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AN EXAMINATION OF THE FACTORS INFLUENCING THE ENACTMENT OF BANKING LEGISLATION AND REGULATION: EVIDENCE FROM FIFTY YEARS OF BANKING LAWS AND TWENTY-FIVE YEARS OF REGULATION

WILLIAM C. HANDORF, REGGIE O’SHIELDS, AND ANDREW RICHARDSON*

The enactment of new banking laws in the United States is cyclical. When the unemployment rate balloons and the economy contracts, more banks fail. In response to surging bank failures, loss of confidence in the banking system, and escalating public costs for the federal government to bailout the system, Congress conducts hearings and passes more restrictive laws. Such legislation attempts to reduce the likelihood of future bank failures, and often creates new regulatory organizations to carry out the mandate. With the passage of time, regulatory agencies provide bankers guidance in the form of regulation. Safety and soundness regulatory guidance varies with the economy, the number of bank failures, and the party affiliation of the President and Congress. Administrative guidance varies little with economic, industry, or political factors. Regulatory compliance rules increase with the passage of a new banking law and with inflation given that many historical laws (e.g., civil money penalties) require that monetary thresholds adjust according to revised price levels. There is no discernable trend or evidence suggesting that either banking laws or their accompanying regulations have been issued more frequently over the period assessed.

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I. INTRODUCTION

Given the importance of access to credit by consumers and businesses and recognition of the substantial public costs that can be and are incurred when insured institutions periodically fail in predictable and preventable situations, banks are a special sector in commerce. Consequently, banks are subject to extensive supervision and regulation resulting from legislation enacted by Congress. The justification for wide-ranging regulatory supervision reflects several different rationales, including: (1) issuance of charters by federal or state government; (2) access to the central bank’s discount window; (3) deposit insurance coverage; (4) control of systemic risk; and (5) commitment to social and community needs. The latter four rationales reflect legislation enacted over the past century.¹

This Article reviews key banking laws enacted in the United States during the past half-century and focuses on resulting regulatory trends over the previous twenty-five years. We address a number of related questions. How has banking legislation, supervision, and regulation evolved and what external factors, if any, precipitate change? Does legislation and resulting regulation primarily respond to periods of increasing bank failure or do other economic, political, and social problems provide a policy catalyst? Do evolving regulations primarily reflect safety and soundness, compliance, or administrative matters? Are regulatory pronouncements increasing, decreasing, or exhibiting little in the way of a trend over the decades studied?

This Article examines the antecedents of the passage of banking law and subsequent promulgation of accompanying regulation. Part II provides general background material on the regulation of the banking industry.² Part III examines historical bank failures and subsequent legislative responses, highlighting the cyclical nature of financial regulation and the economy.³ Part IV examines the correlation between bank failures and economic distress.⁴ Part V discusses recent bank

². See infra Part II
³. See infra Part III.
⁴. See infra Part IV.
legislation.5 Part VI reviews recent bank regulation.6 We conclude in Part VII by highlighting the issues that impact the passage of banking law and the promulgation of accompanying regulation.7

II. GENERAL BACKGROUND INFORMATION ON BANKING LAW AND REGULATION

We have categorized banking law and regulation into three general categories: safety and soundness, compliance, and administrative. Safety and soundness regulation is designed to protect against systemic risk and ensure banks retain sufficient capital and liquidity to remain viable and able to meet the financial needs of communities and the nation.8 Regulation focuses not only on capital and liquidity, but also on asset quality, earnings, sensitivity, management, risk management, and incentive compensation among many other related areas. Compliance regulation is enacted to ensure banks meet the legitimate financial needs of the respective regions they serve and requires institutions to provide full disclosure to, and the fair and non-discriminatory treatment of, all customers.9 Administrative regulation includes rules of practice and procedure, bank governance provisions, assessment and deposit insurance requirements, and freedom of information issues, among other rules. Regulation must balance the threat of monopoly or oligopoly within a market, as banks are allowed to expand in size by merger and acquisition, and add new related services that may promote economies of scale and scope.

Financial regulators exercise their supervisory authority on a number of levels. At the top of that hierarchy are federal statutes, which provide the legislative authority for the relevant regulatory agency to act, consistent with the constitutional concept of separation of powers since regulatory agencies are placed within the executive branch of government. Ultimately, all regulatory action, including rulemaking and other regulatory processes, must be traced back to federal legislation and

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5. See infra Part V.
6. See infra Part VI.
7. See infra Part VII.
must be consistent with that legislation. To the extent the legislation has delegated rulemaking authority to a regulatory agency, as frequently occurs as the statute becomes more complex, courts typically give deference to such agency action unless Congress has been clear in the statute as to its intent.\(^{10}\) Under the Administrative Procedure Act ("APA"),\(^ {11}\) rulemakings or regulations, which have general applicability and the force of law, must typically be issued through a defined process that involves public notice and comment.\(^ {12}\) In 2018, federal banking regulators reiterated the long-standing legal principles that supervisory guidance does not have the force and effect of law and that regulators do not take enforcement actions based on supervisory guidance. Rather, guidance articulates supervisory expectations and priorities.\(^ {13}\)

Existing research has not evaluated how banking law and subsequent regulatory releases have evolved in relation to the health of the industry, the political environment, and the economy. Are there regulatory patterns that can be categorized, classified, differentiated or arranged in any meaningful hierarchical series? As initially hypothesized, bank failures feature prominently in the enactment of banking laws and the subsequent promulgation of regulations.

Many financial, organizational, economic, and legal studies assess the favorable and unfavorable impact of regulation and law once enacted. For example, when rules required banks to increase equity capital, studies demonstrated that return on assets increases, the leverage multiplier declined, and the return on equity tended to decline below the rate required by investors.\(^ {14}\) Similarly, when large and internationally-active banking organizations were subject to compliance with the restrictive Liquidity Coverage Ratio ("LCR") and the Net Stable Funding Ratio ("NSFR"), research disclosed the adverse financial consequence.\(^ {15}\) The LCR was designed to ensure a bank retains sufficient liquid assets to


\(^{12}\) Id.


\(^{15}\) William C. Handorf, The Cost of Bank Liquidity, 15 J. Banking Reg., Jan. 2014, at 1–13 (empirically demonstrating that liquidity regulation encouraging banks to invest in more short-term, low-risk securities and to fund assets by more long-term, stable sources of debt imposes costs on banks that reduce their profits through lower net interest spread, but if bank liquidity is sufficient to withstand subsequent periods of market stress, also will reduce public expenditures associated with bank failure).
withstand a thirty-day runoff of liabilities. The NSFR encouraged banks to rely more fully on long-term, stable sources of funding. Given the existence of a liquidity premium embedded within the yield curve, both liquidity rules adversely impacted net interest income and profitability, as short-term investment securities typically earn less and long-term debt normally costs more. The Bank for International Settlements (“BIS”) has established a repository for the now very large number of articles demonstrating the impact of financial regulation. Its work shows that once a banking law is enacted or a regulation is released, the number of academic and professional references proliferates.

Our investigation precedes such studies and assesses the cycles of the enactment of law, promulgation of regulation, and release of related supervisory measures. Legislators and the administration invariably respond to economic contractions coupled with problems experienced by financial institutions. Bank crises are not a new phenomenon. A crisis can include a panic when the financial markets, the inter-bank market, and depositors lose confidence in the banking sector and withdraw funds, and a failure when many institutions are liquidated or merged by regulatory authority. Crises occur in the U.S. and other countries approximately every generation. U.S. banks have recovered ten years after the 2008 financial crisis and the resulting economic contraction.

It is instructive to briefly review the long and frequent episodes of bank failure and market stress over the past century to provide a base for later legislative and regulatory analysis. Bank failure is a key catalyst prompting Congress and the then existing administration to enact law and introduce new regulatory agencies and accompanying regulation. The introduction of new agencies and programs subsequently broadens and deepens the reasons, or raison d’etre, banks are supervised. Regulation is self-reinforcing.

III. HISTORICAL BANK FAILURE AND LEGISLATIVE ACTIVITY

A former Comptroller of the Currency responsible for regulation and supervision of national banks indicated, “[t]he [bank] failures for the current year have been numerous, many having been characterized by

gross mismanagement and some by criminality of an aggravated character. . .”17 Although these words easily could have been written in the United States during any crisis, including the most recent financial crisis in 2008, they were penned in 1891 by then Comptroller Edward S. Lacey.18 The following chronicle notes how banking laws have responded to financial and banking crises over the past century and introduced new agencies responsible for carrying out the mandate. The legislative responses have increased, broadened, and deepened the reasons banks are supervised.

After winning the presidential election in 1912, Woodrow Wilson prioritized banking reform in response to the devastating banking crisis and severe recession of 1907. The Federal Reserve Act of 191319 created the existing central bank. Additional access to liquidity did not quell future panics, but provided further justification for the supervision of banks.20

The Banking Act of 193321 established the Federal Deposit Insurance Corporation (“FDIC”) and authorized the new agency to provide limited federal deposit insurance as of 1934 following numerous bank failures and bank runs resulting from the Great Depression, the Dust Bowl, and the subsequent National Banking Holiday when deposit institutions were closed.22 The modest governmental deposit coverage did not stem subsequent losses from failure, but again expanded the rationale for why banks are regulated.

The Federal Reserve shocked the markets in 1979 by dramatically increasing short-term interest rates to control rampant inflation. Savings and loan (“S&L”) institutions suffered severe disintermediation as customers withdrew funds in favor of Treasury securities offering higher yields than financial institutions were then able to pay on deposit products. Congress passed several laws, including the Depository Institutions Deregulation and Monetary Control Act of 198023 and the

17. JOHN JAY KNOX, A HISTORY OF BANKING IN THE UNITED STATES 194 (Bradford Rhodes & Co. et al. eds., 1900).
18. See id.
20. Id.
22. Id.
Garn-St. Germain Depository Institutions Act of 1982,\textsuperscript{24} to alleviate the industry’s liquidity and interest rate risk difficulties. The thrift industry was unable to make or purchase a sufficient volume of performing loans then newly authorized. One third of the industry failed between 1986 and 1995.

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989\textsuperscript{25} created the Resolution Trust Corporation to liquidate and manage insolvent S&Ls, imposed new restrictions, abolished the supervisory authority of the Federal Home Loan Banks, and created a new, and short-lived, agency, called the Office of Thrift Supervision, to oversee the rapidly shrinking S&L industry.\textsuperscript{26} In response to market turmoil, commercial banks aggressively entered the residential mortgage loan market vacated by thrifts, thereby setting the stage for the next financial catastrophe.

The Gramm-Leach-Bliley Act of 1999 ("GLBA")\textsuperscript{27} eliminated restrictions on affiliations between commercial banks and investment banks, and between insurance firms and banks. The absence of economic stress or systemic bank failure invariably prompts the industry to lobby for easing prior restrictions.

Congress and the administration responded to the 2008 financial crisis with policy initiatives comparable to those which followed U.S. banking crises over the past century: (1) conduct hearings; (2) enact new restrictive laws that attempt to prevent similar abuses in the future; and (3) create new regulatory agencies or increase authority for existing agencies to promulgate rules and monitor institutional compliance with the law. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act")\textsuperscript{28} created the Consumer Financial Protection Bureau ("CFPB") and the Federal Stability Oversight Council (FSOC) among other entities, and expanded the powers of the Federal Reserve, the FDIC, and the Commodity Futures Trading Commission ("CFTC"), as well as required banks—especially those deemed systemically-important, or \textit{Too Big to Fail}—to increase funding by equity

\textsuperscript{26} See id.
capital, direct more attention to maintaining adequate levels of liquidity, and enhance risk management processes.

Congress revised the Dodd-Frank Act in 2018 with passage of the Economic Growth, Regulatory Relief, and Consumer Protection Act (“EGA”), which required banking regulators to tailor their prudential regulations issued in the aftermath of the 2008 financial crisis to account for differences in risk and complexity among regulated banks.

The United States has a long and undistinguished historical record of bank failure, market panic, and legislative response. Well-conceived public policy initiatives often result in unintended consequences leading to subsequent bank failures, which serve as a catalyst for new legislative and regulatory efforts.

IV. BANK FAILURE AND ECONOMIC DISTRESS

Researchers long ago noted that bank failures coincide with adverse developments in the economy. Freidman and Schwartz contend problems in the financial system worsen an economic contraction by reducing the wealth of bank shareholders and precipitating a rapid decline in the supply of money. Former Federal Reserve Chairman Ben Bernanke extends their pioneering work by evaluating how debtor bankruptcies may further affect economic output and indicating that “[a]s the real costs of intermediation increase, some borrowers (especially households, farmers, and small firms) find credit to be expensive and difficult to obtain. The effects of this credit squeeze on aggregate demand helped convert the severe downturn of 1929–1930 into a protracted depression.”

Charles Kindleberger and Robert Aliber, among other academics, claim that bank failures are part of the business cycle and result from myopic foresight by bankers.

Liquidity issues tend to follow once a bank’s capital, asset quality, and earnings problems become well-known by regulatory

supervisors, credit rating agencies, and the inter-bank market. The press publishes adverse articles about the financial problems of a bank or the banking system. Core and non-core depositors alike withdraw funds. If a rapidly deteriorating bank has little high-quality collateral available for pledging at the central bank or correspondent banks, liquidity pressures deepen. Weak banks lacking unencumbered, quality assets are unable to borrow funds in the inter-bank market even on a short-term basis. Diamond and Dybvig believe the mission of the banking industry is conducive to precipitating banking panics since “[b]anks create liquidity risk for themselves as they provide liquidity to customers in the form of loan commitments and mismatched terms of longer-term assets funded by shorter term liabilities.”

Ultimately, a bank fails when management and the board of directors are unable to establish a viable business plan for qualified management to implement, and unwilling or incapable of identifying, measuring, monitoring, and controlling risks commensurate with a safe and sound institution. Parsons cites the results of almost 100 FDIC Material Loss Reviews that highlight issues leading to governmental losses incurred when banks are liquidated or merged. “Ineffective bank directors are identified as a primary cause of bank failure.” According to the FDIC, typical characteristics of the 489 banks that failed between 2008 and 2013 included “heightened concentrations of [real estate acquisition, development, and construction (“ADC”)] lending, rapid asset growth, reliance on funding sources other than stable core deposits, and relatively lower capital-to-assets ratios.” The failing banks did not modify plans or heed warning signs indicative of imminent economic distress, and thus, the losses were predictable.

The earlier studies cited evaluated economic and financial issues applicable to bank failure more than fifty years ago. Bank failure is related to economic contraction. We updated these studies and also found economic growth or contraction, the condition of the financial markets, and bank failure as indicators of new banking legislation. Table 1 provides statistics on the annual number of bank failures in the United States over a half-century between 1968 and 2018. On average, fifty-nine banks failed per year and annual bank failures ranged from zero during several years sampled to over 500 in the tumultuous year of 1989. The two big waves of failure included the thrift crisis during the 1980s and early 1990s, and that associated with the housing finance debacle during the 2008 financial crisis. Our focus is on promulgation of banking law and related regulation, rather than extensive econometric analysis of bank failure and the economy.

We present four comprehensive economic and financial market indices. As shown in Table 1, the annual civilian unemployment rate over the five decades sampled averaged 6.15%, and ranged between 10.8% in 1982 and 3.4% in 1968. Real or inflation-adjusted gross domestic product (“GDP”) expanded at an average annual rate of 2.81%, and ranged between 7.2% in 1984 and -2.5% in 2009. Ten-year U.S. Treasury notes averaged 6.34% per year, and ranged between 14.59% in 1982 and 1.88% in 2015. By contrast, real or inflation-adjusted ten-year U.S. Treasury rates averaged 2.30%, and ranged between 10.79% in 1982 and -5.31% in 1974. The five decades depicted show high economic and market variability important to understanding the potential relationship to bank failure and resultant legislative action.

Table 1
Illustrative Economic and Market Indices and Bank Failure (1968 to 2018)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Average</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Bank Failure</td>
<td>59</td>
<td>531</td>
<td>0</td>
</tr>
</tbody>
</table>
We hypothesize that bank failures should increase during and after periods of high unemployment, low or contracting GDP, and high interest rates expressed on either a nominal or real basis. We employ statistical correlation analysis to study the influence between the economy, financial markets, and bank failure. Correlation analysis provides a measure of the relative—not absolute—relationship between variables and does not suggest causality or economic consequence. Table 2 illustrates the coincident bank failure correlation data that can range from +1.00 (i.e., perfect positive correlation) to −1.00 (i.e., perfect inverse correlation).

As shown, bank failure correlates positively with the unemployment rate at the 10% confidence level, and nominal and real interest rates at the 5% confidence level with a one-tail or directional (i.e., positive or negative) test. The confidence level represents the probability that a relationship exists when otherwise untrue. As more Americans seeking employment are unable to find meaningful full-time work, they lack the financial ability, cash flow, and liquidity to repay mortgage, credit card, and consumer loan debt. Bank loan originations decline, loan losses increase, profits decay, capital evaporates, and failures surge. Similarly, when nominal or real interest rates increase, consumers and businesses alike find it more expensive to repay loans—and bank failures rise. Although GDP correlates with bank failures in a negative manner as projected (i.e., quicker economic growth should lead to fewer bank failures), the result is not statistically significant. The above statistical
relationships remain when failures are lagged by one year. Other political factors, such as the election of a new President, the party affiliation of the President, and whether the political composition of Congress is unified or divided, proved insignificant to the passage of banking laws and therefore are not illustrated in Table 2.

**Table 2**


<table>
<thead>
<tr>
<th>Factor</th>
<th>Bank Failure</th>
<th>Bank Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Bank Failure</td>
<td>N/A</td>
<td>33.3%*</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>20.0%***</td>
<td>18.2%***</td>
</tr>
<tr>
<td>% Change Real GDP</td>
<td>-4.4%</td>
<td>-27.0%**</td>
</tr>
<tr>
<td>10-year Treasury</td>
<td>25.2%**</td>
<td>1.8%</td>
</tr>
<tr>
<td>Real 10-year Treasury</td>
<td>28.9%**</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Statistical Significance: * at 1%, ** at 5%, and *** at 10%

There have been approximately twenty major pieces of banking legislation enacted in the United States (as listed in the Appendix) during the last half-century. The passage of new legislation coincides very strongly with the condition of the banking industry and the economy. The correlation between those years in which a new banking law was passed (shown as a dummy variable, one, and otherwise, zero) and bank failure is positive, and significant at the 1% level, as shown in Table 2. Congress responds to periods of increasing bank failure and related escalating liquidation costs borne by the public by introducing new programs, rules, and agencies to reduce the potential repetition of failure in the future. Although economic expansion and contraction within GDP showed no significance explaining bank failure, the relationship is negative and significant at the 5% level when correlated with the passage of a new bank law. Similarly, the unemployment rate correlates positively with the enactment of new law and is significant at the 10% confidence level.

Repeated legislative efforts to respond to prior crises by introducing a central bank and lender of last resort, providing modest
deposit insurance coverage, and requiring more stringent regulatory rules applicable to capital, liquidity, and risk management have not been sufficient despite expectations to the contrary. Bankers and regulators appear reluctant to acknowledge the expensive lessons from prior episodes of failure. As cited above, such failure has been attributed to the unwillingness or inability of management and the board to measure, monitor, and control risks compatible with a viable, safe, and sound institution, or implement business plans that promote long-term survival.

Recent regulatory and governance efforts to promote board diversity and require refreshment strategies have produced mixed results. For example, Baum notes that “[t]he empirical support for staffing boards with independent directors, however, remains surprisingly shaky given the ubiquitous reliance on independent directors. The [2008] financial crisis has added further doubts.”36 Similar evidence contradicts “good” governance claims applicable to board diversification.37 Pathan and Faff conducted a longitudinal study of large U.S. bank holding companies prior to and after the rules of Sarbanes-Oxley were introduced and focused on the composition of boards.38 They found that “[a]lthough gender diversity improves bank performance in the pre-Sarbanes-Oxley Act (SOX) period (1997–2002), the positive effect of gender diminishes in both the post-SOX (2003–2006) and the crisis periods (2007–2011).”39 Further, Essen et al. found that prior governance recommendations have not allowed banks to prosper or avoid failure during crises. “Good governance prescriptions, such as board independence, incentive compensation and the separation of the CEO and board chair, have on the whole proved harmful to firm performance in times of crisis.”40 The research mentioned above indicates that efforts to enhance

37. See id.
39. Id. at 1573.
governance have not provided an additional safeguard to augment law and regulation.

Congress responds to periods of economic distress, related surges in bank failure, and ballooning fiscal costs to bailout the financial sector by introducing legislative safeguards. New regulatory agencies are created that precipitate additional reasons financial institutions are supervised. Existing or newly-created banking agencies promulgate regulation among other sources of guidance for the financial sector.

VI. RECENT BANK REGULATION

While banking law is critical to the development of plans and policies by insured financial institutions, accompanying regulation is more influential. In most circumstances, federal legislation is not self-effectuating. Market participants wait until the issuance of accompanying regulations, which outline the true extent of compliance obligations before conforming their business operations to the new legal requirements. In many cases, these regulations are not issued until well after the statute’s effective date. This leaves business and market operations to continue largely unchanged until the regulations are issued and fully effective. It is the issuance of the accompanying regulations, rather than passage of the legislation, that has a substantial impact on financial operations of banks.

In the case of the Dodd-Frank Act, which substantially overhauled regulation of prudential financial regulation, consumer financial protection, and the derivatives and mortgage markets—among other changes—the total number of separate rulemaking requirements was 390. These regulations were not issued for many years after passage of the Act, and in some cases, the regulations are still not yet in full effect. For example, as of July 19, 2016, only 274 of 390 total rulemaking requirements (or 70%) had been finalized—six years after the Act’s enactment. This regulatory overhang happens frequently and results in the impact from new banking laws being felt many years after their enactment.

42. Id.
Many U.S. Presidents have issued executive orders to ensure regulatory benefits exceed costs. President Carter (Executive Order 12044) required procedures for analyzing the impact of new regulations and attempted to minimize their adverse impact in 1980. During the same year, Congress passed, and President Carter signed, a law that created the Office of Information and Regulatory Affairs (“OIRA”) to review and approve all new reporting requirements. President Reagan (Executive Order 12291) provided OIRA with further responsibility to ensure regulatory benefits exceed costs in 1982. By enacting Executive Order 12866 President Clinton retained OIRA’s review of new regulatory burdens and reinforced the viewpoint that regulation should maximize net benefits to society. Most recently, President Trump issued Executive Orders 13891 and 13892 to improve agency guidance and enforcement.

These executive orders are not applicable to independent agencies, such as the federal banking regulators, but set important precedent that may be followed by independent agencies in certain cases. For example, independent agencies may choose to voluntarily adopt the precepts that agency guidance should not form the basis for determining violations of law, and that significant guidance should be issued through public notice and comment with approval from high-ranking agency officials. The executive orders are also consistent with recent Interagency Statement. Nevertheless, the volume of regulation and regulatory guidance has continued to be issued at a rapid pace, significantly impacting operations of financial institutions as many researchers have analyzed.

We evaluate the trend in the number and type of regulatory pronouncements in the United States over the past twenty-five years. We

focus on law and regulation of the banking sector rather than thrift institutions. The majority of regulations released in the 1980s and early 1990s emphasized the problems and failure of the savings and loan industry leading to the creation of the Resolution Trust Corporation, and the merger of the beleaguered and woefully inadequate Savings Association Insurance Fund with the Bank Insurance Fund. Savings and loans are no longer an important component of the banking industry. According to the FDIC, banks account for 87.3% of the 5256 financial institutions and 93.7% of the $18.5 trillion of assets as of September 30, 2019.50 Thrift industry analysis represents a historical perspective while the banking sector is forward-looking. In addition, the FDIC began electronic publication of regulations in 1995.51 Accordingly, we review the trend and type of regulation over twenty-five years between 1995 and 2018. Many regulatory releases of the FDIC (insured banks and state-chartered, non-member banks) are also simultaneously promulgated by the Office of the Comptroller of the Currency (national- or federal-chartered banks), and the Board of Governors of the Federal Reserve System (state-chartered member banks and holding companies).

The FDIC released over 350 regulations during the quarter-century period studied, averaging 14.75 regulations per year. As shown in Table 3, the numbers of regulatory pronouncements ranged between thirty in 2009, to five in 2003. The correlation with economic conditions, bank failure, and political affiliation of the President and Congress is presented in Table 4. The correlation between the passage of time (1995 is one and 2018 is twenty-four) and regulation is negative, and not significant. Similarly, there is a modest—but insignificant—positive correlation between the enactment of new banking law and the release of regulation. The insignificance is unsurprising given the time taken by agencies to respond to a new law and craft guidance for the industry. However, the number of new regulations does correlate positively with the number of annual bank failures; the correlation is significant at the 10% confidence level.

Table 3
Regulation by FDIC (1995 to 2018)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Average</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>14.75</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Safety &amp; Soundness</td>
<td>4.13</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Administrative</td>
<td>6.04</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Compliance</td>
<td>4.58</td>
<td>13</td>
<td>1</td>
</tr>
</tbody>
</table>


Regulatory supervisors invariably face more hostile legislators in committee hearings as the public loses confidence in the banking sector and costs to bailout failed institutions escalate. Regulatory guidance is positively correlated with a Democratic-controlled Congress and a President from the same party. As subsequently established, safety and soundness rules respond to deteriorating conditions within the economy, an increasing number of bank failures and political affiliation of the president and Congress. Compliance regulatory guidance correlates with the passage of bank law and with inflation and nominal interest rates. Select prior laws require adjustment of stated thresholds with changes in price. Administrative guidance retains no obvious relationship to economic, industry or political factors.

Table 4
Correlation between Regulation, the Economy and Political Factors (1995 to 2018)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Regulation</th>
<th>Safety &amp; Soundness</th>
<th>Administrative</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>-11.1%</td>
<td>21.7%</td>
<td>-7.5%</td>
<td>-43.0%</td>
</tr>
<tr>
<td>New Bank Law</td>
<td>13.6%</td>
<td>-4.9%</td>
<td>5.6%</td>
<td>28.9%***</td>
</tr>
<tr>
<td>Bank Failure</td>
<td>28.8%***</td>
<td>58.1%*</td>
<td>-13.1%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>31.8%***</td>
<td>58.9%*</td>
<td>-5.4%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>
We categorize regulation into three types: (1) safety and soundness; (2) administrative; and (3) compliance. The categorization of rules into one of these three groups must be viewed as approximate; other legal scholars or banking experts could reasonably change the placement of several regulations.

\textit{A. Safety and Soundness}

Approximately 28\% of the regulatory releases reflect safety and soundness and the number of safety and soundness regulations ranged from zero for several years to sixteen in 2009 as the housing market crashed and bank failures surged. While the number of such pronouncements has increased with time as reflected by a positive correlation, the relationship is not statistically significant.

By contrast, the release of new regulations designed to enhance bank safety correlates very positively with the number of bank failures in a given year, which is significant at the 1\% level. And, regulatory rules correlate highly with the economy. New guidance related to operating safely correlates positively with the unemployment rate and negatively with real GDP. Both economic metrics are significant at the 1\% level. Bankers can expect more regulatory guidance affecting the balance sheet.

<table>
<thead>
<tr>
<th>% Change Real GDP</th>
<th>-35.5%**</th>
<th>-54.3%*</th>
<th>-15.2%</th>
<th>12.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>5.5%</td>
<td>-24.5%</td>
<td>1.2%</td>
<td>42.4%**</td>
</tr>
<tr>
<td>10-year Treasury</td>
<td>7.3%</td>
<td>-24.9%</td>
<td>5.5%</td>
<td>41.2%**</td>
</tr>
<tr>
<td>Real 10-year Treasury</td>
<td>4.3%</td>
<td>-11.0%</td>
<td>5.1%</td>
<td>17.1%</td>
</tr>
<tr>
<td>New President</td>
<td>9.2%</td>
<td>15.1%</td>
<td>-10.1%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Democratic President</td>
<td>34.2%**</td>
<td>39.9%**</td>
<td>20.5%</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Democratic Congress</td>
<td>50.2%*</td>
<td>64.9%*</td>
<td>16.1%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

Statistical Significance: * at 1\%, ** at 5\% and *** at 10\%
and the income statement when the unemployment rate increases and the economy contracts.

Political factors likewise affect the release of new guidance. While safety and soundness rules increase just after the election of a new President, given a positive correlation, the relationship is not sufficient to be considered significant. The party affiliation of the President and Congress are important to operating safely. However, it is not obvious that a Democratic or Republican President or Congress should be more or less likely to champion new banking regulation. Given the absence of an *a priori* relationship, we apply a two-tail or non-directional statistical test. The correlation between the release of new regulations and a President from the Democratic party is positive and significant at the 5% level and very positive with a Democratic-controlled Congress significant at the 1% level. Party affiliation is important and elections must be monitored closely by bankers to assess likely future asset/liability directions. It is important to note that the correlation between political party and issuance of safety rules applies only to a sample period of the recent quarter-century. Such past relationships may change in the future.

B. **Administrative**

Approximately 41% of the regulations promulgated by the FDIC over the twenty-five-year period examined focus on administrative rules. Administrative rules show no significance to economic or political factors. The lack of correlation should not be interpreted to suggest such rules are not costly to implement and can impact efficiency ratios important to management and investors.

C. **Compliance**

The remaining compliance category accounts for 31% of new regulatory pronouncements by the FDIC. Passage of a new banking law correlates positively with promulgation of new compliance directives, which is significant at the 10% level. Similar to administrative regulation, there is no discernable trend of compliance rules related to political factors or bank failure. Compliance rules do correlate positively with inflation (and interest rates that partially reflect projected inflation) given historically enacted laws that require regulators to adjust thresholds with changes in prices. Inflation and ten-year interest rates on U.S.
Treasury notes are significant at the 5% level of confidence. In addition, the correlation between time and compliance rules is negatively related, not positive as projected, and thereby insignificant.

Bank failures prompt the promulgation of new banking legislation and subsequent regulations, especially those reflecting safety and soundness, structured to remediate the causes of liquidation and related costs to maintain confidence in the financial system. Safety and soundness guidance is especially sensitive to the economy given the relationship to bank failures and the political affiliation of the President and Congress.

Regulations ultimately respond to prior law enacted by Congress. Some laws precipitate more guidance for the industry, or persist over a long period of time with later modifications or revisions. Even though the Dodd-Frank Act was enacted only ten years ago, it has prompted the most supervisory attention and direction when compared to other pieces of legislation during the twenty-five-year period examined. We categorize the major issues and/or laws that precipitated the release of banking regulation below:

- Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010\textsuperscript{52}: 15.8%
- Riegle Community Development and Regulatory Improvement Act of 1994\textsuperscript{53} and Riegel-Neal Interstate Banking and Branching Efficiency Act of 1994\textsuperscript{54}: 7.6%
- Community Reinvestment Act of 1977\textsuperscript{55}: 5.4%
- Securities Act of 1933\textsuperscript{56} and Securities Exchange Act of 1934\textsuperscript{57}: 3.4%
- Basel Compliance: 3.4%
- Temporary Liquidity Guarantee Program: 2.8%
- Gramm-Leach-Bliley Act of 1999\textsuperscript{58}: 2.3%

• Economic Growth, Regulatory Relief, and Consumer Protection Act59: 2.3%
• Accounting: 0.9%

Not all regulations have the same financial impact on the industry. Other research previously cited attempts to recognize the costs of complying with regulation. Our effort is more modest and has assessed why and when banking laws are enacted and subsequent regulations are disseminated.

VII. CONCLUSION

This Article reviews key banking laws enacted in the United States during the past half-century with a focus on resulting regulatory trends over the previous twenty-five years. We have addressed a number of related questions. How has banking legislation, supervision and regulation evolved, and what external factors, if any, precipitate change? Bankers can anticipate they will need to respond to more banking-related laws as the economy contracts and bank failures surge. Once enacted, existing or newly-created regulatory bodies will be more likely to issue guidance.

Do evolving regulations primarily reflect safety and soundness, compliance, or administrative matters? Administrative rules are more common than compliance or safety and soundness rules, but exhibit little association with the economy, the financial sector, or political factors. Compliance regulatory guidance increases during periods of rapidly rising prices and enactment of new law. Regulators are more likely to release new safety and soundness guidance under an adverse economy and deteriorating banking sector. Regulators also disseminate more safety and soundness rules under a Democratic President or Congress. There is no evidence regulatory activity has increased over the past quarter century evaluated. However, we have conclusively determined that economic, market, and political trends cannot be ignored when analyzing the enactment of bank-related laws and notice of resulting regulation.

APPENDIX: KEY BANKING LAWS (1968 TO 2018)

- International Banking Act of 1978
- Financial Institutions Regulatory and Interest Rate Risk Control Act of 1978
- Depository Institutions Deregulation and Monetary Control Act of 1980
- Garn-St Germain Depository Institutions Act of 1982
- Competitive Equality Banking Act of 1987
- Financial Institutions Reform, Recovery and Enforcement Act of 1989
- Crime Control Act of 1990
- Federal Deposit Insurance Corporation Improvement Act of 1991
- Housing and Community Development Act of 1992
- Riegle Community Development and Regulatory Improvement Act of 1994
- Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994
- Economic Growth and Regulatory Paperwork Reduction Act of 1996
- Gramm-Leach-Bliley Act of 1999
- International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001
- Sarbanes-Oxley Act of 2002
- Fair and Accurate Credit Transactions Act of 2003
- The Federal Deposit Insurance Reform Act of 2005
- Financial Services Regulatory Relief Act of 2006
- The Housing and Economic Recovery Act of 2008
- Helping Families Save Their Homes Act of 2009
- Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010