¹⁰⁶ while providing that CET1 alone must constitute a minimum of 4.5% of a commercial bank's risk-weighted assets.¹⁰⁷ The Accord also mandated greater capital cushions¹⁰⁸ and countercyclical

¹⁰¹ The standard reference is Daesik Kim & Anthony M. Santomero, *Risk in Banking and Capital Regulation*, 43 J. FIN. 1219 (1988). For a more recent contribution, see Asli Demirguc-Kunt *et al.*, *Bank Capital: Lessons from the Financial Crisis 2* (World Bank Policy Research Working Paper No. 5473, Nov. 2010), available at <http://documents.worldbank.org/curated/en/568301468325454646/pdf/WPS5473.pdf>.

¹⁰² See *id.* at 2.

¹⁰³ In fact, many banks that received public bailouts “appeared to be in compliance with minimum capital requirements shortly before and even during the crisis.” See Special Report, *Basel 3, An International Capital-Adequacy Standard, Is Unloved but Much Needed*, THE ECONOMIST (May 4, 2017), available at <https://www.economist.com/special-report/2017/05/04/basel-3-an-international-capital-adequacy-standard-is-unloved-but-much-needed>. See also Viral V. Acharya, *Adapting Micro Prudential Regulation for Emerging Markets*, in DEALING WITH THE CHALLENGES OF MACRO FINANCIAL LINKAGES IN EMERGING MARKETS 57, 69 (Octaviano Canuto & Swati R. Ghosh eds., 2013) (providing data on the insufficiency of U.S. banks' pre-crisis capital requirements); Robert Jarrow, *A Critique Of Revised Basel II*, 32 J. FIN. RESEARCH 1 (2007) (offering a general critique of pre-crisis capital requirements).

¹⁰⁴ See BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS, BASEL III: A GLOBAL REGULATORY FRAMEWORK FOR MORE RESILIENT BANKS AND BANKING SYSTEMS (REVISED VERSION JUNE 2011), <https://www.bis.org/publ/bcbs189.htm> [hereafter, BASEL III FRAMEWORK]. The 2009 Basel III Accord was complemented by additional measures in 2017, sometimes referred to as Basel IV. See BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS, BASEL III: FINALISING POST-CRISIS REFORMS, <https://www.bis.org/bcbs/publ/d424.pdf>. It should be noted that the 2017 amendments provide for an additional increase in capital requirements. See BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS, HIGH-LEVEL SUMMARY OF BASEL III REFORMS 1, https://www.bis.org/bcbs/publ/d424_hlsummary.pdf.

¹⁰⁵ The initial Basel I Accord separated bank assets into separate categories and gave them risk-weights ranging from 0% to 100% for each category. It then established that banks should hold a minimum ratio of 8% of capital to risk-weighted assets. In particular, 4% of the capital was required to be comprised of so-called *Tier 1* capital—fully paid common equity and disclosed reserves. The remaining 4% could instead be comprised of *Tier 2* capital—less safe but viable assets, such as undisclosed reserves. See Viral V. Acharya, *The Dodd-Frank Act and Basel III: Intentions, Unintended Consequences, and Lessons for Emerging Markets* 12 (Asian Dev. Bank Inst., Working Paper No. 392, 2012), <https://www.adb.org/sites/default/files/publication/156247/adbi-wp392.pdf>. Basel II was adopted in recognition that the Basel I analysis was too crude, introducing new rules that further graded the risk categories and allowed for the use of internal, and more sophisticated, models to measure risk. See *id.* Even with these improvements, the Basel II approach was unable to prevent the 2008 financial crisis, mainly due to two shortcomings. First, it focused exclusively on individual bank risk while ignoring the increasing systemic risk posed by the modern interconnected bank system. Second, the Accord failed to address the fragility that had developed as banks increasingly relied on short-term financing. See *id.* 12-13.

¹⁰⁶ CET1 focuses on the value of common equity, the share premium attached to equity, and retained earnings; it excludes preferred equity. See BASEL III FRAMEWORK, *supra* note 104, at 13-15, 56. Basel III also specifies other criteria that CET1 capital must satisfy. See *id.* at 15-17.

¹⁰⁷ See *id.* at 12.

¹⁰⁸ Basel III requires a “capital conservation buffer” of 2.5% of common equity to “ensure that banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred,” imposing distribution constraints to the extent a bank falls below the 7% total equity threshold. See *id.* at 20.

capital charges for the largest, systemically significant banks.¹⁰⁹ Overall, Basel III requires the largest commercial banks to maintain capital equal to at least 12% of risk-weighted assets, including CET1.¹¹⁰ Notably, the eight U.S. banking groups the Federal Reserve designated as systemically important are subject to CET1 requirements that are even higher than under Basel III.¹¹¹

Yet, none of those changes addresses a threshold question—namely, to what extent are capital requirements optimal in the first place? To be effective, capital requirements must be substantial enough to deter excessive risk-taking.¹¹² Crafting regulation this way, however, comes at the cost of potentially constraining a bank’s ability to pursue valuable investment opportunities.¹¹³ In fact, by minimizing leverage—requiring commercial banks to finance loans with more equity and less debt—a bank may not be able to provide an optimal level of capital to its borrowers. Banks may be forced to reduce the amount of available loans or charge higher interest rates on the loans they make.¹¹⁴ Restrictive risk-based capital regulation may also exacerbate a procyclicality problem by forcing commercial banks to raise more capital, or reduce lending, precisely when capital is the hardest to raise. The resulting drop in lending may slow the economy, leading to a rise in the riskiness of the assets the banks hold, prompting the banks to reduce lending further, and so on.¹¹⁵ Capital regulation, therefore, may have a contractionary effect on lending when liquidity is most needed, amplifying the negative effects of an economic shock.¹¹⁶

¹⁰⁹ Basel III enables national authorities to apply a “countercyclical buffer” if “excess aggregate credit growth is judged to be associated with a build-up of system-wide risk,” requiring up to an additional 2.5% of common equity to be added to the capital conservation buffer (requiring CET1 to total up to 9.5%). *See id.* at 57-60.

¹¹⁰ *See* BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT’L SETTLEMENTS, GLOBAL SYSTEMICALLY IMPORTANT BANKS: UPDATED ASSESSMENT METHODOLOGY AND THE HIGHER LOSS ABSORBENCY REQUIREMENT 12-15 (JULY 2013), <https://www.bis.org/publ/bcbs255.pdf>

¹¹¹ These banks are Bank of America, Bank of New York Mellon, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, State Street, and Wells Fargo. *See* Press Release, Bd. of Governors of the Fed. Reserve Sys., Federal Reserve Board Approves Final Rule Requiring the Largest, Most Systemically Important U.S. Bank Holding Companies to Further Strengthen Their Capital Positions (July 20, 2015), available at <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20150720a.htm>. More generally, Basel III was implemented into U.S. law through the Dodd-Frank Act and the Federal Reserve’s piecemeal rulemaking. *See* Dodd-Frank Act 12 USC § 5371 (2012) and *Basel Regulatory Framework*, Board Governors Fed. Res. Sys., <http://www.federalreserve.gov/supervisionreg/basel/USImplementation.htm> (last updated Mar. 6, 2017) (listing the Federal Reserve’s piecemeal rulemaking).

¹¹² *See* Sepe, *supra* note 39, at 387-88 (addressing limitations of capital requirements).

¹¹³ *See* Stulz, *supra* note 6, at 55 (arguing that “when risk is managed mostly through limits, the risk capacity of the bank is used less efficiently”)

¹¹⁴ *See* Anjan V. Thakor, *Capital Requirements, Monetary Policy, and Aggregate Bank Lending: Theory and Empirical Evidence*, 51 J. FIN. 279, 281 (1996) (showing that higher capital requirements may increase credit rationing and negatively affect economic growth); Charles K. Whitehead, *The Goldilocks Approach: Financial Risk and Staged Regulation*, 97 CORNELL L. REV. 1267, 1280-83 (2012) (noting that increased capital requirements may force bank managers to invest in higher-yielding, riskier portfolios).

¹¹⁵ *See* Fin. Stability Bd., *Addressing Financial System Procyclicality: A Possible Framework 7* (2008), available at http://www.financialstabilityboard.org/publications/r_0904e.pdf (advancing proposals to mitigate the procyclicality effect of capital regulations); Rafael Repullo & Javier Suarez, *The Procyclical Effects of Bank Capital Regulation*, CEPR Discussion Papers No. DP8897 (March 2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2034115 (arguing that Basel II has exacerbated the procyclical effects of banks’ capital requirements).

¹¹⁶ *See* Whitehead, *supra* note 8, at 346-52.

B. Bank Governance

New bank governance measures were also introduced in the wake of the 2008 financial crisis.¹¹⁷ The new approach was articulated in guidelines issued by the Basel Committee in 2015.¹¹⁸ The Basel Committee's guidelines center on eight core principles whose shared objective is to "reinforce the collective oversight and risk governance responsibilities of the [commercial bank] board."¹¹⁹ Emphasizing the board's responsibility "for overseeing a strong risk governance framework," the guidelines require directors to understand the bank's risk profile and approve its overall business strategy, including the bank's risk policy and risk management procedures.¹²⁰ Specifically, under the guidelines, each commercial bank board must approve an express "risk appetite statement" and establish "three lines of defense" against excessive risk-taking, including a "business line," a "risk management function," and an "internal audit function."¹²¹ The guidelines also require commercial bank boards to be comprised of a "sufficient number of independent directors" (qualified non-executive directors), have adequate collective knowledge of each of the bank's material activities, and establish specialized oversight committees.¹²² In particular, large commercial banks must appoint a risk committee responsible for the "oversight of the strategies for capital and liquidity management as well as for all relevant risks of the bank," a majority of whose members must be independent, as well as having an independent chairperson.¹²³

In the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") also mandated new and enhanced risk-oversight responsibilities for commercial bank boards.¹²⁴ Consistent with the Basel Committee guidelines, most U.S. commercial banks must have a risk committee that is "responsible for the oversight of the [bank's] enterprise-wide risk management practices," and this committee must "include such number of independent directors as the [Federal Reserve] Board of Governors may determine appropriate," with "at least one risk management expert having experience in identifying, assessing, and managing risk exposures of large, complex firms."¹²⁵ The Dodd-Frank Act also requires the largest commercial banks to appoint a chief risk officer who is responsible for, among other things: monitoring and complying with delegated risk limits; establishing appropriate risk management policies, practices, and controls; monitoring and testing risk controls; and ensuring that risk management issues are resolved in a timely manner.¹²⁶

¹¹⁷ See generally Peter O. Mülbert, Corporate Governance of Banks After the Financial Crisis—Theory, Evidence, Reforms, ECGI Law Working Paper No. 130/2009 (Apr. 2010), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1448118.

¹¹⁸ See BASEL COMMITTEE ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS, GUIDELINES: CORPORATE GOVERNANCE PRINCIPLES FOR BANKS 4 (2015), available at <https://www.bis.org/bcbs/publ/d328.pdf> [hereafter, BASEL GOVERNANCE GUIDELINES].

¹¹⁹ *Id.* at 9-11.

¹²⁰ See Mülbert, *supra* note 117, at 22-23 (describing the eight pillars of the Basel Guidelines).

¹²¹ See BASEL GOVERNANCE GUIDELINES, *supra* note 118, at 2, 9-11.

¹²² See *id.* at 13.

¹²³ See *id.* at 17.

¹²⁴ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 951-57, 124 Stat. 1376, 1899-1907 (2010) (codified in scattered sections of 12 U.S.C. and 15 U.S.C.). The governance provisions introduced by the Dodd-Frank Act affect all U.S. public companies, including banks. See also Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations, 79 Fed. Reg. 17240, 17249 (Mar. 27, 2014) (final rule adopted by the Board of Governors of the Federal Reserve System to implement Dodd-Frank Act § 165), available at <https://www.govinfo.gov/content/pkg/FR-2014-03-27/pdf/2014-05699.pdf> [hereafter, Enhanced Prudential Standards].

¹²⁵ See *id.* at 17247.

¹²⁶ See *id.*

Similarly, the Federal Reserve Board introduced new commercial bank board guidelines in August 2017 that largely focused on risk management practices.¹²⁷

The question remains whether recent changes in bank governance are likely to improve risk management. Those reforms rely on traditional corporate law principles that are well-understood to be ill-suited to manage bank risk¹²⁸ and place excessive emphasis on a director's independence, potentially at the expense of her substantive expertise.¹²⁹ Recall that a bank's leverage tends to favor its shareholders at the expense of its creditors.¹³⁰ Shareholders have financial incentives to direct banks to invest in riskier assets. At the same time, as fiduciaries, directors are obligated to reflect shareholder interests in their decisions. In light of those obligations, it is uncertain whether reinforcing the authority of a bank's board will have the unintended consequence of increasing, rather than decreasing, the risks a bank assumes. At the very least, it draws into question whether regulating the board is a sufficiently reliable means to manage the risks to which a bank is exposed.¹³¹

Independent directors—because they have few ties to the bank—may also lack the industry-relevant expertise needed to be effective.¹³² After all, directors who know how to manage a bank's risk may also be closest to the bank and, therefore, less likely to be independent. This lack of expertise may exacerbate risk-taking, as recent empirical studies have shown.¹³³ In response, some have proposed that a bank's directors should be “banking experts” with “banking literacy.”¹³⁴ To be qualified, a director should be “familiar[] with risk modeling, valuation of complex derivatives, synthetic asset replication, hedging strategies, and so on.”¹³⁵ This may improve a board's understanding of the technicalities of risk, but it fails to address the basic concern arising from a director's fiduciary duties to the bank's shareholders. After all, independent directors are still directors subject to the same fiduciary obligations as other board members, and this may skew their decision-making toward greater risk. Consequently, an approach to managing risk that is tied to the board is unlikely to measurably improve risk management so long as the approach continues to rely on traditional corporate law principles.

* * *

Post-crisis regulators raised bank capital requirements and strengthened board oversight over a bank's operations in light of evidence that excessive leverage and weak governance were causes of the 2008 financial crisis. As we have explained, both approaches have

¹²⁷ Among other measures, the new Federal Reserve Board guidelines specify that a commercial bank's strategy should clearly articulate objectives consistent with its risk tolerance, and the risk tolerance should clearly specify the aggregate level and types of risks the board is willing to assume to achieve the bank's strategic objectives. See Proposed Guidance on Supervisory Expectations for Board of Directors, 82 Fed. Reg. 39049, 39051 (Aug. 17, 2017). The Federal Reserve Board's guidelines additionally state that “senior management should have in place robust mechanisms for keeping apprised of, among other things, current and emerging risks to the firm and other material issues, including by maintaining robust management information systems.” *Id.* at 39054.

¹²⁸ See, e.g., Jonathan Macey and Maureen O'Hara, *Bank Corporate Governance: A Proposal for the Post-Crisis World*, FRBNY ECON. POL'Y REV., Aug. 2016, at 85, 86 (arguing that “a lot has changed with respect to banking structure and practice, but little has changed with respect to the duties and obligations of bank directors”).

¹²⁹ See Bruner, *supra* note 116, at 960 (highlighting the tension between independence and expertise).

¹³⁰ See *supra* notes 47-48 and accompanying text.

¹³¹ The agency cost analysis of creditors and shareholders, and the role of management opportunism that favors equity over debt, was first articulated in Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 334-39 (1976).

¹³² See Bruner, *supra* note 116, at 979-81.

¹³³ See *id.* at 980-81.

¹³⁴ See Macey & O'Hara, *supra* note 128, at 86, 103.

¹³⁵ *Id.* at 103.

weaknesses. In the next Part, we begin to investigate an unexplored but significant change in bank governance: the frequent election of lawyer-directors to banks. Our intuition is that understanding the role of lawyer-directors will help to better understand bank risk management and regulatory reforms to date. In particular, we aim to assess whether lawyer-directors play a role that complements these recent reforms and, if so, through what mechanisms.

III. ENTER THE LAWYERS

The rise of lawyer-directors in banks has been striking,¹³⁶ raising the question of why lawyer-directors now appear on most bank boards. We address this question in two steps. First, we present our novel data set on lawyer-directors and their growth. Second, we develop a theory of lawyer-directors in banks based on the value-enhancing benefits that a lawyer's training and skills are likely to bring to bank risk management. We continue our analysis in Part IV, where we analyze our theory using several empirical tests, including tests on bank risk and bank value.

A. Data and Data Sources

We begin our investigation by introducing data on the rise of lawyer-directors in banks (our independent variable) as well as data on bank risk and bank value (our dependent variables). Our data set of lawyer-directors in banks covers the period from 2000 to 2017¹³⁷ and includes 12,343 bank-years of observations¹³⁸ for which we obtained information on lawyer-directors from the BoardEx database,¹³⁹ information on bank fundamentals from the Compustat database, and publicly-traded stock price observations from the Center for Research in Security Prices ("CRSP") database.

Appendix Table A1 provides definitions of all the variables used in our analysis. In particular, the main explanatory variable, *Lawyer-Director*, indicates whether a bank has at least one lawyer-director, where we counted as a lawyer-director any director with one or more of the following academic qualifications: Juris Doctor, Bachelor of Laws, Master of Laws, Doctor of Jurisprudence, Doctor of Canon Law,¹⁴⁰ Doctor of Civil Law,¹⁴¹ Doctor of Juridical Science,¹⁴² Doctor of Law, Doctor of Law and Political Science, Legum Doctor,¹⁴³ or

¹³⁶ See *infra* Figure 1.

¹³⁷ BoardEx data on director characteristics begins in 1999, but our sample begins in 2000 since we use pre-determined (one-year lagged) covariates in our regression analyses.

¹³⁸ To be included in our sample, financial firms (excluding real estate firms) had to have no missing observations for the key dependent and independent variables employed in our regression analyses. More particularly, all the financial firms we tracked operated in the SIC code industry range from 6000 to 6999.

¹³⁹ We also used litigation measures from Audit Analytics and institutional ownership information from Thomson Reuters.

¹⁴⁰ Doctor of Canon Law is the doctoral-level terminal degree in the studies of canon law of the Roman Catholic Church. It can also be an honorary degree awarded by Anglican colleges.

¹⁴¹ Doctor of Civil Law is a degree offered by some universities, such as the University of Oxford, instead of the more common Doctor of Laws (LLD) degrees.

¹⁴² Doctor of Juridical Science (or Doctor of the Science of Law) (abbreviated S.J.D. or J.S.D., respectively, from the Latin for these denominations) is a research doctorate in law equivalent to the more commonly-awarded research doctorate, a Ph.D. It is offered primarily in the United States (where it originated), and in Canada and Australia

¹⁴³ Legum Doctor is the Latin equivalent of Doctor of Laws, where both titles designate a doctorate-level academic degree in law, or an honorary doctorate, depending on the jurisdiction.

Licentiate of Laws.¹⁴⁴ Although the training and skills evidenced by each of these qualifications varies, those variations are sufficiently minor so that any graduate should be considered a lawyer for the purposes of our analysis. More specifically, to construct the *Lawyer-Director* dummy, we used individual director and company profile information from BoardEx and merged it with the Compustat/CRSP file.¹⁴⁵

As to our dependent variables, we explored the impact of *Lawyer-Director* on firm-level risk (*Bank Risk*) using the natural logarithm of Z-Score, which is a standard proxy of a firm's insolvency risk.¹⁴⁶ In light of the many risks that can lead a bank to insolvency (including, for example, liquidity risk, credit risk, strategic risk, regulation risk, and operational risk), we interpret Z-Score as a measure that captures the sum of all these risks or, stated differently, the bank's overall risk. Furthermore, although a high Z-Score indicates a firm with low insolvency risk, and a low Z-Score indicates a firm with high insolvency risk, for ease of interpretation we multiply our Z-Score values by negative one (-1) so that an increase in the measure corresponds to an increase in risk. Next, for *Bank Value*, we follow the empirical finance literature on corporate governance and use Tobin's Q—the ratio of the market value to book value of a bank's assets—as a measure of value¹⁴⁷ using financial data from Compustat.

¹⁴⁴ A licentiate is a degree below that of a Ph.D. given by universities in some countries. Many countries have degrees with this title, but they may represent different educational levels.

¹⁴⁵ We merged the separate director education and experience profile datasets using BoardEx's unique director identifications. This information was then merged into BoardEx's company profile sample using unique company and board identifications. We then combined the BoardEx data with the Compustat/CRSP merged file using CIK codes.

¹⁴⁶ The Z-Score measure was first introduced by Andrew D. Roy, *Safety First and the Holding of Assets*, 70 *ECONOMETRICA* 431 (1952). It was later developed by John H. Boyd & Stanley L. Graham, *Risk, Regulation, and Bank Holding Company Expansion into Nonbanking*, 10 *QUART. REV. FED. RES. BANK OF MINNEAPOLIS* 2 (1986), and John H. Boyd *et al.*, *Bank Holding Company Mergers with Nonbank Financial Firms: Effects on the Risk of Failure*, 17 *J. BANK. & FIN.* 43 (1993). It has since become the standard proxy of bank risk. *See, e.g.*, Luc Laeven & Ross Levine, *Bank Governance, Regulation and Risk Taking*, 93 *J. FIN. ECON.* 259 (2009); Joel F. Houston *et al.*, *Creditor Rights, Information Sharing, and Bank Risk Taking*, 96 *J. FIN. ECON.* 485 (2010); Andrea Beltratti & René M. Stulz, *The Credit Crisis Around the Globe: Why Did Some Banks Perform Better?*, 5 *J. FIN. ECON.* 1 (2012). Specifically, firms with a high Z-Score have a lower probability of insolvency and greater financial stability. A Z-Score is calculated as follows: $Z = (\text{ROA} + \text{CAR})/\sigma(\text{ROA})$. *See* Roy, *supra*, at 439. In our calculation, ROA and CAR are return on assets and the capital-to-asset ratio (the ratio of equity to assets), respectively, averaged over the sample period (2000-2017), and $\sigma(\text{ROA})$ is the standard deviation of ROA calculated over the same window. Since Z is highly skewed, we use the measure's natural logarithm consistent with prior work. *See, e.g.*, Laeven & Levine, *supra*, at 261; Houston *et al.*, *supra*, at 488; Beltratti & Stulz, *supra*, at 3.

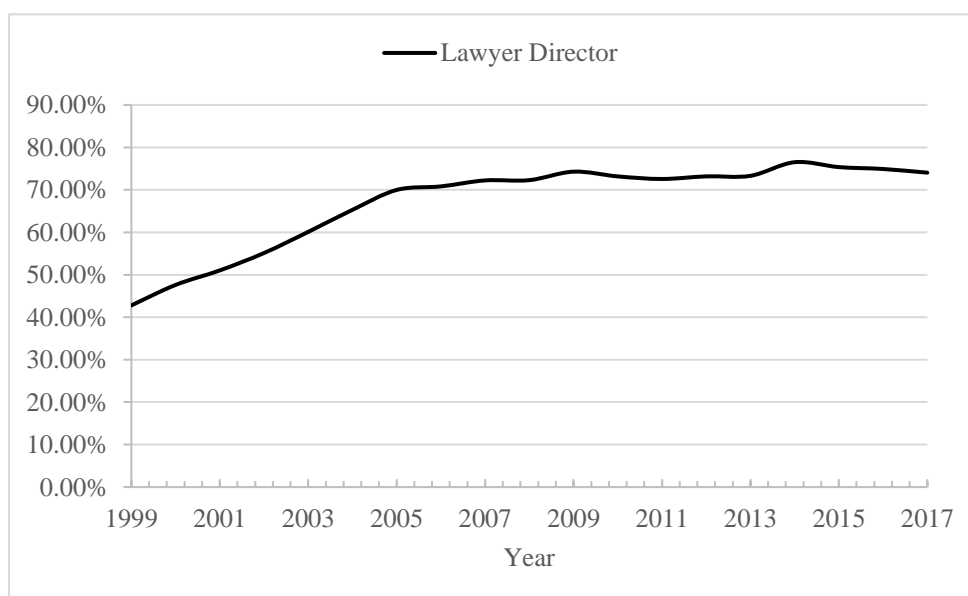
¹⁴⁷ Tobin's Q is the ratio of a firm's market value (defined as the firm's total liabilities, minus its balance sheet deferred taxes and investment tax credits, plus the value of its preferred stock and the market value of its common stock) divided by the replacement cost of its assets. *See* Eugene F. Fama & Kenneth R. French, *Testing Trade-Off and Pecking Order Predictions About Dividends and Debt*, 15 *REV. FIN. STUD.* 1, 8 (2002). The measure was introduced by James Tobin in *A General Equilibrium Approach to Monetary Theory*, 1 *J. MONEY, CREDIT & BANKING* 15 (1969). Since then, it has become a commonly recognized proxy for market valuation. *See, e.g.*, Philip G. Berger & Eli Ofek, *Diversification's Effect on Firm Value*, 37 *J. FIN. ECON.* 39, 40 (1995); Larry H. P. Lang & René M. Stulz, *Tobin's q, Corporate Diversification, and Firm Performance*, 102 *J. POL. ECON.* 1248, 1249-50 (1994); Randall Morck *et al.*, *Management Ownership and Market Valuation: An Empirical Analysis*, 20 *J. FIN. ECON.* 293, 294 (1988). One major advantage of Tobin's Q is its computational simplicity; this measure, however, is not without its critics. First, market prices do not necessarily reflect the marginal cost of capital, but instead may reflect the average cost of capital. In that case, firm value may not be properly captured by Tobin's Q. *See* Joao Gomes, *Financing Investment*, 91 *AM. ECON. REV.* 1263, 1264-65 (2001); *see also* Eric B. Lindenberg & Stephen A. Ross, *Tobin's q Ratio and Industrial Organization*, 54 *J. BUS.* 1, 8-9 (1981). Second, Tobin's Q may not reflect an accurate valuation of the firm due to market irrationality. Irrationality could be significant if investor sentiment drives valuations in the stock market. *See* Malcolm Baker *et al.*, *When Does the Market Matter? Stock Prices and the Investment of Equity-Dependent Firms*, 118 *Q.J. ECON.* 969, 969 (2003).

In order to control for factors that could impact bank risk or bank value, other than the presence of a lawyer-director, we always include in our regressions the following standard control variables (all defined in Appendix Table A1):¹⁴⁸ the value of a bank’s total book assets (*Size*); the number of years since a bank first appeared in Compustat (*Age*); the value of total revenue in millions of dollars in year t divided by the value of revenue in millions of dollars in year $t-1$ (*Revenue Growth*)¹⁴⁹; whether a bank has negative net income during a fiscal year (*Loss*); a bank’s debt-to-equity ratio (*Debt-to-Equity*); the ratio of capital expenditures over the book value of total assets (*CAPX/Assets*); a bank’s ownership percentage held by institutional shareholders weighted by the bank’s market capitalization (*Institutional Ownership*);¹⁵⁰ the natural logarithm of one plus the number of financial litigation occurrences, where “financial litigation” is the sum of bank, consumer credit, derivatives, financial reporting, financial fraud, insurance, and securities litigation ($\ln(\text{Financial Litigation})$); whether a bank’s director is also the bank’s CEO (*CEO Director*); whether a director was never employed by a bank, was not related to a key employee of the bank, and never worked for a major stakeholder of the bank (*Outside Director*); and the ratio of male to female directors on a bank’s board (*Director Gender*).

B. The Rise of Lawyer-Directors in Banks

Our analysis of the role of lawyer-directors in banks begins with a simple observation: The number of lawyer-directors in banks has grown exponentially in the past twenty years. Figure 1 illustrates the magnitude of this change.

Figure 1. Percentage of Banks with a Lawyer-Director. Figure 1 shows the percentage of banks in our sample with a lawyer-director for each year from 1999 to 2017.



¹⁴⁸ We adjusted all the continuous variables in our controls for extreme outliers by winsorizing at the 2.5% level in both the left and right tails of their distributions.

¹⁴⁹ We use the term *Revenue Growth* because we are examining banks, but this variable appears as *Sales Growth* in the Compustat dataset.

¹⁵⁰ This control seems especially relevant in light of recent studies that find that mega-asset managers, such as Blackrock, Vanguard, and State Street, have come to hold increasingly large blocks of bank shares. See Yesha Yadav, *Too-Big-to-Fail Shareholders*, 103 MINN. L. REV. 587, 593-94 (2019).

As Figure 1 shows, the rise of lawyer-directors in banks from 1999 to 2017 has been precipitous. In 1999, the percentage of banks with at least one lawyer-director comprised 42.8% of our sample. Since then, the percentage has substantially increased, reaching an apex of 76.5% in 2014. Overall, the average year-over-year increase in lawyer-directors on bank boards was 4.1%, while the total change in *Lawyer-Directors* from 1999 to 2017 was a staggering 73%.¹⁵¹

These numbers should cause us to pause. Our time period to measure the rise in bank lawyer-directors began in 1999, well before the 2008 financial crisis. As Figure 1 shows, the increase was most precipitous between 1999 and 2005, after which there continued to be a rise in bank lawyer-directors but at a more gradual rate. Neither the 2008 financial crisis nor new post-crisis risk management regulations had a noticeable effect (positive or negative) on the number of lawyer-directors on bank boards. The question is, why?

It may be the case that the rise in lawyer-directors was unrelated to bank risk and its management, a question we consider below.¹⁵² There we offer evidence that rejects this hypothesis, showing that a lawyer-director at a bank is associated with efficient changes in risk management and increases in bank value. In fact, lawyer-directors are most associated with an increase in bank value during a financial crisis. Consequently, the growth of lawyer-directors may have reflected a change in how a bank's stakeholders chose to govern the bank. Rather than relying on regulation—which, as we have described, may constrain “bad” risks at the expense of “good” risks—stakeholders may have preferred having a lawyer-director who can balance “bad” and “good” risks within the constraints of regulation. That ability to find an optimal balance between risk and return is more likely to increase bank value in lieu of, or in coordination with, risk regulation like the heightened bank capital requirements and one-size-fits-all governance requirements.

Analyzing the role of lawyer-directors can also provide guidance on what characteristics are optimal for a bank's board. For example, are lawyers mostly elected as executive or independent directors? Do lawyer-directors have special financial knowledge? Is there another reason why lawyers are elected to the board? To answer these questions, we begin by exploring the characteristics of lawyers sitting on bank boards. This matters for both descriptive and normative purposes. If lawyer-directors in banks share other characteristics, it could explain why—apart from the lawyers' legal training and skills—there are now so many of them on bank boards. Table 1 presents a summary of the characteristics of lawyer-directors in our sample.

¹⁵¹ In the Appendix, we include additional data (Appendix Figure A1) showing that the rise of lawyer-directors has been fairly similar across different types of banks (with the average year-over-year increase in lawyer-directors in each category ranging from 3.4% to 5.8%). The rise was most pronounced in commercial banks, from 39.9% in 1999 to a soaring 74.4% in 2017.

¹⁵² See *infra* Part IV.B.

Table 1. Summary of Lawyer-Director Characteristics. This table sets out a sample summary of the characteristics of lawyer-directors in banks during the period from 2000 to 2017, considering firm-years when there was at least one lawyer-director and presenting the average, mean, median, and 25th and 75th percentiles of (i) the lawyer-directors' age (*Lawyer – Director Age*), (ii) the percentage of lawyer-directors who were CEOs or executives (*Lawyer – CEO* and *Lawyer – Executive*, respectively), (iii) the percentage of male lawyer-directors (*Lawyer – Male Director*), and (iv) the percentage of lawyer-directors who also held a Master of Business Administration degree (*Lawyer – MBA Director*).

| Law Director Characteristics: | 2000 – 2017 | | | | | Obs. |
|---|-------------|----------|-------|--------|-------|--------|
| | Mean | St. Dev. | P25 | Median | P75 | |
| <i>Lawyer – Director_t</i> | 0.671 | 0.470 | 0 | 1 | 1 | 12,343 |
| <i>Lawyer – Director Age_t</i> | 70.31 | 8.140 | 65.5 | 71 | 75.67 | 8,276 |
| <i>Lawyer – Executive_t</i> | 0.443 | 0.376 | 0.083 | 0.333 | 1 | 8,276 |
| <i>Lawyer – CEO_t</i> | 0.112 | 0.272 | 0 | 0 | 0 | 8,276 |
| <i>Lawyer – Male Director_t</i> | 0.891 | 0.255 | 1 | 1 | 1 | 8,276 |
| <i>Lawyer – MBA Director_t</i> | 0.155 | 0.644 | 0 | 0 | 0 | 8,276 |

As set out in Table 1, bank lawyer-directors in our sample are usually men (about 89%) and about 70 years old. They are almost as likely to be executives as outsiders (about 44% being executives), but they are unlikely to be the CEO (only about 11%). Bank lawyer-directors are also unlikely to hold a Master of Business Administration (“MBA”) degree (about 16%).

The evidence that lawyer-directors are almost as likely to be executive-directors as independent-directors deserves special attention. It suggests that independence may be less relevant than a lawyer’s substantive skills. What are those skills? No doubt, some portion ties to a lawyer’s knowledge of financial regulation, although banks may benefit from the same knowledge by hiring lawyers rather than electing them as directors.¹⁵³ Other skills, relating to financial expertise, may be learned by lawyers over the course of their careers, although in that case one might expect more bankers on the board or, at least, a greater number of lawyer-directors with MBA degrees. What this suggests is that lawyer-directors bring expertise to banks that makes them more valuable for other reasons. We turn to those next.

C. Lawyer-Directors’ Expertise

Efficient risk management typically involves identifying and assessing risk, and then using that information to manage risk.¹⁵⁴ We, therefore, conjecture here—and, in the next Part, we verify empirically—that a lawyer-director’s role on the board can be explained, at least in part, by her ability to efficiently produce and use risk-related information as part of the board’s decision-making process. Framed in these terms, we identify three channels to explain why lawyer-directors are likely to assist in managing bank risk effectively: First, lawyers are advocates who promote the gathering of risk-related information,¹⁵⁵ minimize the risk of “group thinking” by a board, and support unbiased decision-making. Second, lawyers are

¹⁵³ The advice provided by a lawyer-director, however, may be more readily accepted by the other members of the board over advice provided by an outside lawyer. See *supra* notes 31-35 and accompanying text.

¹⁵⁴ See GEOFFREY P. MILLER, *THE LAW OF GOVERNANCE, RISK MANAGEMENT AND COMPLIANCE* 757 (2nd ed. 2019).

¹⁵⁵ One of us has previously explored the implications of advocacy for the governance of banks generally. See Sepe, *supra* note 39, at 372-75 (arguing that bank directors should be selected to ensure they can act as “advocates”).

facilitators who know how to decompose complex (often technical) information so that it becomes more accessible by non-expert directors. Making that information more accessible is essential for sound decision-making. Third, experienced lawyers have unique skills in accessing and processing information about litigation and regulatory risks. Over time, those risks have become significant components of a bank's overall risk exposure.

1. Critical Thinking and Advocacy

Within information economics, “advocacy” is a decision-making process that relies on competition in the production and collection of information.¹⁵⁶ The rationale is that rivalry between advocates improves the decision-making process by raising the quality of information on which decisions are made. Advocacy does so by constraining bias in producing information that may result, in part, because people tend to convey information based on their own preferences.¹⁵⁷ It follows that group decision-making, where group members share the same characteristics are more likely to produce biased results. Advocacy reduces that likelihood by enriching the decision-making process with multiple, heterogeneous sources of information.¹⁵⁸

The classic example of advocacy is the courtroom, where advocates for both sides boost the production of information for the trier-of-fact. Indeed, advocacy is an essential part of a lawyer's education. Lawyers are trained to be advocates—to ask critical questions, develop hypotheses, make assumptions, and extract information. This is how lawyers produce compelling narratives and arguments that are designed to persuade factfinders.

This same skill can help promote more informed board decision-making and, hence, improved risk management. First, lawyers are able to advocate positions, even unpopular ones, as part of a board's decision-making process. Lawyer-directors are skilled at critically analyzing an issue, asking challenging questions and demanding (more) supporting evidence before a decision is reached. This reduces the likelihood of group-thinking, which can occur when directors conform to a particular point of view at the expense of fully and critically considering the issue at hand. Several post-crisis regulatory reform committees highlighted group-thinking as a key deficiency in board performance and risk management during the period before the 2008 financial crisis.¹⁵⁹ Second, by questioning the dominant view, lawyer-directors are able to balance the incentives for greater risk-taking that arise from the banks'

¹⁵⁶ The seminal economic contribution on the informational and organizational value of advocacy systems was Mathias Dewatripont & Jean Tirole, *Advocates*, 107 J. POL. ECON. 1 (1999) (providing a formal discussion about the use of such systems in various organizational contexts). See also Paul Milgrom & John Roberts, *Relying on the Information of Interested Parties*, 17 RAND J. ECON. 18 (1986) (providing a model on decisional mechanisms that rely on information provided by interested parties); Hyun Song Shin, *Adversarial and Inquisitorial Procedures in Arbitration*, 29 RAND J. ECON. 378, 378-80 (1998) (showing that decisional procedures in which “the opposing parties are invited to make their cases” are superior to procedures in which the arbitrator adjudicates “on the basis of the information [she] uncovered” because the former procedure “allocate[s] the burden of proof in an effective manner, thereby extracting the maximal informational content”).

¹⁵⁷ See Augustin Landier *et al.*, *Optimal Dissent in Organizations*, 76 REV. ECON. STUD. 761, 769-73, 775 (2009) (providing a model that conceptualizes the value of dissent and preference heterogeneity in organizational models and information production).

¹⁵⁸ See Sepe, *supra* note 39, at 373-74.

¹⁵⁹ See, e.g., Sir David Walker, A Review of Corporate Governance in UK Banks and Other Financial Industry Entities 42, 53 (unpublished manuscript) (2009), available at <https://www.accaglobal.com/content/dam/accaglobal/PDF-technical/corporate-governance/cdr898.pdf>; Shivaram Rajgopal *et al.*, Bank Boards: What Has Changed Since the Financial Crisis 1, 10, 13 (unpublished manuscript) (2019), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2722175.

traditional reliance on asset transformation and leverage.¹⁶⁰ At the very least, one would expect lawyer-directors—and as a result of their contributions, the board as a whole—to be more likely to base their decisions on evidence that reflects all sides of the issue being considered and less likely to make strategic mistakes due to a reliance on poor or biased information.¹⁶¹

2. Conveying Complex Ideas

The argument for requiring experts—in particular, financial experts—to sit on bank boards rests partly on concerns that non-experts lack the analytical tools and experience needed to critically assess and manage a bank,¹⁶² especially in areas as complex and multi-faceted as bank risk.¹⁶³ Although this concern has merit, it misses the bigger point—namely, that diversity among bank directors also has value precisely because not everyone understands a bank’s business in the same way. Non-experts may have valuable, non-technical information that is relevant to the matter at hand. Moreover, while non-experts may struggle with the technical aspects of bank risk, they can still contribute to the decision-making process with questions that challenge assumptions held by directors who are closer to the industry.¹⁶⁴

Nevertheless, as a practical matter, non-experts are likely to over-rely on experts’ opinions in reaching a decision. This reliance may be more true for banks, since experts are likely to be outsiders with less insight into the bank’s operations and, perhaps, time constraints that make it difficult to gain those insights.¹⁶⁵ Under the circumstances, non-experts on a bank’s board may make decisions based on, in the jargon of economists, “second-order” beliefs that primarily rely on the experts’ (first-order) beliefs.¹⁶⁶ As a result, the contributions of non-experts may get lost, resulting in less well-developed information as the basis for the board’s decisions.

Lawyer-directors help mitigate this problem. Lawyers are trained not just to ask questions, but to ask “digestible” questions that can be understood by laymen sitting on juries and unsophisticated clients and witnesses. To do this, lawyers must be able to convey complex information through heuristic shortcuts—often taking the form of hypotheticals and analogies—which can make information more easily accessible to a wider audience. That is, effective storytelling is central to good lawyering, and to be effective, storytellers need to be “alchemists”:¹⁶⁷ They need to know how to analyze and present the relevant facts, reassemble

¹⁶⁰ See *supra* text accompanying notes 42-48.

¹⁶¹ See Sepe, *supra* note 39, at 374.

¹⁶² See Robert C. Pozen, *The Big Idea: The Case for Professional Boards*, HARV. BUS. REV. 50 (Dec. 2010), available at <http://hbr.org/2010/12/the-big-idea-the-case-for-professional-boards/ar/6>. (observing that the lack of expertise among directors is a “perennial” problem that explains why most directors struggle to understand a company’s business).

¹⁶³ See Macey & O’Hara, *supra* note 128, at 86 (arguing that bank directors require greater expertise because of “the greater complexity and opacity of banks, and the increased challenges in monitoring these complex institutions”).

¹⁶⁴ Cf. Ronald C. Anderson et al., *The Economics of Director Heterogeneity*, 40 FIN. MANAG. 5 (2011) (highlighting the value of heterogeneity on boards of directors).

¹⁶⁵ See Stephen M. Bainbridge & M. Todd Henderson, *Boards-R-Us: Reconceptualizing Corporate Boards*, 66 STAN. L. REV. 1051, 1064-65 (2014) (observing that many outsiders have full-time jobs elsewhere and hence can only devote limited time to running the business for which they are directors).

¹⁶⁶ On first- and second-order beliefs and, more generally, the epistemological problems of testimony, see Peter J. Graham, *Transferring Knowledge*, 34 NOUS 131(2000).

¹⁶⁷ See Philip N. Meyer, *How Lawyers’ Can Craft a Case Narrative to Spark Jurists’ and Jurors’ Interests*, ABA JOURNAL (Jan. 1, 2015), available at http://www.abajournal.com/magazine/article/how_lawyers_can_craft_a_case_narrative_to_spark_jurists_and_jurors_interest.

them for a purpose, and match facts with explanations and analytical theories. In that respect, lawyer-directors act as facilitators who can bridge the information gap between experts and non-experts, promoting more-informed decision-making.¹⁶⁸ By being able to break down—and even challenge—complex information, lawyers-directors are well-positioned to reinvent the board’s decision-making process. They can assist non-experts in forming their own first-order beliefs based on understanding the relevant information.

Of course, lawyer-directors are not the only ones who can facilitate a board’s decision-making. For example, professors may be as well-positioned as lawyers to bridge the information gap between experts and non-experts.¹⁶⁹ Other directors, based on their training and career experience, may also assist in assessing complex information and making it accessible to others. In addition, non-experts may reach decisions on their own without relying on experts’ opinions in forming their beliefs. Yet, even with these caveats, electing a lawyer to the board is likely to add value to the bank’s decision-making process. This is especially true with respect to bank risk, where the information gap between experts and non-experts is likely to be significant.

3. Managing Litigation and Regulatory Risk

To date, when considering a bank director’s expertise, the focus has largely been on financial knowledge, particularly regarding bank risk management.¹⁷⁰ This is unsurprising in light of the liquidity and credit risks that banks face.¹⁷¹ The emphasis on financial knowledge found its way into post-crisis banking reforms, with the Dodd-Frank Act requiring at least one member of a large commercial bank’s risk committee to have risk management experience, most often understood to be financial knowledge.¹⁷² Liquidity and credit risk, however, are not the only risks to which banks are exposed. Litigation and regulatory risk have also grown to become a principal part of a bank’s risk exposure.¹⁷³

Banks face substantially greater litigation risk following the 2008 financial crisis, in many cases due to the failure to maintain adequate internal controls, and this trend shows no signs of waning. In 2014, for example, J.P. Morgan Chase agreed to pay close to \$13 billion in a civil settlement with the U.S. government for lax practices in the vetting and packaging of mortgage-backed securities.¹⁷⁴ In the following year, Bank of America agreed to pay approximately \$16 billion to settle lawsuits and investigations into its mortgage and

¹⁶⁸ The management literature refers to this set of communication skills as “cross-training.” See J. Richard Hackman, *The Design of Work Teams*, in HANDBOOK OF ORGANIZATIONAL BEHAVIOR 314-342 (J. Lorsch ed., 1987). Cross-training relates to social interaction that promotes a group’s ability to cooperate productively. See Susan G. Cohen & Diane E. Bailey, *What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite*, 23 J. MANAG. 239, 239 (1997).

¹⁶⁹ See Bill Francis *et al.*, *Professors in the Boardroom and Their Impact on Corporate Governance and Firm Performance*, 57 FIN. MANAG. 547, 548-50 (2015) (providing evidence that firms with directors from academia exhibit increased performance).

¹⁷⁰ See, e.g., Macey & O’Hara, *supra* note 128, at 103; Bruner, *supra* note 116, at 983.

¹⁷¹ See *supra* Part I.A.1-2.

¹⁷² See *supra* notes 125-126 and accompanying text.

¹⁷³ See *supra* Part I.A.4-5.

¹⁷⁴ See Press Release, Justice Department, Justice Department, Federal and State Partners Secure Record \$13 Billion Global Settlement with JP Morgan for Misleading Investors about Securities Containing Toxic Mortgages, (Nov, 19, 2013), <https://www.justice.gov/opa/pr/justice-department-federal-and-state-partners-secure-record-13-billion-global-settlement>.

securitization businesses (including legacy businesses it had acquired).¹⁷⁵ These are substantial payments, vividly illustrating why litigation risk has moved to the center stage of bank risk management.

Regulatory risk is also higher in the aftermath of the 2008 financial crisis, with new requirements introduced by Basel III and the Dodd-Frank Act accounting for a substantial portion of that increase.¹⁷⁶ New areas of focus continue to emerge—from the next generation of bank secrecy laws to anti-money laundering regulation.¹⁷⁷ In this new landscape, managing regulatory risk increasingly requires knowledge of the laws that cut across a bank’s business and operations.

Lawyer-directors are better positioned than non-lawyers to manage litigation and regulatory risks¹⁷⁸—for example, to weigh whether a litigation strategy will fail or succeed, or a regulation will be interpreted in a particular way, and then determine a strategy to manage those risks. By optimizing the risk-and-return balance, particularly when the risk relates to litigation or regulation, lawyer-directors add value that others cannot provide. A lawyer’s role has been characterized in different ways—as “a counselor, planner, drafter, negotiator, investigator, lobbyist, scapegoat, champion, and, most strikingly, even as a friend.”¹⁷⁹ Add now to that list the lawyer’s expertise as a “risk appraiser.”

IV. THE VALUE OF LAWYER-DIRECTORS

Our analysis so far of the rise of lawyer-directors in banks has pointed to three factors that help explain this trend:

- (i) As advocates, lawyers are likely to improve a board’s decision-making process by mitigating unproductive group-thinking and reining in incentives for excessive risk-taking or other forms of “bad” strategic risk;¹⁸⁰
- (ii) Lawyers can facilitate the exchange of ideas between experts and non-experts, especially on complex matters such as bank risk, promoting decisions that are based on more information and input by all of a bank’s directors;¹⁸¹ and
- (iii) A lawyer-director’s unique understanding of legal and regulatory issues places her in the best position to manage a bank’s litigation and regulatory risks, two dimensions of bank risk that have grown since the 2008 financial crisis.¹⁸²

¹⁷⁵ See Press Release, Justice Department, Bank of America To Pay \$16.65 Billion in Historic Justice Department Settlement for Financial Fraud Leading Up to and During the Financial Crisis (Aug. 21, 2014), available at <https://www.justice.gov/opa/pr/bank-america-pay-1665-billion-historic-justice-department-settlement-financial-fraud-leading>.

¹⁷⁶ See *supra* notes 100-111, 124-127 and accompanying text.

¹⁷⁷ See McKinsey & Company, A Best Practice Model for Bank Compliance (Jan. 2016), available at <https://www.mckinsey.com/business-functions/risk/our-insights/a-best-practice-model-for-bank-compliance>.

¹⁷⁸ That benefit extends beyond lawyers as directors. A recent study found that when a firm has a CEO with legal education it also has less corporate litigation and a lower proportion of lost and settled litigation. See M. Todd Henderson *et al.*, *supra* note 14, at 4. The study also found that hiring a CEO with legal expertise is likely to be value enhancing, although there is a trade-off between the benefits of litigation reduction and excessively conservative investment policies. See *id.* at 5.

¹⁷⁹ Ronald J. Gilson, *Value Creation by Business Lawyers: Legal Skills and Asset Pricing*, 94 YALE L.J. 239, 242 (1984).

¹⁸⁰ See *supra* Part III.C.1

¹⁸¹ See *supra* Part III.C.2.

¹⁸² See *supra* Part III.C.3.

In this Part, we empirically test the importance of those factors. We do so, first, by investigating whether individual bank characteristics that are more likely to be associated with the election of a lawyer to a bank's board are consistent with our working hypothesis that lawyers are especially well-placed to manage bank risk effectively. Second, we investigate whether lawyer-directors add value to banks through better risk management by testing their impact on bank risk and bank value. Finally, we dig into channels that may transmit value from lawyer-directors to banks, including the effect of lawyer-directors on litigation and regulatory risks, as well as examining what other skills, beyond lawyering skills, may add value to banks.

A. *What Predicts a Lawyer-Director?*

We begin our empirical analysis of the effect of lawyer-directors on banks by investigating the bank characteristics that are more likely to be associated with having a lawyer on the board. Empirically, we use a logistic regression model over our full sample period from 2000 to 2017 with *Lawyer-Director* as the dependent variable and a menu of pre-determined (lagged by one-year) firm-level, director-level, and macro-level explanatory variables that, based on our theory of lawyer-directors, may matter the most in the decision to elect them to the board. Table 2 presents the results of our analysis.

Table 2. Predicting Lawyer-Directors. This table presents a logit analysis of the decision to employ a lawyer-director from 2000 to 2017. In all specifications, we included industry and year fixed effects and estimate standard errors using firm-level clustering. Additionally, for ease of comparison, we standardized all continuous predictor variables to have a mean of zero and a variance of one. Table A1 in the Appendix provides the variables' definitions. Continuous variables are winsorized at the 2.5% level in both tails. The estimated t -statistics are based on robust standard errors clustered by firm and are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Dep. Variable: <i>Lawyer – Director</i> _{t} | 2000 – 2017 | | |
|---|---------------------|---------------------|--------------------|
| | (1) | (2) | (3) |
| Variables | | | |
| <i>Bank Value</i> _{$t-1$} | 0.180** (2.09) | 0.241*** (2.56) | 0.228** (2.43) |
| Δ <i>Bank Value</i> _{$t-1$} | -0.143** (-2.11) | -0.142** (-1.99) | -0.123* (-1.77) |
| <i>Size</i> _{$t-1$} | | 0.222*** (2.80) | 0.152* (1.68) |
| $\ln(\text{Age})$ _{$t-1$} | | -0.087 (-1.00) | -0.145 (-1.59) |
| <i>Revenue Growth</i> _{$t-1$} | | 0.305*** (4.68) | 0.273*** (4.06) |
| <i>Loss</i> _{$t-1$} | | 0.167 (0.79) | 0.168 (0.78) |
| <i>Debt-to-Equity</i> _{$t-1$} | | 0.054 (0.80) | 0.083 (1.26) |
| <i>CAPX/Assets</i> _{$t-1$} | | -0.093 (-1.06) | -0.100 (-1.12) |
| <i>Inst. Ownership</i> _{$t-1$} | | 0.009 (0.12) | -0.026 (-0.36) |
| <i>Bank Risk</i> _{$t-1$} | | -0.078 (-1.22) | -0.057 (-0.87) |
| $\ln(\text{Financial Litigation})$ _{$t-1$} | | | 0.163* (1.72) |
| $\ln(\text{Class Action Litigation})$ _{$t-1$} | | | -0.172 (-1.47) |
| <i>CEO Director</i> _{$t-1$} | | | 0.540*** (3.10) |
| <i>Outside Director</i> _{$t-1$} | | | 0.290 (1.54) |
| <i>Financial Crisis</i> _{$t-1$} | | | 2.219*** (5.09) |
| Industry and Year Fixed Effects | Yes | Yes | Yes |
| # of Unique Firms | 1,379 | 1,379 | 1,379 |
| N | 6,949 | 6,949 | 6,949 |
| Pseudo R ² | 0.042 | 0.056 | 0.080 |

We begin by investigating the relationship between the decision to elect a lawyer-director (*Lawyer-Director*) and bank value (*Bank Value*) as well as trends in bank value (Δ *Bank Value*).¹⁸³ Recall that our working hypothesis is that lawyer-directors add value to how a bank manages risk. If our hypothesis is correct, we expect underperforming banks to be more likely to elect lawyer-directors, since those banks will benefit more from a lawyer's risk management skills.

¹⁸³ Since our interest is focused on predicting a bank's initial election of a lawyer-director (and not whether the bank retained or elected another lawyer-director later), we exclude all firm-year observations from the analysis after a *Lawyer-Director* was initially elected by a bank.

As shown by column (1) of Table 2, banks with higher valuations (as proxied by Tobin's Q) were more likely to have at least one lawyer-director on the board. For instance, a 1% increase in *Bank Value* translates to a 19.7%¹⁸⁴ increase in the likelihood of a bank selecting a lawyer-director. In contrast, the coefficient for Δ *Bank Value* suggests that banks with upward trends in value are less likely to have a *Lawyer-Director*. Specifically, a 1% increase in Δ *Bank Value* translates into a 13.3%¹⁸⁵ decrease in a bank's likelihood of electing a lawyer-director.¹⁸⁶ We interpret this evidence to indicate that the decision to appoint a lawyer-director may partly reflect recent underperformance in *Bank Value* that has not improved. That is, consistent with our hypothesis, it would seem that lawyer-directors tend to be elected to the board when there are negative factors that impair a bank's performance, although column (1) of Table 1 does not tell us whether that underperformance resulted from poor risk management.

Firm size and revenue growth—reflecting a bank's use of leverage to fund its investments¹⁸⁷ and that, following prior studies, we employ as proxies for a bank's complexity¹⁸⁸—are also associated with having a *Lawyer-Director*. Specifically, as shown in column 2, when a bank's size increases by 1%, the bank becomes 24.9%¹⁸⁹ more likely to have a lawyer-director. This suggests that the benefits lawyer-directors bring to banks are greater when a bank is large or complex.

Column (3) of Table 2 includes additional firm-level, director-level, and macro-level predictor variables. We find that the selection of a lawyer-director also correlates with (i) a bank having higher levels of overall litigation, including regulatory litigation (*Ln(Financial Litigation)*), (ii) a bank having a CEO who also serves on the bank's board, and (iii) the occurrence of the 2008 financial crisis.

All of these results are consistent with our working hypothesis. First, banks with higher litigation levels are more likely to elect a lawyer-director, confirming our conjecture that lawyers may be particularly valuable in assessing litigation and regulatory risks.¹⁹⁰ Second, the greater likelihood of having a lawyer-director when the CEO is on the board is consistent with our hypothesis that lawyers, as advocates, add value to the board's decision-making process.¹⁹¹ CEOs influence what information a bank's board receives from the bank's staff. Their influence can be even greater when the CEO is also a director, because under those circumstances the CEO can exert direct influence over the board's decision-making process. That

¹⁸⁴ The 19.7% economic significance is calculated by computing the exponent of the coefficient estimate of *Bank Value* minus 1 ($=\exp(0.180)-1$)

¹⁸⁵ The 13.3% economic significance is calculated by computing the exponent of the coefficient estimate of Δ *Bank Value* minus 1 ($=\exp(-0.143)-1$).

¹⁸⁶ Column (2) of Table 2 applies a number of predetermined firm-level predictor variables to the specifications in column (1), verifying that the economic and statistical significance of the regression estimates of *Bank Value* (coefficient = 0.241 and *t*-stat = 2.56) and Δ *Bank Value* (coefficient = -0.142 and *t*-stat = -1.99) are qualitatively similar to column (1).

¹⁸⁷ See Whitehead, *supra* note 38, at 781-94 (demonstrating the growth in assets, leverage, and total risk of investment banks during the period leading up to the 2008 financial crisis).

¹⁸⁸ On the use of firm size and revenue growth as proxies for greater organizational complexity, see J. E. Core *et al.*, *Corporate Governance, Chief Executive Officer Compensation and Firm Performance*, 51 J. FIN. ECON. 371 (1999); K.J. Martijn Cremers, Lubomir P. Litov & Simone M. Sepe, 126 J. FIN. ECON. 422 (2017); Augustine Duru *et al.*, *Staggered Boards, Corporate Opacity and Bank Value*, 37 J. BANK. & FIN. 341 (2013).

¹⁸⁹ The 24.9% economic significance is calculated by computing the exponent of the coefficient estimate of *Size* minus 1 ($=\exp(-0.143)-1$).

¹⁹⁰ See *supra* Part III.C.3.

¹⁹¹ See *supra* Part III.C.1.

influence may include increasing risk to inefficient levels if the CEO has incentives to do so—not unlikely in light of the shareholders’ interest in greater risk and skewed CEO pay packages, as noted before.¹⁹² Lawyer-directors can help address this problem since, as advocates, they are less likely to defer to CEO pressure to incur excessive risk.¹⁹³ Third, electing lawyer-directors during the 2008 financial crisis indicates that a lawyer’s skills may improve (or, at least, be seen as improving) a bank’s risk management capabilities, which can be expected to be more pressing in times of financial crisis.

In sum, Table 2 suggests that banks that are likely to benefit the most from having a lawyer-director are large and complex, have greater litigation and regulatory risks, have a CEO who is also a director, and weathered the 2008 financial crisis. Furthermore, the combined results from column (1) on *Bank Value* and Δ *Bank Value* suggest that the direction of the relationship between *Lawyer-Director* and *Bank Value* runs from “right to left”—that is, having a lawyer-director correlates with greater *Bank Value* rather than the other way around (a negative association with *Bank Value* or greater *Bank Value* correlating with having a lawyer-director). At the same time, Table 2 suggests that the channels leading to greater bank value when a lawyer-director is on the board come from enhanced risk management, improved board decision-making, and a better response to the 2008 financial crisis. We verify whether lawyer-directors improve bank risk management and, hence, increase bank value, as well as our hypotheses about the channels of value transmission, in the following sections.

B. *Lawyers, Bank Risk, and Bank Value*

Moving from our working hypothesis, and the evidence in Table 2 regarding the types of banks that have a lawyer-director, we investigate the impact of lawyer-directors on a bank’s overall risk as proxied by Z-Score. Z-Score is a standard measure of risk, which we interpret broadly as capturing a bank’s overall risk.¹⁹⁴ Empirically, the challenge to overcome in performing this analysis is endogeneity—the ever-present possibility that correlation could be mistaken for causation.¹⁹⁵ In particular, one needs to exclude changes in the dependent variable (here, bank risk) that might be due to changes in some omitted variable other than the independent variable (here, the presence of a lawyer-director). For instance, a bank’s investment opportunity set (which is unobservable and, hence, impossible to measure empirically) could correlate positively with both selecting a lawyer-director and changes in bank risk, leading to an omitted variable bias that creates the appearance of a correlation between *Lawyer-Director* and *Bank Risk* when one does not exist.

In the empirical literature, a primary response to endogeneity concerns is the use of a matching methodology.¹⁹⁶ Using this methodology, the risk of banks with a lawyer-director (the “treated” firms) is compared to the risk of a set of “control” firms, where the control firms are selected due to their shared essential characteristics with the treated firms, but they do not have a lawyer-director.¹⁹⁷ The intuition behind this procedure is that comparing banks with a

¹⁹² See *supra* note 48 and accompanying text.

¹⁹³ See *supra* Part III.C.1.

¹⁹⁴ See *supra* note 146 and accompanying text.

¹⁹⁵ See K.J. Martijn Cremers, Simone M. Sepe & Saura Masconale, *Is the Staggered Board Debate Really Settled?*, 167 PA. L. REV. ONLINE 9, 20-29 (2018) (illustrating the advantages and disadvantages of different empirical methodologies).

¹⁹⁶ See GUIDO W. IMBENS & DONALD B. RUBIN, CAUSAL INFERENCE FOR STATISTICS, SOCIAL, AND BIOMEDICAL SCIENCES 401-04 (2015).

¹⁹⁷ See K.J. Martijn Cremers, Saura Masconale & Simone M. Sepe, *Activist Hedge Funds and the Corporation*, 94 WASH. U. L. REV. 261, 282-85 (2016) (describing the matching methodology).

lawyer-director to banks that share essential, *observable* characteristics, but do not have a lawyer-director, decreases the likelihood that significant differences in *unobservable* (and, thus, omitted) factors between banks having a lawyer-director and those that do not will bias our regression estimates.¹⁹⁸ Specifically, we use a propensity score matched sample¹⁹⁹ to match each treated firm with a *Lawyer-Director* to a control firm without a *Lawyer-Director* during the four- and five-year period following the initial year in which the matched, treated firm first appointed a *Lawyer-Director*.²⁰⁰

Using the matched sample, we regress *Bank Risk* on *Treated Lawyer* \times *Post*, where *Treated Lawyer* is an indicator that equals one (zero) for firms with (without) a lawyer-director, and *Post* is an indicator variable equal to one in the years after a bank first selects a lawyer-director and zero otherwise. In addition, since Table 2 suggested that the 2008 financial crisis increased the likelihood of banks having a lawyer-director, we divide our sample between *Normal Times* and the *Financial Crisis* using a triple interaction analysis where *Financial Crisis* is an indicator variable equal to one during the years 2007 to 2009 and *Normal Times* includes all other years outside this range. In fact, based on the results in Table 2, we conjecture that the impact of *Lawyer-Director* on *Bank Risk* may be different in *Normal Times* and the *Financial Crisis*. Table 3 shows our results. In all our regressions, we include firm and industry \times year fixed effects to control for time-invariant and time-varying heterogeneity at the firm and industry levels.²⁰¹ Including these higher-order fixed effects provides additional robustness to our methodology, allowing us to control for common sources of industry- or time-dependent unobserved heterogeneous variation.²⁰²

¹⁹⁸ See *id.*

¹⁹⁹ Under propensity score matching, one collapses a multitude of covariates to a scalar propensity score, which is the probability that an observation receives treatment given the covariates, estimated by some logistic regression. Relative to other matching methodologies, this procedure maximizes the number of matches between treated and control firms. For an exhaustive discussion of propensity score matching, see Marco Caliendo & Sabine Kopeinig, *Some Practical Guidance for the Implementation of Propensity Score Matching*, DIW Berlin Discussion Papers, No. 485 (2005), available at <https://www.econstor.eu/bitstream/10419/18336/1/dp485.pdf>.

²⁰⁰ In particular, we use propensity scores based on *Bank Value*, *Size*, *Institutional Ownership*, and *Bank Risk* and exact matching by two-digit SIC codes to build our matched dataset, which is summarized in Table A2 in the Appendix. We match based on *Bank Value* and *Bank Risk* to ensure that our two main dependent variables of interest were similar between the treated and untreated control groups before the election of a *Lawyer-Director*. We also match based on *Size* and *Industry* as these have been found to be important predictors of a financial firm's decision to elect a *Lawyer-Director* (see Table 2). Lastly, we match based on *Institutional Ownership* to ensure that the treated and control firms had similar levels of shareholder monitoring (governance). Panel A of Table A2 in the Appendix shows the pre-treatment year (*t*-1) summary statistics for treated and control firms and the results of tests for significant differences in means (test statistics in parentheses) between the two groups. Panel B of Table A2 in the Appendix presents the full matched sample summary statistics over the estimation window, (*t*-5) to (*t*+5).

²⁰¹ We were able to include firm fixed effects in the matched sample specifications since we required treated financial firms to have at least one year in which lawyer-directors were not present on the board. This eliminated roughly 50% of the financial firms in our sample that always had a *Lawyer-Director*.

²⁰² On the use of higher-order fixed effects for added robustness, see Todd A. Gormley & David A. Matsa, *Common Errors: How to (and Not to) Control for Unobserved Heterogeneity*, 27 REV. FIN. STUD. 617, 617 (2014); Jonathan M. Karpoff & Michael D. Wittry, *Institutional and Legal Context in Natural Experiments: The Case of State Antitakeover Laws*, 73 J. FIN. 657, 657 (2018).

Table 3. Lawyer-Directors and Bank Risk. This table reports the results for matched panel regressions of the natural logarithm of Z-Score (multiplied by negative one (-1)) on various interaction variables. The main variables of interest, *Bank Risk*, *Treated Lawyer* \times *Post* \times *Normal Times*, *Treated Lawyer* \times *Post* \times *Financial Crisis*, *Treated Lawyer* \times *Post*, *Treated Lawyer*, and *Post*, and the other interaction terms, are measured contemporaneously whereas the remaining controls are lagged by one period. We employ estimation windows spanning eight and ten years around the first time a treated firm selects a lawyer-director; the year of employment ($t = 0$) is excluded from the panel. Included controls are *Bank Value*, *Size*, *Age*, *Revenue Growth*, *Loss*, *Debt-to-Equity*, *CAPX/Assets*, *Inst. Ownership*, *Ln(Financial Litigation)*, *CEO Director*, *Outside Director* and *Director Gender*. The variables *Normal Times* and *Financial Crisis* are subsumed by the industry \times year fixed effects. Table A1 in the Appendix provides the variables' definitions. Industry fixed effects are defined using three-digit SIC code industry definitions. All continuous variables are winsorized at the 2.5% level in both tails. The estimated t -statistics are based on robust standard errors clustered by firm and are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Dep. Variable: <i>Bank Risk</i> _{t} | $(t - 4)$ to $(t + 4)$ | | | $(t - 5)$ to $(t + 5)$ | | |
|---|------------------------|---------------------|--------------------|------------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Variables | | | | | | |
| <i>Treated Lawyer</i> _{t} \times <i>Post</i> _{t} | 0.033 (0.33) | -0.274* (-1.68) | 0.079 (0.68) | 0.021 (0.21) | -0.337** (-2.04) | 0.116 (1.07) |
| <i>Treated Lawyer</i> _{t} \times <i>Post</i> _{t} \times <i>Normal Times</i> _{t} | | 0.346* (1.79) | | | 0.422** (2.21) | |
| <i>Treated Lawyer</i> _{t} \times <i>Post</i> _{t} \times <i>Financial Crisis</i> _{t} | | | -0.265* (-1.93) | | | -0.415*** (-3.14) |
| <i>Treated Lawyer</i> _{t} \times <i>Normal Times</i> _{t} | | -0.172 (-1.11) | | | -0.221 (-1.43) | |
| <i>Treated Lawyer</i> _{t} \times <i>Financial Crisis</i> _{t} | | | 0.156 (1.42) | | | 0.267*** (2.58) |
| <i>Post</i> _{t} \times <i>Normal Times</i> _{t} | | -0.392** (-2.20) | | | -0.476*** (-2.68) | |
| <i>Post</i> _{t} \times <i>Financial Crisis</i> _{t} | | | 0.289** (2.31) | | | 0.427*** (3.51) |
| <i>Post</i> _{t} | -0.013 (-0.14) | 0.315** (2.02) | -0.070 (-0.67) | -0.005 (-0.06) | 0.397** (2.50) | -0.104 (-1.03) |
| Control Variables | Yes | Yes | Yes | Yes | Yes | Yes |
| Firm Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry \times Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| # of Unique Firms | 662 | 662 | 662 | 675 | 675 | 675 |
| N | 4,683 | 4,683 | 4,683 | 5,614 | 5,614 | 5,614 |
| Adjusted R ² | 0.651 | 0.662 | 0.678 | 0.627 | 0.628 | 0.628 |

Table 3, columns (1) and (4), show that the average effect of a lawyer-director on bank risk is insignificant in the four and five years after she joined the board. On its face, this result contradicts our hypothesis about the value of lawyer-directors in managing bank risk. Recall, however, that effective risk management is not simply risk reduction, but rather a determination of a bank's optimal risk-and-return tradeoff. This may entail taking different levels of risk under different circumstances.

Further examination confirms this point. When we disentangle our sample of banks into *Normal Times* and *Financial Crisis* (in columns 2-3 and 5-6), we find that the insignificant average effect that lawyer-directors have on risk over the full period (2000-2017) is attributable to the cancelling effect of lawyer-directors during non-crisis and crisis periods. Under ordinary circumstances (*Normal Times*), having a lawyer-director is more likely to increase bank risk, but during times of crisis (*Financial Crisis*), having a lawyer-director is more likely to reduce

risk—canceling out a lawyer-director’s overall effect on bank risk during our full sample period (2000-2017). For instance, column (5), which considers changes in *Bank Risk* within ten-year estimation windows, shows that banks with lawyer-directors during *Normal Times* increased *Bank Risk* by 9.5%²⁰³ relative to the sample mean, while they decreased *Bank Risk* (in column (6)) during the *Financial Crisis* by 9.4%²⁰⁴ relative to the sample mean. The findings are qualitatively the same when we consider changes in *Bank Risk* during *Normal Times* and the *Financial Crisis* within eight-year estimation windows.²⁰⁵

Overall, these results are consistent with our hypothesis that lawyer-directors contribute to changes in risk that are efficient for banks.²⁰⁶ When greater risk-taking made economic sense during *Normal Times*, banks with lawyer-directors were more likely to undertake it, while banks with lawyer-directors were more likely to reduce risk during the *Financial Crisis* when it was optimal to do so.

If we are correct, having a lawyer-director at a bank should be associated with higher bank value. Table 4 verifies this association by assessing the impact of lawyer-directors on bank value in our matched sample using a differences-in-differences approach. Specifically, we regress *Bank Value* on *Treated Lawyer* \times *Post* considering five separate estimation windows ranging from two, four, six, eight, and ten years around the first time a treated firm employs a lawyer-director (while the year of employment ($t = 0$) is excluded from the panel).

²⁰³ The 9.5% economic significance for the increase in *Bank Risk* during *Normal Times* is calculated by dividing the coefficient of *Treated Lawyer* _{t} \times *Post* _{t} \times *Normal Times* _{t} (=0.422) by the treated and control firms’ *Bank Risk* mean over the t plus or minus 5-year window (=4.431, see Appendix Table A2.Panel B).

²⁰⁴ The 9.4% economic significance for the decrease in *Bank Risk* during *Financial Crisis* is calculated by dividing the coefficient of *Treated Lawyer* _{t} \times *Post* _{t} \times *Financial Crisis* _{t} (=−0.415) by the treated and control firms’ *Bank Risk* mean over the t plus or minus 5-year window (=4.431, see Appendix Table A2.Panel B).

²⁰⁵ The coefficient for the ($t \pm 1$) matched sample in *Normal Times* (*Financial Crisis*) is −0.095 (0.137) with a t -statistic of −0.36 (0.39). The coefficient for the ($t \pm 2$) matched sample in *Normal Times* (*Financial Crisis*) is −0.061 (0.013) with a t -statistic of −0.23 (0.06). The coefficient for the ($t \pm 3$) matched sample in *Normal Times* (*Financial Crisis*) is −0.057 (0.079) with a t -statistic of −0.26 (0.51). We did not find significant increases or decreases in bank risk over the ($t \pm 1$), ($t \pm 2$), and ($t \pm 3$) estimation periods, although the signs are consistent with the ($t \pm 4$) and ($t \pm 5$) results. There are two likely reasons for this. First, it takes time for a new lawyer-director to implement operational strategies that increase or decrease risk. Second, the number of matched firms during the 2008 financial crisis was greatly reduced when we looked at the shorter estimation periods. Using the four- and five-year periods allow us to increase the sample size to an amount necessary to detect the impact of lawyer-directors on bank risk during *Normal Times* and the *Financial Crisis*.

²⁰⁶ We report robustness results in the Appendix. There, we estimate pooled panel regressions of the effect of *Lawyer-Director* on *Bank Risk* (see Appendix Table A3, and for the summary statistics of the pooled panel, see Appendix Table A4). In pooled panel regressions, the coefficient of *Lawyer-Director* is only identified through changes in *Bank Risk*, indicating the difference in average *Bank Risk* before versus after a change in the presence of a lawyer-director on the bank’s board. The pooled panel regressions of Appendix Table A2 (columns 1-3) point to a negative association between *Bank Risk* and *Lawyer-Director*. While pooled panel regressions are less able to address endogeneity concerns, what matters are the additional results we obtain when we examine the effect of *Lawyer-Director* on *Bank Risk* by considering other roles a lawyer-director can hold in the firm. As shown by columns (4) and (5), having a *Lawyer-Executive* or a *Lawyer-CEO* on the board does not result in a differential reduction in risk. Rather, all the risk reduction is associated with the impact of *Lawyer-Director* on *Bank Risk* (whether or not the lawyer-director is a CEO or executive). This result seems to further corroborate our hypothesis about the value of a lawyer’s skills and experience. The finding that the effect on bank risk is tied to a lawyer’s role as a director, rather than whether she is in a “control position” (as a CEO or executive), suggests the effect is tied to the lawyer’s skills as a director and not simply whether she has greater control over the bank’s operations.

Table 4. Lawyer-Directors and Bank Value. This table reports the results for matched panel regressions of Tobin's Q on treated and post-indicator variables over varying estimation windows. The main variables of interest, *Bank Value*, *Treated Law* × *Post*, *Treated Law*, and *Post*, are measured contemporaneously, whereas the remaining controls are lagged by one period. Included controls are *Size*, *Age*, *Revenue Growth*, *Loss*, *Debt-to-Equity*, *CAPX/Assets*, *Inst. Ownership*, *Ln(Financial Litigation)*, *CEO Director*, and *Outside Director*, and *Director Gender*. Table A1 in the Appendix provides the variables' definitions. Industry fixed effects are defined using three-digit SIC code industry definitions. All continuous variables are winsorized at the 2.5% level in both tails. The estimated *t*-statistics are based on robust standard errors clustered by firm and are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Estimation windows: | (<i>t</i> ±1) | (<i>t</i> ±2) | (<i>t</i> ±3) | (<i>t</i> ±4) | (<i>t</i> ±5) |
|---|---------------------|----------------------|--------------------|---------------------|--------------------|
| Dep. Variable: <i>Bank Value</i> _{<i>t</i>} | | | | | |
| Variables | (1) | (2) | (3) | (4) | (5) |
| <i>Treated Lawyer</i> _{<i>t</i>} × <i>Post</i> _{<i>t</i>} | 0.070*** (2.75) | 0.050*** (3.13) | 0.036** (1.98) | 0.048** (2.09) | 0.042* (1.85) |
| <i>Post</i> _{<i>t</i>} | -0.064** (-2.39) | -0.041*** (-2.78) | -0.028* (-1.68) | -0.041** (-2.06) | -0.037* (-1.81) |
| Control Variables | Yes | Yes | Yes | Yes | Yes |
| Firm Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Industry×Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| # of Unique Firms | 492 | 681 | 688 | 695 | 699 |
| N | 1,174 | 2,720 | 3,940 | 5,052 | 6,041 |
| Adjusted R ² | 0.842 | 0.867 | 0.861 | 0.849 | 0.840 |

As shown by Table 4, banks with a *Lawyer-Director* have higher valuations than banks without a *Lawyer-Director*. For instance, column (1) shows that, in the year immediately after a lawyer-director joins a bank, *Bank Value* increases by 5.7%²⁰⁷ compared to the mean value one year prior to the lawyer-director joining. Similar findings appear in columns (3) and (5), which show, relative to the full sample mean, that *Bank Value* is 3.1%²⁰⁸ and 3.7%²⁰⁹ higher for *Treated Lawyer* banks (banks with a lawyer-director) in the third and fifth year after a lawyer was elected to the board compared to the third and fifth year prior to the lawyer-director joining the bank.

Thus, the results in Table 4 provide strong support for our theory of lawyer-directors and banks: Lawyer-directors contribute to efficient changes in bank risk that add value to banks.²¹⁰ In particular, based on Tables 3 and 4, lawyer-directors seem especially well-positioned to adapt to changing circumstances, with changes in risk depending on whether the bank is in *Normal Times* or *Financial Crisis*.

²⁰⁷ The 5.7% economic significance for the increase in *Bank Value* is calculated by dividing the coefficient of *Treated Lawyer*_{*t*} × *Post*_{*t*} (=0.070) by the treated firms' *Bank Value* mean in the year before treatment (*t*-1) (=1.234, see Appendix Table A2.Panel A).

²⁰⁸ The 3.1% economic significance for the increase in *Bank Value* is calculated by dividing the coefficient of *Treated Lawyer*_{*t*} × *Post*_{*t*} (=0.036) by the treated and control firms' *Bank Value* mean over the *t* plus or minus 5-year window (=1.148, see Appendix Table A2.Panel B).

²⁰⁹ The 3.7% economic significance for the increase in *Bank Value* is calculated by dividing the coefficient of *Treated Lawyer*_{*t*} × *Post*_{*t*} (=0.042) by the treated and control firms' *Bank Value* mean over the *t* plus or minus 5-year window (=1.148, see Appendix Table A2.Panel B).

²¹⁰ We provide a robustness check for the main finding of a positive association between *Bank Value* and *Lawyer-Director* in Tables A5 and A6 in the Appendix, respectively. Table A5 presents results for pooled panel regressions. Table A6 further investigates what happens when we exclude all insurance companies (two-digit SIC code: 63-64) and other financial firms (two-digit SIC code: 66-67) from the pooled panel and matched sample regressions. Our results are robust to the exclusion of those firms.

Yet, in light of the importance of risk to banks,²¹¹ and the several types of risk to which banks are exposed,²¹² it is reasonable to assume that a lawyers' skills may matter most when a bank's risk-taking goes awry—that is, in situations when the bank's board needs to act swiftly to rein-in risk. This would explain why, as shown in Table 2, banks were more likely to hire lawyer-directors during the 2008 financial crisis. We test this further in Table 5 below by exploring the heterogeneous effect on *Bank Value* of having a lawyer-director during a financial crisis. Empirically, we do so by interacting *Lawyer-Director* with *Financial Crisis* and then estimating the interacted impact on *Bank Value*. Here we use pooled panel regressions, rather than a matched sample, since investigating interactions requires a larger number of observations and these are only provided by pooled panel samples.

Table 5. Lawyer-Directors, Economic Crisis, and Bank Value. This table reports the results for pooled panel regressions of Tobin's Q on the interaction of *Lawyer-Director* and *Financial Crisis* during the sample period from 2000 to 2017. The main variable of interest, *Bank Value*, is measured contemporaneously, whereas *Lawyer-Director* × *Financial Crisis*, *Lawyer-Director*, *Financial Crisis*, and the remaining controls are lagged by one period. Included controls are *Size*, *Age*, *Sales Growth*, *Loss*, *Debt-to-Equity*, *CAPX/Assets*, *Inst. Ownership*, *Ln(Financial Litigation)*, *CEO Director*, *Outside Director*, and *Director Gender*. Columns (1)-(2) specify industry and year fixed effects, while column (3) employs the higher dimensional industry × year fixed effects. *Financial Crisis* is subsumed by the industry × year fixed effects. Table A1 in the Appendix provides the variables' definitions. Industry fixed effects are defined using three-digit SIC code industry definitions. All continuous variables are winsorized at the 2.5% level in both tails. The estimated *t*-statistics are based on robust standard errors clustered by firm and are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Dep. Variable: <i>Bank Value</i> _{<i>t</i>} | 2000 – 2017 | | |
|---|----------------------|----------------------|--------------------|
| Variables | (1) | (2) | (3) |
| <i>Lawyer Director</i> _{<i>t</i>-1} × <i>Financial Crisis</i> _{<i>t</i>-1} | 0.043* (1.76) | 0.018* (1.79) | 0.019* (1.90) |
| <i>Lawyer Director</i> _{<i>t</i>-1} | 0.021 (0.70) | 0.025* (1.89) | 0.026** (2.00) |
| <i>Financial Crisis</i> _{<i>t</i>-1} | -0.152*** (-4.49) | -0.086*** (-4.37) | Omitted |
| Significance of Joint Effect: [<i>Lawyer Director</i> _{<i>t</i>-1} × <i>Financial Crisis</i> _{<i>t</i>-1}] + [<i>Lawyer Director</i> _{<i>t</i>-1}] | 0.064** (2.31) | 0.043*** (3.01) | 0.045*** (3.18) |
| Control Variables | No | Yes | Yes |
| Industry and Year Fixed Effects | Yes | Yes | No |
| Industry×Year Fixed Effects | No | No | Yes |
| # of Unique Firms | 1,530 | 1,530 | 1,530 |
| N | 12,343 | 12,343 | 12,343 |
| Adjusted R ² | 0.175 | 0.440 | 0.461 |

As expected, Table 5 (columns (2) and (3), including the full set of control variables) shows a positive and significant association between *Lawyer-Director* and *Bank Value*

²¹¹ See *supra* Part I.B.

²¹² See *supra* Part I.A.

(2.2%²¹³ and 2.3%,²¹⁴ respectively), as well as a differential increase in value for banks with a *Lawyer-Director* during the *Financial Crisis* (1.6%²¹⁵ and 1.7%,²¹⁶ respectively). Additionally, when we test the *Significance of Joint Effect* (the interacted impact of having a lawyer-director and being in a financial crisis), we find a positive and significant total effect for banks. Specifically, columns (2) and (3) suggest a total incremental increase in *Bank Value* over the period from 2000 to 2017 of 3.8%²¹⁷ to 4%²¹⁸ for banks with at least one lawyer-director relative to the sample average.

C. More Value-Transmission Channels

The empirical evidence so far confirms that lawyer-directors are effective risk managers. We push our empirical analysis further in this section. We do so, first, by verifying whether the benefits of having a lawyer-director increase when the risk to be managed arises from litigation or regulatory issues. Second, consistent with our analysis of the effect of a lawyer's skills on bank risk management, we examine more broadly whether banks benefit from directors with a diverse set of educational and professional skills.

1. Litigation and Regulatory Risk

A central tenet of our theory of lawyer-directors is that, among the risks faced by a bank, lawyer-directors are especially well-positioned to manage litigation and regulatory risks. Table 2 above, which identified bank features that are more likely to be associated with having a lawyer-director, appears to confirm this position. It shows that banks with more overall litigation (including regulatory litigation) are more likely to have a lawyer-director. Furthermore, in Appendix Table A3, where we report the results for the pooled panel regression of *Lawyer-Director* on *Bank Risk*, we find that the level of a bank's litigation (*Financial Litigation*) is positively associated with *Bank Risk*. This result indicates that higher levels of financial litigation increase overall bank risk, also suggesting—in conjunction with the results of Tables 3 and 4—that the value of having a lawyer-director should increase in banks with more litigation.

²¹³ The 2.2% economic significance for the increase in *Bank Value* is calculated by dividing the coefficient of *Lawyer Director*_{*t*-1} in column 2 (=0.025), which includes industry and year fixed effects, by the average *Bank Value* in our pooled sample during the period 2000 to 2017 (=1.133, see Appendix A.3).

²¹⁴ The 2.3% economic significance for the increase in *Bank Value* is calculated by dividing the coefficient of *Lawyer Director*_{*t*-1} in column 3 (=0.026), which includes higher-order fixed effects, by the average *Bank Value* in our pooled sample during the period 2000 to 2017 (=1.133, see Appendix A.3).

²¹⁵ The 1.6% economic significance for the differential increase in *Bank Value* is calculated by dividing the coefficient of *Lawyer Director*_{*t*-1} × *Financial Crisis*_{*t*-1} in column 2 (=0.018), which includes industry and year fixed effects, by the average *Bank Value* in our pooled sample during the period 2000 to 2017 (=1.133, see Appendix A.3).

²¹⁶ The 1.7% economic significance for the differential increase in *Bank Value* is calculated by dividing the coefficient of *Lawyer Director*_{*t*-1} × *Financial Crisis*_{*t*-1} in column 3 (=0.019), which includes higher-order fixed effects, by the average *Bank Value* in our pooled sample during the period 2000 to 2017 (=1.133, see Appendix A.3).

²¹⁷ The 3.8% economic significance for the total incremental increase in *Bank Value* is calculated by dividing the coefficient of *Significance of Joint Effect* in column 2 (=0.043), which includes industry and year fixed effects, by the average *Bank Value* in our pooled sample during the period 2000 to 2017 (=1.133, see Appendix A.3).

²¹⁸ The 4.5% economic significance for the total incremental increase in *Bank Value* is calculated by dividing the coefficient of *Lawyer Director*_{*t*-1} × *Financial Crisis*_{*t*-1} in column 3 (=0.045), which includes higher-order fixed effects, by the average *Bank Value* in our pooled sample during the period 2000 to 2017 (=1.133, see Appendix A.3).

In this section, we dig further into bank litigation and its relationship with lawyer-directors and bank value. To do this, we add four additional litigation measures to our general *Financial Litigation* measure (which we use as a proxy for overall bank litigation): *Class Action Litigation*, *Securities Litigation*, *Consumer Credit Litigation*, and *Derivative Litigation*, where each proxy is designed to capture only the indicated type of litigation.²¹⁹ Table 6 presents our results.²²⁰

Table 6. Lawyer-Director, Litigation, and Bank Value. This table reports results from pooled panel regressions of Tobin's Q on lawyer-director and litigation interactions during the sample period from 2000 and 2017. *Bank Value* is measured contemporaneously, whereas *Lawyer-Director* \times *Litigation*, *Lawyer-Director*, *Financial Litigation*, and the controls are lagged by one period. Included controls are *Size*, *Age*, *Revenue Growth*, *Loss*, *Debt-to-Equity*, *CAPX/Assets*, *Inst. Ownership*, *Ln(Financial Litigation)*, *CEO Director*, *Outside Director*, and *Director Gender*. Table A1 in the Appendix provides the variables' definitions. Industry fixed effects are defined using three-digit SIC code industry definitions. All continuous variables are winsorized at the 2.5% level in both tails. The estimated *t*-statistics are based on robust standard errors clustered by firm and are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Dep. Variable: <i>Bank Value</i> _{<i>t</i>} | 2000 - 2017 | | | | |
|--|--------------------|--------------------|--------------------|-------------------|--------------------|
| Variables | (1) | (2) | (3) | (4) | (5) |
| <i>Lawyer Director</i> _{<i>t-1</i>} \times <i>Financial Litigation</i> _{<i>t-1</i>} | 0.045** (2.08) | | | | |
| <i>Lawyer Director</i> _{<i>t-1</i>} \times <i>Class Action Litigation</i> _{<i>t-1</i>} | | 0.042* (1.79) | | | |
| <i>Lawyer Director</i> _{<i>t-1</i>} \times <i>Securities Litigation</i> _{<i>t-1</i>} | | | 0.072** (2.12) | | |
| <i>Lawyer Director</i> _{<i>t-1</i>} \times <i>Consumer Credit Litigation</i> _{<i>t-1</i>} | | | | 0.286* (1.71) | |
| <i>Lawyer Director</i> _{<i>t-1</i>} \times <i>Derivatives Litigation</i> _{<i>t-1</i>} | | | | | 0.052* (1.88) |
| <i>Lawyer Director</i> _{<i>t-1</i>} | 0.024* (1.86) | 0.025* (1.92) | 0.024* (1.82) | 0.029** (2.28) | 0.027** (2.18) |
| <i>Financial Litigation</i> _{<i>t-1</i>} | -0.016 (-0.54) | | | | |
| <i>Class Action Litigation</i> _{<i>t-1</i>} | | -0.026 (-1.35) | | | |
| <i>Securities Litigation</i> _{<i>t-1</i>} | | | -0.066* (-1.77) | | |
| <i>Consumer Credit Litigation</i> _{<i>t-1</i>} | | | | -0.154 (-0.97) | |
| <i>Derivatives Litigation</i> _{<i>t-1</i>} | | | | | -0.012 (-0.39) |
| Significance of Joint Effect: [<i>Law Director</i> _{<i>t-1</i>} \times <i>Litigation</i> _{<i>t-1</i>}] + [<i>Law Director</i> _{<i>t-1</i>}] | 0.070*** (2.94) | 0.067*** (2.62) | 0.096*** (2.78) | 0.315* (1.89) | 0.079*** (2.67) |
| Control Variables | Yes | Yes | Yes | Yes | Yes |
| Industry and Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| # of Unique Firms | 1,530 | 1,530 | 1,530 | 1,530 | 1,530 |
| N | 12,343 | 12,343 | 12,343 | 12,343 | 12,343 |
| Adjusted R ² | 0.438 | 0.438 | 0.438 | 0.438 | 0.438 |

²¹⁹ We only show the results for these four litigation measures, since they are what the data indicates matters the most in terms of bank value and having a lawyer-director. Interactions with other measures, such as financial reporting, financial fraud, and insurance litigation, are insignificantly associated with bank value.

²²⁰ In both Tables 6 and 7, we explore interactions that require a large number of observations, and so we use pooled panel regressions rather than matched samples.

As Table 6 shows, our regressions confirm our hypothesis that the risk management benefits brought by a lawyer-director increase in banks with higher levels of litigation, regardless of the type of litigation. Our most significant results are shown in column (3) of Table 6, where we find that on average banks with lawyers-directors and greater levels of securities litigation have greater *Bank Value* than banks without a lawyer-director. In terms of economic magnitude, the differential gain in *Bank Value* for this subset of banks is important at 6.4%²²¹ relative to the sample mean of banks without a lawyer-director. Additionally, when we verify the significance of the joint effect of (i) having a *Lawyer-Director* and (ii) having a *Lawyer-Director* and above-average sample-year levels of securities litigation, we find that the total effect for this group of banks is a 8.5% increase in *Bank Value* (significant at the 1% level).²²² Meanwhile, as one would expect, the impact of *Securities Litigation* on *Bank Value* is negative (coefficient = -0.066) and statistically significant (*t*-stat = -1.77).

We find qualitatively similar results using the other four litigation proxies. For instance, in column (2) (showing the interaction of *Lawyer-Director* with *Class Action Litigation*), we find evidence that banks with a lawyer-director and above-average sample-year levels of class-action litigation have a differential increase in *Bank Value* of 3.7%²²³ and a total value increase of 5.9%²²⁴ (in each case relative to the sample mean of *Bank Value*). Similar results appear in columns (1) and (4)-(5) with respect to *Financial Litigation*, *Consumer Credit Litigation*, and *Derivatives Litigation*.

2. Intellectual Diversity

Our empirical results on the value of lawyer-directors for banks support arguments that favor enhanced requirements for bank directors.²²⁵ The results also suggest that these requirements should be broader than only requiring directors to have a certain expertise. Instead, they suggest a need for directors who can think critically about the multiple risks facing banks today. For lawyers, this includes advocacy skills that are likely to promote more-informed decision-making, the ability to facilitate information between experts and non-experts on the board, and experience in assessing litigation and regulatory risks. However, this is not the only skill set that matters for effective bank risk management. Other skills may also be valuable. For example, it seems reasonable that having directors with financial expertise is likely to decrease the risk of financial and accounting errors.²²⁶

²²¹ The 6.4% economic significance for the total incremental increase in *Bank Value* is calculated by dividing the coefficient of $Lawyer\ Director_{t-1} \times Securities\ Litigation_{t-1}$ (=0.072) by the average *Bank Value* in our pooled sample during the period 2000 to 2017 the sample (=1.133, see Appendix A.3).

²²² The 8.5% economic significance for the total incremental increase in *Bank Value* by dividing the coefficient of *Significance of Joint Effect for Securities Litigation* (=0.096) by the average *Bank Value* in our pooled sample during the period 2000 to 2017 the sample (=1.133, see Appendix A.3).

²²³ The 3.7% economic significance for the total incremental increase in *Bank Value* by dividing the coefficient of $Lawyer\ Director_{t-1} \times Class\ Action\ Litigation_{t-1}$ (=0.042) by the average *Bank Value* in our pooled sample during the period 2000 to 2017 the sample (=1.133, see Appendix A.3).

²²⁴ The 5.9% economic significance for the total incremental increase in *Bank Value* by dividing the coefficient of *Significance of Joint Effect for Class Action Litigation* (=0.067) by the average *Bank Value* in our pooled sample during the period 2000 to 2017 the sample (=1.133, see Appendix A.3).

²²⁵ See *supra* notes 134-135 and accompanying text.

²²⁶ See, e.g., Wang *et al.*, *supra* note 133, at 936-37 (finding evidence that the presence of independent directors with relevant expertise on an audit committee can reduce the probability of earnings manipulation). In addition, our conclusion is consistent with empirical studies noting that having academics on boards enhances functional knowledge and skills, with beneficial effect. See Daniel P. Forbes & Frances J. Milliken, *Cognition*

Based on this conjecture, we assess whether banks that have directors with a diverse set of educational and professional skills—that is, “intellectual diversity”—have higher value. We do so by exploring the heterogeneous effect on bank value of having a *Lawyer-Director* plus one or more directors with diverse educational backgrounds. In particular, we focus on directors who hold an MBA degree (*MBA Director*), directors with scientific expertise who hold a Master of Science degree (*MS Director*), and directors with a doctoral degree (*Doctorate Directors*). As shown in Table 7, we conduct this analysis by creating a *Board Intellectual Diversity* index variable, built as follows: First, if the bank does not have a *Lawyer-Director*, it receives a value of zero. Second, for banks with at least one *Lawyer-Director*, we set the *Board Intellectual Diversity Index* at one. Third, for firm-year observations with a *Lawyer-Director* and at least one director with an *MBA*, *MS*, or *Doctorate*²²⁷ degree, we set the index value at two. Fourth, if the bank’s board has a *Lawyer-Director* and directors with at least two of the *MBA*, *MS*, or *Doctorate* degrees (which could be held by the *Lawyer-Director* or one or more other directors), we set the index value at three. Lastly, for banks with a *Lawyer-Director* and directors with at least one each of an *MBA*, *MS*, and *Doctorate* degree, we set the *Board Intellectual Diversity Index* at four.

and *Corporate Governance: Understanding Board of Directors as Strategic Decision-Making Group*, 24 *ACAD. MANAG. REV.* 489, 497(1999).

²²⁷ Included in the *Doctorate Director* variable are directors in BoardEx with Ph.D., Doctor, or M.D. degrees listed in their qualifications.

Table 7. Board Intellectual Diversity and Bank Value. This table reports the results for pooled panel regressions of Tobin's Q on an index proxy variable for a board's intellectual diversity during the sample period from 2000 to 2017. The main variable of interest, *Bank Value*, is measured contemporaneously, whereas *Board Intellectual Diversity*, *Lawyer-Director*, *MBA Director*, *MS Director*, *Doctorate Director*, and the remaining controls are lagged by one period. *Board Intellectual Diversity* is a count variable ranging from zero to four where larger values represent boards of directors with greater varieties of educational and professional backgrounds. Included controls are *Size*, *Age*, *Revenue Growth*, *Loss*, *Debt-to-Equity*, *CAPX/Assets*, *Inst. Ownership*, *Ln(Financial Litigation)*, *CEO Director*, *Outside Director*, and *Director Gender Director*. Table A1 in the Appendix provides the variables' definitions. Columns (1)-(3) regress *Bank Value* against the index, together with industry and year (columns (1) and (2)) or industry \times year (column (3)) fixed effects. Industry fixed effects are defined using three-digit SIC code industry definitions. All continuous variables are winsorized at the 2.5% level in both tails. The estimated *t*-statistics are based on robust standard errors clustered by firm and are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Dep. Variable: <i>Bank Value</i> _{<i>t</i>} | | 2000 - 2017 | | | |
|---|------------------|--------------------|--------------------|-------------------|--|
| Variables | (1) | (2) | (3) | (4) | |
| <i>Board Intellectual Diversity</i> _{<i>t</i>-1} | 0.010* (1.78) | 0.016*** (3.01) | 0.015*** (2.96) | | |
| <i>Lawyer Director</i> _{<i>t</i>-1} | | | | 0.029** (2.33) | |
| <i>MBA Director</i> _{<i>t</i>-1} | | | | 0.006 (0.52) | |
| <i>MS Director</i> _{<i>t</i>-1} | | | | 0.025 (1.44) | |
| <i>Doctorate Director</i> _{<i>t</i>-1} | | | | 0.023* (1.93) | |
| Control Variables | No | Yes | Yes | Yes | |
| Industry and Year Fixed Effects | Yes | Yes | No | No | |
| Industry \times Year Fixed Effects | No | No | Yes | Yes | |
| # of Unique Firms | 1,411 | 1,411 | 1,411 | 1,411 | |
| N | 11,486 | 11,486 | 11,486 | 11,486 | |
| Adjusted R ² | 0.338 | 0.449 | 0.483 | 0.460 | |

For each of the specifications in Table 7, and consistent with our conjecture, we find a positive and significant association between *Bank Value* and *Board Intellectual Diversity*. For example, column (2) indicates that a one unit increase in the index translates to a 1.4%²²⁸ increase in *Bank Value* relative to the sample mean. Moreover, for banks that moved from not having a single *Lawyer-Director* (index value = 0) to having one of a *Lawyer* and at least one each of an *MBA*, *MS*, and *Doctorate Director* (index value = 4), the relative value of the bank increased by 5.6%.²²⁹

Table 7, however, tells us something more. In column (4), where we divide the index into four different educational backgrounds (*Lawyer*, *MBA*, *MS*, and *Doctorate*), we find

²²⁸ The 1.4% economic significance for the increase in *Bank Value* is calculated by multiplying the coefficient of *Board Intellectual Diversity* in column 2 (=0.016), which includes industry and year fixed effects, by a 1-unit increase in the index and then dividing the product by the average *Bank Value* in our pooled sample over the period 2000 to 2017 (=1.133, see Appendix Table 3)

²²⁹ The 5.6% economic significance for the increase in *Bank Value* is calculated by multiplying the coefficient of *Board Intellectual Diversity* in column 2 (=0.016), which includes industry and year fixed effects, by a 4-unit increase in the index and then dividing the product by the average *Bank Value* in our pooled sample over the period 2000 to 2017 (=1.133, see Appendix Table 3)

evidence that most of the positive value associated with *Board Intellectual Diversity* is tied to the effect of lawyer-directors on *Bank Value*. Specifically, the magnitude of the *Lawyer-Director* coefficient is 0.029, statistically significant at the 5% level ($t\text{-stat}=2.33$). In contrast, neither an *MBA* nor *MS Director* is significantly related to *Bank Value*, whereas having a *Doctorate Director* marginally contributes (coefficient=0.023; $t\text{-stat}=1.93$) to the value of the banks where they serve. These results suggest that, while banks can benefit from the skills of directors other than lawyers, they seem to benefit most from lawyer-directors. We see two possible explanations for this result. First, as we have discussed, a lawyer has special skills that support more effective risk management.²³⁰ This is particularly important for banks in light of the prominence of risk in a bank's business and operations. Second, lawyers' skills as facilitators are indispensable for a bank to benefit fully from an intellectually diverse board. Lawyer-directors can help bridge the information gap between expert and non-expert directors, as well as between different types of experts.²³¹

* * *

Lawyer-directors contribute skills to a bank's board that enhance bank value. A key to understanding the role of lawyer-directors is understanding what it means for risk management to be effective. The goal is not to reduce risk; the goal is to optimize the assumption of risk in ways that maximize bank value. From that perspective, having a lawyer-director correlates with a bank increasing or decreasing risk when it is optimal to do so. This critical feature of lawyer-directors draws into question the current one-size-fits-all approach to regulation that emphasizes minimum capital requirements and director independence. We next consider the policy implications of our findings.

V. POLICY CONSIDERATIONS

Our findings on lawyer-directors raise two principal policy implications. First, we challenge the view that efficient risk management is simply a product of stricter regulation. Effective regulation requires a more nuanced approach to understanding bank governance. Specifically, a bank needs directors who can think critically about risk and how best to manage the bank's risk-to-reward balance.

Second, our findings underscore the need to focus on the expertise that directors bring to a bank's board. For lawyer-directors, that expertise includes a critical ability to manage risk, particularly litigation and regulatory risks, as well as to facilitate discussion and decision-making by a bank's board. At the same time, our findings raise questions about the kinds of expertise directors need in the face of the complex risks facing banks today. We suggest below that an effective solution requires more than regulation.

A. *Beyond Compliance*

Improving risk management is more than a matter of complying with stricter rules. To be effective, a bank must be able to weigh the probability that a risk will result in a loss against the probability it will create value, and then determine the optimal risk-and-reward balance. This is a complicated task.²³² Our analysis suggests that a bank's directors are better-positioned than regulators to identify bank risks, both good and bad. As a result, they are also better-placed

²³⁰ See *supra* Part III.C.1-3.

²³¹ See *supra* Part III.C.3.

²³² See *supra* text accompanying notes 9-12.

than regulators to manage the risks to which banks are exposed. Stated differently, regulators can no longer view how banks operate as a “black box” within which managers increase or decrease risk.²³³ Instead, new regulation must begin to reflect a bank’s internal features and how those features affect the board’s decision-making process.²³⁴

New capital and governance requirements fail to do this. Stricter capital requirements, for example, pre-suppose that, by increasing the cost of investing in riskier assets, a bank will reduce risk. The 2008 financial crisis, however, can be ascribed, in part, to decisions by bank managers to increase risk in response to higher capital charges.²³⁵ There is a logic to this—because a bank’s managers seek to maximize profits, they invested in riskier assets as one means to increase returns that offset the higher costs from stricter regulation. Bank managers also decided to transfer risky assets to “off-balance-sheet” entities to minimize regulatory costs, or they exploited crude risk-weighting categories that failed to fully capture the risk of the assets in which the banks invested.²³⁶ Post-crisis amendments to capital regulation (for example, newly-refined risk-weighting categories)²³⁷ are unlikely to resolve this problem, since they also fail to reflect the internal processes affecting how banks react to new regulation.²³⁸

Post-crisis rules on bank governance are similarly weak. The new rules focus on one characteristic of a bank’s directors—namely, whether or not they are independent—as a means to address potential conflicts of interest.²³⁹ Beyond this, the rules say little on how a bank board should agree on a risk management strategy. For example, the new rules do not address the process by which a bank’s board collects and assesses risk-related information, although this process is critical to how a bank manages risk. The rules also fail to take account of the basic corporate law obligations of directors to act for the benefit of a bank’s shareholders. Since shareholders may prefer riskier investments, the new rules may not be as effective as their drafters intended in helping banks to manage risk.²⁴⁰

Our findings on lawyer-directors begin to penetrate the black box of a bank’s board. We demonstrate that the expertise a bank’s directors bring to the board *does* influence its ability to manage toward an optimal risk-and-return balance. First, as advocates, lawyer-directors are likely to minimize unproductive group-thinking by the board.²⁴¹ Second, as facilitators, lawyer-directors are better placed to ensure that information on bank risk is effectively disseminated

²³³ See Timothy F. Malloy, *Regulating by Incentives: Myths, Models, and Micromarkets*, 80 TEX. L. REV. 531, 535 (2002) (arguing that regulation should take into consideration that corporations are not black boxes).

²³⁴ The management literature has attempted to go beyond the black-box approach to board decision-making. See, e.g., Forbes & Milliken, *supra* note 226, at 490 (proposing a model of board processes that integrates the literature on boards with the literature on group dynamics and workgroup effectiveness); Andrew Pettygrew, *On Studying Managerial Elites*, 13 STRAT. MANAG. J. 163, 164 (1992) (arguing that research on boards should focus on their actual behavior, supplementing our knowledge of what boards look like with evidence of what boards actually do).

²³⁵ See Douglas J. Elliott, A Primer on Bank Capital, 17 Brookings Institution Research Paper (Jan. 28, 2010), available at <http://www.brookings.edu/research/papers/2010/01/29-capital-elliott>. See also *supra* notes --- and accompanying text.

²³⁶ *Id.*

²³⁷ See *supra* notes 106-111 and accompanying text.

²³⁸ See Malloy, *supra* note 233, at 536 (proposing a “resource-allocation” model to regulation premised on the claim that “a firm’s organization and internal processes affect its reaction to regulation in predictable ways”).

²³⁹ See *supra* notes 122, 125 and accompanying text.

²⁴⁰ See *supra* text accompanying notes 128-131.

²⁴¹ See *supra* notes 157-159 and accompanying text.

among board members.²⁴² Third, as experts in regulation and litigation, lawyer-directors can help the board assess litigation and regulatory risks, including managing a bank's operations in light of increasingly complex bank regulations.²⁴³

In other words, what goes on *inside* the board and *who the directors are* are as important, if not more important, than regulatory standards that restrict capital or legislate governance. In that respect, the current regulatory emphasis on independence is both too broad and too narrow. It is too broad because it makes it more difficult for directors with industry-relevant expertise to join a bank's board. It is too narrow in that it focuses on independence and not on what skills a prospective director can bring to the board's decision-making process. One can even argue that the current approach to regulating bank boards—by restricting the universe of eligible directors—encourages a black-box approach to risk management. Recall that a board's decision-making is benefited by heterogeneous directors who assess and decide how to manage risk.²⁴⁴ Narrowing the pool from whom bank directors are selected may inadvertently promote more similarity in thinking. In effect, regulations that treat the board as a black box—without reflecting the give-and-take needed for informed decisions—may paradoxically result in boards that act more like a black box, making risk management less effective.

B. Beyond Financial Skills

To date, proposals to include experts on bank boards have focused primarily on one kind of expertise—financial skills.²⁴⁵ Banks, the argument goes, require directors with the special technical expertise needed to manage a bank today, including familiarity with finance and financial instruments. Those proposals have an intuitive appeal. After all, during the 2008 financial crisis, it became clear that many bank directors did not have the skills to evaluate the risky, subprime-mortgage assets that banks had created and owned. Nevertheless, our analysis of lawyer-directors suggests that a focus only on financial skills is too narrow. Other types of expertise may be as relevant as financial expertise for today's banks. In fact, legal expertise may be *more* relevant in light of the legal challenges some U.S. banks have had to navigate in recent times.²⁴⁶ Banks may also benefit from other kinds of expertise. For example, in the digital era, it seems reasonable to conclude that having a director with technological expertise will benefit banks generally and risk management in particular.²⁴⁷ In today's global markets, banks may also benefit from directors with experience in international relations or international economics. The point is that board expertise is important, but regulation that focuses on particular types of expertise may cause a bank to favor some skills over those that will actually benefit the bank the most.

More is needed of regulation than a focus only on technical skills. For example, as we have shown, the association of lawyer-directors with efficient risk management appears to be tied, in part, to their ability to facilitate communication among directors. Being able to enhance a board's decision-making process goes beyond technical expertise. Instead, it reflects a

²⁴² See *supra* Part III.C.2.

²⁴³ See *supra* Part III.C.1.

²⁴⁴ See *supra* note 164 and accompanying text.

²⁴⁵ See *supra* notes 134-135 and accompanying text.

²⁴⁶ See *supra* notes 86, 174, 175 and accompanying text.

²⁴⁷ See McKinsey & Company, *Digital Risk: Transforming Risk Management for the 2020s*, <https://www.mckinsey.com/business-functions/risk/our-insights/digital-risk-transforming-risk-management-for-the-2020s> (highlighting the importance of digital risk).

combination of experience and practice that lawyers gain throughout their careers.²⁴⁸ Lawyers are trained to assess risk—for example, to weigh the risk that a litigation strategy will fail or succeed, or that a regulation will be interpreted in a particular way. Through clients and their risks, lawyers also gain a broad perspective on how businesses operate and the likelihood that particular risks—beyond litigation and regulation—will occur, as well as ways to manage those risks. A common theme across these skills is that they cannot be taught, but rather they must be developed through practice and real-world experience.

Additionally, there is a value to being able to “think like a lawyer,” which is true even if the director is not a lawyer.²⁴⁹ As we described, lawyers take nothing for granted and instead consider all logical approaches to an issue, including those that counter their own arguments. Lawyers learn to ask questions where others might accept things as they appear to be. Asking the right question is a skill that a lawyer cultivates over years of practice. These strengths go beyond technical skills—such as financial knowledge—to reflect the real-world expertise, experience, and practical reasoning that lawyers bring to bank boards.

Nevertheless, the importance of non-technical expertise to a bank’s directors has received only passing attention.²⁵⁰ Our results show that this is a significant gap in how regulators think about bank boards. Expertise grounded in a “way of thinking”—the value that lawyer-directors bring to banks—can be just as important as expertise grounded in technical skill. Consequently, the scope of what is considered to be valuable for a bank’s board must be broadened. That expertise is not necessarily limited to a particular career. For example, like lawyers, academics can be critical thinkers²⁵¹ who help bridge the information gap between experts and non-experts. This skill may help explain why recent empirical studies find the presence of academics on boards to be associated with higher firm performance.²⁵² Technical skills also are not limited to a particular career. For example, even if a lawyer-director lacks formal financial training, she may gain valuable expertise through representing banks and working on bank transactions. The upshot is that the lines regulators have drawn around bank boards now need to be re-drawn.

We recognize that this is more easily said than done. Regulations that identify “ways of thinking” are likely to be vague and confusing to implement.²⁵³ As a result, we tentatively

²⁴⁸ See *supra* notes 167, 168 and accompanying text.

²⁴⁹ Our investigation of lawyer-directors supports recent empirical research on the financial value of going to law school. See Michael Simkovic & Fanck McIntyre, *The Economic Value of a Law Degree*, 43 J. LEGAL STUDIES 249 (2014). This research rejects the anecdotal evidence that earning a law degree is irrational, since doing so costs more than what it pays back. On the contrary, the authors empirically demonstrate that “[f]or most law school graduates, the net present value of a law degree typically exceeds its cost by hundreds of thousands of dollars.” See *id.* at 250. In particular, they find that “a law degree is associated with a 60 percent median increase in monthly earnings and 50 percent increase in median hourly wages,” although they do not investigate the channels that support a law degree’s earnings premium. See *id.* at 251. Our study points to one possibility: that the association of lawyers with effective risk management, and more generally, their ability to enhance a board’s decision-making process, may provide one means to increase a law degree’s earnings premium.

²⁵⁰ See Macey & O’Hara, *supra* note 128, at 103 (suggesting that experience might count as much as education in the acquisition of banking “experience”).

²⁵¹ See Bing Jiang & Patrick J. Murphy, *Do Business School Professors Make Good Executive Managers?*, 21 ACAD. MANAG. PERSP. 29, 30 (2007).

²⁵² See Francis *et al.*, *supra* note 169, at 547, 549.

²⁵³ A recent example of this problem can be found in the Volcker Rule. Section 619 of the Dodd-Frank Act prohibited a commercial bank and its affiliates from engaging in “proprietary trading” as distinct from “market-making,” which was a permissible activity. The problem was that the Volcker Rule failed to draw a clear line between permissible and impermissible activities. See Charles K. Whitehead, *The Volcker Rule and Evolving Financial Markets*, 1 HARV. BUS. L. REV. 39, 47-51 (2011). To identify prohibited activities, the regulations

suggest a different approach that harnesses the market discipline that has been a part of our empirical analysis—specifically, the changes in bank value that arise relative to changes in the composition of a bank’s board. A summary of our proposal is as follows:

- The Federal Reserve Board (and other principal bank regulators) should issue guidance on the skills a bank’s board should possess (the “Guidance”). The listed skills should cover technical skills (such as financial knowledge), as well as more general areas of expertise (such as the ability to facilitate communication among directors).
- The Guidance skills will not be mandatory. Banks will decide how to reflect the Guidance in their boards, although the regulator can choose to consider the presence (or absence) of those skills among a bank’s directors in the event of a later risk management failure. The possibility that Guidance skills will affect bank value can temper the natural tendency of a bank’s board to promote risk-taking that favors shareholders over creditors. A board that fails to incorporate Guidance skills into its decision-making process may be more likely to promote risk in the short-term, but the failure may also cause the bank to be subject to greater penalties at the shareholders’ expense. The possibility of greater penalties, and the reflection of that possibility in a lower share price, is a strong incentive to incorporate Guidance skills into a bank’s board.
- Most systemically-important banks are publicly-traded companies. The Securities and Exchange Commission will require each public bank to include in its prospectus, annual report, and proxy statement disclosures a statement of how its board complies with the Guidance or, if relevant, why aspects of the Guidance do not apply to its board. That disclosure will have the benefit of a safe harbor that minimizes the risk of shareholder lawsuits under the securities laws.
- Proxy statement monitors, like Institutional Shareholder Services, will be encouraged to assess how closely a bank’s board meets the Guidance’s criteria. As noted before, the possibility of heightened penalties, and the effect of that possibility on a bank’s share price, is likely to be a strong incentive to incorporate Guidance skills into the board. Most likely, investment banking equity analysts will also reflect compliance with the Guidance in their reports to the extent that a failure to do so increases the possibility of future penalties.

implementing the Volcker Rule included, among other things, a “purpose test”—trading principally for the purpose of short-term resale, benefiting from actual or expected short-term price movements, realizing short-term arbitrage profits, or hedging a position resulting from any of the foregoing trading activities. *See* Morrison & Foerster, *A User’s Guide to The Volcker Rule 5*, Feb. 2014, available at <https://www.iflr.com/pdfs/A-users-guide-to-the-Volcker-Rule.pdf>. The subjective nature of this test sparked concerns among banks that implementing and enforcing the new rules would be difficult to do. As Jamie Dimon, the Chairman and CEO of J.P. Morgan, commented at the time, “if you want to be trading, you have to have a lawyer and a psychiatrist sitting next to you determining what was your intent every time you did something.” Ben Protess, *Jamie Dimon Shows Some Love for Volcker Rule*, *DEALBOOK*, May 21, 2012, at <https://dealbook.nytimes.com/2012/05/21/jamie-dimon-shows-some-love-for-volcker-rule/>.

Implementing our proposal will help reinforce the expertise that is most valuable to a bank through market-based incentives. First, the Guidance will cause bank boards to more deliberately consider the skills needed to manage the bank and its risks. By giving banks the flexibility to meet the Guidelines, banks themselves can determine how best to manage risk rather than being bound by a one-size-fits-all set of requirements. Second, public disclosure, by itself, is likely to provide banks with incentives to meet the Guidance. Few boards will want to acknowledge that they fall short of the standards in the Guidance. Third, banks that meet the Guidance are likely to be rewarded by a higher share price, partly reflecting the greater risk for banks that fail to do so. The potential effect of board composition on share price will also increase the public's focus on those skills that are most likely to enhance bank value—such as we saw with lawyer-directors and efficient risk management.

CONCLUSION

This Article is the first to analyze—theoretically and empirically—the role of lawyers as bank directors. Specifically, we show that lawyer-directors at banks are associated with efficient changes in how banks manage risk, as well as significant increases in bank value. What is intriguing is the effect on bank risk management of having a lawyer on the board. Banks with a lawyer-director assume more risk in ordinary (non-crisis) circumstances and less risk when a crisis arises, in each case in a way that makes banks more valuable. In other words, banks with lawyer-directors do more than simply minimize “bad” risk. They also pursue “good” risk under circumstances that are more likely to result in greater bank value.

We have focused on lawyer-directors as a means to help penetrate the black box around bank boards. We do so not to advocate for lawyers as directors, but rather to demonstrate that board composition—and the skills directors bring to their jobs—is important in how banks manage risk. In the case of lawyer-directors, for example, those skills extend beyond assessing litigation and regulatory risks. Rather, lawyer-directors also add value by drawing on advocacy skills to critically analyze the risks that banks face, as well as by making complex information more accessible to a bank's board.

Those kinds of skills are difficult to identify precisely. How can one define what constitutes a board's “critical analysis” skills? Likewise, how can a director's skill at “explaining complex topics” be measured? Drafting new regulation that tries to capture those skills would be difficult, and compliance would be unwieldy. Nevertheless, the fact that regulation may not be able to precisely identify, define, or measure a skill does not make it any less valuable to a bank. The trick is to find a means to encourage board skills that are most likely to be valuable. Drawing on market feedback, as we have proposed, provides one means to encourage banks to elect directors whose skills will enhance risk management.

This approach, however, raises an interesting question. In many cases, one would expect credit default swaps (CDS), and similar credit instruments, whose value is tied to the creditworthiness of a bank (or group of banks), to fluctuate in value based on changes in a bank's risk-taking. Lenders, in turn, may consider changes in CDS and similar values when deciding what to charge a bank borrower.²⁵⁴ Consequently, if adding a lawyer-director enhances a bank's risk management, one would expect it also to lower the cost of any related CDS (or similar measure of credit) and, in turn, lower the bank's cost of funding. Conversely, a bank without a lawyer-director should incur a higher cost of funding, providing strong

²⁵⁴ See Whitehead, *supra* note 65, at 667-70.

market-based incentives to add a lawyer to its board. In other words, the credit market should provide a discipline that rewards (punishes) banks that (fail to) reflect the skills necessary to enhance risk management among their directors.²⁵⁵ Value-maximizing banks should encourage lawyers to join their boards. This may be one reason why the recent rise in lawyer-directors has been so significant across banks. Adding a lawyer-director can directly affect value to the extent it is rewarded by the markets.

Why, then, the need for regulation? The most likely answer is that market participants are unaware of the value that lawyer-directors bring to the board or the value of the substantive skills they and other directors can provide. Market participants may not be able to identify how a director's particular skills support stronger risk management. Moreover, factors outside the addition of a lawyer-director may affect bank value, making it more difficult for market participants to assess a particular director's skills. As a result, market feedback may not be precise in awarding or disciplining banks based on changes in board composition.

In that respect, new regulation may be most useful if it helps focus market participants on those features of a board that are most likely to influence a bank's value. The optimal features may depend on the bank's particular circumstances. Consequently, rather than imposing a one-size-fits-all requirement on banks—as regulation does today, with its director independence requirements—the effects of a board's composition on bank risk may be reflected in changes in cost (such as CDS and funding costs) tied to a bank's particular features that have a real-time effect on value. This greater appreciation of board composition can balance the current regulatory focus on director independence. Stated differently, beyond director independence, a complete assessment of a bank's board should consider the incremental value that can result from the skills and experience represented among its directors. A new approach to bank regulation, that harnesses market assessment of the skills that are best-suited for a bank, can help sharpen that focus.

²⁵⁵ *See id.*

APPENDIX TO
BANKING ON THE LAWYERS
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Figure A1. Percentage of Financial Firms with a Lawyer-Director by Type of Institution. Figure A1 shows the percentage of financial firms in our sample (SIC code 6000-6999), excluding real estate firms (two-digit SIC code: 65), with a lawyer-director separated by the type of institution each year from 1999 to 2017. We separated the sample by Commercial Banks, Investment Banks, Insurance Companies, and Other Financial Institutions.

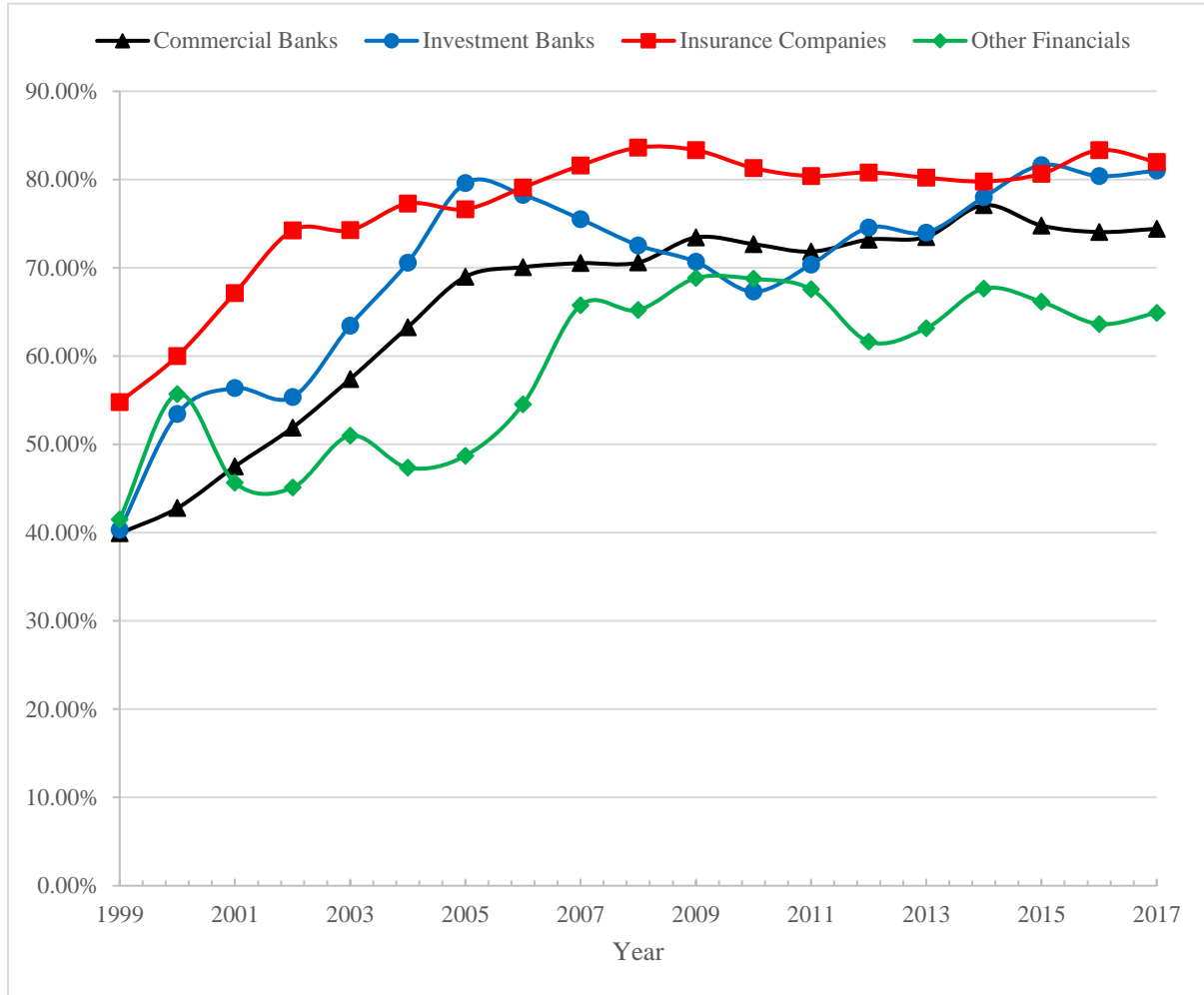


Table A1. Variable Descriptions. This table defines the variables used in all of our empirical tests.

| Dependent Variables | Description |
|----------------------------------|---|
| <i>Bank Value</i> | Tobin's Q: market value of assets (book value of assets – book equity + market equity (prcc_f*csho)) divided by the book value of assets. |
| <i>Bank Risk</i> | The natural logarithm of Z-Score multiplied by negative one (-1). Z-Score: the ratio of the sum of return on assets (ROA) and each financial firm's capital ratio to the standard deviation of each financial firm's ROA. |
| Main Explanatory Variables | Description |
| <i>Lawyer – Director</i> | An indicator variable equal to one if a firm has a lawyer-director, and zero otherwise. We classify board members as lawyer-directors if they have one or more of the following academic qualifications: Juris Doctor, Bachelor of Laws, Master of Laws, Doctor of Jurisprudence, Doctor of Canon Law, Doctor of Civil Law, Doctor of Juridical Science, Doctor of Law, Doctor of Law and Political Science, Legorum Doctor, or Licentiate of Laws. |
| <i>Board Education Diversity</i> | A count index variable ranging from zero to four, where greater index values represent a larger collection of educational backgrounds on the board of directors in a given year. The index equals zero if there is no <i>Lawyer-Director</i> ; it equals one if there is a <i>Lawyer-Director</i> but no <i>MBA-</i> , <i>MS-</i> , or <i>Doctorate Directors</i> ; it equals two if there is a <i>Lawyer-Director</i> and one of an <i>MBA-</i> , <i>MS-</i> , or <i>Doctorate Director</i> ; it equals three if there is a <i>Lawyer-Director</i> and any two of an <i>MBA-</i> , <i>MS-</i> , or <i>Doctorate Director</i> ; and it equals four if there is a <i>Lawyer-Director</i> and an <i>MBA-</i> , <i>MS-</i> , and <i>Doctorate Director</i> . |
| Main Interaction Variables | Description |
| <i>Executive Director</i> | An indicator variable equal to one if a director is also an executive of the firm, and zero otherwise. |
| <i>CEO Director</i> | An indicator variable equal to one if a director is also the firm's CEO, and zero otherwise. It is also a control variable in the <i>Q</i> and <i>Ln(Z-Score)</i> regressions. |
| <i>Normal Times</i> | An indicator variable equal to one if the sample year is outside the 2007 through 2009 range, and zero otherwise. |
| <i>Financial Crisis</i> | An indicator variable equal to one if the sample year is between 2007 and 2009, inclusive, and zero otherwise. |
| <i>Financial Litigation</i> | An indicator variable equal to one if a financial firm has a natural logarithm of one plus a financial litigation count value above the sample year mean, and zero otherwise. "Financial litigation" is defined as the sum of bank, consumer credit, derivatives, financial reporting, financial fraud, insurance, and securities litigation. <i>Ln(Financial Litigation)</i> is also included as a control variable in the <i>Q</i> and <i>Ln(Z-Score)</i> regressions, where we take the natural logarithm of one plus the count of financial litigation occurrences. |
| <i>Class Action Litigation</i> | An indicator variable equal to one if a firm has a natural logarithm of one plus a class action litigation count value above the sample year mean, and zero otherwise. "Class Action Litigation" is defined as <i>is_category_type_1</i> in Audit Analytics. |
| <i>Securities Litigation</i> | An indicator variable equal to one if a firm has a natural logarithm of one plus a securities litigation count value above the sample year mean, and zero otherwise. "Securities Litigation" is defined as <i>is_category_type_41</i> in Audit Analytics. |

| | |
|--|---|
| <i>Consumer Credit Litigation</i> | An indicator variable equal to one if a firm has a natural logarithm of one plus a consumer credit litigation count value above the sample year mean, and zero otherwise. “Consumer Credit Litigation” is defined as <i>is_category_type_98</i> in Audit Analytics. |
| <i>Derivatives Litigation</i> | An indicator variable equal to one if a firm has a natural logarithm of one plus a derivatives litigation count value above the sample year mean, and zero otherwise. “Derivatives Litigation” is defined as <i>is_category_type_97</i> in Audit Analytics. |
| Control Variables | Description |
| <i>Size</i> | The natural logarithm of the value of the firm’s total book assets in millions of dollars. |
| <i>Firm Age</i> | The natural logarithm of one plus the number of firm-year observations since the firm’s first appearance in Compustat. |
| <i>Revenue Growth</i> | The natural logarithm of the value of revenue in millions of dollars in year <i>t</i> divided by the value of revenue in millions of dollars in year <i>t-1</i> . |
| <i>Loss</i> | An indicator variable equal to one if a firm has negative net income during a fiscal year, and zero otherwise. |
| <i>Debt-to-Equity</i> | A firm’s long-term debt divided by its book equity. |
| <i>CAPX/Assets</i> | A firm’s capital expenditures divided by the value of its total book assets. |
| <i>Inst. Ownership</i> | The percentage ownership of a firm by its institutional shareholders, as measured by their equity ownership reported in their Form 13F reports appearing in Thomson Reuters, weighted by the firm’s market capitalization. |
| <i>Outside Director</i> | The number of directors who are outsiders. For these purposes, an “outside director” is a director who was never employed by the financial firm, is not related to a key employee of the firm, and never worked for a major stakeholder of the firm. |
| <i>Director Gender</i> | The ratio of (1+ male) to (1+ female) directors that sit on a financial firm’s board. |
| Law Director Characteristic Variables | Description |
| <i>Lawyer Director Age</i> | The average age of all lawyer-directors who sit on a financial firm’s board. |
| <i>Lawyer- Executive</i> | The percentage of lawyer-directors on a financial firm’s board who are also executives of the firm. |
| <i>Lawyer- CEO</i> | The percentage of lawyer-directors on a financial firm’s board who are also the firm’s CEO. |
| <i>Lawyer Male Director</i> | The percentage of lawyer-directors on the board who are male. |
| <i>Lawyer MBA Director</i> | The percentage of lawyer-directors on the board who also have an MBA degree. |

Table A2. Matched Sample Summary Statistics. This table reports summary statistics for a propensity score matched sample. *Treated Lawyer* firms are defined as financial firms that have a lawyer-director, whereas the control firms do not have a lawyer-director during at least the five-year period following the first year its matched counterpart becomes treated (when a lawyer-director joins its board). We use propensity score matching with replacement in year $t-1$ to create a sample matched on *Firm Value*, *Size*, *Inst. Ownership*, and *Firm Risk*, and two-digit SIC codes. Panel A presents the summary statistics for the year prior to lawyer-director treatment. The column “Difference” provides the difference between the Treated Lawyer and control sample mean (test statistic in parentheses). The row “N (by group)” provides the number of unique firms for each group. Panel B shows summary statistics for the full matched panel. Table A1 above provides the variables’ definitions. All continuous variables are winsorized at the 2.5% level in both tails. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Panel A: Pre-Treatment Lawyer-Director Year ($t-1$) | | | |
|---|-------------------|-------------------|---------------------|
| Matched Variables: | Treated Lawyer | Control | Difference |
| <i>Bank Value_t</i> | 1.234 (0.764) | 1.192 (0.676) | 0.041 (0.86) |
| <i>Size_t</i> | 7.083 (1.690) | 7.180 (1.809) | -0.097 (-0.83) |
| <i>Inst. Ownership_t</i> | 0.233 (0.272) | 0.252 (0.275) | -0.020 (-1.08) |
| <i>Bank Risk_t</i> | -4.302 (1.140) | -4.285 (1.107) | -0.017 (-0.22) |
| Other Independent Variables: | | | |
| <i>Age_t</i> | 2.309 (0.693) | 2.419 (0.661) | -0.110** (-2.43) |
| <i>Revenue Growth_t</i> | 0.103 (0.226) | 0.077 (0.219) | 0.026* (1.70) |
| <i>Loss_t</i> | 0.131 (0.338) | 0.160 (0.367) | -0.029 (-1.23) |
| <i>Debt- to- Equity_t</i> | 0.787 (1.007) | 0.863 (1.094) | -0.075 (-1.07) |
| <i>CAPX/Assets_t</i> | 0.006 (0.018) | 0.007 (0.023) | -0.001 (-0.58) |
| <i>Ln(Financial Litigation)_t</i> | 0.126 (0.492) | 0.139 (0.454) | -0.013 (-0.40) |
| <i>CEO Director_t</i> | 0.245 (0.431) | 0.235 (.424) | 0.011 (0.38) |
| <i>Outside Director_t</i> | 2.030 (2.727) | 1.913 (3.548) | 0.116 (0.54) |
| <i>Director Gender_t</i> | 6.110 (6.275) | 6.335 (8.990) | -0.235 (-0.43) |
| <i>Normal Times_t</i> | 0.887 (0.317) | 0.887 (0.317) | 0.000 (0.00) |
| <i>Financial Crisis_t</i> | 0.113 (0.317) | 0.113 (0.317) | 0.000 (0.00) |
| N (by group) | 450 | 450 | |

Table A2 (Continued)

| Panel B: Summary statistics for (t-5) to (t+5) | | | | |
|---|--------|----------|--------|-------|
| Matched Variables: | Mean | St. Dev. | Median | Obs. |
| <i>Bank Value_t</i> | 1.148 | 0.522 | 1.047 | 6,041 |
| <i>Size_t</i> | 7.514 | 1.656 | 7.344 | 6,041 |
| <i>Inst. Ownership_t</i> | 0.276 | 0.279 | 0.185 | 6,041 |
| <i>Bank Risk_t</i> | -4.431 | 1.101 | -4.496 | 6,041 |
| Other Control Variables: | Mean | St. Dev. | Median | Obs. |
| <i>Age_t</i> | 2.588 | 0.576 | 2.565 | 6,041 |
| <i>Revenue Growth_t</i> | 0.070 | 0.197 | 0.058 | 6,041 |
| <i>Loss_t</i> | 0.130 | 0.337 | 0 | 6,041 |
| <i>Debt- to- Equity_t</i> | 0.872 | 1.071 | 0.507 | 6,041 |
| <i>CAPX/Assets_t</i> | 0.004 | 0.013 | 0.001 | 6,041 |
| <i>Ln(Financial Litigation)_t</i> | 0.161 | 0.528 | 0 | 6,041 |
| <i>CEO Director_t</i> | 0.258 | 0.438 | 0 | 6,041 |
| <i>Outside Director_t</i> | 2.225 | 3.387 | 1 | 6,041 |
| <i>Director Gender_t</i> | 7.454 | 8.363 | 5.500 | 6,041 |
| Interaction Variables: | Mean | St. Dev. | Median | Obs. |
| <i>Normal Times_t</i> | 0.838 | 0.368 | 1 | 6,041 |
| <i>Financial Crisis_t</i> | 0.162 | 0.368 | 0 | 6,041 |

Table A3. Lawyer-Directors and Bank Risk (Pooled Panel). This table reports the results for pooled panel regressions of the natural logarithm of Z-Score (multiplied by negative one (-1)) on a lawyer-director indicator variable during 2000 to 2017. The main variable of interest, *Firm Risk*, is measured contemporaneously, whereas *Lawyer-Director* and the remaining controls are lagged by one period. Table A1 in the Appendix provides the variables' definitions. Industry fixed effects are defined using three-digit SIC code industry definitions. All continuous variables are winsorized at the 2.5% level in both tails. The estimated *t*-statistics are based on robust standard errors clustered by firm and are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Dep. Variable: <i>Firm Risk_t</i> | 2000 – 2017 | | | | |
|---|-------------|-----------|-----------|-----------|-----------|
| | (1) | (2) | (3) | (4) | (5) |
| Variables | | | | | |
| <i>Lawyer Director_{t-1}</i> | -0.073* | -0.062* | -0.062* | -0.077* | -0.079* |
| | (-1.80) | (-1.69) | (-1.67) | (-1.65) | (-1.67) |
| <i>Lawyer Director</i> | | | | 0.007 | 0.002 |
| <i>× Executive Director_{t-1}</i> | | | | (0.13) | (0.46) |
| <i>Lawyer Director × CEO Director_{t-1}</i> | | | | | 0.030 |
| | | | | | (0.46) |
| <i>Executive Director_{t-1}</i> | | | | -0.002 | 0.009 |
| | | | | (-0.03) | (0.17) |
| <i>CEO Director_{t-1}</i> | | -0.006 | -0.019 | -0.005 | -0.043 |
| | | (-0.14) | (-0.44) | (-0.11) | (-0.71) |
| <i>Firm Value_{t-1}</i> | | 0.299*** | 0.240** | 0.287*** | 0.287*** |
| | | (5.00) | (3.67) | (4.57) | (4.51) |
| <i>Size_{t-1}</i> | | -0.025 | -0.023 | -0.028* | -0.025 |
| | | (-1.63) | (-1.46) | (-1.80) | (-1.64) |
| <i>Age_{t-1}</i> | | -0.329*** | -0.342*** | -0.353*** | -0.355*** |
| | | (-7.93) | (-7.89) | (-8.10) | (-8.12) |
| <i>Revenue Growth_{t-1}</i> | | -0.020 | 0.046 | -0.029 | -0.029 |
| | | (-0.26) | (0.58) | (-0.38) | (-0.39) |
| <i>Loss_{t-1}</i> | | 0.988*** | 0.976*** | 0.965*** | 0.962*** |
| | | (22.32) | (21.54) | (22.35) | (22.27) |
| <i>Debt-to-Equity_{t-1}</i> | | 0.177*** | 0.178*** | 0.186*** | 0.185*** |
| | | (10.26) | (10.24) | (10.54) | (10.52) |
| <i>CAPX/Assets_{t-1}</i> | | -1.398 | -0.620 | -0.844 | -0.732 |
| | | (-0.63) | (-0.27) | (-0.74) | (-0.33) |
| <i>Inst. Ownership_{t-1}</i> | | -0.052 | -0.051 | -0.015 | -0.043 |
| | | (-0.66) | (-0.63) | (-0.19) | (-0.59) |
| <i>Ln(Financial Litigation)_{t-1}</i> | | 0.187*** | 0.167*** | 0.183*** | 0.182*** |
| | | (5.59) | (5.05) | (5.58) | (5.53) |
| <i>Outside Director_{t-1}</i> | | 0.004 | 0.005 | 0.004 | 0.004 |
| | | (0.56) | (0.67) | (0.53) | (0.60) |
| <i>Director Gender_{t-1}</i> | | 0.003 | 0.003 | 0.003 | 0.003 |
| | | (1.11) | (1.06) | (1.24) | (1.15) |
| Industry and Year Fixed Effects | Yes | Yes | No | Yes | Yes |
| Industry×Year Fixed Effects | No | No | Yes | No | No |
| # of Unique Firms | 1,466 | 1,466 | 1,466 | 1,466 | 1,466 |
| N | 11,533 | 11,533 | 11,533 | 11,533 | 11,533 |
| Adjusted R ² | 0.158 | 0.296 | 0.308 | 0.302 | 0.302 |

Table A4. Pooled Panel Summary Statistics. This table reports full sample summary statistics for the dependent and explanatory variables used in the pooled panel regressions. The sample is comprised of financial firms (SIC code 6000-6999), excluding real estate companies (two-digit SIC code: 65), over the period 2000 to 2017. Continuous variables are winsorized at the 2.5% and 97.5% levels. Table A1 above provides the variables' definitions.

| | 2000 – 2017 | | | | | |
|---|-------------|----------|--------|--------|--------|--------|
| Main Dependent Variables: | Mean | St. Dev. | P25 | Median | P75 | Obs. |
| <i>Bank Value_t</i> | 1.133 | 0.373 | 0.992 | 1.033 | 1.099 | 12,343 |
| <i>Bank Risk_t</i> | -4.501 | 1.065 | -3.801 | -4.581 | -5.263 | 11,537 |
| Main Independent Variables: | Mean | St. Dev. | P25 | Median | P75 | Obs. |
| <i>Lawyer Director_t</i> | 0.671 | 0.470 | 0 | 1 | 1 | 12,343 |
| <i>Board Education Diversity_t</i> | 1.478 | 1.397 | 0 | 1 | 3 | 12,343 |
| <i>Size_t</i> | 7.510 | 1.817 | 6.322 | 7.238 | 8.571 | 12,343 |
| <i>Age_t</i> | 2.616 | 0.552 | 2.197 | 2.565 | 2.996 | 12,343 |
| <i>Revenue Growth_t</i> | 0.056 | 0.170 | -0.042 | 0.044 | 0.140 | 12,343 |
| <i>Loss_t</i> | 0.136 | 0.342 | 0 | 0 | 0 | 12,343 |
| <i>Debt- to- Equity_t</i> | 0.886 | 1.056 | 0.190 | 0.504 | 1.162 | 12,343 |
| <i>CAPX/Assets_t</i> | 0.004 | 0.009 | 0 | 0.001 | 0.003 | 12,343 |
| <i>Inst. Ownership_t</i> | 0.293 | 0.285 | 0.014 | 0.207 | 0.523 | 12,343 |
| <i>Ln(Financial Litigation)_t</i> | 0.179 | 0.535 | 0 | 0 | 0 | 12,343 |
| <i>CEO Director_t</i> | 0.195 | 0.396 | 0 | 0 | 0 | 12,343 |
| <i>Outside Director_t</i> | 1.765 | 2.750 | 0 | 1 | 3 | 12,343 |
| <i>Director Gender_t</i> | 7.586 | 7.028 | 3 | 6 | 10 | 12,343 |
| Main Interacted Variables: | Mean | St. Dev. | P25 | Median | P75 | Obs. |
| <i>Executive Director_t</i> | 0.777 | 0.416 | 1 | 1 | 1 | 12,343 |
| <i>Financial Litigation_t</i> | 0.139 | 0.345 | 0 | 0 | 0 | 12,343 |
| <i>Class Action Litigation_t</i> | 0.142 | 0.349 | 0 | 0 | 0 | 12,343 |
| <i>Securities Litigation_t</i> | 0.102 | 0.303 | 0 | 0 | 0 | 12,343 |
| <i>Consumer Credit Litigation_t</i> | 0.003 | 0.058 | 0 | 0 | 0 | 12,343 |
| <i>Derivatives Litigation_t</i> | 0.026 | 0.158 | 0 | 0 | 0 | 12,343 |
| <i>Financial Crisis_t</i> | 0.180 | 0.384 | 0 | 0 | 0 | 12,343 |

Table A5. Lawyer-Directors and Bank Value (Pooled Panel). This table reports the results for pooled panel regressions of *Firm Value* on a *Lawyer-Director* indicator variable during the sample period 2000 to 2017. The main variable of interest, *Firm Value*, was measured contemporaneously, whereas *Lawyer-Director* and the remaining controls were lagged by one period. Table A1 in the Appendix provides the variables' definitions. Industry fixed effects were defined using three-digit SIC code industry definitions. All continuous variables were winsorized at the 2.5% level in both tails. The estimated *t*-statistics were based on robust standard errors clustered by firm and are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Dep. Variable: <i>Firm Value</i> _{<i>t</i>} | 2000 – 2017 | | | | |
|---|------------------|----------------------|----------------------|----------------------|----------------------|
| Variables | (1) | (2) | (3) | (4) | (5) |
| <i>Lawyer Director</i> _{<i>t</i>-1} | 0.025* (1.71) | 0.030** (2.35) | 0.030** (2.39) | -0.004 (-0.27) | 0.003 (0.15) |
| <i>Lawyer Director</i> × <i>Executive Director</i> _{<i>t</i>-1} | | | | 0.035** (2.20) | 0.014 (0.55) |
| <i>Lawyer Director</i> × <i>CEO Director</i> _{<i>t</i>-1} | | | | | 0.057* (1.94) |
| <i>Executive Director</i> _{<i>t</i>-1} | | | | 0.016 (1.03) | 0.027 (1.42) |
| <i>CEO Director</i> _{<i>t</i>-1} | | 0.010 (0.61) | 0.008 (0.51) | -0.001 (-0.04) | -0.036* (-1.66) |
| <i>Size</i> _{<i>t</i>-1} | | -0.033*** (-4.46) | -0.028*** (-3.86) | -0.035*** (-4.78) | -0.033*** (-4.54) |
| <i>Age</i> _{<i>t</i>-1} | | 0.043*** (2.67) | 0.040** (2.55) | 0.044*** (2.75) | 0.043*** (2.66) |
| <i>Revenue Growth</i> _{<i>t</i>-1} | | 0.083*** (2.85) | 0.102*** (3.31) | 0.152*** (5.45) | 0.083*** (2.82) |
| <i>Loss</i> _{<i>t</i>-1} | | -0.060*** (-3.51) | -0.065*** (-3.77) | -0.055*** (-3.38) | -0.060*** (-3.49) |
| <i>Debt-to-Equity</i> _{<i>t</i>-1} | | -0.022*** (-4.51) | -0.022*** (-4.40) | -0.021*** (-4.28) | -0.022*** (-4.49) |
| <i>CAPX/Assets</i> _{<i>t</i>-1} | | 10.92*** (6.22) | 11.16*** (6.10) | 10.71*** (6.15) | 10.84*** (6.22) |
| <i>Inst. Ownership</i> _{<i>t</i>-1} | | 0.150*** (4.38) | 0.141*** (4.20) | 0.160*** (4.72) | 0.147*** (4.32) |
| <i>Ln(Financial Litigation)</i> _{<i>t</i>-1} | | -0.022 (-1.59) | -0.032** (-2.19) | -0.020 (-1.45) | -0.022 (-1.56) |
| <i>Outside Director</i> _{<i>t</i>-1} | | -0.002 (-1.03) | -0.002 (-1.14) | -0.002 (-0.89) | -0.002 (-1.06) |
| <i>Director Gender</i> _{<i>t</i>-1} | | 0.003*** (3.68) | 0.003*** (3.58) | 0.002*** (3.21) | 0.003*** (3.22) |
| Industry and Year Fixed Effects | Yes | Yes | No | Yes | Yes |
| Industry × Year Fixed Effects | No | No | Yes | No | No |
| # of Unique Firms | 1,530 | 1,530 | 1,530 | 1,530 | 1,530 |
| N | 12,343 | 12,343 | 12,343 | 12,343 | 12,343 |
| Adjusted R ² | 0.337 | 0.438 | 0.473 | 0.441 | 0.439 |

Table A6. Lawyer-Directors and Firm Value, Excluding Insurance Companies and Other Financials. This table reports results for pooled panel and matched sample regressions of Firm Value on *Lawyer-Director* or *Treated Lawyer* \times *Post* indicators, excluding insurance companies (two-digit SIC code: 63-64) and other financials (two-digit SIC code: 66-67). The main variables of interest, *Firm Value*, *Treated Law* \times *Post*, and *Post*, are measured contemporaneously, whereas *Lawyer-Director* and the remaining controls are lagged by one period. Columns (1)-(3) provide pooled panel regression estimates over the period 2000 to 2017. Columns (4)-(6) show the matched sample results over the ($t\pm 1$), ($t\pm 3$), and ($t\pm 5$) windows. Control variables included in columns (2)-(3) and (4)-(6) are *Size*, *Age*, *Revenue Growth*, *Loss*, *Debt-to-Equity*, *CAPX/Assets*, *Inst. Ownership*, *Ln(Financial Litigation)*, *CEO Director*, *Outside Director*, and *Director Gender*. Table A1 above provides the variables' definitions. All continuous variables are winsorized at the 2.5% level in both tails. The estimated *t*-statistics are based on robust standard errors clustered by firm (reported in parentheses). *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

| Dep. Variable: <i>Firm Value</i> _{<i>t</i>} | Pooled Panel | | | Matched Sample | | |
|---|-------------------|-------------------|-------------------|---------------------|---------------------|---------------------|
| | 2000 to 2017 | | | (<i>t</i> \pm 1) | (<i>t</i> \pm 3) | (<i>t</i> \pm 5) |
| Estimation Window: | (1) | (2) | (3) | (4) | (5) | (6) |
| Variables | | | | | | |
| <i>Lawyer Director</i> _{<i>t</i>-1} | 0.029** (2.07) | 0.026** (2.02) | 0.028** (2.26) | | | |
| <i>Treated Lawyer</i> _{<i>t</i>} \times <i>Post</i> _{<i>t</i>} | | | | 0.081** (2.51) | 0.037* (1.70) | 0.044* (1.67) |
| <i>Post</i> _{<i>t</i>} | | | | -0.077** (-2.28) | -0.030 (-1.57) | -0.042* (-1.74) |
| Control Variables | No | Yes | Yes | Yes | Yes | Yes |
| Industry and Year Fixed Effects | Yes | Yes | No | No | No | No |
| Industry \times Year Fixed Effects | No | No | Yes | Yes | Yes | Yes |
| Firm Fixed Effects | No | No | No | Yes | Yes | Yes |
| # of Firms in Regression | 1,168 | 1,168 | 1,168 | 404 | 597 | 623 |
| N | 9,252 | 9,252 | 9,252 | 971 | 3,305 | 5,101 |
| Adjusted R ² | 0.380 | 0.470 | 0.502 | 0.863 | 0.825 | 0.809 |