# Observing Enforcement: Evidence from Banking

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## Abstract

This paper finds that the disclosure of supervisory actions is associated with changes in regulators' enforcement behavior. Using a novel sample of enforcement decisions and orders (EDOs) and the setting of the 1989 Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA), which required the public disclosure of EDOs, we find that U.S. bank regulators issue more EDOs, intervene sooner, and rely more on publicly observable signals after the disclosure regime change. The content of EDOs also changes, with documents becoming more complex and boilerplate. Our results are stronger in counties with higher news circulation, indicating that disclosure plays an incremental role in regulators' changing behavior. We evaluate the main potentially confounding changes around FIRREA, including the S&L crisis and competition from thrifts, and find robust results. We also study changes in bank outcomes following the regime change and find that uninsured deposits decline at EDO banks, especially for banks with EDOs covered in the news. Finally, we observe that bank failure accelerates despite improvements in capital ratios and asset quality.

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*There is now a widespread consensus on the need for regulation, but that still leaves open the question: even if we have good regulations, how do we ensure that they will be enforced? How do we prevent regulatory failure?*

—Joseph Stiglitz, in "Regulation and Failure" (Stiglitz, 2009)

## 1. Introduction

We study whether the required disclosure of regulators' supervisory actions is associated with changes in their enforcement behavior. This sort of disclosure could either increase or decrease regulatory strictness. It could increase strictness by impacting regulators' reputation and credibility. Disclosure increases the costs of forbearance; therefore regulators concerned about their reputation and career prospects might become stricter when their supervisory actions receive public scrutiny (Holmström, 1999). On the other hand, disclosure might lead regulators to take less aggressive actions. Bank regulators might be concerned with how disclosing enforcement actions affects financial stability, in particular the likelihood of bank runs, and reduces risk-sharing opportunities (Diamond & Dybvig, 1983; Goldstein & Leitner, 2018; He & Manela, 2016; Morris & Shin, 2002). They might also want to ward off lawsuits from regulated firms and ensure their continued cooperation.[1]

Although prior literature studies the impact disclosure of supervisory actions has on regulated entities, limited empirical evidence exists on the effects of disclosure on regulators because regulators' actions are generally unobservable in a nondisclosure regime (Anbil, 2018; Docking et al., 1997; Jin & Leslie, 2003; Slovin et al., 1999). We address this empirical challenge by exploiting the 1989 Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA), which, among other changes, required U.S. banking regulators to publicly disclose their enforcement actions against banks.

Enforcement actions (officially referred to as enforcement decisions and orders or EDOs)

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[1] We provide examples of banks suing regulators in the online appendix. Banks also have the right to contest regulators' decision to issue an EDO before an administrative law judge (see Section 2 and Appendix A).

are an important regulatory tool that bank regulators and supervisors use to require a bank to take corrective actions (Curry et al., 1999; Eisenbach et al., 2017; Hirtle et al., 2020). Noncompliance with an EDO is a serious offense that could lead to monetary penalties or the withdrawal of deposit insurance. Although bank regulators have issued enforcement actions since 1966, contemporaneous information on these actions has been publicly disclosed only since the August 9, 1989, passage of FIRREA.

To study the effects of the change in the disclosure regime on regulatory incentives, a researcher must observe enforcement actions before and after the regime change, even though EDOs issued before were never disclosed by the regulators. A key feature of our study is that we identify enforcement actions in the pre-FIRREA regime by using termination documents that were released following the regime change. From the U.S. National Archives, we also hand-collect a subset of enforcement actions for 1983–1984 that terminated during the pre-disclosure period. Unlike the post-FIRREA actions, the pre-FIRREA EDOs were not public. Therefore this setting and our sample allow us to study changes in regulators' behavior once their actions become observable. A drawback of our sample is that, apart from the hand-collected observations, our pre-disclosure sample consists of enforcement orders that were initiated prior to FIRREA and terminated afterward. This likely results in some missing observations in the earlier part of the 1985–1989 sample for EDOs that were initiated and resolved prior to FIRREA. Our sample for 1983–1984 partially alleviates this concern, as it has a similar distribution of EDO length as the post-FIRREA sample (Figure 1).

We begin our analyses by investigating the likelihood of banks' receiving an enforcement action in the two regimes. Once enforcement actions are observable, we find regulators become stricter, as evidenced by intervening more and, conditional on intervening, issuing enforcement actions sooner. Publicly observable signals are also more strongly associated with EDOs after the change in disclosure regime. For instance, we find banks' nonperforming assets, capital ratio, and profitability play a more significant role in regulators' decisions to issue enforcement actions after the regime change. We also observe that, conditional

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on intervening, regulators issue EDOs 71% sooner in the disclosure regime, relative to the nondisclosure regime. Next, we evaluate whether the content of enforcement actions changes following the disclosure regime change. Prior studies have documented that regulators facing increased public scrutiny make their disclosures less informative and more standardized (Meade & Stasavage, 2008; Hansen et al., 2017). In our content analyses, we likewise find that EDOs become longer, more complex, and include more boilerplate language after the regime change. These results suggest that the disclosure regime change is associated with changes in regulators' actions.

FIRREA was passed toward the end of the thrift crisis and included other changes to regulatory enforcement. Therefore the disclosure of EDOs was not the only provision that affected regulators' actions but rather one of several contributors. To tie our findings to the disclosure channel, we use variation in news circulation across counties. We argue that regulators' cost of *not* issuing enforcement actions is higher in counties with higher news circulation because banks' funding providers are more likely to be aware of issues at their banks through news coverage. Therefore regulators' credibility and reputation would be harmed if they do not issue timely enforcement actions. In addition, market discipline is likely to work better in counties with higher news circulation because funding providers are more likely to learn about EDOs. Consequently, we expect the marginal benefit of regulators' disclosing enforcement actions to be higher in counties with higher news circulation, leading regulators to issue more enforcement actions to problem banks in these counties. Even though depositors are more likely to learn about EDOs in higher news circulation counties and withdraw their deposits from affected banks, regulators trade off the possibility of a run against their credibility. Consistent with these arguments, in counties with higher news circulation, we find regulators are 40% more likely to issue enforcement actions in the disclosure regime than in the nondisclosure regime. We also find regulators intervene sooner in counties with higher news circulation. These findings suggest that the disclosure regime change plays an important role in observed changes in regulatory behavior.

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We further evaluate concerns that other changes that occurred around FIRREA could explain our results. For example, conditions that led to the enactment of the law at the beginning of the resolution of the savings and loan (S&L) crisis, could have changed enforcement. We conduct several tests to assess the impact of the S&L crisis on our inferences. First, thrifts were at the center of the crisis, which resulted in an unprecedented number of thrift failures.[2] We exclude thrifts from our sample and focus our analyses on commercial banks, which were less involved in the S&L crisis. Second, we investigate whether competition from thrifts in risky lending and deposit markets affects our results for commercial banks. We find that our inferences are robust to controlling for competition from thrifts. Finally, we evaluate whether negative publicity during the S&L crisis might have made regulators stricter and less willing to forbear, regardless of the disclosure of enforcement actions. If negative publicity drove our results, we would expect our findings to be less persistent, based on the conjecture that the news media helps form public opinion (Dunaway et al., 2010; Happer & Philo, 2013; McCombs, 2018; Norris et al., 2004). On the contrary, our results persist even after mentions of the S&L crisis decline in the news. Overall, these tests provide further evidence that the disclosure regime change plays an incremental role in changing regulators' behavior.

Another concern is that regulators respond similarly to any banking crisis. Therefore we investigate regulators' response in another crisis when they faced significant negative public opinion but no change in the disclosure regime. Specifically, we repeat our main analyses using the financial crisis of 2007–2009.[3] As opposed to our main results, we find regulators were more likely to forbear in the financial crisis. When evaluating the textual content of EDOs during that crisis, we also find different results from those we observe after the change in the disclosure regime. These findings suggest that regulators do not issue EDOs in the

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[2]Among other changes, FIRREA abolished the thrift regulator (Federal Home Loan Bank Board or FHLBB) and created the Office of Thrift Supervision (OTS) for regulating thrifts. For more details, see Black (1990), Kane (1989), and Malloy (1989).

[3]We do not consider the two crises to be the same but provide this analysis to address the concern that regulators respond similarly to crises when facing negative publicity.

same way in all crises.[4]

Finally, we study bank outcomes. One of the reasons for disclosing EDOs under FIRREA is to increase market discipline by funding providers. Consistent with this objective, we find that EDO banks' uninsured deposits decline following the regime change. We also find that uninsured depositors react more to EDOs that are covered in the news, with a greater response to EDOs with more intensive, longer, and national news media coverage. Depositors' response to the news of EDOs suggests they may view the issuance of an EDO as a warning signal of issues at their bank and withdraw funds. One possibility is that such withdrawals may accelerate bank failure. Therefore we study how EDOs are associated with bank failure in the two regimes. We find that, conditional on failure, banks that receive an EDO in the disclosure regime fail 74% faster, relative to those that receive an EDO in the nondisclosure regime. We also study whether banks respond to the increased market discipline and reduced probability of receiving forbearance in the disclosure regime and find improvements in banks' capital ratios and asset quality. Overall, our findings suggest an increased role of market discipline and improved bank outcomes in the disclosure regime.

Our inferences are subject to limitations. First, our pre-FIRREA sample is limited to enforcement actions we could identify through termination documents and hand-collect from the National Archives. Therefore our data likely excludes more rapidly resolved EDOs for at least a part of our pre-FIRREA sample. While we conduct several robustness tests to alleviate this concern, we cannot fully rule out the impact of these missing EDOs on our findings. Second, FIRREA introduced several changes to the enforcement environment in addition to the change in the disclosure of EDOs. Our study does not rule out the effect of regulators' increased enforcement powers as a result of FIRREA but rather offers evidence consistent with the disclosure channel playing an incremental role. Finally, other events that occurred before or after FIRREA could have influenced our findings. We conduct additional

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[4]We also consider the potential effect of the FDIC Improvement Act of 1991 (FDICIA), which was implemented in December 1992, as well as preemptive changes in bank behavior in anticipation of increased enforcement. We discuss these alternatives further in Section 5.

analyses to evaluate these alternative explanations and find robust results. However, we cannot rule out their impact.

Our research contributes to several strands of the literature. First, our study relates to work on regulatory incentives (Agarwal et al., 2014; Costello et al., 2019; Granja & Leuz, 2019; Kedia & Rajgopal, 2011; Peltzman, 1976; Stigler, 1971). Given that supervisory actions are generally unobservable in a nondisclosure regime, our paper provides a unique opportunity to study changes in regulatory incentives once regulatory effort becomes observable. Our results provide suggestive evidence that regulators strive to protect their reputation and credibility once their supervisory actions are disclosed. Our findings are consistent with the work of Hansen et al. (2017), who analyze the text of the Federal Open Market Committee (FOMC) deliberations and find that career concerns matter for how policymakers respond to the disclosure of their discussions.

Second, our paper contributes to the literature on disclosure of supervisory information disciplining financial institutions (Acharya & Ryan, 2016; Anbil, 2018; Bushman & Williams, 2012; Flannery, 1998; Flannery et al., 2013). Although the disclosure of supervisory actions has been shown to result in improved outcomes in many industries, banks are unique in that they operate in a market with significant informational frictions and are prone to contagion and runs (Diamond & Dybvig, 1983; Granja, 2018; He & Manela, 2016; Morris & Shin, 2002). In the presence of these externalities, more information might lead to increased costs (Anbil, 2018; Chen et al., 2018; Goldstein & Sapra, 2014; Goldstein & Leitner, 2018; Kleymenova, 2018; Thakor, 2015). We find a decline in deposits and acceleration of bank failure in the disclosure regime, despite improvements in banks' capital ratios and asset quality following the regime change.

Finally, our study adds to the research investigating mandatory disclosure by bank regulators as well as to the literature related to bank enforcement actions (Beatty & Liao, 2014; Bischof & Daske, 2013; Curry et al., 1999; Delis et al., 2016; Ellahie, 2013; Gilbert & Vaughan, 2001; Peristiani et al., 2010; Roman, 2016; Wheeler, 2019). We show that disclo-

sure of bank enforcement actions is associated with improvements in bank capital and loan quality and has implications for bank failure. More importantly, we find that disclosure of regulatory actions plays an incremental role in changing regulatory incentives.

## 2. Background

Bank supervision and regulation aim to ensure banks follow safe and sound practices and do not take risks that could threaten the stability of the banking system. As part of their supervision, regulators issue enforcement actions against banks and their officers. These actions could come in response to such problems as inadequate capital, liquidity, or loan loss reserves, excessive risk-taking, or poor management. Although bank regulators could issue enforcement actions against banks following the Financial Institution Supervisory Act of 1966 (FISA), these enforcement orders were publicly disclosed only after the 1989 passage of FIRREA.

Bank regulators bring enforcement actions as a last resort and exercise discretion in issuing these actions. For instance, regulators could employ informal methods, such as bank board resolutions or issue memoranda of understanding, before resorting to more formal techniques and issuing EDOs. The process for issuing an enforcement order starts with bank examiners assigning low CAMELS ratings of 4 or 5 and recommending that the regulators initiate proceedings against a bank.[5]

The primary reason for issuing a formal enforcement order is to force the affected bank to take the specified corrective actions (Curry et al., 1999; Hirtle et al., 2020; Srinivas et al., 2015). Upon the bank's completion of those actions and receipt of an improved CAMELS rating from bank examiners, a termination order is issued. If a bank fails to satisfy the

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[5]CAMELS rating is an acronym for composite and component ratings issued by bank examiners. The components are based on the evaluation of six critical elements of bank operations: capital adequacy, asset quality, management, earnings, liquidity, and sensitivity to risk (market and interest rate). The highest rating is 1 and the lowest is 5. CAMELS ratings are not public and are only communicated to senior bank management and bank regulators. The examiners recommend issuance of an EDO based on the component ratings.

requirements of the order, the FDIC has the power to enforce it in U.S. district court or terminate the bank's deposit insurance. If a bank becomes insolvent or is put into receivership, a formal termination order is issued specifying that the bank failed. If a bank is acquired or merges with another, the original order remains under the original name of the bank, and the order is only terminated once the regulators are satisfied that the new entity has met its requirements. Sometimes, enforcement orders are modified to include additional conditions or requirements. We provide a schematic description of the C&D enforcement order process over time in Appendix A.

The move from the nondisclosure to disclosure regime in 1989 followed a series of events summarized in Appendix B. The S&L crisis of the mid-1970s–early 1990s sparked a debate regarding the role of market discipline and increased regulation in the banking industry. During the late 1980s, many banks failed, leading to a depletion of the FDIC deposit insurance fund. As a result, the FDIC chairman at the time called for a greater role for market discipline in bank regulation and oversight. In 1985, the FDIC released a proposal to disclose enforcement actions, allowing depositors and other funding providers to monitor banks using this information. However, citing the fear of bank runs and financial instability, banks and banking associations opposed the proposal: of the 768 comment letters the FDIC received, only 57 favored its implementation.[6]

The FDIC postponed consideration of the proposal to move forward in conjunction with other federal bank regulators. FIRREA was passed in August 1989, and upon its implementation, the FDIC and other bank regulators were required to disclose final enforcement actions and termination orders. In particular, FIRREA required that "the appropriate Federal banking agency shall publish and make available to the public—(A) any final order issued with respect to any administrative enforcement proceeding initiated by such agency under this section or any other provision of the law; and (B) any modification or termination

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[6]See, for example, "FDIC May Delay Public-Disclosure Rule for Banks," *The Wall Street Journal*, December 11, 1985; "F.D.I.C. Decides to Disclose Disciplinary Actions," *The New York Times*, May 5, 1985.

of any final order."[7]

## 3. Data and sample

Our data come from several sources. We focus our empirical analyses on commercial banks and obtain financial data from Call Reports from the Federal Financial Institutions Examination Council (FFIEC). Using the S&P Global SNL Financial database, we collect all enforcement actions issued by bank regulators disclosed after the introduction of FIRREA in August 1989. To identify enforcement actions in the pre-FIRREA (nondisclosure) period, we mainly rely on termination documents that were made public in the post-FIRREA (disclosure) period. If a bank received an enforcement order in the pre-FIRREA period but this order was terminated after the passage of the act, a public termination order reveals the identity of the bank that received an enforcement action as well as the date of issuance.[8] We also hand-collect a subset of enforcement actions from the nondisclosure period from the U.S. National Archives (the archives could only be viewed for 1983 and 1984).

Apart from the hand-collected sample for 1983–1984, we observe enforcement orders that were initiated prior to FIRREA and terminated afterward, likely leading to some missing observations in our pre-disclosure sample. We terminate our sample in 1997 to avoid creating a panel that is skewed toward the post-FIRREA period. In the (pre-) post-FIRREA period, the mean length of an EDO is (3.5) 2.3 years, the median is (3.1) 2.0 years, and the maximum is (11.3) 11.8 years. In Figure 1, we plot the kernel distributions of the length of enforcement actions in the pre- and post-disclosure regimes. The figure shows an overlap between the distributions of the length of EDOs issued in the two regimes. In fact, the distributions are very similar for the sample of EDOs that were issued and terminated pre-FIRREA and those that were issued and terminated post-FIRREA (but not for other pre-FIRREA EDOs that

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[7]Section 913—Public Disclosure of Enforcement Actions Required of FIRREA.

[8]Publicly listed commercial banks were required to disclose information related to EDOs in their 8-K filings before FIRREA. However, public banks represent less than 5% of our overall sample and have very few EDOs in the pre-disclosure period. Our search of local news produced only one mention of an EDO in the nondisclosure regime.

were terminated post-FIRREA).

Several types of enforcement actions exist that vary by degree of severity. We restrict our analysis to the most common and severe types: C&D orders, formal agreements/supervisory agreements, consent orders, and PCA orders. C&D orders are enforceable, injunction-type orders that may be issued to a banking organization when it engages, has engaged, or is about to engage in an unsafe or unsound banking practice or violation of the law. Formal agreements prescribe restrictions, corrective measures, and remedies that banks must follow to return to a safe and sound condition. PCA orders require banks to take certain corrective measures to protect or raise the level of their regulatory capital. We use SNL's classification of orders after verifying them with the orders available on banking regulators' websites to ensure classification accuracy. Our main sample consists of 1,823 unique severe enforcement actions issued by any federal bank regulator during the years 1983–1997, of which 302 are pre-FIRREA EDOs collected from the National Archives and termination orders.[9] We focus on severe enforcement actions for comparability because our pre-FIRREA sample consists of only such EDOs.

Table 1 shows the characteristics of enforcement actions issued by the FDIC from 1983 to 2017: their length in terms of the total number of words, the most commonly used phrases found in these actions (using bigrams), two widely used measures of content readability (Gunning FOG index and Flesch Grade Level readability score), and the use of boilerplate language.[10] The focus of enforcement actions changed over time from unsafe and unsound practices to a greater emphasis on fiduciary duty toward depositors and deposit insurance. The resolution years after the financial crisis (as well as 1991 and 1992) had the longest

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[9]All federal banking regulators refers to the FDIC, Federal Reserve, and OCC. Severe EDOs issued to state-chartered banks are jointly issued by federal and state banking regulators. We checked a sample of EDOs issued only by state regulators and found they were primarily targeted at individual managers or employees at a bank. As we do not include thrifts in our sample, we exclude enforcement actions issued by the OTS from our analyses.

[10]We focus our textual analysis on the FDIC's severe enforcement actions because this is the sample for which we could collect the most comprehensive set of documents pre- and post-FIRREA. We identified 2,546 severe enforcement actions issued by the FDIC that could be analyzed using textual analysis methods for the full sample up to 2017, 700 of which were issued in 1983–1984 and 1989Q3–1997.

documents, averaging between 542 and 3,308 words across all sample years. The average length of EDOs is 1,836 words. Due to their complexity, EDOs require, on average, more than 17 years of education to understand. The most commonly used phrases over the whole period are "supervisory authorities," "deposit insurance," and "federal deposit." These terms are not surprising, given that we study the severest enforcement actions from the FDIC. The focus and content of EDOs change over time, with "federal deposit insurance" featuring more prominently in later years, especially after the financial crisis.

We provide additional information on the number of EDOs, their severity (measured as the length of time from issuance to resolution), and the name of the regulator issuing EDOs. Figure 2 presents the number and average length of EDOs and shows two distinct periods generated the highest volume of EDOs: the resolutions of the S&L crisis in the early 1990s and the financial crisis from 2009 to 2011. The largest number of enforcement actions were issued after the financial crisis, with 2010 being the most active year with 874 actions. The average length of EDOs issued in later years is truncated, because many of these EDOs were still outstanding at the point of data collection. Figure 3 shows the FDIC issues the most EDOs, followed by the Federal Reserve (Fed), and the Office of the Comptroller of the Currency (OCC). The FDIC issued the most EDOs after the financial crisis in 2010, with more than 350 enforcement actions issued that year.[11]

Table 2 shows the summary statistics for the full sample. Panel A and Panel B present the financial characteristics for EDO bank-quarters and non-EDO bank-quarters, respectively, whereas Panel C shows the differences between EDO and non-EDO bank-quarters in the two regimes. The panels show that, on average, unconditional bank characteristics improved in the disclosure regime, relative to the nondisclosure regime, and EDO banks were on average of worse quality than non-EDO banks.

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[11]In addition, we summarize the fines that regulators impose on financial institutions as monetary remedies following an enforcement action and find that less than a quarter of banks are required to pay a penalty. These monetary penalties could be levied against a bank, an individual responsible for a particular action (e.g., a bank or a branch manager), or both. We include details related to penalties in the online appendix, Figure OA1.

## 4. EDO disclosure and regulators' incentives

### 4.1. Changes in the determinants of enforcement actions

We begin our analyses by examining the role of bank-specific characteristics and the changing disclosure regime on the likelihood of banks' receiving an enforcement action. We predict the likelihood of a bank receiving an enforcement action in the two regimes using a Cox proportional-hazards model with time-varying covariates. The literature has used the proportional-hazards model to predict the occurrence of events such as the decision to privatize (Dinc & Gupta, 2011) and bank failure (Lane et al., 1986; Liu & Ngo, 2014). The proportional-hazards model has two main advantages in our setting. First, it incorporates both the receipt and timing of an EDO. Second, it allows for a general baseline hazard function that can take whatever shape is necessary to capture the distribution of event occurrence in the sample (Singer & Willett, 2003).

We use the following model to estimate the probability that a bank receives an enforcement action in quarter $t$, given that it has not received one up to quarter $t - 1$:

$$h(t) = h_0(t)exp(\beta_1 Disclosure\ Regime + \beta_k X^k), \tag{1}$$

where the time of an EDO is determined by the first time the regulator issues an enforcement action. The model assumes a bank's hazard rate at event time $t$ equals the product of the baseline hazard rate $h_0(t)$ and the function of bank EDO risk factors $exp(\beta_k X^k)$, where $X$ is a vector of $k$ time-varying explanatory variables lagged by one quarter. We allow the baseline hazard rates to vary across time by estimating the model by year.

The indicator variable *Disclosure Regime* takes the value of 1 post-FIRREA and 0 otherwise. $X$ includes controls for size, capital ratio, nonperforming assets ratio (a proxy for asset quality), return on assets (a proxy for profitability), and liquidity ratio. We expect that banks with higher levels of capital, higher profitability, and more liquid assets are less likely to receive enforcement actions, whereas those with higher values of nonperforming assets are

more likely to receive such actions. $X$ also includes changes in capital, liquidity, and loans. Banks with declining capital and liquidity are more likely to receive an EDO. Furthermore, regulators might view very high loan growth as risky if banks are not well diversified.[12] We also include distance from the regulators' regional offices to control for regulatory attention (Gopalan et al., 2017; Kedia & Rajgopal, 2011; Tomy, 2019). In addition, we control for employment growth as local economic conditions could influence the likelihood of receiving an EDO. We lag all explanatory variables by one quarter and define all the variables in Appendix C.

We restrict the sample to the years around the change in the regime, namely, 1983 to 1997. This period includes 6.5 years before the change in the regulation (the first quarter of 1983–the second quarter of 1989) and eight years after the change (the fourth quarter of 1989–the fourth quarter of 1997). We remove EDOs that were received in the third quarter of 1989, the quarter in which the disclosure regime changed. We expand the period after the change in regulation to eight years to minimize the impact of the period immediately following 1989, which coincides with the resolution of the S&L crisis.

Table 3 reports the results of this estimation. Column (1) shows banks are more likely to receive an enforcement action in the disclosure regime and banks with lower levels of capital, higher nonperforming assets, lower profitability, and lower liquidity are more likely to receive enforcement actions. Banks with large negative changes in their capital ratios or loan portfolios are also more likely to receive enforcement actions. The coefficient on the distance to regulators' field offices is positive and statistically significant, suggesting more distant banks are more likely to receive EDOs. Because formal enforcement actions are a measure of last resort, a resource-constrained regulator may be less willing to spend time negotiating with banks that are farther away and thus more prone to issue enforcement actions against these banks.

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[12]In untabulated results, we include changes in deposits and two measures of loan portfolio diversification (the ratio of commercial real estate loans to total loans and nonresidential real estate loans to total loans). The measures of portfolio diversification are not statistically significant and do not affect our main findings.

In columns (2) to (5), we interact capital ratio, nonperforming assets, return on assets, and liquidity with the disclosure-regime indicator. In column (2), a negative and significant coefficient on *Capital Ratio×Disclosure Regime* suggests a bank with a higher capital ratio is relatively less likely to receive an EDO in the disclosure regime than in the nondisclosure regime. Interpreting these results in terms of the hazard ratio over the distribution of capital ratio implies a bank in the 75th percentile of *Capital Ratio* is 0.67 times as likely as a bank in the 25th percentile of *Capital Ratio* to receive an EDO in the nondisclosure regime, whereas a bank in the 75th percentile is only 0.56 times as likely as a bank in the 25th percentile of *Capital Ratio* to receive an enforcement action in the disclosure regime.[13]

Column (3) shows that nonperforming assets are a significant predictor of EDOs in both regimes. The positive coefficient on *Nonperforming Assets × Disclosure Regime* suggests a bank with higher nonperforming assets is relatively more likely to receive an EDO in the disclosure regime. In terms of magnitude, a bank in the 75th percentile of *Nonperforming Assets* is 1.48 times more likely than a bank in the 25th percentile to receive an EDO in the nondisclosure regime. In the disclosure regime, this ratio increases to 1.75. We find similar results for return on assets in column (4). A bank in the 75th percentile of *Return On Assets* is 0.88 times as likely as a bank in the 25th percentile to receive an EDO in the nondisclosure regime; in the disclosure regime, a bank in the 75th percentile of *Return On Assets* is only 0.75 times as likely to receive an EDO. We do not find the liquidity ratio to be incrementally significant in the disclosure regime. In column (6), we include all four interactions and find the results related to nonperforming assets and return on assets continue to hold. We lose significance on the capital ratio when interacted with the disclosure-regime indicator.[14]

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[13]Table 2 shows that bank quality on average improves in the post-FIRREA period. However, the distribution of bank quality also changes (standard deviation increases) in the post-disclosure period relative to the pre-disclosure regime. Therefore, even though average bank quality improves post-FIRREA, in a multivariate setting where we control for year effects (in addition to bank characteristics and local economic factors), we find that poorly performing banks are more likely to receive EDOs in the disclosure regime relative to the nondisclosure regime.

[14]In an untabulated analysis, we find high correlations between the four interacted variables and the disclosure-regime indicator in column (6), resulting in the risk of multicollinearity. We do not find similar high correlations between the explanatory variables in columns (1) to (5) and therefore base our interpretations

Finally, we estimate an accelerated-time model to ascertain whether regulators intervene sooner in the disclosure regime (Anbil, 2018; Cleves et al., 2008):

$$log(t) = \beta_1 Disclosure\ Regime + \beta_k X^k + log(\tau), \qquad (2)$$

where $t$ is the survival time (time the bank does not receive an EDO) and the residual $\tau$ is assumed to have a Weibull distribution.[15] All other variables are defined above. Column (7) presents the results from the estimation of Equation 2. The coefficient of $-1.232$ on the disclosure-regime indicator converts to a time ratio of 0.29 ($e^{-1.232}$), which indicates that, conditional on receiving an EDO, banks received an enforcement action 71% ($1-0.29$) faster in the disclosure regime.[16]

The results in Table 3 indicate that, in the disclosure regime relative to the nondisclosure regime, regulators intervene more and that publicly observable signals, such as nonperforming assets and return on assets, are stronger determinants of the likelihood a bank receives an enforcement action. Furthermore, conditional on receiving an EDO, regulators intervene sooner in the disclosure regime.

We conduct several additional analyses to evaluate the robustness of our findings. First, to address concerns about increasing trends in the dependent variable prior to the regime change, we compare banks that received EDOs and those that did not before the change in the disclosure regime. The coefficients plot in Figure OA2 of the online appendix shows the

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on the findings in these columns.

[15]Please see Section 3 in the online appendix for a brief description of this model.

[16]Equation 2 lends itself to a conditional interpretation of the results—a bank cannot receive an EDO faster if in fact it did not receive an EDO (Anbil, 2018; Cleves et al., 2008). The full sample is employed in the estimation because the analyses assume that all banks, in theory, have some likelihood of receiving an EDO (Singer & Willett, 2003). The non-EDO banks (censored observations) contribute information only through their survival function. For example, consider the general form of the likelihood function:

$$L = \prod_{j=1}^{N} [f(t_j)]^{d_j} [S(t_j)]^{1-d_j} \ .$$

The uncensored observations ($d_j = 1$) contribute to the density $f$, whereas the censored observations ($d_j = 0$) contribute to the survival function $S$.

lack of a distinct trend in the pre-disclosure period. Second, we repeat our main analysis using a linear probability model, controlling for year-quarter and bank fixed effects. Our main results continue to hold (online appendix, Table OA1). Third, we conduct additional analyses to address concerns that our method of constructing the pre-FIRREA sample could bias our results. As described in Section 3, our sample of pre-FIRREA enforcement actions from 1985 through the second quarter of 1989 is biased toward EDOs that take longer to resolve and thus are likely more severe.

To assess the impact of the missing, quicker resolution EDOs on our results, we conduct an additional robustness test by restricting the pre-FIRREA sample to 1983–1984. The sample for these two years is hand-collected from the National Archives and therefore contains shorter EDOs as well (Figure 1 shows that EDO length distributions are similar between 1983–1984 and post-FIRREA samples). We conduct a rolling-window analysis, where for the pre-FIRREA years of 1983–1984, and we select all possible consecutive 20-quarter windows in the post-FIRREA period and repeat our main specification. As the online appendix, Figure OA3 shows, our results generally hold in these subsamples, reducing concerns that the missing shorter EDOs could be biasing our results. Furthermore, our results also hold when we restrict the pre-FIRREA sample to 1983–1984 and include the full post-FIRREA sample (online appendix, Table OA2). Finally, we redefine the dependent variable to C&D orders only to control for the heterogeneity in enforcement actions (online appendix, Table OA3) and find similar results.[17] Overall, our findings suggest that regulators become stricter in their enforcement behavior, as evidenced by intervening more and issuing EDOs sooner, and rely more on publicly observable signals when their efforts become observable.[18]

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[17]We analyze a random sample of C&D orders and find a substantial overlap in the topics covered, indicating that restricting the sample to C&D orders controls for heterogeneity in EDOs. We include these analyses in Section 4 of the online appendix.

[18]One concern is that risky loans due to the thrift crisis may result in nonperforming loans and return on assets being stronger predictors of EDOs in the disclosure regime, which coincided with the resolution of the S&L crisis. However, as shown later in Table 6, our results are robust to controlling for thrifts' share of risky lending at the county level and its interaction with the *Disclosure Regime* indicator.

*4.2. Changes in the content of enforcement actions*

Next, we investigate whether changes in the content of enforcement actions is associated with the change in the disclosure regime. We employ textual analysis techniques to analyze the severe EDOs issued by the FDIC by using our hand-collected sample of 1983–1984 enforcement actions and the publicly disclosed EDOs from Q4 1989–Q4 1997. We control for bank characteristics and local economic conditions, as in our other specifications, but given that we do not observe many banks with multiple enforcement actions in our sample period, we do not include fixed effects. We evaluate measures of complexity, such as document length (measured as the natural logarithm of the number of words in a document), clarity (measured as the Gunning FOG index), overall document readability (measured as the Flesch Grade Level readability), numerical intensity (the relative percentage of numerical characters in the document), and the percentage of boilerplate language used (based on common usage of four-word phrases).

We rely on prior studies, which analyze the textual content of public financial disclosures, to identify proxies for document complexity and readability. In particular, document length is computed based on the number of words and has been used as a measure of the quantity of disclosure. Gunning FOG index and the Flesch Grade Level readability index are constructed based on the usage of complex words in sentences and capture years of education required to understand a given text (Li, 2008, 2010). These proxies for document readability have been used to evaluate investors' and analysts' understanding of financial disclosures (Lehavy et al., 2011; Miller, 2010). Similarly, numerical intensity has been used as a measure of information content and usefulness to investors (Li, 2010; Bozanic et al., 2018). Finally, financial regulators and accounting standard setters have identified companies' increased use of boilerplate language as an attempt to reduce legal or reputation exposure, making disclosures with boilerplate language less informative (Lang & Stice-Lawrence, 2015). Following Lang & Stice-Lawrence (2015), we define boilerplate language as standardized disclosures so prevalent that it is unlikely to be informative. We measure boilerplate by identifying four-

word phrases (tetragrams) that are extremely common across documents in a given year after removing common and stop words such as "Federal Deposit Insurance Corporation," "and," or "bank" from the text of EDOs.[19] The measure relies on the assumption that using these common phrases does not provide new incremental information because it repeats the language of other EDOs. The measure of boilerplate language usage is the percentage of words in the text of EDOs that contain at least one of these boilerplate phrases.

Table 4 presents our main findings. Column (1) shows that following the change in the disclosure regime, EDO documents become longer, with the average number of words increasing by approximately 71%. Column (2) shows that enforcement actions also become less clear, with the FOG index indicating a significant increase in complexity of the words and structures used. This result is confirmed by our findings in column (3) that an additional 5.5 years of education are required to understand the text of EDOs in the disclosure regime. In addition, EDOs contain 0.8 percentage points more numerical information following the change in the disclosure regime (column 4). Finally, column (5) shows that some of the increased length of EDOs is attributable to the use of boilerplate, which increases by 9.8%. This increase, combined with the increase in document length, indicates that regulators employ more standardized and legal language in enforcement orders in the disclosure period.[20]

Overall, our analysis of EDOs' content indicates that, following the change in the disclosure regime, publicly disclosed enforcement actions become more complex and difficult to understand. Some of this increased complexity is due to regulators' increased use of boilerplate language. The reliance on more boilerplate following FIRREA could reflect an increase in public scrutiny and attention from the media as a result of the public consump-

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[19]Only tetragrams that occur in at least 80% of the documents in a given year are considered to be boilerplate. We also require that all the documents in this analysis are FDIC C&D orders for comparability. This restriction reduces our sample size for boilerplate analysis.

[20]In robustness analyses (online appendix, Table OA4), we also control for EDO severity, measured as the length of time it takes a bank to exit an enforcement action. We find similar results that EDOs increase in complexity and usage of boilerplate language.

tion of enforcement actions for the first time. Public scrutiny increases the cost of receiving EDOs, because it elevates the risk of funding providers withdrawing their funds in response to learning about EDOs.[21]

## 4.3. The disclosure channel and enforcement

To tie our results to the disclosure channel, we explore how news circulation is associated with enforcement actions in the two regimes. In regions with higher news circulation, banks' stakeholders and the public are more likely to learn about problems at the bank from news media. Therefore regulators' credibility would be diminished if they do not issue timely enforcement actions. The relationship between increased enforcement in the disclosure regime and news circulation also reveals which of two general incentives contributes to changes in regulators' behavior. Regulators more concerned about their credibility and reputation should be more likely to enforce in regions with higher news coverage, consistent with the argument that transparency disciplines them. Alternatively, regulators more concerned about bank runs and the impact of EDO disclosure on depositors should be less likely to enforce in regions with higher news circulation.

We use the following Cox proportional-hazards model to estimate how the probability of receiving enforcement actions varies with news circulation:

$$h(t) = h_0(t)exp(\beta_1 Disclosure\ Regime + \beta_2 News\ Circulation$$
$$+ \beta_3 Disclosure\ Regime \times News\ Circulation + \beta_k X^k), \tag{3}$$

where *News Circulation* is a county-level measure of the intensity of newspaper circulation. Following Gentzkow et al. (2011), we define newspaper circulation as the number of newspaper copies scaled by the population of the county.[22] All other variables are defined above

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[21]In our discussions with examiners and supervisors, we learned that increased public scrutiny as a result of public disclosures was an important consideration when FIRREA was first implemented.

[22]The county-level news-circulation measure is available for the presidential election years of 1984, 1988, 1992, and 1996. We interpolate the data for the missing years. This measure does not vary significantly over our sample period. For example, the Pearson (Spearman) correlation between news circulation in 1984 and

and in Appendix C.

A potential concern is that news circulation could be confounded by other factors related to the probability of receiving an enforcement action. For example, county characteristics, such as per capita income or the employment growth rate, could drive both news circulation and the likelihood of banks receiving enforcement actions if regulators paid differential attention to high- and low-income counties. We follow the literature and control for variables likely to be correlated with news circulation (Bishop et al., 1980). These variables include urbanization, per capita income and employment growth in a county, and the interaction of urbanization with *News Circulation*. We also include *News Circulation*$^2$ as a control variable, because the effect of news circulation could increase with its level. Furthermore, we interact urbanization, per capita income, and employment growth with the disclosure regime indicator to allow for the impact of these variables to vary in the two regimes.

In addition, we estimate an accelerated-time model to assess whether regulators intervene sooner in counties with higher news circulation using the following specification:

$$
\begin{aligned}
log(t) = {} & \beta_1 Disclosure\ Regime + \beta_2 News\ Circulation \\
& + \beta_3 Disclosure\ Regime \times News\ Circulation \\
& + \beta_k X^k + log(\tau),
\end{aligned}
\tag{4}
$$

where $t$ is the time to receiving an EDO and the residual $\tau$ is assumed to have a Weibull distribution. The remaining variables are defined above and in Appendix C.

We present results from these estimations in Table 5. Columns (1), (2), and (3) present the results from the estimation of the Cox model (Equation 3), whereas columns (4) and (5) present the accelerated-time model results (Equation 4). Column (1) includes our main control variables described above. Denser and wealthier urban areas are likely to have higher news circulation; therefore we include *News Circulation* × *Urbanization* as a control variable

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1996 is 0.807 (0.883) with *p*-value < 0.0001. We plot kernel densities for the measure in these two years and find similar distributions.

in column (2). In column (3), we also include interactions of employment growth, per capita income, and urbanization with the disclosure regime indicator. The positive coefficient of *Disclosure Regime* × *News Circulation* in columns (1) to (3) suggests counties with higher news circulation are more likely to receive an enforcement action in the disclosure regime. The coefficient of 0.335 in column (3) suggests regulators are 40% more likely to issue an EDO in counties with higher news circulation in the disclosure regime relative to the nondisclosure regime.[23] The estimates in column (2) suggest a similar magnitude of 39%.

In columns (4) and (5), we present the results for the accelerated-time model. The coefficient of $-0.375$ on *Disclosure Regime* × *News Circulation* in column (5) converts to a time ratio of 0.69 ($e^{-0.375}$), which indicates that, conditional on receiving an EDO, banks in higher-news-circulation counties received an EDO 31% ($1 - 0.69$) faster in the disclosure regime. The estimates in column (4) suggest a similar magnitude of 30%. These results corroborate our main findings that regulators intervene faster in the disclosure regime.

In additional robustness analyses, we include interactions of the *Disclosure Regime* indicator with bank characteristics (capital ratio, nonperforming assets, return on assets, and liquidity ratio). As the online appendix, Table OA5 shows, our results continue to hold. We also analyze nonsevere enforcement actions to assess whether regulators' expanded enforcement powers could drive our results. We re-estimate the likelihood of receiving a nonsevere enforcement action in the post-FIRREA period for models (3) and (5) of Table 5. Our results for *News Circulation* are insignificant (online appendix, Table OA6), indicating that the likelihood of issuing nonsevere enforcement actions does not vary with news circulation. This suggests that regulators' expanded powers are unlikely to solely drive our results.[24] Overall, the results in this section provide evidence of the link between the disclosure channel and regulators' changing incentives.

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[23]Calculation: $(e^{0.335} - 1) * 100 = 40\%$.

[24]We provide examples of news media coverage of enforcement actions in Section 5 of the online appendix.

## 5. Addressing alternative explanations

### 5.1. Impact of the S&L crisis

Although we exclude thrifts from our main analyses, the concern remains that some (potentially small, local) commercial banks could also have been affected by the events leading up to the S&L crisis. As one important example, competitive pressure from thrifts could have led commercial banks to take greater risk and therefore receive more enforcement actions.[25] To measure competition, we evaluate thrifts' investment in risky loans that might have harmed commercial banks' asset portfolios. Following Kandrac & Schlusche (2020), we measure these risky investments as commercial real estate loans; acquisition, development, and construction loans; and service corporation investments, which tend to have high credit risk. We compute the share of these risky investments held by thrifts in a given county lagged by one quarter. We include this measure of competition in our main specification (Equation 1) as well as interact it with the *Disclosure* indicator. Table 6, Panel A shows that our inferences are unaffected by the inclusion of this proxy for competition from thrifts.[26]

We also include this measure of competition from thrifts in our analyses of EDO content. Table 6, Panel B shows that our results related to the content of enforcement actions continue to hold. These findings suggest that competition from thrifts, which is believed to have led to increased risk-taking by commercial banks, is not the main reason for the increase in enforcement actions issued in the disclosure period or regulators' increased reliance on publicly observable signals. In an additional analysis, we construct a second measure of competition based on the market share of deposits. In particular, for each EDO bank, we measure the share of deposits held by thrifts in a given county where an EDO bank is

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[25]See, for example, page 98 of *FDIC's Managing the Crisis: The FDIC and RTC Experience* available at https://www.fdic.gov/bank/historical/managing/documents/history-consolidated.pdf.

[26]Data for thrifts for 1983–1990 is not publicly available. Therefore we rely on confidential data from the Federal Reserve Board for form FHLBB 770 (for 1980–1983, available semiannually) and form FHLBB/OTS 1313 (for 1984–1997, available quarterly). Our results (untabulated) are similar if we construct competition measures using data for two, three, or four quarters prior to the receipt of an EDO by a given bank or by using an average for the four quarters before a corresponding EDO.

headquartered. Our main inferences continue to hold (online appendix, Table OA7).

Another potential concern relating to the S&L crisis is that regulators might respond to the negative publicity following the thrift crisis and more so in regions with higher news circulation. The negative publicity was driven by the failure of thrifts and therefore targeted at the thrift regulators.[27] We exclude thrifts, their regulators, and any enforcement actions they issue from our analyses and limit our sample to commercial banks throughout. Nonetheless, the regulators of commercial banks could also have experienced negative publicity from the crisis. To deal with this concern, we assess the persistence of our results. If negative publicity following the S&L crisis explains our results, we should not observe persistent results. Instead, our findings would be concentrated around the time when the negative public opinion against bank regulators peaked. This conjecture assumes that the news media plays a crucial role in forming public opinion (Dunaway et al., 2010; Happer & Philo, 2013; McCombs, 2018; Norris et al., 2004).

We use news coverage of the S&L crisis as a measure of public opinion and search for articles that relate to variants of the search terms "S&L crisis," "savings and loan crisis," or "thrift failure" in Factiva, the Dow Jones news database. We find the press coverage of this crisis peaked in 1988–1992. Coverage picked up in 2008–2009, as the financial crisis elicited comparisons to the previous banking crises and the thrift crisis in particular (online appendix, Figure OA5). Our sample extends to 1997, reducing concerns that our results are driven by negative public opinion following the S&L crisis. In additional robustness tests, we expand our sample to 1983–2007 and include indicator variables for Q4 1989–1997 and Q4 1998–2007. We find our main results hold in both periods, confirming that our findings persist over a fairly long time horizon and therefore are unlikely to be driven by negative public opinion following the S&L crisis. We present these results in the online appendix, Table OA8.

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[27]Online appendix, Figure OA4 shows the cost to the deposit insurance fund for thrifts and commercial banks and demonstrates the loss was largely due to the failure of thrifts.

*5.2. Enforcement actions in crisis periods*

To further address the potential alternative explanation that regulators respond similarly to any crisis event involving banks, we investigate regulators' response in another crisis period. Specifically, we repeat our main analyses for the period around the financial crisis of 2007–2009.[28] Although the S&L and financial crises differed drastically, one similarity is that regulators faced significant negative public opinion during and afterward. However, there was no change in the disclosure regime for enforcement actions following the financial crisis. We use data from 2003–2017 and estimate variants of the following model:

$$h(t) = h_0(t)exp(\beta_1 Crisis + \beta_1 Post\ Crisis + \beta_k X^k), \tag{5}$$

where *Crisis* is an indicator variable that equals 1 for the financial crisis quarters of Q4 2007–Q2 2009, consistent with the NBER dates for the recessionary period, and 0 otherwise; *Post Crisis* is an indicator variable that equals 1 for Q3 2009–Q4 2017 and 0 otherwise. The remaining variables are defined as before. As Table 7 shows, our main results do not generally hold in this sample. The insignificant coefficients on *Crisis* and *Post Crisis* in column (1) of the table indicate that, conditional on covariates, regulators are not more likely to issue enforcement actions in the aftermath of a crisis. In columns (2) to (5), we interact the crisis-period indicators with the capital ratio, nonperforming assets, return on assets, and the liquidity ratio. Although we still find a negative and significant coefficient on the capital ratio interacted with the crisis-period indicator, we find opposite signs on the interactions with nonperforming assets and return on assets. Hence, after the financial crisis banks with high nonperforming assets and low profitability are not more likely to receive an enforcement action. Finally, the results in column (6) are estimates from an accelerated-time model, and they show regulators do not intervene sooner to issue EDOs during or after the

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[28]We do not include the dot-com bubble burst in this analysis, because it is unlikely that our findings are affected by this crisis. The dot-com bubble was primarily a stock market crisis and not a financial crisis; in particular, its burst did not seriously affect the financial sector (Bernanke, 2013).

financial crisis.

To compare our results in Table 7 to the S&L crisis, we re-estimate our main specifications (Equation 1 and Equation 2) after separating the *Disclosure Regime* indicator into two distinct periods: *S&L Crisis Resolution* from Q4 1989–Q4 1992 and *Post S&L Crisis* from Q4 1993–Q4 1997. We present these results in the online appendix, Table OA9. Our results continue to hold, as evidenced by the consistent coefficients on the *S&L Crisis Resolution* and *Post S&L Crisis* indicators.

These results indicate that, unlike in the disclosure-regime after FIRREA, regulators are in fact more likely to forbear during and after the financial crisis.[29] Therefore a crisis period on its own is not a reason why we observe increased intervention by regulators, suggesting that the change in the disclosure regime played an incremental role in regulators intervening sooner, issuing more enforcement actions, and relying more on publicly observable signals to issue enforcement actions. Overall, the results discussed above allow us to conclude that our findings are unlikely to be driven solely by regulators' response to negative publicity during a crisis.

### 5.3. Impact of FDICIA

FDICIA was enacted in December 1991 and implemented in December 1992. It introduced prompt corrective action (PCA), capitalization requirements, and credit risk exposures to comply with the Basel Capital Accord of 1988 by the end of 1992 (Getter, 2014). Under FDICIA, banks are classified into five categories (from well capitalized to critically undercapitalized) based on their capital levels, and the law requires regulators to intervene and apply increasingly stringent restrictions if capital falls below certain thresholds. For banks above

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[29]We also investigate whether the content of EDOs changes during and after the financial crisis. Using the same period and textual analysis variables as described above, we find that, during and after the financial crisis, the content of EDOs generally changes in a different direction from those we have documented in the disclosure regime. In particular, online appendix, Table OA10 shows that, while the length of EDOs increases during and after the financial crisis, relative to the pre-crisis period, complexity decreases significantly, and readability improves. Regulators also use less boilerplate language during this time, suggesting that enforcement actions issued and disclosed during and after the financial crisis contain more bank-specific information and are clearer.

a certain size, FDICIA also required improved internal controls, such as audit committees and providing audited regulatory reports.[30] The adoption (implementation) of FDICIA only two (three) years after FIRREA introduces the concern that our results could be driven by early intervention by regulators because of PCA or by increased reporting requirements for banks above a certain size.[31] As we describe below, due to the characteristics of our sample and findings, FDICIA is unlikely to explain all of our results.

First, our sample contains only 12 PCA orders and removing these does not qualitatively change our results. Second, our reading of enforcement actions and conversations with bank examiners reveal that C&D orders contained PCA-type requirements, even before the introduction of FDICIA. Third, the Basel Accord capital requirements applied to all regulated banks and were implemented at a particular point in time, which we capture with our research design and fixed effects. Fourth, the introduction of increased reporting requirements for banks above the $500 million size threshold by the time of FDICIA implementation in 1993 does not explain our findings either. In our robustness tests, we exclude banks above the initially announced $150 million threshold or above the implemented $500 million threshold and find that our main results of regulators intervening more after the change in the disclosure regime continue to hold. Finally, our results related to regulators' relying more on publicly observable signals, enforcing more in counties with higher news circulation, and adjusting the textual content of EDOs is unlikely to be explained by early intervention due to PCAs, changes to capital requirements for all banks, or the introduction of a reporting threshold for a subset of commercial banks.

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[30]The initial threshold specified in FDICIA was $150 million. This threshold was increased to $500 million by the time of its implementation in 1993 (Altamuro & Beatty, 2010).

[31]Events preceding FDICIA's implementation and in particular proposals to introduce FDICIA might have been in the works in mid-1980s. Some of these provisions were proposed at the time of FIRREA but were not passed by Congress. Benston & Kaufman (1997) discuss that some of the provisions were watered down by the time FDICIA was passed in 1991.

### 5.4. Banks changing behavior in anticipation of the change in the disclosure regime

An additional concern is that banks may change their behavior in anticipation of increased enforcement in the new regime. Although disentangling the effect of changes in the behavior of banks from that of regulators is difficult, our results are unlikely to be explained by banks changing their conduct in anticipation of regulatory change. We find that, after the regime change, regulators issue more EDOs, intervene sooner, and rely more on publicly observable signals. If banks improved their quality post-FIRREA, regulators would issue fewer EDOs, not more. Furthermore, our findings that the textual content of EDOs becomes more complex and boilerplate cannot be explained by this alternative.

## 6. Additional analyses and robustness

### 6.1. EDO disclosure and depositor reaction

If learning about enforcement actions leads depositors to exercise market discipline, we would expect the change in the disclosure regime to result in higher withdrawals from depositors at banks that receive an EDO as depositors learn about issues at their bank. We start by assessing the potential impact on all deposits and then distinguish deposits covered by FDIC deposit insurance versus those that are not. Because the uninsured deposits are at higher risk to bank failure, we expect uninsured depositors to withdraw funds more quickly when concerns arise about the soundness of a bank receiving an EDO.

We match banks that receive an EDO to those that do not based on bank size (total assets) and geographic location (county) to control for bank characteristics and local economic

conditions and estimate the following model.[32]

$$Y_{it} = \beta_0 + \beta_1 Treatment_i + \beta_2 Post\ EDO_{i\tau}$$
$$+ \beta_3 Post\ EDO_{i\tau} \times Treatment_i + \gamma X_{i\tau-1} + \alpha_i + \delta_t + \epsilon_{it}, \tag{6}$$

where $Y_{it}$ refers to total deposits, insured deposits, and uninsured deposits, measured as natural logarithms; $Treatment$ is an indicator that takes the value of 1 for banks that receive an EDO and 0 otherwise; and $Post\ EDO$ takes the value of 1 for the 12 quarters after the EDO has been received and 0 for the prior 12 quarters. (This window length is based on the average length of an enforcement action.)[33] $X_{i\tau-1}$ is a vector of control variables, including bank size (natural logarithm of total assets), profitability (measured as the return on assets), and bank liquidity (measured as the ratio of liquid assets to total assets). We also include county-level employment growth as a control for local economic conditions. Bank-specific control variables are lagged by one quarter. We define the variables in more detail in Appendix C. The terms $\alpha_i$ and $\delta_t$ are bank and year-quarter fixed effects, respectively. The full set of fixed effects subsumes the main effect of the $Treatment$ indicator. Our main coefficient of interest is $\beta_3$, which measures the incremental effect of receiving an EDO on deposits in the disclosure regime.

We present our findings in Table 8, Panel A, which shows total deposits decrease by 3.8% (column 4). Uninsured deposits decline by 9.0% (column 6). We do not observe similar results for insured deposits. This finding is consistent with uninsured depositors responding to publicly disclosed enforcement actions and suggests that these depositors impose market discipline on affected banks. Overall, our results are in line with those of Anbil (2018) and

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[32]In this analysis, we cannot match on additional bank characteristics, because of the limited number of banks in a given county. We restrict our analyses of insured and uninsured deposits to the disclosure regime from the first quarter of 1991, due to lack of data availability in the pre-FIRREA period. For total deposits, we estimate this model for the whole sample. In robustness tests, we also match EDO banks in the two regimes on EDO severity (measured as the time it takes a bank to exit an EDO) and find consistent results.

[33]As discussed in Section 3, in the (pre-) post-FIRREA period, the mean length of an EDO is (3.5) 2.3, and the median is (3.1) 2.0 years. In robustness analyses, we decrease the window size to eight quarters around an EDO. Our results are robust to using shorter EDO windows.

Chen et al. (2018), who find uninsured depositors respond to the disclosure of bad news by withdrawing their funds.

To more closely tie depositor response to the *disclosure* of enforcement actions, we investigate the press coverage of enforcement actions in the disclosure regime once EDOs become publicly observable. We search the NewsBank archives for local newspapers covering all banks that receive EDOs in our sample across all U.S. states and identify whether the news of an EDO is covered by the media. Figure 4 shows significant variation across years in the news coverage of EDOs. The indicator variable *News Coverage* takes the value of 1 if an EDO receives news coverage by local media and 0 otherwise. We interact *News Coverage* with our *Post EDO* indicator. As above, we control for bank characteristics and changes in the local economic conditions and include bank and year-quarter fixed effects. With the inclusion of bank fixed effects, the main effect of *News Coverage* indicator is subsumed.

We present our findings related to news coverage for banks that receive EDOs in Table 8, Panel B. The results in column (6) indicate that uninsured deposits decrease by 13.9% for banks whose EDOs are covered by the local news, relative to banks whose enforcement actions are not. In Table 8, Panel C, we construct measures related to the intensity (the number of news articles) and length (the number of days between the first and last news articles) of news media coverage.[34] We find that, conditional on being covered, depositor reaction is greater for EDOs with more intense and lengthy coverage, consistent with the argument that news coverage aids market discipline, motivating regulators to target counties with higher news circulation. In additional analyses, we find that uninsured depositors react incrementally more to EDO coverage in national news (as uninsured depositors are more likely to be nonlocal). These findings tie depositors' responses to the disclosure channel. Furthermore, the evidence based on news coverage suggests that depositors were mostly unaware of EDOs before FIRREA.

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[34]To ensure that our search is robust, we impose the more restrictive condition that an EDO is covered in both the NewsBank and Factiva archives. Our measures related to the intensity and length of news media coverage are based on EDO coverage in Factiva.

*6.2. EDO disclosure and bank failure*

Next, we study bank failure in the two regimes. As our findings above suggest, depositors view the issuance of an EDO as a warning signal in the disclosure regime. Bank failure without this early warning would bring into question the credibility of the regulator. We use bank-failure data and a hazard model to estimate the probability that a bank fails in quarter $t$, given that it has survived until quarter $t - 1$:

$$h(t) = h_0(t)exp(\beta_1 Disclosure\ Regime + \beta_2 Treatment$$
$$+ \beta_3 Treatment \times Disclosure\ Regime + \beta_k X^k), \tag{7}$$

where $Treatment$ is an indicator variable that takes the value of 1 for banks that received an enforcement action and 0 otherwise; and $Disclosure\ Regime$ is an indicator variable that equals 1 in the period after the change in regulation and 0 otherwise. The term $X^k$ is a vector of $k$ control variables based on prior literature and includes size, capital ratio, nonperforming assets, liquidity ratio, interest on deposits, loan portfolio composition, and employment growth (Lane et al., 1986). We define our variables in more detail in Appendix C.

Table 9, column (1) presents our findings. The coefficient on the *Treatment* × *Disclosure Regime* indicator is positive and significant with a magnitude of 1.360, indicating banks that received enforcement actions have a hazard of failure that is 36% higher in the disclosure regime. A test that the sum of coefficients on *Treatment* and *Treatment* × *Disclosure Regime* equals zero fails to reject the null ($\chi^2 = 1.32$, p-value = 0.2507). In untabulated results, we separately estimate the coefficient on *Treatment* in the two regimes. The coefficients are $-1.536$ and $-0.380$ in the nondisclosure and disclosure regimes, respectively. Both coefficients are highly statistically significant. These results indicate that, although EDO banks are less likely to fail in both regimes, consistent with intervention by the regulator preventing failure, they are relatively more likely to fail in the disclosure regime (as indicated by the positive and significant coefficient on *Treatment* × *Disclosure Regime* in model (1)). Our

results are consistent with the explanation that regulators care about the public perception of their actions and are more likely to issue EDOs to problem banks in the disclosure regime.

In Section 6.1, we show depositors react to information about enforcement actions. One possibility is that depositors' reaction could accelerate bank failure as they withdraw funds from the affected banks. To assess whether the time to bank failure decreases in the disclosure regime, we estimate the following accelerated-time model:

$$log(t) = \beta_1 Disclosure\ Regime + \beta_2 Treatment$$
$$+ \beta_3 Treatment \times Disclosure\ Regime + \beta_k X^k + log(\tau), \tag{8}$$

where $t$ is the survival time for a bank, and the residual $\tau$ is assumed to have a Weibull distribution. The remaining variables are defined above and described in more detail in Appendix C.

Table 9, column (2) shows the results of estimating Equation 8. The coefficient for $Treatment \times Disclosure\ Regime$ implies that, conditional on failure, banks that received an EDO in the disclosure regime failed 74% $(1 - e^{-1.330})$ faster than banks that received an EDO in the nondisclosure regime. This translates to an acceleration of failure by approximately nine months.[35] The signs of the coefficients indicate how the covariates affect logged survival times. For instance, a positive coefficient on $Capital\ Ratio$ indicates banks with higher capital ratios have higher logged survival times.

Results in this section suggest EDOs are more strongly associated with bank failure in the disclosure regime and, conditional on failure, bank failure occurs faster in the disclosure regime. We conduct additional analyses to assess whether competition from thrifts could have played a role. Using the measures of competition discussed in Section 5.1, we find that

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[35]Unconditionally, the average number of months between receiving an EDO and bank failure is 29 in the pre-disclosure period for EDOs issued and terminated in that period. In the disclosure regime, this average falls to 15 months. A test that the sum of coefficients on $Treatment$ and $Treatment \times Disclosure\ Regime$ equals zero rejects the null ($\chi^2 = 4.64$, p-value = 0.0313), suggesting the two coefficients are significantly different from each other.

EDO banks in counties with a higher share of risky loans made by thrifts (or higher share of deposits held by thrifts) are not more likely to fail, relative to other EDO banks that do not face the same competitive pressure from thrifts. In addition, our findings—that EDO banks are *relatively* more likely to fail in the disclosure regime and fail sooner—continue to hold. We present these findings in the online appendix, Table OA11. Overall, our results are consistent with regulators becoming stricter in the disclosure regime.[36]

### 6.3. EDO disclosure and other bank outcomes

In this section, we investigate whether banks' ability to lend and their capital and asset quality vary with the change in disclosure regime. Disclosure increases the cost of receiving an enforcement action, because funding providers may withdraw their capital. Furthermore, disclosure increases the cost of forbearance, leading to regulators becoming stricter to protect their credibility. Therefore banks may respond to the increased market discipline and reduced probability of receiving regulatory forbearance and improve their capital adequacy and operating decisions to avoid an enforcement action.

To account for changes in the macroeconomic and enforcement environments, we create a matched control sample (matched on size and geography) that consists of banks similar to treated banks based on observable characteristics. Banks that receive an EDO at a point in time form our treatment sample, and those that do not receive an EDO form our control sample. Using the matched banks, we create a stacked panel in which each EDO bank and its control bank have 24 quarters of data: twelve quarters before the receipt of an EDO and 12 quarters after, including the quarter when an EDO is received (*Post EDO*). We introduce an indicator variable for banks that receive an EDO (*Treatment*) and estimate the following

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[36]One concern is that post-FIRREA enforcement actions may be more severe. However, our results in Table 2 indicate that, on average, bank quality improved in the post-FIRREA period. Therefore any increase in the severity of enforcement actions could be tied to regulators' changing behavior as opposed to declining bank fundamentals. Another concern is that the disclosure regime changes regulators' ability to forbear. An insignificant coefficient on *Disclosure Regime* in model (1) suggests no change in the likelihood of bank failure for non-EDO banks, which is consistent with no change in regulatory forbearance with respect to bank closures for these banks. However, we cannot rule out the effect of changes in regulatory forbearance for EDO banks.

model.

$$
\begin{aligned}
Y_{it} = {} & \theta_0 + \theta_1 Treatment_i + \theta_2 Post\ EDO_{i\tau} \\
& + \theta_3 Treatment_i \times Post\ EDO_{i\tau} \\
& + \theta_4 Treatment_i \times Disclosure\ Regime_t \\
& + \theta_5 Post\ EDO_{i\tau} \times Disclosure\ Regime_t \\
& + \theta_6 Treatment_i \times Post\ EDO_{i\tau} \times Disclosure\ Regime_t \\
& + \gamma X_{i\tau-1} + \alpha_i + \delta_t + \epsilon_{it},
\end{aligned}
\tag{9}
$$

where $Y_{it}$ corresponds to the ratio of loans to total assets (*Loans*), log of total deposits (*Total Deposits*), total equity to total assets (*Capital Ratio*), and total nonperforming assets to total assets (*Nonperforming Assets*); $\theta_6$ is the parameter of interest, which measures the effect of the change in the disclosure regime on banks that receive an EDO, relative to control banks. We expect $\theta_6$ to be significant if our outcome variables are associated with the change in disclosure regime. We include the same control variables as before and use year-quarter and bank-level fixed effects to account for unobserved heterogeneity. The main effect on *Treatment* is subsumed by the inclusion of bank-level fixed effects. We present our findings in Table 10. As the table shows, affected banks experience a 3% decline in total deposits (column 4), 0.9% improvement in capital ratios (column 6), and 0.7% increase in the quality of their assets (column 8), relative to control banks.[37]

### 6.4. Economic trends

Finally, we conduct additional robustness tests to assess the impact of changing economic trends by estimating our main results in various subsamples. We expand the post-FIRREA period to 2007 (prior to the financial crisis) and re-estimate Equation 1 for consecutive 16-quarter windows in the pre- and post-FIRREA periods. Specifically, we conduct a rolling-window analysis where, for each 16-quarter window in the pre-disclosure period, we select all

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[37]We use other matching techniques (entropy and propensity-score matching) to construct alternative matched samples, as shown in the online appendix, Table OA12. Our main findings remain robust. Our results are also robust and qualitatively similar when using eight-quarter EDO windows.

possible consecutive 16-quarter windows in the disclosure period. We then re-estimate the Cox hazard models for all possible combinations of pre- and post-FIRREA periods, allowing us to assess the sensitivity of coefficients to the choice of sample period.[38]

The results of this analysis are presented in Figure OA6 and Figure OA7 of the online appendix.[39] The horizontal axis in the figure corresponds to the starting point of the 16 consecutive quarters in the post-disclosure period. For example, the coefficient estimate for the analysis comparing pre-FIRREA rolling window sample to the post-FIRREA 1990–1994 sample corresponds to 1990 in the graph. Each line in the figure corresponds to a different 16-quarter window in the pre-FIRREA period. Plots of coefficients of the *Disclosure Regime* indicator are presented in Panel A. The coefficient values are consistently positive over the entire sample period, suggesting that, controlling for covariates, regulators are more likely to issue enforcement actions in the disclosure regime than in the nondisclosure regime. Panel B, Panel C, and Panel D plot the coefficients of *Capital Ratio×Disclosure Regime*, *Nonperforming Assets×Disclosure Regime*, and *Return On Assets×Disclosure Regime*. Although the graphs show a trend over time, the figures are consistent with our findings that, relative to the nondisclosure regime, regulators in the disclosure regime are more likely to issue enforcement actions against banks that have lower capital ratios, higher nonperforming assets, and lower profitability.

## 7. Conclusion

We use the setting of the 1989 Financial Institutions Reform, Recovery, and Enforcement Act, which mandated public disclosure of bank enforcement actions, to study how regulators respond to the public scrutiny of their actions. A key feature of our study is that we identify EDOs issued in the nondisclosure regime through termination documents issued in

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[38]In this analysis, we drop year indicators from the model because our objective is to assess the variation in coefficients over time.

[39]Figure OA6 shows all possible combinations of the consecutive sixteen-quarter windows, whereas Figure OA7 shows the graphs for only the first and last pre-FIRREA 16-quarter windows (but all post-FIRREA windows) with 95% confidence intervals.

the disclosure period and a sample of EDOs from the U.S. National Archives.

We find that the change in disclosure regime is associated with several changes in regulators' supervisory actions. In particular, we find that relative to the pre-FIRREA period, regulators issue more EDOs, intervene sooner, and seem to rely more on publicly observable signals in the disclosure regime. We also find that EDO documents become less informative and more boilerplate following the regime change. These results provide suggestive evidence that regulators respond to the public scrutiny of their actions.

FIRREA included several changes to regulatory enforcement which could confound our inferences. To tie our findings to the disclosure channel, we study how our results vary with news circulation. Because banks' funding providers are more likely to learn about issues at the bank in regions with higher news circulation, regulators' credibility and reputation would be adversely affected if they did not issue timely enforcement actions in these regions. Market discipline is also likely to be higher in regions with higher news circulation because banks' funding providers learn about EDOs in these regions. Accordingly, we find that regulators issue more EDOs and intervene sooner in regions with higher news circulation. We also evaluate other potentially confounding events, including the resolution of the S&L crisis and FDICIA, and find robust results. Finally, we find that the increased market discipline and lower likelihood of forbearance in the disclosure regime is associated with improved bank outcomes, even though uninsured deposits decline and bank failure accelerates.

While we show that our findings are robust, our results are based on one regulatory event in the banking sector and limited to the sample of enforcement actions we could identify. Nonetheless, our analyses are informative for situations where regulators face the choice of whether to disclose enforcement efforts. For example, the implications of our study may extend to a broad range of outcomes as diverse as restaurant hygiene and the disclosure of SEC comment letters (Jin & Leslie, 2003; Duro et al., 2019; Dechow et al., 2016). We look forward to future research on the impact of observability of regulatory actions on enforcement in other settings.

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# Appendix A. FDIC's process for issuing Cease and Desist orders

41

```
Examiner identifies problems
        │
        ▼
Regional director writes to FDIC
       Board of Review
        │
        ▼
FDIC issues a "Notice of        ──Bank consents──▶  "Consent and Stipulation" issued  ──▶  Cease & Desist Order issued
Charges and of Hearing"                                                                         │
        │                                                                                        │──Bank takes corrective action──▶  Order terminating C&D Order
        │                                                                                        │
        └──Bank does not consent──▶  Hearing before Administrative   ──▶  FDIC decides whether to accept   ──Bank does not comply──▶  FDIC enforces order in US
                                         Law Judge (ALJ)                      ALJ recommendations                                      District Court and/or terminates
                                                                                   │                                                   deposit insurance
                                                          FDIC decides to issue C&D Order (▲)
                                                                                   │
                                                                                   └──FDIC does not issue C&D order──▶  Order terminating Section 8(b) proceedings issued
```

Source: *FDIC Enforcement Decisions Volume I* published by Prentice Hall (1988); authors' reading of enforcement actions and interviews.

## Appendix B. Events leading up to the disclosure of enforcement actions

| | |
|---|---|
| August 1981 | Ronald Reagan appoints William M. Isaac as chairman of the FDIC. In his first 10 months (August 1981–June 1982), Isaac oversees the disbursement of over $1.5 billion to satisfy in deposit insurance claims, three times as much as the FDIC had paid out in its first 47 years of existence. [1] |
| April 3, 1983 | In an environment of mounting bank failures, William M. Isaac argues for regulatory reform by providing investors with information regarding banks' problem loans and interest rate vulnerability. [2] |
| May 1984 | Continental Illinois National Bank, with $40 billion in assets, fails. It is the largest bank failure in the FDIC's history at the time. [3] |
| February 11, 1985 | The FDIC proposes weekly disclosure of the names of banks and employees cited in enforcement actions against the 8,850 banks it regulates and solicits comments from the public. [4] |
| February - May 1985 | The FDIC receives 768 comment letters regarding the February proposal, with only 57 favoring the agency's plan. [5] |
| May 6, 1985 | The FDIC votes unanimously to disclose when the FDIC enters a final enforcement action against a bank, rolling back, in part, its February plan. The new rule is set to take effect on January 1, 1986. [6] |
| October 1, 1985 | William M. Isaac leaves the FDIC; L. William Seidman is appointed as chairman. [7] |
| December 11, 1985 | The FDIC prepares a proposal to defer the January 1, 1986, implementation of disclosure policy. Seidman favors postponement in order to move forward in conjunction with the Comptroller of the Currency and the Federal Reserve Board. [8] |

| | |
|---|---|
| March 8, 1989 | FDIC Chairman L. William Seidman testifies before the House Banking Committee's Subcommittee on Financial Institutions, stating that the proposed Bush bailout plan for savings institutions does not give the FDIC enough power to act expediently in revoking deposit insurance of member banks, nor does it provide enough independence to the FDIC since the plan gives the President authority to remove the FDIC's chairman and vice chairman at will. [9] |
| April 6, 1989 | The House Banking subcommittee amends the Bush Administration's rescue plan for the savings industry, expanding the FDIC's jurisdiction and insulating it from White House intervention by prohibiting the President from removing the chairman before his four-year term expires. [10] |
| August 9, 1989 | George H.W. Bush signs the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) of 1989. FIRREA expands the enforcement authority of bank regulators, giving regulators expanded cease-and-desist authority and the authority to terminate insured banks' coverage more expediently. Regulators are also given the authority to temporarily suspend deposit insurance to a bank with no tangible capital. Enforcement actions are made public beginning with this regulation. [11] |

[1] Jack Anderson and Dale Van Atta, "Heroics at the FDIC," *The Washington Post*, August 4, 1985.

[2] William M. Isaac, "Forum: A Challenge for Financial Regulators Instilling Discipline in Banks," *The New York Times*, April 3, 1983.

[3] "Federal Deposit Insurance Corporation Historical Timeline." FDIC.

[4] Monica Langley, "FDIC Proposes Full Disclosure of Enforcement," *The Wall Street Journal*, February 12, 1985.

[5] Nathaniel C. Nash, "FDIC Decides to Disclose Disciplinary Actions," *The New York Times*, May 7, 1985.

[6] Nathaniel C. Nash, "FDIC Decides to Disclose Disciplinary Actions," *The New York Times*, May 7, 1985.

[7] Kenneth N. Gilpin and Eric Schmitt, "Ex-F.D.I.C. Chairman Said to Form New Firm," *The New York Times*, January 7, 1986.

[8] Monica Langley, "FDIC May Delay Public-Disclosure Rule for Banks," *The Wall Street Journal*, December 11, 1985.

[9] Nathaniel C. Nash, "FDIC Chairman Asks Changes in Rescue Plan," *The New York Times*, March 9, 1989.

[10] Nathaniel C. Nash, "Bush Plan On Savings Is Set Back," *The New York Times*, April 7, 1989.

[11] Federal Deposit Insurance Corporation. Division of Research and Statistics. History of the Eighties: Lessons for the Future. (Washington, District of Columbia: Federal Deposit Insurance Corporation, 1997), 101-102.

# Appendix C. Variable definitions

| Variable | Definition | Source | Code |
|---|---|---|---|
| Boilerplate | Percentage of boilerplate words relative to total number of words in a document based on identifying 4-word phrases (tetragrams) that are extremely common across documents (usage of more than 80%) in a given year after removing common and stop words (Lang & Stice-Lawrence, 2015) | SNL, National Archives and authors' calculations | |
| Capital Ratio | Total equity as a proportion of total assets. | Call Reports | RCFD3210 / RCFD2170 |
| Commercial and Industrial Loans | Ratio of commercial and industrial loans to net total loans. | Call Reports | RCFD1766 / (RCFD1400 - RCFD3123 - RCFD2123) |
| Crisis | Indicator variable which takes the value of 1 for quarters during the Great Recession (2007Q4–2009Q2) and 0 otherwise. | NBER | |
| Disclosure Regime | Indicator variable which takes the value of 1 for the period after 1989 Q3 and 0 otherwise. | | |
| Distance | Natural logarithm of the physical distance between the regional functional regulator's office and the bank's headquarters. | SNL and authors' calculations | |
| Employment Growth | The growth of employment level (Total employment is defined as the number of jobs) | Bureau of Economic Analysis | (Total Employment - Lagged Total Employment) / Lagged Total Employment |
| Failure | Indicator variable which takes the value of 1 for banks identified by the FDIC as failed banks. | FDIC | |
| Flesch Grade Level Readability | Readability score computed using sentence length and word complexity in a given document. It corresponds to the years of education required to understand a given document. | SNL, National Archives and authors' calculations | (0.39 x average sentence length) + (11.8 x average number of syllables per word) - 15.59 |
| Gunning FOG Index | Readability index corresponds to the years of education required to understand a given document (Li, 2008). | SNL, National Archives and authors' calculations | (Average words per sentence + percent of complex words) x 0.4 |

| Insured Deposits | Natural logarithm of FDIC-insured deposits (based on Chen et al. (2018) and Balakrishnan (2018)). | Call Reports and authors' calculations | log(RCON2702) |
|---|---|---|---|
| Interest on Deposits | Ratio of interest on deposits to average deposits. | Call Reports | RIAD4170 / RCFD2200 |
| Liquidity Ratio | Ratio of cash and cash equivalents to lagged total assets, where cash is defined as the sum of interest-bearing balances, non-interest bearing balances, and currency and coin. | Call Reports | (RCFD0071 + RCFD0081) / RCFD2170 |
| Loans | Net total loans scaled by lagged total assets. | Call Reports | (RCFD1400 - RCFD3123 - RCFD2123) / RCFD2170 |
| National Coverage | Natural logarithm of the number of articles covering an EDO in the national newspapers. | NewsBank and Factiva | |
| News Circulation | The number of newspaper copies divided by the total population at the county level. | Gentzkow et al. (2011) | |
| News Coverage | Indicator variable which takes the value of 1 if an EDO for a given bank is covered by the local media and 0 otherwise. | NewsBank | |
| News Coverage Intensity | Natural logarithm of the number of articles that cover the EDO. | NewsBank and Factiva | |
| News Coverage Length | Natural logarithm of the number of days between the first and last news article. | NewsBank and Factiva | |
| Nonperforming Assets Ratio (NPA) | The sum of nonaccruing loans and accruing loans past 90 days divided by lagged net total loans. | Call Reports | (RCFD1403+RCFD1407) / (RCFD1400 - RCFD3123 - RCFD2123) |
| Number of words | Natural logarithm of the total number of words in a document | SNL, National Archives and authors' calculations | |
| Numeric intensity | Ratio of numerical characters in a document relative to the number of alphabetical characters (Li, 2010). | SNL, National Archives and authors' calculations | Total numerical characters/total alphabetical characters |
| Per Capita Income | Natural logarithm of the level of per capital personal income | Bureau of Economic Analysis | log(Per capita personal income) |
| Post Crisis | Indicator variable which takes the value of 1 for quarters after the Great Recession (2009Q3–2017Q4) and 0 otherwise. | NBER | |

| | | | |
|---|---|---|---|
| Post EDO | Indicator variable which takes the value of 1 for 12 quarters after the EDO was received for treatment banks and matched control banks and 0 for the 12 quarters prior. | SNL and authors' calculations | |
| Real Estate Loans | Ratio of real estate loans to net total loans. | Call Reports | RCFD1410 / (RCFD1400 - RCFD3123 - RCFD2123) |
| Return on Assets (ROA) | Net income divided by average total assets. | Call Reports | RIAD4340 / RCFD2170 |
| Size | Total assets of the bank (or natural log of total assets) | Call Reports | RCFD2170 |
| Thrifts' Share of Risky Lending | Thrifts total risky lending at a county level divided by the share of total risky lending by thrifts and commercial banks in the same county level. Risky loans are defined as the sum of CRE loans, ADC loans and Service corporate investments (Kandrac & Schlusche, 2020). | FHLB 770, FHLBB 1313 and Call Reports | (SVGL1441 + SVGL0136 + SVGL1448 + SVGL1449 + SVGL1451 + SVGL1534 + SVGL0035 + SVGL2130) /((SVGL1441 + SVGL0136 + SVGL1448 + SVGL1449 + SVGL1451 + SVGL1534 + SVGL0035 + SVGL2130) + (RCON1415 + RCON1420 + RCON1460 + RCON1480 + RCON2130) |
| Total Deposits | Natural log of total deposits. | Call Reports | log(RCFD2200) |
| Treatment | Indicator variable which takes the value of 1 if a bank has received an EDO and 0 otherwise | SNL and authors' calculations | |
| Uninsured Deposits | Natural log of deposits not covered by the FDIC insurance (based on Chen et al. (2018) and Balakrishnan (2018)). | Call Reports and authors' calculations | log(RCFD2200 - RCON2702) |
| Urbanization | The ratio of nonagricultural population to total population | 1990 Decennial Census | 1- (P0060004 (Rural: Farm) / P0010001 (Persons Total)) |
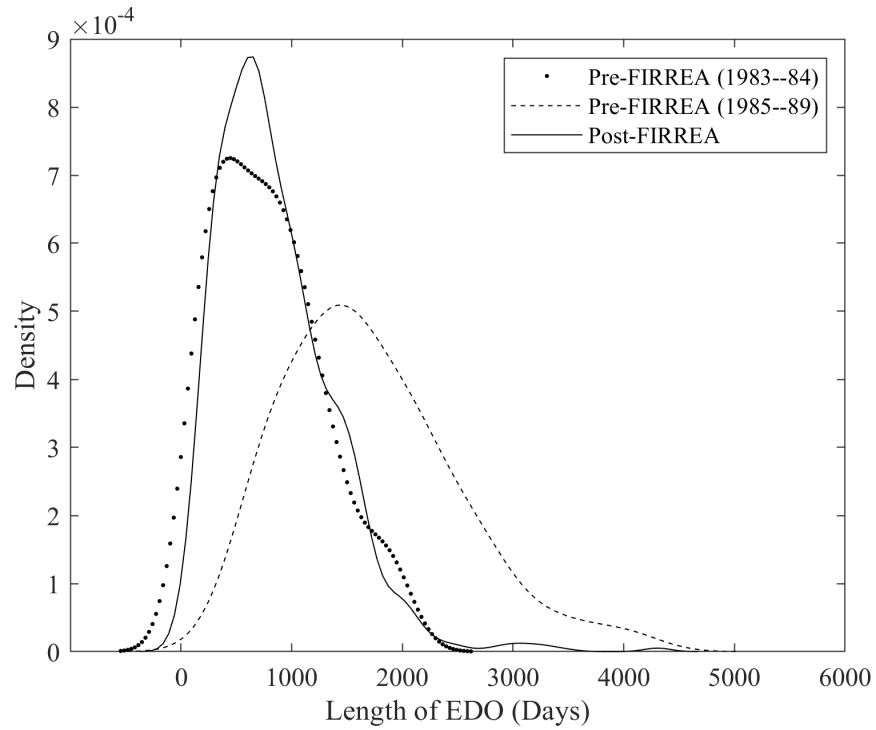
Figure 1: Distribution of EDO length

This figure shows the kernel density function for the length of an EDO in the nondisclosure (pre-FIRREA) and disclosure (post-FIRREA) regimes. Length of an EDO is defined as the number of days from the issuance of an EDO to its termination. The dotted line represents EDOs that were issued and terminated in the nondisclosure regime (1983–84). The dashed line represents EDOs that were issued in the nondisclosure regime but terminated in the disclosure regime (1985–89). The solid line represents EDOs issued and terminated in the disclosure regime.
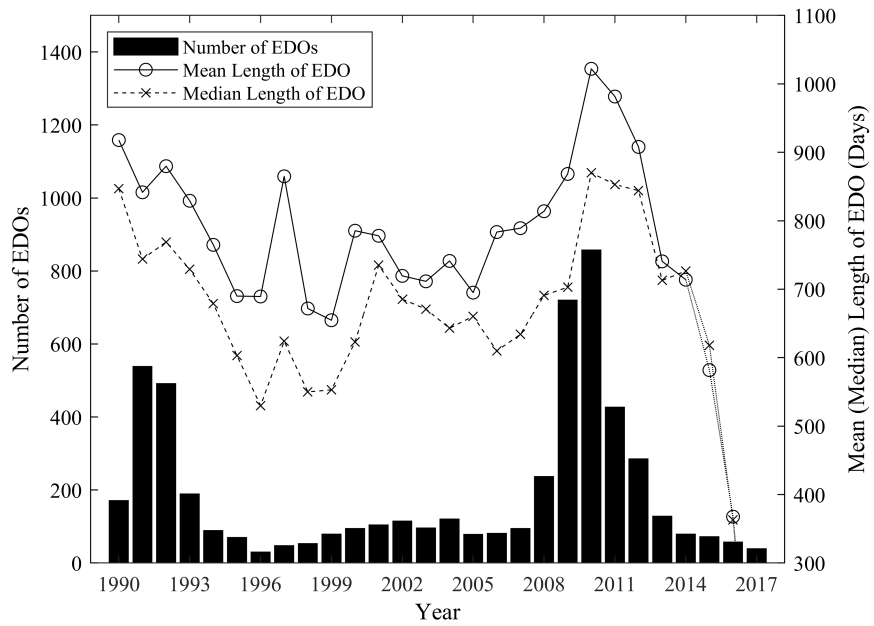
Figure 2: Number and the average length of enforcement actions (EDO)
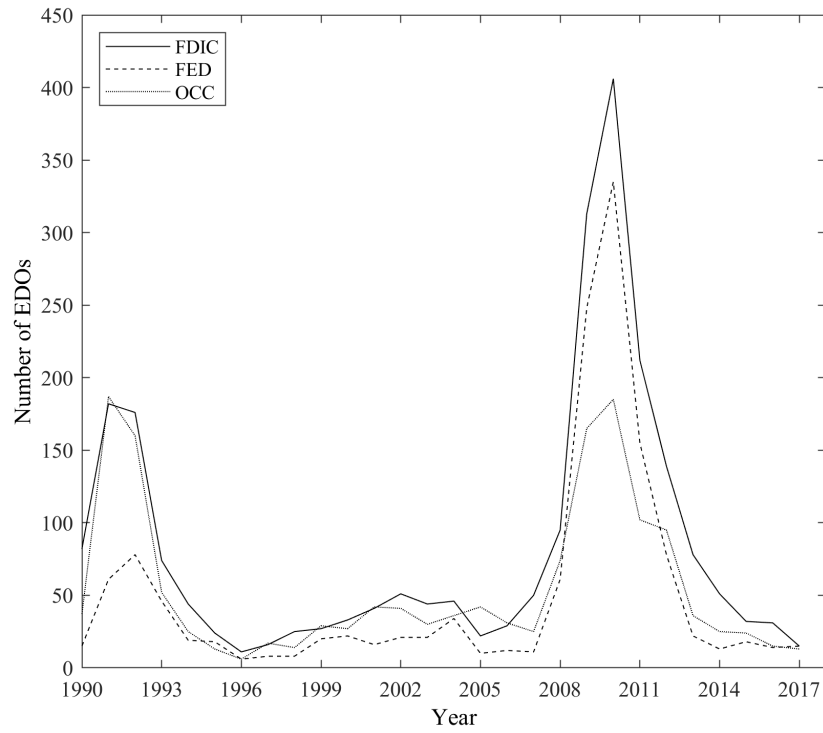


Figure 3: Number of enforcement actions by primary federal regulator
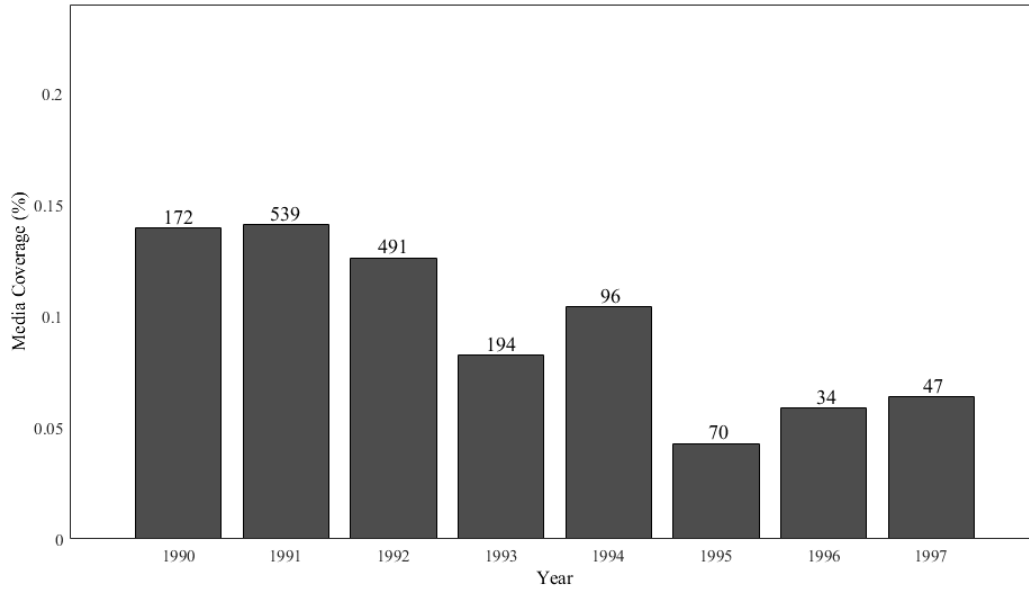
Figure 4: News coverage of EDOs

This figure shows the news coverage of EDOs for banks that received an EDO during the sample period of 1990 to 1997. The bars refer to the percentage of EDOs that received news coverage in a given year. The numbers above the bars represent the total number of EDOs received by banks in that year.

Table 1: Bigrams and textual characteristics of enforcement actions' content

This table presents descriptive evidence of the content and textual characteristics of severe enforcement actions received by banks from the FDIC in 1983–1984 and Q3 1989–2017. Columns (2) to (4) show the most commonly used two-word phrases in a given year (bigrams) and their corresponding frequencies. Column (5) shows the total number of documents that could be read using machine reading techniques. Column (6) shows the average number of words per document. Column (7) presents the average FOG index for EDOs in a given year, with higher values indicating more complexity. Column (8) shows the average values of the Flesch Grade Level readability index corresponding to the years of education required to understand a given body of text. Column (9) shows the average percentage of boilerplate language used.

| Year | Most Common Phrases (Rank 1) | | Most Common Phrases (Rank 2) | | Most Common Phrases (Rank 3) | | Number of Documents | Average Words per Document | Average Gunning-FOG Index | Average Flesch Grade Level Readability | Average Boilerplate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | | (3) | | (4) | | (5) | (6) | (7) | (8) | (9) |
| 1983 | banking practices | 0.84% | assets classified | 0.76% | equity capital | 0.75% | 116 | 1,774 | 14.56 | 11.36 | 0.5916 |
| 1984 | assets classified | 0.90% | equity capital | 0.84% | banking practices | 0.75% | 14 | 1,916 | 15.93 | 12.68 | 0.6002 |
| 1989 | primary capital | 1.30% | total assets | 0.74% | equity capital | 0.74% | 11 | 1,688 | 21.11 | 17.58 | 0.6518 |
| 1990 | primary capital | 0.71% | equity capital | 0.69% | unsafe unsound | 0.68% | 31 | 1,838 | 22.13 | 18.77 | 0.5993 |
| 1991 | unsafe unsound | 0.98% | insured institution | 0.87% | unsound banking | 0.59% | 62 | 2,548 | 19.20 | 16.06 | 0.6121 |
| 1992 | tier capital | 0.75% | unsafe unsound | 0.60% | operating inadequate | 0.55% | 116 | 1,437 | 21.27 | 18.02 | 0.5776 |
| 1993 | unsafe unsound | 0.61% | tier capital | 0.59% | federal deposit | 0.58% | 110 | 1,238 | 19.36 | 16.35 | 0.5266 |
| 1994 | federal deposit | 1.04% | deposit insurance | 1.03% | unsafe unsound | 0.70% | 119 | 650 | 16.62 | 13.93 | 0.5953 |
| 1995 | federal deposit | 0.83% | deposit insurance | 0.83% | laws regulations | 0.76% | 74 | 792 | 20.52 | 17.59 | 0.5327 |
| 1996 | federal deposit | 1.13% | deposit insurance | 1.13% | tier capital | 0.84% | 31 | 542 | 19.36 | 16.79 | 0.5554 |
| 1997 | information systems | 1.94% | electronic information | 1.63% | unsafe unsound | 0.85% | 16 | 1,999 | 22.53 | 19.14 | 0.6188 |
| 1998 | tier capital | 0.76% | unsafe unsound | 0.66% | superintendent regional | 0.64% | 24 | 1,841 | 21.35 | 18.18 | 0.6038 |
| 1999 | processing fee | 0.96% | finance charge | 0.79% | unsafe unsound | 0.57% | 20 | 2,145 | 16.98 | 14.25 | 0.6411 |
| 2000 | insured institution | 1.53% | unsafe unsound | 0.73% | insured institutions | 0.64% | 27 | 2,080 | 21.26 | 18.36 | 0.5355 |
| 2001 | insured institution | 0.89% | tier capital | 0.69% | unsafe unsound | 0.58% | 23 | 2,139 | 20.84 | 17.92 | 0.5634 |
| 2002 | tier capital | 0.61% | rules regulations | 0.55% | loan lease | 0.52% | 41 | 2,622 | 20.47 | 17.27 | 0.6033 |
| 2003 | unsafe unsound | 0.62% | banking practices | 0.58% | insured institution | 0.54% | 49 | 1,537 | 20.29 | 17.34 | 0.5398 |
| 2004 | rules regulations | 0.90% | banking practices | 0.66% | unsafe unsound | 0.61% | 25 | 1,619 | 20.07 | 17.21 | 0.5523 |
| 2005 | federal deposit | 1.18% | deposit insurance | 1.18% | civil money | 1.15% | 30 | 759 | 18.72 | 16.68 | 0.6378 |
| 2006 | rules regulations | 0.82% | banking practices | 0.79% | unsafe unsound | 0.70% | 23 | 1,982 | 20.96 | 18.11 | 0.6119 |
| 2007 | insured institution | 1.66% | insured institutions | 0.91% | deposit insurance | 0.68% | 46 | 2,085 | 21.98 | 19.22 | 0.4516 |
| 2008 | banking practices | 0.60% | rules regulations | 0.53% | deposit insurance | 0.50% | 86 | 3,308 | 21.60 | 18.45 | 0.5955 |
| 2009 | supervisory authorities | 0.84% | banking practices | 0.60% | tier capital | 0.59% | 310 | 2,984 | 20.45 | 17.45 | 0.6652 |
| 2010 | supervisory authorities | 1.05% | deposit insurance | 0.56% | federal deposit | 0.56% | 424 | 2,926 | 20.56 | 17.70 | 0.6464 |
| 2011 | supervisory authorities | 0.92% | deposit insurance | 0.56% | federal deposit | 0.56% | 220 | 2,958 | 20.95 | 18.13 | 0.5981 |
| 2012 | supervisory authorities | 1.18% | deposit insurance | 0.88% | federal deposit | 0.87% | 178 | 1,909 | 20.48 | 17.80 | 0.4718 |
| 2013 | federal deposit | 1.04% | deposit insurance | 1.03% | supervisory authorities | 0.77% | 107 | 1,457 | 20.44 | 17.83 | 0.3711 |
| 2014 | federal deposit | 0.84% | deposit insurance | 0.83% | insurance corporation | 0.59% | 79 | 1,780 | 18.63 | 16.27 | 0.4641 |
| 2015 | federal deposit | 0.94% | deposit insurance | 0.93% | insurance corporation | 0.67% | 54 | 1,640 | 19.48 | 17.13 | 0.4278 |
| 2016 | deposit insurance | 0.89% | federal deposit | 0.88% | insurance corporation | 0.61% | 41 | 1,603 | 18.43 | 15.95 | 0.4350 |
| 2017 | supervisory authorities | 1.32% | federal deposit | 1.03% | deposit insurance | 0.98% | 25 | 1,127 | 19.50 | 17.23 | 0.3468 |
| **Total** | **supervisory authorities** | **0.68%** | **deposit insurance** | **0.62%** | **federal deposit** | **0.62%** | **2,546** | **1,836** | **19.80** | **16.90** | **0.5556** |

Table 2: Descriptive statistics

This table presents financial characteristics for our sample of banks in the disclosure and nondisclosure regimes from 1983 to 1997. Panel A presents the characteristics for EDO bank-quarters, Panel B presents the characteristics for non-EDO bank-quarters, and Panel C presents differences in means between non-EDO and EDO banks in the two regimes. The differences in characteristics are tested using two-sample $t$-tests of the difference in means. All variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. Variable definitions are provided in Appendix C. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

Panel A: Descriptive statistics for EDO bank-quarters

| | Nondisclosure Regime | | | Disclosure Regime | | | | |
| | N | Mean | Sd | N | Mean | Sd | Difference | (t-statistic) |
| | | (1) | | | (2) | | (2) - (1) | |
|---|---|---|---|---|---|---|---|---|
| Total Deposits | 265 | 10.154 | 1.012 | 917 | 11.013 | 1.245 | 0.859*** | (10.291) |
| Loans to Total Assets Ratio | 265 | 0.589 | 0.096 | 917 | 0.594 | 0.133 | 0.005 | (0.564) |
| Capital Ratio | 265 | 0.062 | 0.022 | 917 | 0.070 | 0.034 | 0.008*** | (3.417) |
| Nonperforming Assets Ratio | 265 | 0.085 | 0.058 | 917 | 0.056 | 0.063 | -0.029*** | (-6.634) |
| Size | 265 | 10.248 | 1.020 | 917 | 11.116 | 1.262 | 0.868*** | (10.276) |
| Return On Assets | 265 | -0.010 | 0.020 | 917 | -0.005 | 0.015 | 0.005*** | (4.422) |
| Liquidity Ratio | 265 | 0.082 | 0.046 | 917 | 0.067 | 0.043 | -0.015*** | (-5.095) |
| Insured Deposits | | | | 729 | 10.771 | 1.150 | | |
| Uninsured Deposits | | | | 728 | 9.441 | 1.585 | | |

Panel B: Descriptive statistics for non-EDO bank-quarters

| | Nondisclosure Regime | | | Disclosure Regime | | | | |
| | N | Mean | Sd | N | Mean | Sd | Difference | (t-statistic) |
| | | (3) | | | (4) | | (4) - (3) | |
|---|---|---|---|---|---|---|---|---|
| Total Deposits | 345,473 | 10.475 | 1.226 | 326,012 | 10.882 | 1.288 | 0.407*** | (132.929) |
| Loans to Total Assets Ratio | 345,819 | 0.509 | 0.143 | 326,394 | 0.532 | 0.154 | 0.023*** | (63.348) |
| Capital Ratio | 345,821 | 0.092 | 0.054 | 326,395 | 0.100 | 0.059 | 0.008*** | (59.084) |
| Nonperforming Assets Ratio | 345,211 | 0.027 | 0.034 | 325,492 | 0.015 | 0.045 | -0.012*** | (-126.952) |
| Size | 345,821 | 10.611 | 1.222 | 326,395 | 11.043 | 1.283 | 0.432*** | (141.376) |
| Return On Assets | 344,059 | 0.005 | 0.014 | 325,405 | 0.007 | 0.016 | 0.002*** | (54.209) |
| Liquidity Ratio | 345,819 | 0.089 | 0.071 | 326,394 | 0.061 | 0.053 | -0.028*** | (-182.514) |
| Insured Deposits | | | | 258,800 | 10.653 | 1.259 | | |
| Uninsured Deposits | | | | 257,520 | 9.253 | 1.584 | | |

Table 2: Descriptive statistics, continued

Panel C: Descriptive statistics for differences between non-EDO and EDO bank-quarters

| | Nondisclosure Regime | | Disclosure Regime | |
|---|---|---|---|---|
| Variable | Difference | (t-statistic) | Difference | (t-statistic) |
| | (3) - (1) | | (4) - (2) | |
| Total Deposits | 0.321*** | (4.250) | -0.131*** | (-3.071) |
| Loans to Total Assets Ratio | -0.080*** | (-9.093) | -0.062*** | (-12.233) |
| Capital Ratio | 0.030*** | (8.928) | 0.030*** | (15.491) |
| Nonperforming Assets Ratio | -0.058*** | (-27.800) | -0.041*** | (-27.634) |
| Size | 0.363*** | (4.839) | -0.073* | (-1.726) |
| Return On Assets | 0.015*** | (17.217) | 0.012*** | (22.120) |
| Liquidity Ratio | 0.007* | (1.643) | -0.006*** | (-3.014) |
| Insured Deposits | | | -0.118*** | (-2.539) |
| Uninsured Deposits | | | -0.188*** | (-3.198) |

Table 3: Likelihood of receiving an enforcement action

This table presents the coefficients from estimating models of the regulators' decision to issue an enforcement action during the period of 1983 to 1997. Columns (1)–(6) present the results from the estimation of a Cox proportional-hazards model. Column (7) presents the results from the estimation of an accelerated-time model. The variable *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C. The $z$-statistics are presented in parentheses. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| Disclosure Regime | 1.786*** | 2.050*** | 1.156* | 1.394** | 1.735*** | 0.850 | -1.232*** |
| | (2.820) | (3.181) | (1.725) | (2.085) | (2.712) | (1.184) | (-4.039) |
| Size | -0.031 | -0.029 | -0.034 | -0.033 | -0.030 | -0.036 | 0.011 |
| | (-1.279) | (-1.205) | (-1.392) | (-1.363) | (-1.248) | (-1.445) | (0.709) |
| Capital Ratio | -17.104*** | -12.300*** | -16.913*** | -16.906*** | -17.098*** | -19.846*** | 11.409*** |
| | (-9.248) | (-4.973) | (-9.255) | (-9.202) | (-9.244) | (-5.962) | (6.883) |
| Nonperforming Assets | 20.678*** | 20.724*** | 16.098*** | 20.774*** | 20.663*** | 17.683*** | -15.660*** |
| | (19.485) | (19.630) | (11.344) | (19.855) | (19.437) | (10.146) | (-11.457) |
| Return On Assets | -34.104*** | -34.486*** | -34.528*** | -19.384*** | -34.109*** | -22.520*** | 28.556*** |
| | (-10.014) | (-10.229) | (-10.269) | (-4.149) | (-10.015) | (-3.815) | (9.208) |
| Liquidity Ratio | -1.763*** | -1.744*** | -1.917*** | -1.811*** | -2.157** | -2.281** | 0.900* |
| | (-2.649) | (-2.613) | (-2.859) | (-2.711) | (-1.989) | (-2.141) | (1.900) |
| Change in Capital Ratio | -0.397** | -0.444** | -0.427** | -0.428** | -0.399** | -0.418** | 0.649*** |
| | (-2.257) | (-2.493) | (-2.414) | (-2.423) | (-2.266) | (-2.357) | (4.161) |
| Change in Liquidity Ratio | 0.079 | 0.078 | 0.081 | 0.077 | 0.082 | 0.082 | -0.044 |
| | (1.164) | (1.130) | (1.183) | (1.122) | (1.193) | (1.189) | (-0.919) |
| Change in Loans | -0.931*** | -0.924*** | -0.885*** | -0.899*** | -0.929*** | -0.879*** | 0.497*** |
| | (-3.782) | (-3.771) | (-3.646) | (-3.692) | (-3.772) | (-3.623) | (2.814) |
| Distance | 0.133*** | 0.135*** | 0.140*** | 0.136*** | 0.133*** | 0.139*** | -0.084*** |
| | (4.768) | (4.802) | (4.952) | (4.835) | (4.767) | (4.913) | (-4.120) |
| Employment Growth | -3.073*** | -3.017*** | -3.079*** | -3.004*** | -3.075*** | -3.062*** | 1.530** |
| | (-2.823) | (-2.765) | (-2.799) | (-2.732) | (-2.824) | (-2.773) | (2.022) |
| Capital Ratio x Disclosure Regime | | -5.884** | | | | 3.635 | |
| | | (-2.206) | | | | (0.970) | |
| Nonperforming Assets x Disclosure Regime | | | 7.032*** | | | 4.670** | |
| | | | (4.731) | | | (2.283) | |
| Return On Assets x Disclosure Regime | | | | -22.688*** | | -17.733*** | |
| | | | | (-4.847) | | (-2.595) | |
| Liquidity Ratio x Disclosure Regime | | | | | 0.566 | 0.527 | |
| | | | | | (0.433) | (0.404) | |
| Observations | 685,346 | 685,346 | 685,346 | 685,346 | 685,346 | 685,346 | 685,346 |
| Wald $\chi^2$ | 2828*** | 2940*** | 2989*** | 2989*** | 2828*** | 3074*** | 1557*** |
| Reg Type | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Weibull AFT |
| Strata | Year | Year | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All |

Table 4: Changes in the textual content of enforcement actions

This table presents changes in the textual content of enforcement actions using textual analysis of severe enforcement actions issued by the FDIC, Federal Reserve and OCC for the period 1983–1984 and Q3 1989–1997. Column (5) contains only FDIC severe enforcement actions. The indicator *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C. The $t$-statistics are presented in parentheses. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | Number of Words | Gunning FOG | Flesch Grade Level Readability | Numeric Intensity | Boilerplate |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Disclosure Regime | 0.709*** | 7.093*** | 5.484*** | 0.795*** | 0.098*** |
| | (8.786) | (22.264) | (18.590) | (5.068) | (8.645) |
| Size | -0.001 | 0.140 | 0.151 | 0.138** | -0.009 |
| | (-0.036) | (0.961) | (1.158) | (2.936) | (-0.966) |
| Return On Assets | -5.261* | -15.830* | -15.049* | 11.103** | 0.664 |
| | (-2.018) | (-1.893) | (-1.904) | (2.252) | (1.589) |
| Liquidity Ratio | -1.065* | 1.226 | 0.619 | -0.563 | 0.603* |
| | (-2.097) | (0.382) | (0.202) | (-0.328) | (1.852) |
| Employment Growth | -2.006 | -3.574 | -5.244 | 8.794*** | 1.067 |
| | (-1.074) | (-0.515) | (-0.826) | (4.240) | (0.903) |
| Intercept | 7.473*** | 14.352*** | 11.168*** | 0.640 | 0.448*** |
| | (25.037) | (8.416) | (7.358) | (1.196) | (3.986) |
| | | | | | |
| Observations | 599 | 599 | 599 | 599 | 296 |
| Adjusted R-squared | 0.111 | 0.404 | 0.313 | 0.069 | 0.104 |
| Reg Type | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | No | No | No | No | No |
| Bank FE | No | No | No | No | No |
| Cluster | Year | Year | Year | Year | Year |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All |

Table 5: News circulation and the likelihood of receiving an enforcement action

This table presents the coefficients from estimating models of the regulators' decision to issue an enforcement action during the period of 1983 to 1997. Columns (1) to (3) present the results from estimating a Cox proportional-hazards model, whereas columns (4) and (5) present the results from an accelerated-time model. The indicator *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise. *News Circulation* is a continuous measure of the county-level newspaper readership. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C. The $z$-statistics are presented in parentheses. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| Disclosure Regime | 1.521** | 1.515** | -8.282*** | -0.898*** | 5.558*** |
| | (2.480) | (2.465) | (-5.088) | (-3.063) | (5.113) |
| News Circulation | -0.303 | 0.224 | -3.132 | 0.716 | 3.208 |
| | (-1.563) | (0.077) | (-0.912) | (0.363) | (1.421) |
| Disclosure Regime x News Circulation | 0.317** | 0.327* | 0.335* | -0.351** | -0.375** |
| | (2.007) | (1.931) | (1.652) | (-2.335) | (-2.069) |
| Size | -0.101*** | -0.101*** | -0.119*** | 0.069*** | 0.077*** |
| | (-3.656) | (-3.657) | (-4.283) | (3.966) | (4.452) |
| Capital Ratio | -16.843*** | -16.844*** | -16.723*** | 9.984*** | 9.858*** |
| | (-9.210) | (-9.209) | (-9.156) | (6.805) | (6.794) |
| Nonperforming Assets | 20.451*** | 20.454*** | 20.018*** | -14.076*** | -13.430*** |
| | (19.258) | (19.244) | (18.951) | (-11.691) | (-11.491) |
| Return On Assets | -32.323*** | -32.312*** | -32.036*** | 24.485*** | 22.946*** |
| | (-9.534) | (-9.526) | (-9.539) | (9.052) | (8.732) |
| Liquidity Ratio | -2.274*** | -2.273*** | -1.875*** | 1.401*** | 1.147** |
| | (-3.323) | (-3.320) | (-2.752) | (2.994) | (2.531) |
| Change in Capital Ratio | -0.384** | -0.384** | -0.437** | 0.563*** | 0.574*** |
| | (-2.221) | (-2.221) | (-2.486) | (4.122) | (4.278) |
| Change in Liquidity Ratio | 0.096 | 0.096 | 0.072 | -0.055 | -0.052 |
| | (1.395) | (1.396) | (1.048) | (-1.254) | (-1.225) |
| Change in Loans | -0.937*** | -0.937*** | -0.910*** | 0.453*** | 0.435*** |
| | (-3.877) | (-3.875) | (-3.797) | (2.958) | (2.907) |
| Distance | 0.167*** | 0.167*** | 0.176*** | -0.101*** | -0.103*** |
| | (5.872) | (5.870) | (6.187) | (-5.393) | (-5.630) |
| Employment Growth | -3.142*** | -3.150*** | 1.617 | 1.442** | -1.362 |
| | (-2.874) | (-2.879) | (0.972) | (2.034) | (-1.412) |
| Per Capita Income | 0.490*** | 0.491*** | -0.692* | -0.294*** | 0.517** |
| | (3.161) | (3.167) | (-1.872) | (-3.068) | (2.266) |
| Urbanization | 2.019*** | 2.368 | -3.528 | -1.966 | 2.330 |
| | (2.868) | (1.127) | (-1.308) | (-1.385) | (1.287) |
| News Circulation$^2$ | 0.016 | 0.016 | 0.020* | -0.007 | -0.008 |
| | (1.500) | (1.520) | (1.709) | (-0.598) | (-0.673) |
| News Circulation x Urbanization | | -0.545 | 2.771 | -0.414 | -2.873 |
| | | (-0.180) | (0.777) | (-0.204) | (-1.224) |
| Disclosure Regime x Employment Growth | | | -6.763*** | | 4.311*** |
| | | | (-3.061) | | (3.156) |
| Disclosure Regime x Per Capita Income | | | 1.360*** | | -0.933*** |
| | | | (3.447) | | (-3.759) |
| Disclosure Regime x Urbanization | | | 6.272*** | | -4.012*** |
| | | | (4.492) | | (-4.127) |
| | | | | | |
| Observations | 685,338 | 685,338 | 685,338 | 685,338 | 685,338 |
| Wald $\chi^2$ | 2927*** | 2928*** | 2987*** | 1663*** | 1932*** |
| Reg Type | Cox Hazard | Cox Hazard | Cox Hazard | Weibull AFT | Weibull AFT |
| Strata | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All |

Table 6: Competition from thrifts

This table presents the effect of competition from thrifts on the likelihood of receiving an EDO and EDO content. Panel A presents the coefficients from estimating models of the regulators' decision to issue a severe enforcement action. Columns (1)–(7) present the results from estimating a Cox proportional-hazards model and columns (8)–(9) present the results from an accelerated-time model. Panel B shows the impact on EDO content using OLS estimation. The indicator *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise. *Thrifts' Share of Risky Lending* is a proportion of risky loans held by thrifts in a given county where an EDO bank is headquartered lagged by one quarter. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C. The $z$-statistics (Panel A) and $t$-statistics (Panel B) are presented in parentheses. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

Panel A: Likelihood of receiving an EDO, competition from thrifts in risky lending

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---|---|---|---|---|---|---|---|---|---|
| Disclosure Regime | 1.798*** | 2.074*** | 1.110 | 1.407** | 1.755*** | 1.303** | 0.368 | -1.263*** | -0.951*** |
| | (2.798) | (3.163) | (1.625) | (2.063) | (2.706) | (1.993) | (0.494) | (-4.201) | (-3.119) |
| Size | -0.031 | -0.030 | -0.036 | -0.034 | -0.031 | -0.032 | -0.038 | 0.015 | 0.017 |
| | (-1.279) | (-1.211) | (-1.434) | (-1.378) | (-1.252) | (-1.283) | (-1.497) | (0.899) | (1.027) |
| Capital Ratio | -17.057*** | -12.085*** | -16.871*** | -16.842*** | -17.052*** | -17.127*** | -19.853*** | 11.258*** | 11.266*** |
| | (-8.997) | (-4.795) | (-9.011) | (-8.952) | (-8.994) | (-9.025) | (-5.826) | (6.752) | (6.783) |
| Nonperforming Assets | 20.824*** | 20.874*** | 15.850*** | 20.919*** | 20.810*** | 20.818*** | 17.350*** | -15.529*** | -15.327*** |
| | (19.246) | (19.407) | (11.098) | (19.636) | (19.197) | (19.306) | (9.869) | (-11.301) | (-11.290) |
| Return On Assets | -33.295*** | -33.673*** | -33.704*** | -18.431*** | -33.295*** | -33.243*** | -22.704*** | 27.411*** | 27.125*** |
| | (-9.497) | (-9.705) | (-9.744) | (-3.844) | (-9.496) | (-9.464) | (-3.736) | (8.828) | (8.826) |
| Liquidity Ratio | -1.746** | -1.730** | -1.933*** | -1.805*** | -2.078* | -1.778*** | -2.185** | 0.887* | 0.902* |
| | (-2.575) | (-2.543) | (-2.828) | (-2.653) | (-1.904) | (-2.623) | (-2.078) | (1.863) | (1.919) |
| Change in Capital Ratio | -0.441** | -0.492*** | -0.475*** | -0.476*** | -0.443** | -0.444** | -0.464** | 0.671*** | 0.660*** |
| | (-2.418) | (-2.659) | (-2.588) | (-2.599) | (-2.425) | (-2.425) | (-2.525) | (4.201) | (4.180) |
| Change in Liquidity Ratio | 0.109 | 0.108 | 0.113 | 0.107 | 0.111 | 0.109 | 0.113 | -0.055 | -0.057 |
| | (1.603) | (1.572) | (1.638) | (1.555) | (1.629) | (1.601) | (1.640) | (-1.167) | (-1.218) |
| Change in Loans | -0.958*** | -0.952*** | -0.906*** | -0.924*** | -0.956*** | -0.971*** | -0.914*** | 0.530*** | 0.530*** |
| | (-3.786) | (-3.777) | (-3.641) | (-3.697) | (-3.777) | (-3.808) | (-3.649) | (2.892) | (2.902) |
| Distance | 0.121*** | 0.123*** | 0.128*** | 0.124*** | 0.121*** | 0.119*** | 0.124*** | -0.072*** | -0.070*** |
| | (4.361) | (4.398) | (4.563) | (4.429) | (4.358) | (4.275) | (4.431) | (-3.634) | (-3.543) |
| Employment Growth | -3.730*** | -3.663*** | -3.729*** | -3.655*** | -3.730*** | -3.613*** | -3.586*** | 1.748** | 1.721** |
| | (-3.385) | (-3.317) | (-3.340) | (-3.289) | (-3.386) | (-3.292) | (-3.212) | (2.239) | (2.242) |
| Thrifts' Share of Risky Lending | 0.638*** | 0.644*** | 0.640*** | 0.644*** | 0.638*** | -0.523 | -0.478 | -0.448*** | 0.269 |
| | (3.011) | (3.033) | (2.990) | (3.012) | (3.011) | (-1.425) | (-1.309) | (-2.851) | (0.972) |
| Capital Ratio x Disclosure Regime | | -6.127** | | | | | 3.631 | | |
| | | (-2.260) | | | | | (0.949) | | |
| Nonperforming Assets x Disclosure Regime | | | 7.736*** | | | | 5.464*** | | |
| | | | (5.185) | | | | (2.646) | | |
| Return on Assets x Disclosure Regime | | | | -23.082*** | | | -16.247** | | |
| | | | | (-4.838) | | | (-2.309) | | |
| Liquidity Ratio x Disclosure Regime | | | | | 0.481 | | 0.318 | | |
| | | | | | (0.363) | | (0.243) | | |
| Thrifts' Share of Risky Lending x Disclosure Regime | | | | | | 1.756*** | 1.683*** | | -1.025*** |
| | | | | | | (3.979) | (3.800) | | (-3.071) |
| Observations | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 |
| Wald $\chi^2$ | 2811*** | 2929*** | 3004*** | 2992*** | 2811*** | 2848*** | 3117*** | 1431*** | 1572*** |
| Reg Type | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Weibull AFT | Weibull AFT |
| Strata | Year | Year | Year | Year | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All | All | All |

Table 6: Competition from thrifts, continued

Panel B: Changes in the textual content of enforcement actions

| | Number of Words | Number of Words | Gunning FOG | Gunning FOG | Flesch Grade Level Readability | Flesch Grade Level Readability | Numeric Intensity | Numeric Intensity | Boilerplate | Boilerplate |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Disclosure Regime | 0.715*** | 0.633*** | 7.343*** | 7.903*** | 5.709*** | 6.545*** | 0.783*** | 0.765** | 0.114*** | 0.169*** |
| | (8.639) | (5.118) | (20.551) | (25.623) | (16.433) | (20.802) | (5.102) | (3.157) | (5.728) | (9.202) |
| Size | -0.006 | -0.005 | 0.133 | 0.131 | 0.149 | 0.148 | 0.142** | 0.142** | -0.010 | -0.010 |
| | (-0.191) | (-0.184) | (0.899) | (0.888) | (1.132) | (1.112) | (3.094) | (3.082) | (-1.207) | (-1.230) |
| Return On Assets | -5.224* | -5.183* | -18.675** | -18.948** | -17.805** | -18.213** | 11.150** | 11.159** | 0.704* | 0.642* |
| | (-2.083) | (-2.019) | (-2.552) | (-2.661) | (-2.558) | (-2.750) | (2.273) | (2.257) | (2.103) | (2.000) |
| Liquidity Ratio | -1.266** | -1.256** | 0.720 | 0.653 | 0.290 | 0.190 | -0.368 | -0.366 | 0.439 | 0.435 |
| | (-2.418) | (-2.354) | (0.254) | (0.230) | (0.109) | (0.071) | (-0.222) | (-0.218) | (1.391) | (1.374) |
| Employment Growth | -2.284 | -2.234 | -0.918 | -1.260 | -2.560 | -3.070 | 8.849*** | 8.849*** | 0.424 | 0.339 |
| | (-1.325) | (-1.292) | (-0.130) | (-0.181) | (-0.388) | (-0.477) | (4.461) | (4.469) | (0.839) | (0.684) |
| Thrifts' Share of Risky Lending | 0.232 | 0.022 | 2.445*** | 3.867*** | 2.025** | 4.147*** | -0.265 | -0.310 | 0.159** | 0.269*** |
| | (1.103) | (0.078) | (3.811) | (17.337) | (2.918) | (23.247) | (-0.678) | (-1.161) | (2.414) | (15.642) |
| Thrifts' Share of Risky Lending x Disclosure Regime | | 0.278 | | -1.887** | | -2.817*** | | 0.059 | | -0.216** |
| | | (0.709) | | (-2.747) | | (-5.356) | | (0.094) | | (-3.088) |
| Intercept | 7.499*** | 7.568*** | 13.738*** | 13.273*** | 10.574*** | 9.879*** | 0.645 | 0.659 | 0.429*** | 0.394*** |
| | (26.667) | (23.763) | (7.635) | (7.848) | (6.300) | (6.493) | (1.187) | (1.405) | (3.523) | (3.738) |
| Observations | 592 | 592 | 592 | 592 | 592 | 592 | 592 | 592 | 289 | 289 |
| Adjusted R-squared | 0.106 | 0.105 | 0.401 | 0.401 | 0.310 | 0.311 | 0.070 | 0.068 | 0.098 | 0.105 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | No | No | No | No | No | No | No | No | No | No |
| Bank FE | No | No | No | No | No | No | No | No | No | No |
| Cluster | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All | All | All | All |

Table 7: Likelihood of receiving an enforcement action during a crisis

This table presents the coefficients from estimating models of the regulators' decision to issue an enforcement action during the period of 2003 to 2017. Columns (1)–(5) present the results from the estimation of a Cox proportional-hazards model, while column (6) presents the results from the estimation of an accelerated-time model. The indicator *Crisis* takes the value of 1 for the quarters during the financial crisis in Q4 2007–Q2 2009 and 0 otherwise and *Post Crisis* takes the value of 1 in Q3 2009–2017 and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C. The $z$-statistics are presented in parentheses. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| Crisis | 0.169 | 1.129 | 0.486 | 0.072 | 0.231 | 0.087 |
| | (0.189) | (1.101) | (0.597) | (0.087) | (0.256) | (0.548) |
| Post Crisis | -0.099 | 0.309 | 0.952 | 0.166 | -0.045 | -0.222 |
| | (-0.104) | (0.303) | (1.074) | (0.186) | (-0.047) | (-1.075) |
| Size | 0.115*** | 0.114*** | 0.136*** | 0.129*** | 0.116*** | -0.133*** |
| | (4.893) | (4.862) | (5.937) | (5.575) | (4.932) | (-6.102) |
| Capital Ratio | -11.606*** | -8.274*** | -12.630*** | -12.018*** | -11.605*** | 7.957*** |
| | (-9.090) | (-2.891) | (-9.680) | (-9.339) | (-9.094) | (5.543) |
| Nonperforming Assets | 15.272*** | 15.305*** | 46.141*** | 15.745*** | 15.281*** | -16.874*** |
| | (18.469) | (18.613) | (16.374) | (19.367) | (18.475) | (-9.898) |
| Return On Assets | -24.606*** | -24.570*** | -24.474*** | -96.216*** | -24.606*** | 26.499*** |
| | (-9.260) | (-9.269) | (-9.505) | (-14.279) | (-9.258) | (7.815) |
| Liquidity Ratio | -0.388 | -0.365 | -0.199 | -0.292 | 1.112 | 0.451 |
| | (-0.790) | (-0.747) | (-0.433) | (-0.625) | (0.747) | (1.181) |
| Change in Capital Ratio | -0.476** | -0.447** | -0.504** | -0.508** | -0.477** | 0.776*** |
| | (-2.150) | (-1.997) | (-2.339) | (-2.366) | (-2.155) | (3.827) |
| Change in Liquidity Ratio | 0.039** | 0.038** | 0.036** | 0.040*** | 0.039** | -0.058*** |
| | (2.430) | (2.386) | (2.358) | (2.601) | (2.445) | (-3.466) |
| Change in Loans | -1.305*** | -1.287*** | -1.083*** | -1.291*** | -1.301*** | 0.841*** |
| | (-4.263) | (-4.196) | (-3.801) | (-4.591) | (-4.256) | (3.290) |
| Distance | 0.032 | 0.033 | 0.035 | 0.040* | 0.032 | -0.028 |
| | (1.311) | (1.375) | (1.499) | (1.665) | (1.311) | (-1.435) |
| Employment Growth | -1.184 | -1.099 | -0.442 | -0.890 | -1.175 | -0.300 |
| | (-1.043) | (-0.969) | (-0.404) | (-0.795) | (-1.036) | (-0.362) |
| Capital Ratio x Crisis | | -9.504* | | | | |
| | | (-1.945) | | | | |
| Capital Ratio x Post Crisis | | -2.959 | | | | |
| | | (-0.922) | | | | |
| Nonperforming Assets x Crisis | | | -23.946*** | | | |
| | | | (-7.831) | | | |
| Nonperforming Assets x Post Crisis | | | -32.820*** | | | |
| | | | (-11.495) | | | |
| Return On Assets x Crisis | | | | 60.205*** | | |
| | | | | (7.863) | | |
| Return On Assets x Post Crisis | | | | 79.444*** | | |
| | | | | (11.354) | | |
| Liquidity Ratio x Crisis | | | | | -1.723 | |
| | | | | | (-0.878) | |
| Liquidity Ratio x Post Crisis | | | | | -1.581 | |
| | | | | | (-1.011) | |
| Observations | 331,153 | 331,153 | 331,153 | 331,153 | 331,153 | 331,153 |
| Wald $\chi^2$ | 2182*** | 2220*** | 2737*** | 2657*** | 2204*** | 805.2*** |
| Reg Type | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Weibull AFT |
| Strata | Year | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 2003–17 | 2003–17 | 2003–17 | 2003–17 | 2003–17 | 2003–17 |
| Period | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime |

Table 8: EDOs and bank deposits

This table presents changes in banks' deposits. Panel A shows total, insured, and uninsured deposits using a difference-in-differences research design and a control sample of non-EDO banks matched on size and geography. Panel B shows the association between EDO news coverage in the NewsBank archive and deposits for banks that receive an EDO in the disclosure regime. Panel C shows the association between the intensity of news coverage and deposits for EDO banks, conditional on news coverage in the NewsBank and Factiva archives. The indicator *Treatment* takes the value of 1 for banks that receive an EDO and 0 otherwise; *Post EDO* takes the value of 1 for 12 quarters after the EDO was received for treatment banks and for the same quarters for matched banks and 0 for the 12 quarters prior for both treatment and control banks; and *News Coverage* takes the value of 1 for banks whose EDOs were covered in the local media and 0 otherwise. The variable *News Coverage Intensity* is the natural logarithm of the number of articles that cover the EDO; *News Coverage Length* is the natural logarithm of the number of days between the first and last news articles; and *National Coverage* is the natural logarithm of the number of articles covering EDOs in the national newspapers. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. The sample period is Q1 1991–1997 (disclosure regime period). The sample starts in 1991 due to data availability for computing insured and uninsured deposits. All variables are lagged by one quarter and defined in Appendix C. The $t$-statistics are presented in parentheses. We also present the $\chi^2$ statistic for the significance of the difference of the coefficients on the interaction term between insured and uninsured deposits using seemingly unrelated regressions method. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

Panel A: EDOs and bank deposits

| | Total Deposits | Insured Deposits | Uninsured Deposits | Total Deposits | Insured Deposits | Uninsured Deposits |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Post EDO | 0.081*** | 0.074*** | 0.082*** | 0.019* | 0.011 | 0.006 |
| | (4.798) | (4.751) | (3.536) | (1.762) | (1.162) | (0.388) |
| Treatment x Post EDO | -0.203*** | -0.163*** | -0.287*** | -0.038*** | -0.001 | -0.090*** |
| | (-9.143) | (-8.199) | (-9.055) | (-2.699) | (-0.104) | (-4.072) |
| Size | | | | 0.855*** | 0.810*** | 1.009*** |
| | | | | (19.176) | (16.516) | (25.481) |
| Return On Assets | | | | 0.357 | -0.341 | 1.924*** |
| | | | | (1.215) | (-1.080) | (3.681) |
| Liquidity Ratio | | | | 0.026 | -0.367** | 0.251 |
| | | | | (0.312) | (-2.510) | (1.396) |
| Employment Growth | | | | -0.029 | -0.058 | -0.125 |
| | | | | (-0.388) | (-0.658) | (-0.657) |
| Test of difference of coefficients on Treatment x Post EDO ($\chi^2$) | | 24.46*** | | | 11.89*** | |
| Observations | 24,055 | 24,031 | 23,943 | 23,979 | 23,957 | 23,871 |
| Adjusted R-squared | 0.972 | 0.970 | 0.946 | 0.991 | 0.988 | 0.962 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 |
| Period | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime |

Table 8: EDOs and bank deposits, continued

Panel B: News coverage and bank deposits

| | Total Deposits | Insured Deposits | Uninsured Deposits | Total Deposits | Insured Deposits | Uninsured Deposits |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Post EDO | -0.046*** | -0.031*** | -0.112*** | -0.013*** | -0.001 | -0.066*** |
| | (-4.996) | (-3.435) | (-6.120) | (-3.356) | (-0.136) | (-4.181) |
| Post EDO x News Coverage | -0.051 | -0.014 | -0.191*** | -0.004 | 0.029 | -0.139*** |
| | (-1.380) | (-0.389) | (-2.892) | (-0.381) | (1.556) | (-3.275) |
| Size | | | | 0.012 | 0.035 | 0.070 |
| | | | | (0.176) | (0.379) | (0.250) |
| Return On Assets | | | | 0.906*** | 0.845*** | 1.075*** |
| | | | | (28.471) | (12.093) | (18.340) |
| Liquidity Ratio | | | | 0.173 | -0.624* | 2.485*** |
| | | | | (0.592) | (-1.774) | (3.753) |
| Employment Growth | | | | 0.029 | -0.378** | 0.589** |
| | | | | (0.276) | (-2.411) | (2.268) |
| Test of difference of co-efficients on Post EDO x News ($\chi^2$) | | 9.70** | | | 9.94** | |
| Observations | 12,067 | 12,066 | 12,012 | 12,055 | 12,054 | 12,000 |
| Adjusted R-squared | 0.972 | 0.969 | 0.943 | 0.993 | 0.990 | 0.960 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 |
| Period | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime |

Table 8: EDOs and bank deposits, continued

Panel C: Intensity and length of news coverage and bank deposits

| | Total Deposits | Insured Deposits | Uninsured Deposits | Total Deposits | Insured Deposits | Uninsured Deposits | Total Deposits | Insured Deposits | Uninsured Deposits |
|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Post EDO | -0.028* | -0.026 | -0.142** | -0.028* | -0.007 | -0.159** | -0.019 | 0.024 | -0.197*** |
| | (-1.916) | (-1.021) | (-2.254) | (-1.805) | (-0.287) | (-2.239) | (-1.125) | (0.610) | (-2.942) |
| Post EDO x News Coverage Intensity | 0.003 | 0.071 | -0.123** | | | | | | |
| | (0.165) | (1.572) | (-2.130) | | | | | | |
| Post EDO x News Coverage Length | | | | 0.001 | 0.014 | -0.029* | | | |
| | | | | (0.187) | (1.591) | (-1.710) | | | |
| Post EDO x National Coverage | | | | | | | -0.014 | 0.029 | -0.119** |
| | | | | | | | (-0.995) | (1.210) | (-2.134) |
| Size | 0.864*** | 0.713*** | 1.239*** | 0.864*** | 0.696*** | 1.270*** | 0.857*** | 0.715*** | 1.203*** |
| | (34.594) | (5.674) | (6.482) | (33.148) | (5.404) | (6.306) | (37.657) | (5.387) | (5.696) |
| Return On Assets | -1.124 | -1.329* | 0.706 | -1.120 | -1.351* | 0.622 | -1.145 | -1.679* | 1.277 |
| | (-1.520) | (-1.878) | (0.300) | (-1.499) | (-1.774) | (0.259) | (-1.504) | (-1.917) | (0.544) |
| Liquidity Ratio | 0.461* | -0.789** | 2.396* | 0.461 | -0.810* | 2.408* | 0.453 | -0.867* | 2.510* |
| | (1.682) | (-2.150) | (1.897) | (1.674) | (-1.975) | (1.859) | (1.647) | (-1.928) | (1.928) |
| Employment Growth | 0.735** | -0.662 | 0.642 | 0.730** | -0.812 | 0.903 | 0.747** | -0.846 | 1.048 |
| | (2.117) | (-1.160) | (0.314) | (2.054) | (-1.204) | (0.436) | (2.128) | (-1.250) | (0.497) |
| Test of difference of coefficients on Post EDO x News ($\chi^2$) | | 5.06** | | | 4.36** | | | 5.31** | |
| Observations | 596 | 596 | 596 | 596 | 596 | 596 | 596 | 596 | 596 |
| Adjusted R-squared | 0.998 | 0.993 | 0.978 | 0.998 | 0.993 | 0.977 | 0.998 | 0.993 | 0.977 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 |
| Period | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime |

Table 9: Disclosure of enforcement actions and bank failure

This table presents the coefficients from estimating hazard models of bank failure. Column (1) presents the results from the estimation of a Cox proportional-hazards model, while column (2) presents the results from the estimation of an accelerated-time model. The indicator *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise and *Treatment* takes the value of 1 for banks that received an EDO and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. The full sample period is 1983–1997. All variables are lagged by one quarter and defined in Appendix C. The $z$-statistics are presented in parentheses. $*p < 0.1$; $**p < 0.05$; $***p < 0.01$ (two-tailed).

|  | (1) | (2) |
|---|---|---|
| Disclosure Regime | 0.184 | -0.352* |
|  | (0.717) | (-1.923) |
| Treatment | -1.470*** | 1.490*** |
|  | (-6.969) | (5.096) |
| Treatment x Disclosure Regime | 1.360*** | -1.330*** |
|  | (5.938) | (-4.588) |
| Size | -0.220*** | 0.215*** |
|  | (-8.608) | (6.453) |
| Capital Ratio | -78.676*** | 81.329*** |
|  | (-30.755) | (8.502) |
| Nonperforming Assets | 13.651*** | -14.096*** |
|  | (17.647) | (-7.738) |
| Return on Assets | -22.774*** | 20.983*** |
|  | (-10.255) | (6.448) |
| Liquidity Ratio | -3.398*** | 3.779*** |
|  | (-5.552) | (4.965) |
| Interest on Deposits | 0.158*** | 9.148*** |
|  | (11.937) | (4.154) |
| Commercial and Industrial Loans | 0.213*** | -0.152*** |
|  | (4.897) | (-4.716) |
| Real Estate Loans | -0.629*** | 0.380** |
|  | (-3.781) | (2.448) |
| Employment Growth | -2.500*** | 3.588*** |
|  | (-2.988) | (4.059) |
| Observations | 653,555 | 653,555 |
| Wald $\chi^2$ | 4901*** | 379.1*** |
| Reg Type | Cox Hazard | Weibull AFT |
| Strata | Year | Year |
| Cluster | Bank | Bank |
| Years | 1983–97 | 1983–97 |
| Period | All | All |

Table 10: Disclosure regime and bank outcomes

This table presents changes in bank outcomes for the matched sample of banks that received an EDO (*Treatment*) and those that did not (matched on size and geography). The indicator *Post EDO* takes the value of 1 for 12 quarters after the EDO was received for treatment banks and for the same quarters for matched banks, and 0 for the 12 quarters prior. *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. The full sample period is 1983–1997. All variables are lagged by one quarter and defined in Appendix C. The $t$-statistics are presented in parentheses. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | Loans | Total Deposits | Capital Ratio | Nonperforming Assets | Loans | Total Deposits | Capital Ratio | Nonperforming Assets |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Treatment x Post EDO | -0.029*** | -0.159*** | -0.009*** | 0.014*** | -0.015** | -0.002 | -0.014*** | 0.011*** |
| | (-3.974) | (-8.679) | (-4.479) | (3.957) | (-2.143) | (-0.256) | (-7.036) | (3.322) |
| Treatment x Disclosure Regime | -0.001 | 0.001 | -0.010*** | 0.006*** | 0.002 | 0.009 | -0.010*** | 0.004** |
| | (-0.135) | (0.034) | (-5.264) | (2.809) | (0.315) | (1.168) | (-6.381) | (2.170) |
| Post EDO x Disclosure Regime | 0.002 | 0.014 | -0.001 | -0.000 | 0.005 | 0.023*** | -0.003 | 0.000 |
| | (0.243) | (0.606) | (-0.574) | (-0.253) | (0.851) | (2.883) | (-1.482) | (0.109) |
| Treatment x Post EDO x Disclosure Regime | -0.005 | -0.061** | 0.011*** | -0.010*** | -0.006 | -0.030*** | 0.009*** | -0.007** |
| | (-0.533) | (-2.419) | (4.606) | (-2.796) | (-0.726) | (-3.362) | (4.251) | (-1.986) |
| Size | | | | | -0.083*** | 0.050 | -0.005 | -0.101*** |
| | | | | | (-3.033) | (1.438) | (-0.728) | (-10.277) |
| Return On Assets | | | | | 0.044*** | 0.873*** | -0.028*** | 0.007*** |
| | | | | | (4.803) | (26.084) | (-11.656) | (5.065) |
| Liquidity Ratio | | | | | 0.377*** | 0.154 | 0.385*** | -0.863*** |
| | | | | | (4.712) | (1.143) | (14.464) | (-26.725) |
| Employment Growth | | | | | -0.320*** | -0.037 | 0.019* | -0.014* |
| | | | | | (-9.612) | (-0.958) | (1.923) | (-1.750) |
| Observations | 43,284 | 43,239 | 43,284 | 43,131 | 42,962 | 42,921 | 42,962 | 42,815 |
| Adjusted R-squared | 0.789 | 0.967 | 0.717 | 0.557 | 0.815 | 0.991 | 0.775 | 0.600 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All | All |

# Online Appendix to "Observing Enforcement: Evidence from Banking"

# Contents

# List of Figures

# List of Tables

# 1 Figures and Tables



Figure OA1: Number of EDOs with penalties and mean (median) penalties by year
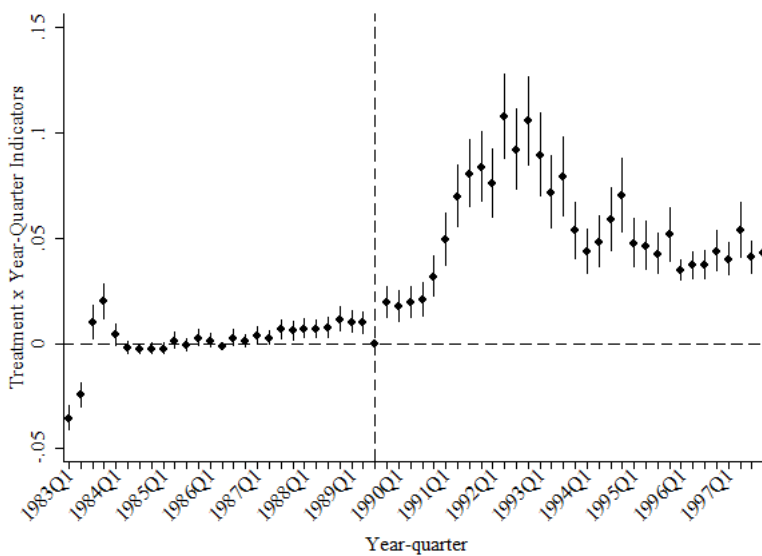


Figure OA2: Coefficient plot to assess pre-trends

This figure presents the coefficient plot for the interaction coefficient of *Treatment* with year-quarter indicators from the estimation of the linear probability model of regulators' decision to issue an enforcement action during the period of 1983 to 1997 with bank fixed effects and control variables. The estimation is similar to that presented in Table OA1 apart from year-quarter indicators interacted with the *Treatment* indicator. *Treatment* takes the value of 1 for banks that receive an EDO and 0 otherwise. The vertical dashed line corresponds to the change in the disclosure regime in Q3 1989.
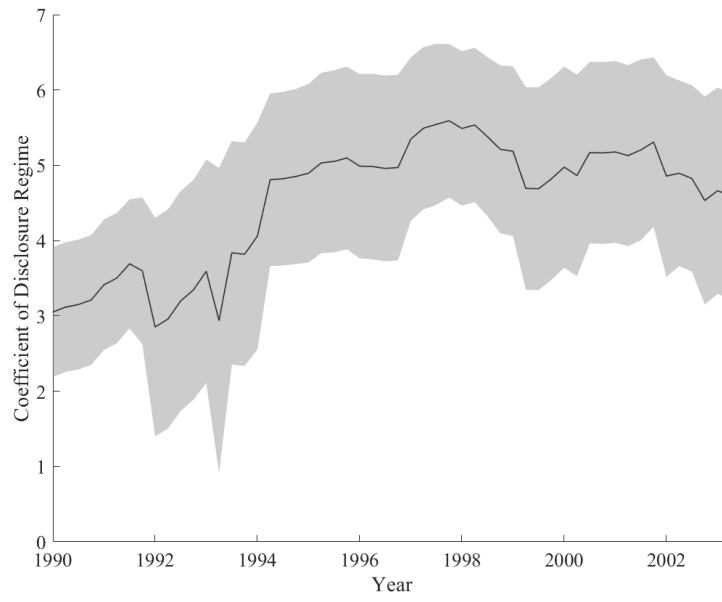
Panel A
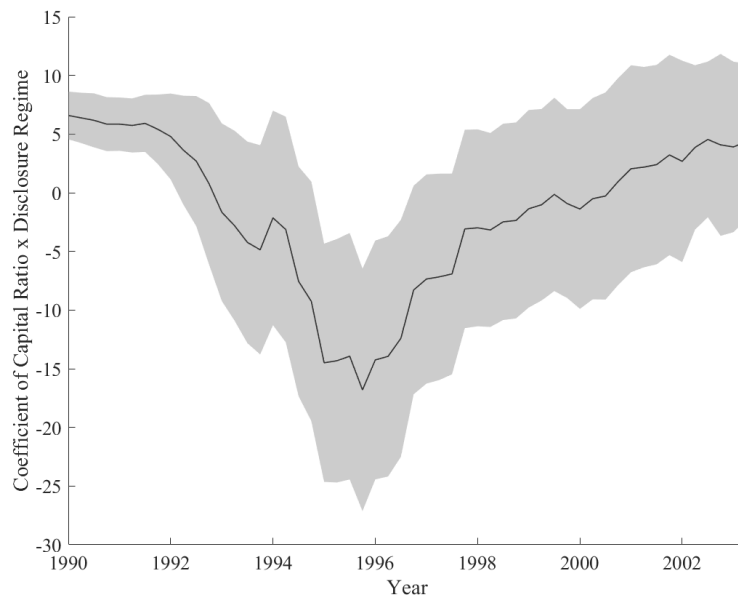


Panel B
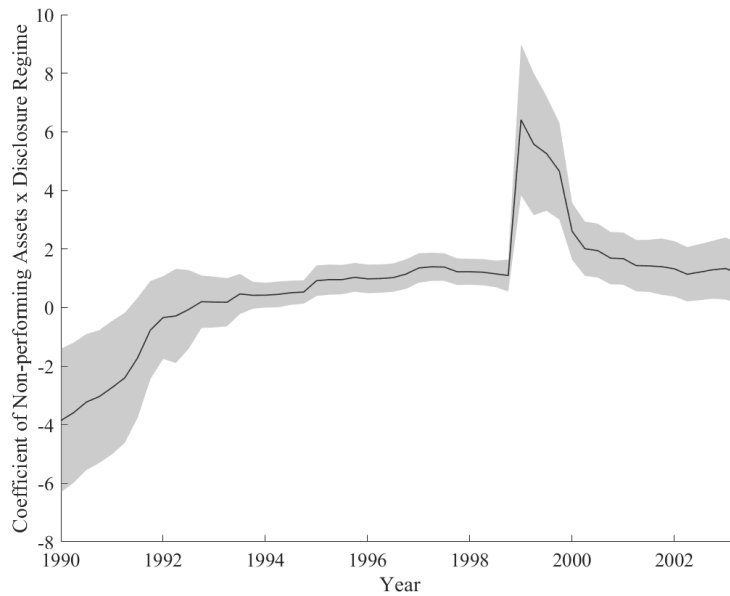
Panel C
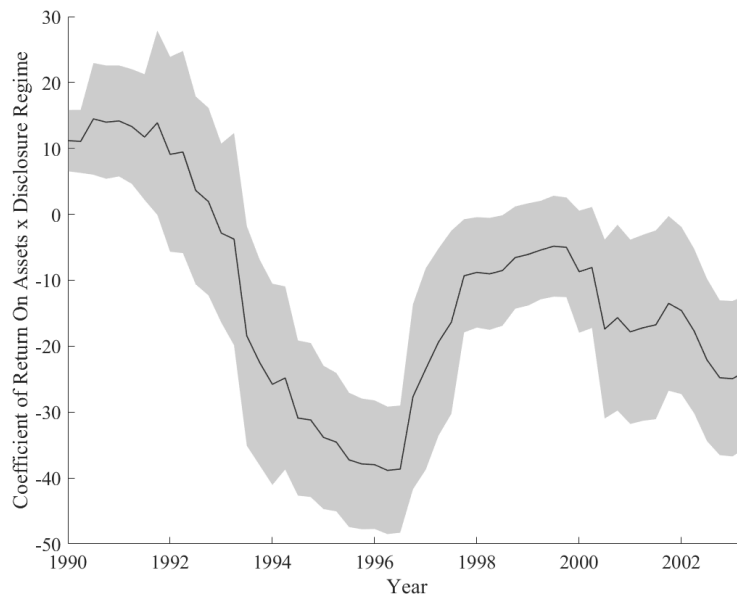


Panel D

Figure OA3: Time trend of coefficients (pre-FIRREA 1983–1984)

This figure shows the time trend of coefficients of *Disclosure Regime* (Panel A), *Capital Ratio × Disclosure Regime* (Panel B), *Nonperforming Assets × Disclosure Regime* (Panel C), and *Return On Assets × Disclosure Regime* (Panel D) from the estimation of Equation 1 in the manuscript (excluding year indicators). The pre-FIRREA sample consists of the years 1983–1984, whereas the post-FIRREA sample consists of all possible consecutive 20-quarter windows. The gray bands correspond to the 95% confidence intervals around the coefficient estimates.

5
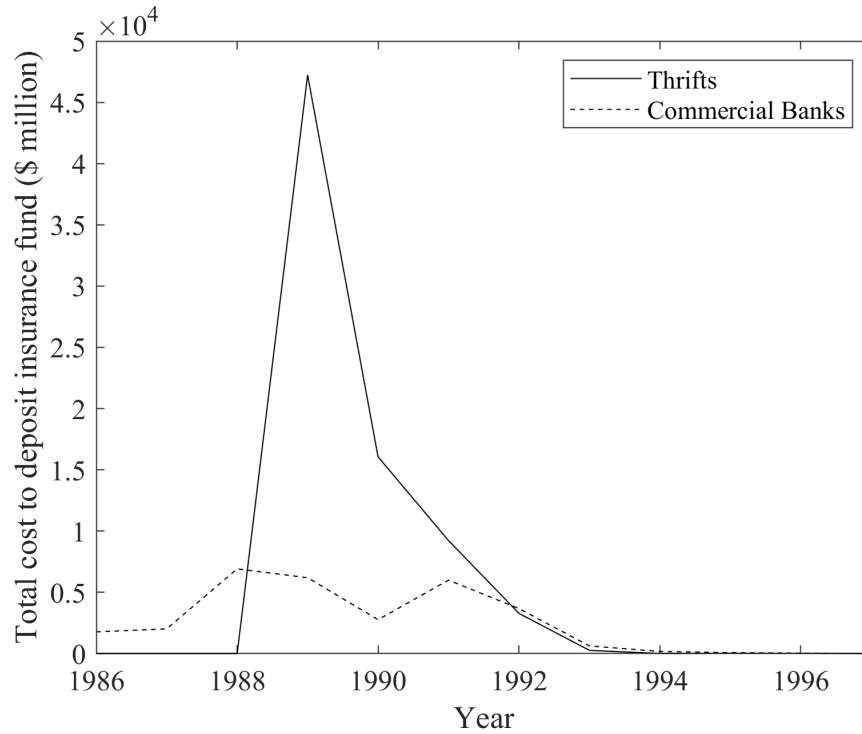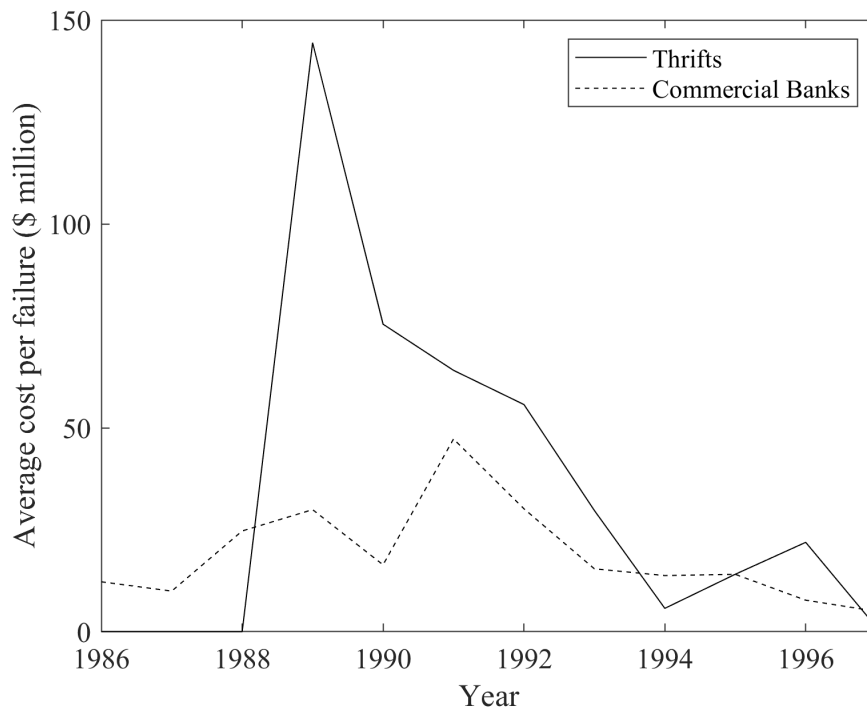
(Panel A)



(Panel B)

Figure OA4: Cost of thrift/bank failure to the deposit insurance fund

This figure shows the total (Panel A) and average (mean) (Panel B) cost of thrift and bank failure to the deposit insurance fund for the years 1986–1997. Data is from the FDIC's *Bank Failures and Assistance Dataset*. The earliest year for which data is available is 1986.
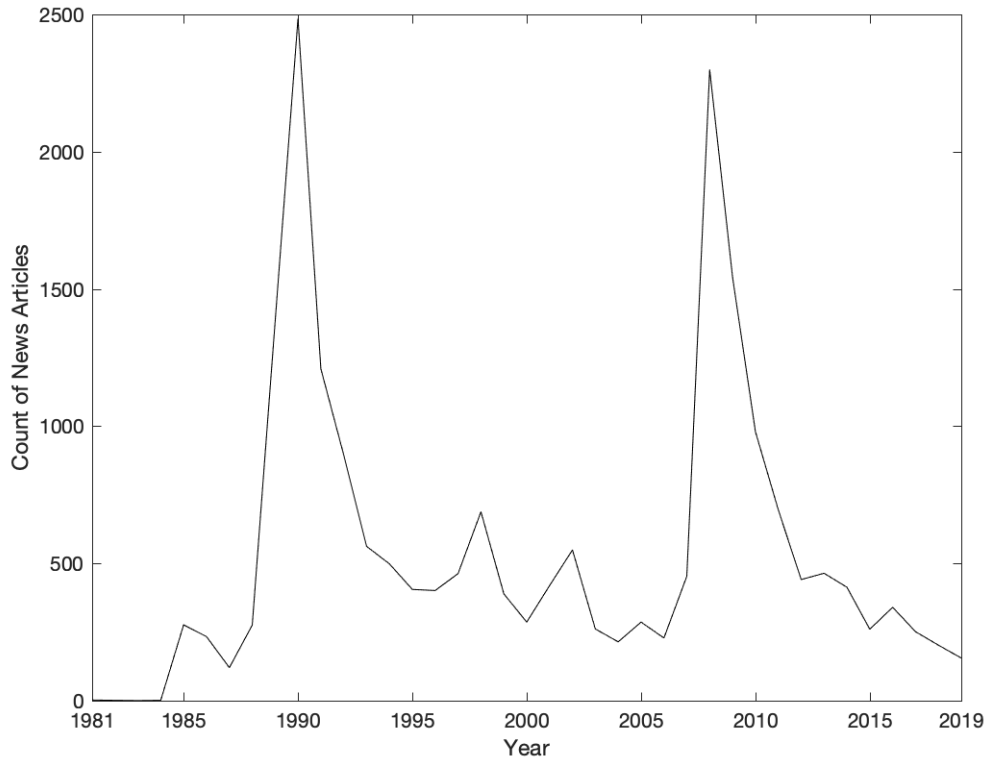
Figure OA5: Number of news articles related to the S&L crisis

This figure shows the number of articles in the Dow Jones Factiva news database related to the variations of the following search terms: "S&L crisis," "savings and loan crisis," or "thrift failure."
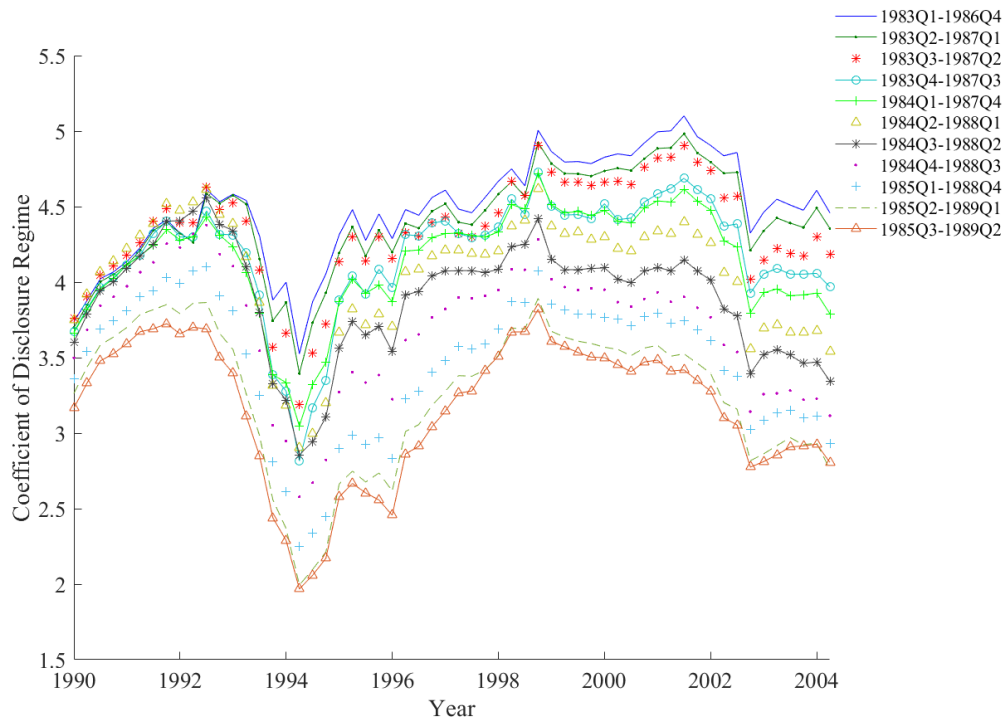
(Panel A)
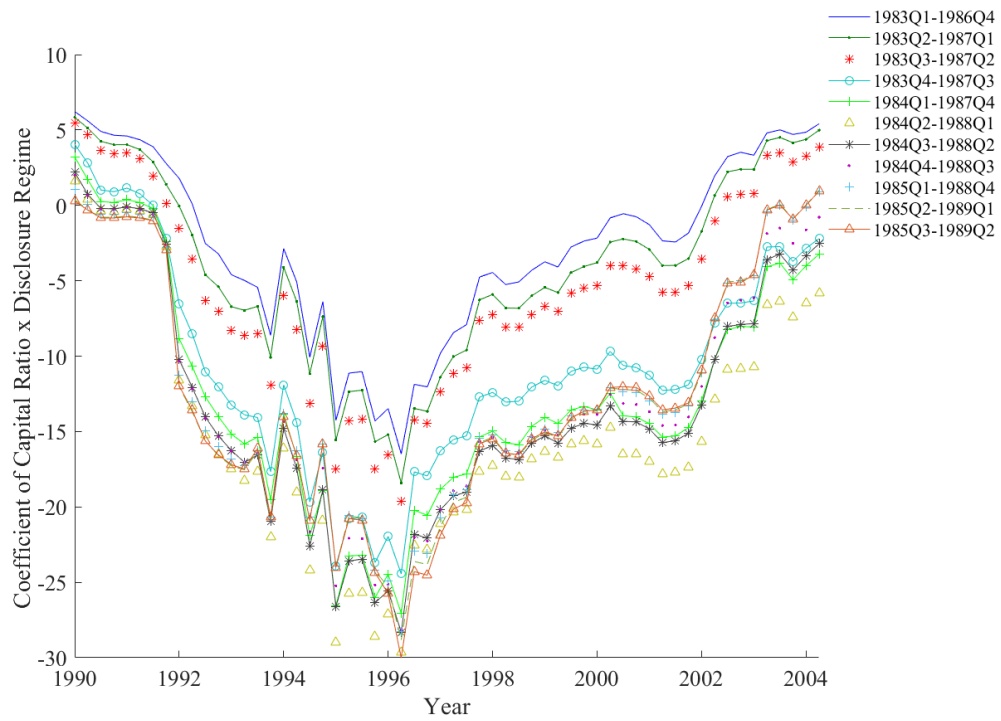


(Panel B)
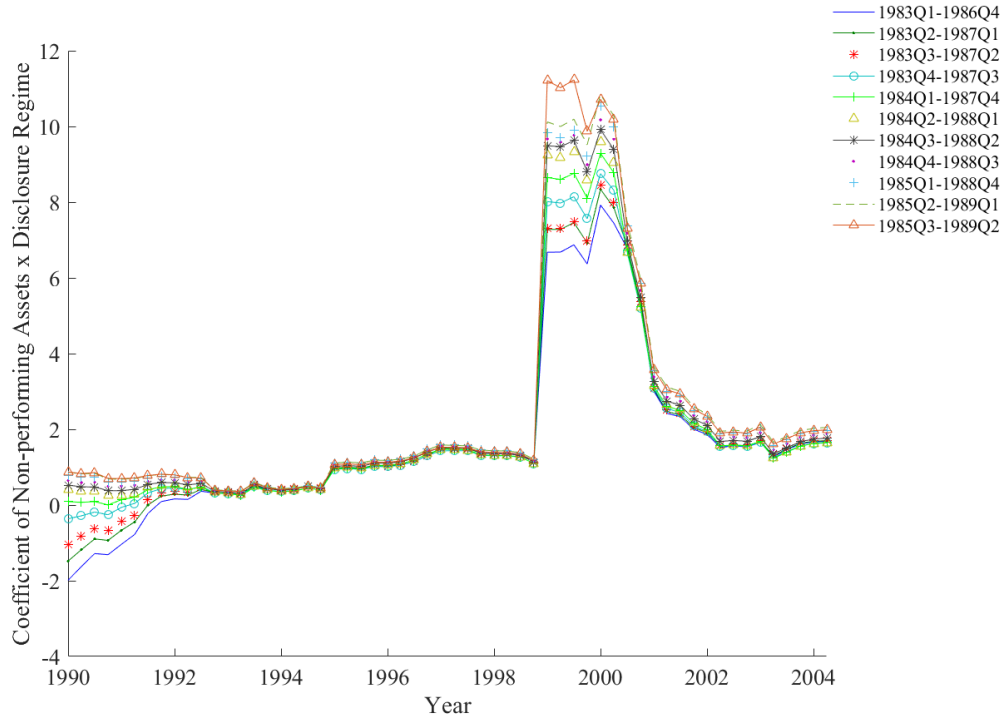
(Panel C)
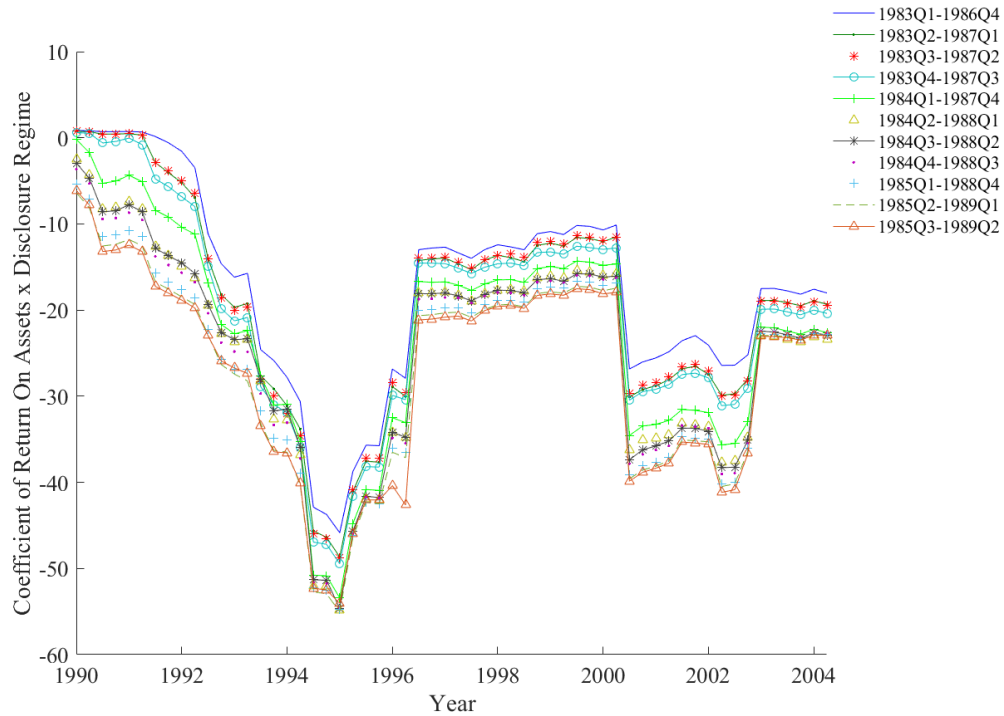


(Panel D)

Figure OA6: Time trend of coefficients (full sample)

This figure shows the time trend of coefficients of *Disclosure Regime* (Panel A), *Capital Ratio × Disclosure Regime* (Panel B), *Nonperforming Assets × Disclosure Regime* (Panel C), and *Return On Assets × Disclosure Regime* (Panel D) from the estimation of Equation 1 in the manuscript (excluding year indicators). The legend indicates pre-FIRREA quarters selected. Details of the estimation are described in Section 6.4 of the manuscript.
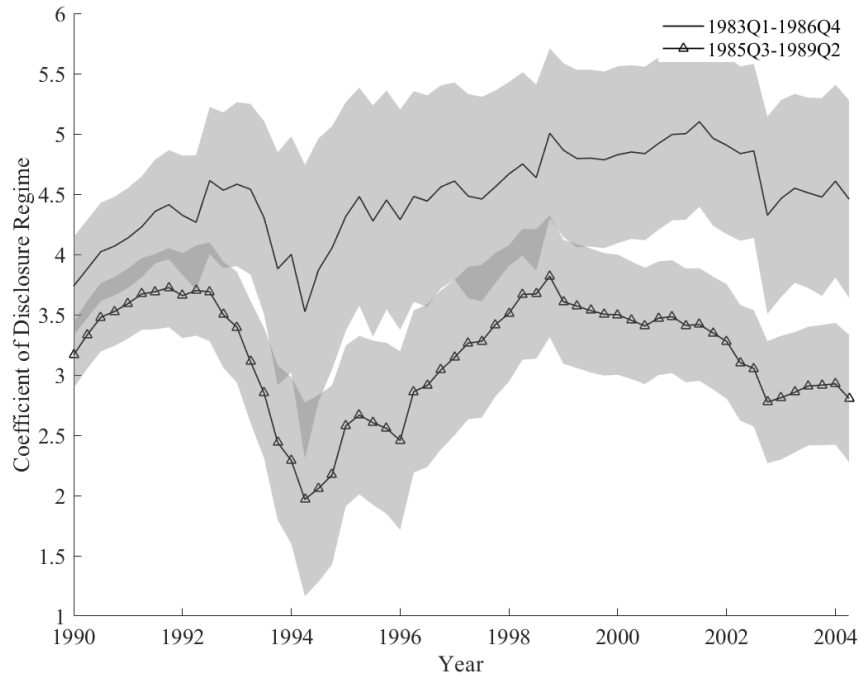
(Panel A)
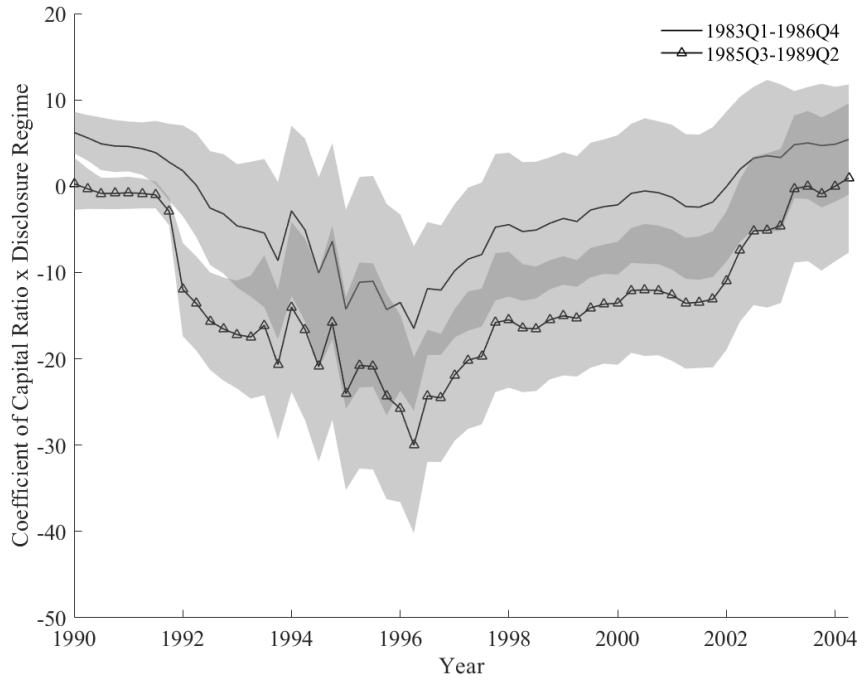


(Panel B)
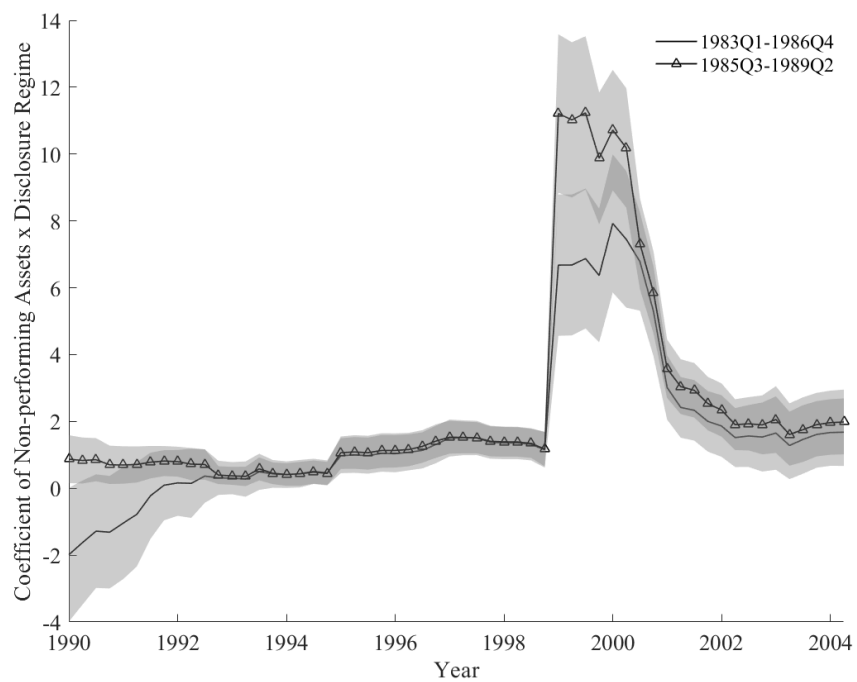
(Panel C)
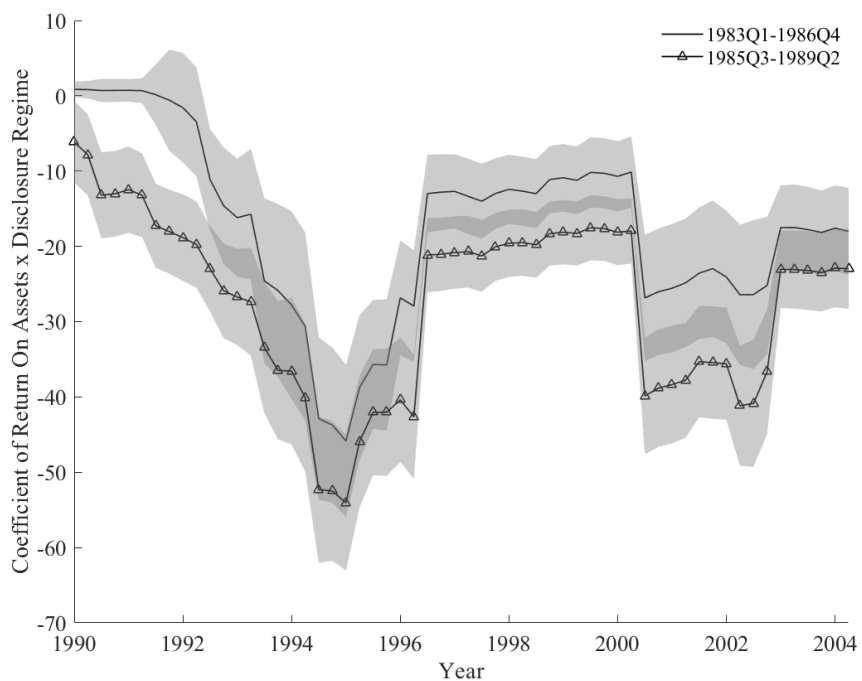


(Panel D)

Figure OA7: Time trend of coefficients (sub sample)

This figure shows the time trend of coefficients of *Disclosure Regime* (Panel A), *Capital Ratio × Disclosure Regime* (Panel B), *Nonperforming Assets × Disclosure Regime* (Panel C), and *Return On Assets × Disclosure Regime* (Panel D) from the estimation of Equation 1 in the manuscript (excluding year indicators). The legend indicates pre-FIRREA quarters selected. Details of the estimation are described in Section 6.4 of the manuscript. The gray bands correspond to the 95% confidence intervals around the coefficient estimates.

Table OA1: Likelihood of receiving an enforcement action (linear probability model)

This table presents the results from estimating a linear probability model of regulators' decision to issue an enforcement action during the period of 1983 to 1997. The dependent variable is 1 in the year of EDO issuance and zero otherwise. Observations for EDO banks after receiving an EDO are dropped from the analysis. The variable *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript; $t$-statistics are presented in parentheses; $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| Disclosure Regime | 0.021*** | 0.050*** | 0.006*** | 0.049*** | 0.019*** | 0.040*** |
| | (15.839) | (18.963) | (4.289) | (23.412) | (13.668) | (15.315) |
| Size | -0.006*** | -0.007*** | -0.002*** | -0.005*** | -0.005*** | -0.003*** |
| | (-5.902) | (-7.192) | (-2.717) | (-4.933) | (-5.848) | (-3.325) |
| Capital Ratio | -0.206*** | -0.067*** | -0.183*** | -0.166*** | -0.203*** | -0.096*** |
| | (-13.626) | (-4.155) | (-12.468) | (-11.423) | (-13.475) | (-6.134) |
| Nonperforming Assets | 0.203*** | 0.211*** | -0.021* | 0.217*** | 0.203*** | 0.038*** |
| | (13.519) | (13.937) | (-1.822) | (14.438) | (13.512) | (3.440) |
| Return On Assets | -0.491*** | -0.555*** | -0.525*** | 0.277*** | -0.494*** | -0.032 |
| | (-13.629) | (-14.975) | (-14.629) | (7.458) | (-13.692) | (-0.986) |
| Liquidity Ratio | -0.016*** | -0.010** | -0.017*** | -0.011** | -0.024*** | -0.013** |
| | (-3.155) | (-2.070) | (-3.413) | (-2.351) | (-4.446) | (-2.487) |
| Change in Capital Ratio | -0.001 | -0.002 | -0.004** | -0.005** | -0.001 | -0.006*** |
| | (-0.605) | (-1.104) | (-2.086) | (-2.373) | (-0.751) | (-3.223) |
| Change in Liquidity Ratio | 0.001** | 0.001* | 0.001*** | 0.001* | 0.001** | 0.001* |
| | (2.469) | (1.724) | (2.586) | (1.907) | (2.407) | (1.813) |
| Change in Loans | -0.010*** | -0.010*** | -0.010*** | -0.010*** | -0.010*** | -0.011*** |
| | (-11.540) | (-11.791) | (-11.895) | (-11.966) | (-11.502) | (-12.236) |
| Distance | 0.002* | 0.003** | 0.003** | 0.003** | 0.002* | 0.003** |
| | (1.846) | (2.110) | (2.104) | (2.371) | (1.863) | (2.527) |
| Employment Growth | -0.039*** | -0.035*** | -0.043*** | -0.034*** | -0.039*** | -0.037*** |
| | (-4.669) | (-4.221) | (-5.178) | (-4.122) | (-4.650) | (-4.494) |
| Capital Ratio x Disclosure Regime | | -0.273*** | | | | -0.128*** |
| | | (-14.249) | | | | (-7.900) |
| Nonperforming Assets x Disclosure Regime | | | 0.882*** | | | 0.703*** |
| | | | (19.658) | | | (17.073) |
| Return On Assets x Disclosure Regime | | | | -2.818*** | | -1.897*** |
| | | | | (-20.436) | | (-16.258) |
| Liquidity Ratio x Disclosure Regime | | | | | 0.037*** | 0.008 |
| | | | | | (3.757) | (0.796) |
| Observations | 686,872 | 686,872 | 686,872 | 686,872 | 686,872 | 686,872 |
| Adjusted R-squared | 0.230 | 0.232 | 0.241 | 0.239 | 0.230 | 0.246 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | No | Yes | Yes | Yes | Yes | Yes |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All |

Table OA2: Likelihood of receiving an enforcement action (pre-FIRREA sample of 1983–84)

This table presents the results from estimating linear probability models of the regulators' decision to issue an EDO during the period of 1983–1984 and Q4 1989–1997. The dependent variable is 1 in the year of EDO issuance and zero otherwise. Observations for EDO banks after receiving an EDO are dropped from the analysis. The variable *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined Appendix C of the manuscript; $t$-statistics are presented in parentheses; $*p < 0.1$; $**p < 0.05$; $***p < 0.01$ (two-tailed).

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| Disclosure Regime | 0.016*** | 0.047*** | -0.000 | 0.045*** | 0.014*** | 0.037*** |
| | (13.102) | (17.972) | (-0.069) | (22.163) | (10.799) | (14.297) |
| Size | -0.003*** | -0.005*** | -0.000 | -0.002*** | -0.003*** | -0.001 |
| | (-3.909) | (-5.378) | (-0.327) | (-2.780) | (-3.845) | (-1.019) |
| Capital Ratio | -0.168*** | -0.020 | -0.144*** | -0.126*** | -0.165*** | -0.050*** |
| | (-11.777) | (-1.341) | (-10.453) | (-9.261) | (-11.601) | (-3.489) |
| Nonperforming Assets | 0.173*** | 0.181*** | -0.062*** | 0.188*** | 0.173*** | 0.000 |
| | (12.450) | (12.931) | (-7.074) | (13.518) | (12.441) | (0.022) |
| Return On Assets | -0.419*** | -0.487*** | -0.454*** | 0.402*** | -0.421*** | 0.075*** |
| | (-12.710) | (-14.267) | (-13.844) | (12.836) | (-12.784) | (3.012) |
| Liquidity Ratio | -0.017*** | -0.012** | -0.018*** | -0.013*** | -0.026*** | -0.014*** |
| | (-3.703) | (-2.479) | (-4.017) | (-2.813) | (-5.202) | (-3.024) |
| Change in Capital Ratio | 0.001 | -0.000 | -0.002 | -0.003* | 0.000 | -0.005*** |
| | (0.294) | (-0.261) | (-1.345) | (-1.700) | (0.128) | (-2.637) |
| Change in Liquidity Ratio | 0.001** | 0.000 | 0.001** | 0.000* | 0.001** | 0.000 |
| | (2.418) | (1.530) | (2.552) | (1.744) | (2.341) | (1.615) |
| Change in Loans | -0.010*** | -0.010*** | -0.010*** | -0.010*** | -0.010*** | -0.010*** |
| | (-11.512) | (-11.779) | (-11.913) | (-11.971) | (-11.470) | (-12.279) |
| Distance | 0.002* | 0.003* | 0.003* | 0.003** | 0.002* | 0.003** |
| | (1.668) | (1.949) | (1.936) | (2.216) | (1.686) | (2.384) |
| Employment Growth | -0.039*** | -0.034*** | -0.043*** | -0.033*** | -0.038*** | -0.036*** |
| | (-4.927) | (-4.420) | (-5.495) | (-4.322) | (-4.906) | (-4.724) |
| Capital Ratio x Disclosure Regime | | -0.290*** | | | | -0.138*** |
| | | (-15.279) | | | | (-8.628) |
| Nonperforming Assets x Disclosure Regime | | | 0.919*** | | | 0.728*** |
| | | | (20.602) | | | (17.826) |
| Return On Assets x Disclosure Regime | | | | -2.971*** | | -2.011*** |
| | | | | (-21.784) | | (-17.471) |
| Liquidity Ratio x Disclosure Regime | | | | | 0.040*** | 0.009 |
| | | | | | (4.078) | (0.946) |
| Observations | 684,065 | 684,065 | 684,065 | 684,065 | 684,065 | 684,065 |
| Adjusted R-squared | 0.233 | 0.236 | 0.247 | 0.245 | 0.233 | 0.254 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| EDO years | 1983–84 & 1989Q4–97 | 1983–84 & 1989Q4–97 | 1983–84 & 1989Q4–97 | 1983–84 & 1989Q4–97 | 1983–84 & 1989Q4–97 | 1983–84 & 1989Q4–97 |
| Period | All | All | All | All | All | All |

Table OA3: Likelihood of receiving an enforcement action (C&D orders)

This table presents the coefficients from estimating models of the regulators' decision to issue a cease and desist enforcement order during the period of 1983 to 1997. Columns (1)–(6) present the results from the estimation of a Cox proportional-hazards model. Column (7) presents the results from the estimation of an accelerated-time model. The variable *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript; $z$-statistics are presented in parentheses; $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| Disclosure Regime | 1.794*** | 2.053*** | 1.165* | 1.369** | 1.773*** | 0.902 | -0.888*** |
| | (2.857) | (3.210) | (1.736) | (2.061) | (2.769) | (1.219) | (-3.711) |
| Size | -0.095*** | -0.093*** | -0.099*** | -0.099*** | -0.095*** | -0.102*** | 0.035** |
| | (-3.027) | (-2.973) | (-3.153) | (-3.141) | (-3.010) | (-3.231) | (2.094) |
| Capital Ratio | -17.153*** | -12.885*** | -16.831*** | -16.803*** | -17.149*** | -19.192*** | 8.478*** |
| | (-7.262) | (-4.858) | (-7.256) | (-7.189) | (-7.260) | (-5.743) | (5.171) |
| Nonperforming Assets | 19.791*** | 19.838*** | 16.157*** | 19.892*** | 19.785*** | 17.554*** | -11.567*** |
| | (15.199) | (15.335) | (10.606) | (15.506) | (15.166) | (9.856) | (-9.253) |
| Return On Assets | -31.705*** | -32.053*** | -32.057*** | -19.575*** | -31.707*** | -21.841*** | 20.079*** |
| | (-7.615) | (-7.792) | (-7.825) | (-3.912) | (-7.614) | (-3.685) | (7.164) |
| Liquidity Ratio | -2.362*** | -2.344*** | -2.531*** | -2.420*** | -2.489** | -2.542** | 1.059** |
| | (-2.917) | (-2.886) | (-3.109) | (-2.972) | (-2.207) | (-2.299) | (2.251) |
| Change in Capital Ratio | -0.600*** | -0.655*** | -0.632*** | -0.627*** | -0.601*** | -0.613*** | 0.660*** |
| | (-2.758) | (-2.987) | (-2.905) | (-2.884) | (-2.759) | (-2.822) | (4.220) |
| Change in Liquidity Ratio | 0.124 | 0.122 | 0.128 | 0.122 | 0.125 | 0.126 | -0.054 |
| | (1.542) | (1.507) | (1.574) | (1.499) | (1.555) | (1.553) | (-1.218) |
| Change in Loans | -0.878*** | -0.867*** | -0.819*** | -0.832*** | -0.877*** | -0.813*** | 0.358** |
| | (-2.923) | (-2.908) | (-2.787) | (-2.818) | (-2.919) | (-2.764) | (2.189) |
| Distance | 0.070** | 0.071** | 0.077** | 0.072** | 0.069** | 0.075** | -0.027 |
| | (2.175) | (2.223) | (2.380) | (2.239) | (2.174) | (2.322) | (-1.635) |
| Employment Growth | -2.828** | -2.777** | -2.824** | -2.780** | -2.829** | -2.820** | 1.244* |
| | (-2.197) | (-2.152) | (-2.172) | (-2.135) | (-2.197) | (-2.160) | (1.768) |
| Capital Ratio x Disclosure Regime | | -5.934* | | | | 3.408 | |
| | | (-1.941) | | | | (0.818) | |
| Nonperforming Assets x Disclosure Regime | | | 6.962*** | | | 4.413* | |
| | | | (4.201) | | | (1.894) | |
| Return On Assets x Disclosure Regime | | | | -23.173*** | | -18.617** | |
| | | | | (-4.522) | | (-2.446) | |
| Liquidity Ratio x Disclosure Regime | | | | | 0.222 | 0.023 | |
| | | | | | (0.150) | (0.015) | |
| Observations | 691,802 | 691,802 | 691,802 | 691,802 | 691,802 | 691,802 | 691,802 |
| Wald $\chi^2$ | 2229*** | 2335*** | 2397*** | 2386*** | 2229*** | 2463*** | 1637*** |
| Reg Type | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Weibull AFT | Weibull AFT |
| Strata | Year | Year | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All |

Table OA4: Changes in the textual content of enforcement actions (with EDO length and sample filters)

This table presents changes in the content of enforcement actions using textual analysis of severe enforcement actions issued by the FDIC, OCC or the Federal Reserve for the period 1983–1984 and Q3 1989–1997. Column (5) contains only FDIC severe enforcement actions, resulting in a reduced number of observations. The variable *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise; *EDO Severity* is the length of time it takes a bank to exit an EDO. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript; *t*-statistics are presented in parentheses; $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | Number of Words | Gunning FOG | Flesch Grade Level Readability | Numeric Intensity | Boilerplate |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Disclosure Regime | 0.933*** | 7.184*** | 5.533*** | 0.452*** | 0.101*** |
| | (13.450) | (23.067) | (19.381) | (3.314) | (5.163) |
| Size | 0.009 | 0.151 | 0.168 | 0.090* | -0.006 |
| | (0.329) | (1.042) | (1.334) | (1.834) | (-0.738) |
| Return On Assets | -0.635 | -12.139 | -12.001 | 3.686 | 0.816 |
| | (-0.606) | (-1.271) | (-1.295) | (1.194) | (1.572) |
| Liquidity Ratio | -1.379** | 2.131 | 1.494 | -0.891 | 0.793*** |
| | (-2.594) | (0.488) | (0.361) | (-0.978) | (3.462) |
| Employment Growth | -1.228 | 2.295 | 0.379 | 5.354*** | 0.833** |
| | (-1.005) | (0.338) | (0.065) | (3.760) | (2.668) |
| EDO Severity | 0.041 | -0.113 | -0.105 | -0.054 | -0.016 |
| | (0.749) | (-0.289) | (-0.286) | (-0.384) | (-1.064) |
| Intercept | 7.150*** | 14.828*** | 11.546*** | 1.488 | 0.505*** |
| | (12.705) | (4.985) | (4.107) | (1.324) | (3.445) |
| | | | | | |
| Observations | 499 | 499 | 499 | 499 | 234 |
| Adjusted R-squared | 0.377 | 0.458 | 0.362 | 0.067 | 0.140 |
| Reg Type | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | No | No | No | No | No |
| Bank FE | No | No | No | No | No |
| Cluster | Year | Year | Year | Year | Year |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All |

Table OA5: News circulation and the likelihood of receiving an enforcement action

This table presents the coefficients from estimating models of the regulators' decision to issue an enforcement action during the period of 1983 to 1997. Column (1) presents the results from estimating a Cox proportional-hazards model, whereas column (2) presents the results from an accelerated-time model. The variable *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise; *News Circulation* is a continuous measure of the county-level newspaper readership. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript; $z$-statistics are presented in parentheses; $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

|  | (1) | (2) |
|---|---|---|
| Disclosure Regime | -9.304*** | 5.991*** |
|  | (-5.476) | (5.708) |
| News Circulation | -2.470 | 2.886 |
|  | (-0.723) | (1.525) |
| Disclosure Regime x News Circulation | 0.418** | -0.271** |
|  | (2.008) | (-2.038) |
| Size | -0.119*** | 0.081*** |
|  | (-4.226) | (4.556) |
| Capital Ratio | -22.485*** | 11.754*** |
|  | (-6.559) | (5.425) |
| Nonperforming Assets | 17.146*** | -7.514*** |
|  | (9.728) | (-6.017) |
| Return On Assets | -21.414*** | 10.012*** |
|  | (-3.669) | (3.233) |
| Liquidity Ratio | -1.490 | 0.961* |
|  | (-1.441) | (1.845) |
| Change in Capital Ratio | -0.422** | 0.432*** |
|  | (-2.410) | (3.246) |
| Change in Liquidity Ratio | 0.071 | -0.059 |
|  | (1.040) | (-1.563) |
| Change in Loans | -0.864*** | 0.368** |
|  | (-3.641) | (2.497) |
| Distance | 0.176*** | -0.103*** |
|  | (6.122) | (-5.290) |
| Employment Growth | 0.891 | -0.684 |
|  | (0.528) | (-1.020) |
| Per Capita Income | -0.743** | 0.313* |
|  | (-2.020) | (1.883) |
| Urbanization | -3.173 | 2.100 |
|  | (-1.185) | (1.439) |
| News Circulation2 | 0.023* | -0.009 |
|  | (1.798) | (-0.710) |
| News Circulation x Urbanization | 2.015 | -2.653 |
|  | (0.568) | (-1.352) |
| Disclosure Regime x Employment Growth | -5.589** | 3.872*** |
|  | (-2.467) | (2.972) |
| Disclosure Regime x Per Capita Income | 1.356*** | -0.712*** |
|  | (3.435) | (-3.530) |
| Disclosure Regime x Urbanization | 6.332*** | -4.344*** |
|  | (4.478) | (-4.791) |
| Disclosure Regime x Capital Ratio | 7.154* | -1.260 |
|  | (1.861) | (-0.473) |
| Disclosure Regime x Nonperforming Assets | 4.435** | -9.455*** |
|  | (2.120) | (-4.606) |
| Disclosure Regime x Return On Assets | -15.938** | 20.077*** |
|  | (-2.357) | (4.126) |
| Disclosure Regime x Liquidity Ratio | -0.717 | 0.374 |
|  | (-0.560) | (0.494) |
| Observations | 685,338 | 685,338 |
| Wald $\chi^2$ | 3138*** | 2808*** |
| Reg Type | Cox Hazard | Weibull AFT |
| Strata | Year | Year |
| Cluster | Bank | Bank |
| Years | 1983–97 | 1983–97 |
| Period | All | All |

Table OA6: News circulation and the likelihood of receiving a non-severe enforcement action

This table presents the coefficients from estimating models of the regulators' decision to issue a non-severe enforcement action during the disclosure regime. Column (1) presents the results from estimating a Cox proportional-hazards model, whereas column (2) presents the results from an accelerated-time model. The variable *News Circulation* is a continuous measure of the county-level newspaper readership; *Severe EDO* is an indicator for whether a bank received a severe enforcement action prior to receiving the non-severe enforcement action. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript; $z$-statistics are presented in parentheses; $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

|  | (1) | (2) |
|---|---|---|
| News Circulation | 0.213 | 0.129 |
|  | (0.053) | (0.030) |
| Severe EDO | 2.690*** | -3.005*** |
|  | (26.905) | (-5.937) |
| Size | -0.050 | 0.015 |
|  | (-1.376) | (0.364) |
| Capital Ratio | -6.942*** | 6.302*** |
|  | (-3.957) | (2.922) |
| Nonperforming Assets | 10.535*** | -11.404*** |
|  | (7.036) | (-4.354) |
| Return On Assets | -25.510*** | 21.269*** |
|  | (-5.220) | (3.287) |
| Liquidity Ratio | 3.173*** | -2.902*** |
|  | (4.159) | (-2.966) |
| Change in Capital Ratio | 2.014*** | -1.899*** |
|  | (9.199) | (-4.841) |
| Change in Liquidity Ratio | 0.032 | -0.019 |
|  | (0.360) | (-0.211) |
| Change in Loans | -0.020 | 0.029 |
|  | (-0.095) | (0.135) |
| Distance | -0.014 | 0.014 |
|  | (-0.471) | (0.436) |
| Employment Growth | 1.400 | -1.507 |
|  | (1.187) | (-1.178) |
| Per Capita Income | 0.231 | -0.189 |
|  | (1.255) | (-0.892) |
| Urbanization | 2.111 | -2.016 |
|  | (0.815) | (-0.727) |
| News Circulation$^2$ | 0.040 | -0.040 |
|  | (1.317) | (-1.110) |
| News Circulation x Urbanization | -0.457 | 0.095 |
|  | (-0.111) | (0.022) |
| Observations | 318,426 | 318,426 |
| Wald $\chi^2$ | 2113*** | 45.06*** |
| Reg Type | Cox Hazard | Weibull AFT |
| Strata | Year | Year |
| Cluster | Bank | Bank |
| Years | 1989–97 | 1989–97 |
| Period | Disclosure Regime | Disclosure Regime |

## Table OA7: Competition from thrifts (thrifts' share of deposits)

This table presents the effect of competition from thrifts on the likelihood of receiving an EDO and EDO content. Panel A presents the coefficients from estimating models of the regulators' decision to issue a severe enforcement action. Columns (1)–(7) present the results from estimating a Cox proportional-hazards model and columns (8)–(9) present the results from an accelerated-time model. Panel B shows the impact on EDO content using OLS estimation. The indicator *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise. *Thrifts' Share of Deposits* is a proportion of deposits held by thrifts in a given county where an EDO bank is headquartered lagged by one quarter. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript. $z$-statistics (Panel A) and and $t$-statistics (Panel B) are presented in parentheses. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

### (Panel A): Likelihood of receiving an EDO, competition from thrifts in deposit market

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---|---|---|---|---|---|---|---|---|---|
| Disclosure Regime | 1.795*** | 2.058*** | 1.128 | 1.416** | 1.757*** | 1.390** | 0.472 | -1.243*** | -1.062*** |
| | (2.774) | (3.121) | (1.644) | (2.067) | (2.693) | (2.131) | (0.636) | (-4.182) | (-3.395) |
| Size | -0.032 | -0.031 | -0.037 | -0.035 | -0.032 | -0.034 | -0.040 | 0.017 | 0.019 |
| | (-1.314) | (-1.251) | (-1.474) | (-1.416) | (-1.290) | (-1.360) | (-1.572) | (1.064) | (1.142) |
| Capital Ratio | -17.106*** | -12.367*** | -16.926*** | -16.892*** | -17.101*** | -17.132*** | -19.863*** | 11.303*** | 11.323*** |
| | (-8.998) | (-4.886) | (-9.009) | (-8.951) | (-8.996) | (-9.001) | (-5.828) | (6.777) | (6.787) |
| Nonperforming Assets | 20.744*** | 20.795*** | 15.929*** | 20.838*** | 20.733*** | 20.724*** | 17.349*** | -15.361*** | -15.300*** |
| | (19.241) | (19.393) | (11.168) | (19.613) | (19.196) | (19.241) | (9.859) | (-11.307) | (-11.304) |
| Return On Assets | -33.196*** | -33.555*** | -33.584*** | -18.781*** | -33.196*** | -33.124*** | -22.701*** | 27.162*** | 27.025*** |
| | (-9.466) | (-9.663) | (-9.699) | (-3.923) | (-9.465) | (-9.429) | (-3.743) | (8.806) | (8.797) |
| Liquidity Ratio | -1.814*** | -1.797*** | -1.993*** | -1.871*** | -2.103* | -1.834*** | -2.208** | 0.943** | 0.945** |
| | (-2.654) | (-2.623) | (-2.894) | (-2.728) | (-1.923) | (-2.684) | (-2.088) | (1.972) | (1.988) |
| Change in Capital Ratio | -0.433** | -0.481*** | -0.465** | -0.466** | -0.435** | -0.431** | -0.452** | 0.659*** | 0.655*** |
| | (-2.363) | (-2.590) | (-2.526) | (-2.536) | (-2.369) | (-2.350) | (-2.448) | (4.148) | (4.134) |
| Change in Liquidity Ratio | 0.110 | 0.108 | 0.113* | 0.107 | 0.112 | 0.110 | 0.113 | -0.056 | -0.058 |
| | (1.611) | (1.581) | (1.646) | (1.560) | (1.633) | (1.610) | (1.636) | (-1.194) | (-1.237) |
| Change in Loans | -0.968*** | -0.961*** | -0.918*** | -0.935*** | -0.966*** | -0.971*** | -0.918*** | 0.531*** | 0.530*** |
| | (-3.807) | (-3.797) | (-3.671) | (-3.724) | (-3.799) | (-3.810) | (-3.660) | (2.894) | (2.891) |
| Distance | 0.114*** | 0.116*** | 0.121*** | 0.117*** | 0.114*** | 0.113*** | 0.119*** | -0.066*** | -0.065*** |
| | (4.084) | (4.121) | (4.286) | (4.159) | (4.080) | (4.025) | (4.188) | (-3.322) | (-3.291) |
| Employment Growth | -3.494*** | -3.431*** | -3.497*** | -3.426*** | -3.495*** | -3.446*** | -3.422*** | 1.599** | 1.604** |
| | (-3.154) | (-3.090) | (-3.114) | (-3.066) | (-3.154) | (-3.101) | (-3.029) | (2.050) | (2.068) |
| Thrifts' Share of Deposits | 0.947*** | 0.941*** | 0.914*** | 0.921*** | 0.946*** | -0.173 | -0.156 | -0.604*** | -0.114 |
| | (4.977) | (4.923) | (4.723) | (4.778) | (4.973) | (-0.398) | (-0.363) | (-4.557) | (-0.363) |
| Capital Ratio x Disclosure Regime | | -5.841** | | | | | 3.639 | | |
| | | (-2.154) | | | | | (0.950) | | |
| Nonperforming Assets x Disclosure Regime | | | 7.498*** | | | | 5.327*** | | |
| | | | (5.038) | | | | (2.578) | | |
| Return on Assets x Disclosure Regime | | | | -22.400*** | | | -16.061** | | |
| | | | | (-4.710) | | | (-2.286) | | |
| Liquidity Ratio x Disclosure Regime | | | | | 0.418 | | 0.273 | | |
| | | | | | (0.314) | | (0.207) | | |
| Thrifts' Share of Deposits x Disclosure Regime | | | | | | 1.369*** | 1.300*** | | -0.572* |
| | | | | | | (2.844) | (2.712) | | (-1.654) |
| Observations | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 | 661,792 |
| Wald $\chi^2$ | 2859*** | 2973*** | 3048*** | 3037*** | 2858*** | 2879*** | 3142*** | 1482*** | 1563*** |
| Reg Type | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Weibull AFT | Weibull AFT |
| Strata | Year | Year | Year | Year | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All | All | All |

## Competition from thrifts, continued

### (Panel B): Changes in the textual content of enforcement actions, competition from thrifts in deposit market

| | Number of Words | Number of Words | Gunning FOG | Gunning FOG | Flesch Grade Level Readability | Flesch Grade Level Readability | Numeric Intensity | Numeric Intensity | Boilerplate | Boilerplate |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Disclosure Regime | 0.686*** | 0.604*** | 6.988*** | 7.542*** | 5.408*** | 6.260*** | 0.828*** | 0.675** | 0.089*** | 0.162*** |
| | (8.602) | (4.577) | (20.522) | (25.338) | (17.047) | (22.424) | (5.383) | (2.495) | (6.051) | (7.895) |
| Size | -0.007 | -0.007 | 0.127 | 0.124 | 0.146 | 0.142 | 0.141** | 0.141** | -0.010 | -0.011 |
| | (-0.240) | (-0.228) | (0.853) | (0.835) | (1.104) | (1.075) | (3.030) | (3.033) | (-1.260) | (-1.329) |
| Return On Assets | -5.224* | -5.164* | -18.625** | -19.027** | -17.755** | -18.373** | 11.137** | 11.248** | 0.720* | 0.616 |
| | (-2.078) | (-1.984) | (-2.459) | (-2.517) | (-2.472) | (-2.635) | (2.252) | (2.269) | (1.902) | (1.695) |
| Liquidity Ratio | -1.256** | -1.245** | 1.101 | 1.031 | 0.645 | 0.536 | -0.448 | -0.429 | 0.490 | 0.480 |
| | (-2.484) | (-2.420) | (0.368) | (0.342) | (0.229) | (0.189) | (-0.261) | (-0.261) | (1.459) | (1.415) |
| Employment Growth | -2.251 | -2.220 | -1.132 | -1.340 | -2.818 | -3.137 | 8.942*** | 9.000*** | 0.401 | 0.338 |
| | (-1.296) | (-1.269) | (-0.163) | (-0.195) | (-0.436) | (-0.495) | (4.484) | (4.483) | (0.783) | (0.681) |
| Thrifts' Share of Deposits | 0.177 | -0.050 | 1.212** | 2.743* | 0.911* | 3.262** | -0.039 | -0.461 | 0.065 | 0.240*** |
| | (0.829) | (-0.163) | (2.663) | (2.165) | (2.031) | (3.058) | (-0.091) | (-1.265) | (1.336) | (6.382) |
| Thrifts' Share of Deposits x Disclosure Regime | | 0.255 | | -1.720 | | -2.643** | | 0.474 | | -0.229*** |
| | | (0.647) | | (-1.262) | | (-2.293) | | (0.749) | | (-4.010) |
| Intercept | 7.535*** | 7.606*** | 14.211*** | 13.737*** | 10.977*** | 10.250*** | 0.581 | 0.712 | 0.460*** | 0.409*** |
| | (25.206) | (23.960) | (8.073) | (8.926) | (6.854) | (7.464) | (1.082) | (1.582) | (3.906) | (4.143) |
| Observations | 592 | 592 | 592 | 592 | 592 | 592 | 592 | 592 | 289 | 289 |
| Adjusted R-squared | 0.106 | 0.104 | 0.397 | 0.397 | 0.307 | 0.307 | 0.070 | 0.068 | 0.080 | 0.089 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | No | No | No | No | No | No | No | No | No | No |
| Bank FE | No | No | No | No | No | No | No | No | No | No |
| Cluster | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All | All | All | All |

Table OA8: Persistence of results related to news circulation and the likelihood of receiving an enforcement action

This table presents the coefficients from estimating models of the regulators' decision to issue an enforcement action during the period of 1983 to 2007. Columns (1) to (3) present the results from estimating a Cox proportional-hazards model, whereas columns (4) and (5) present the results from an accelerated-time model. The variable *Disclosure Regime (Q4 1989–1997)* takes the value of 1 for the quarters after the introduction of FIRREA from Q4 1989 to Q4 1997 and 0 otherwise; *Disclosure Regime (1998–2007)* takes the value of 1 for the years 1998–2007 and 0 otherwise; and *News Circulation* is defined as an indicator variable that equals 1 for banks located in counties in the highest quintile of news circulation and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript; $z$-statistics are presented in parentheses; $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| News Circulation | -0.443* | -1.379 | -1.442 | 2.281 | 2.067 |
| | (-1.947) | (-0.622) | (-0.699) | (1.055) | (1.035) |
| News Circulation x Disclosure Regime (Q4 1989–1997) | 0.646*** | 0.630*** | 0.467* | -0.834*** | -0.679** |
| | (2.660) | (2.612) | (1.817) | (-3.049) | (-2.501) |
| News Circulation x Disclosure Regime (1998–2007) | 0.541** | 0.533** | 0.400 | -0.745*** | -0.616** |
| | (2.148) | (2.127) | (1.527) | (-2.721) | (-2.302) |
| Size | -0.093*** | -0.093*** | -0.104*** | 0.057** | 0.060*** |
| | (-3.826) | (-3.839) | (-4.242) | (2.542) | (2.713) |
| Capital Ratio | -12.518*** | -12.522*** | -12.451*** | 11.236*** | 11.087*** |
| | (-9.021) | (-9.029) | (-8.969) | (7.577) | (7.495) |
| Nonperforming Assets | 22.164*** | 22.157*** | 21.876*** | -25.301*** | -24.872*** |
| | (22.559) | (22.527) | (22.270) | (-12.851) | (-12.738) |
| Return On Assets | -43.779*** | -43.780*** | -43.632*** | 47.024*** | 46.265*** |
| | (-13.363) | (-13.362) | (-13.428) | (12.158) | (11.990) |
| Liquidity Ratio | -2.100*** | -2.101*** | -1.798*** | 2.207*** | 1.944*** |
| | (-3.412) | (-3.415) | (-2.937) | (3.634) | (3.240) |
| Change in Capital Ratio | -0.419*** | -0.419*** | -0.463*** | 0.908*** | 0.929*** |
| | (-2.644) | (-2.642) | (-2.891) | (4.873) | (5.022) |
| Change in Liquidity Ratio | 0.158*** | 0.158*** | 0.141** | -0.163*** | -0.158*** |
| | (2.861) | (2.857) | (2.563) | (-3.187) | (-3.138) |
| Change in Loans | -1.097*** | -1.098*** | -1.100*** | 0.753*** | 0.753*** |
| | (-5.470) | (-5.470) | (-5.475) | (3.869) | (3.886) |
| Distance | 0.142*** | 0.141*** | 0.148*** | -0.127*** | -0.128*** |
| | (5.835) | (5.824) | (6.080) | (-5.325) | (-5.446) |
| Employment Growth | -1.889** | -1.880** | 2.223 | 1.010 | -2.565 |
| | (-2.088) | (-2.076) | (1.323) | (1.243) | (-1.533) |
| Per Capita Income | 0.349*** | 0.340*** | -0.708* | -0.310*** | 1.016*** |
| | (2.720) | (2.625) | (-1.921) | (-2.655) | (2.624) |
| Urbanization | 2.337*** | 2.302*** | -1.474 | -3.061*** | 0.333 |
| | (4.083) | (3.981) | (-1.415) | (-5.543) | (0.276) |
| News Circulation x Urbanization | | 0.967 | 1.123 | -1.656 | -1.542 |
| | | (0.430) | (0.521) | (-0.759) | (-0.743) |
| Disclosure Regime (Q4 1989–1997) x Employment Growth | | | -6.310*** | | 6.424*** |
| | | | (-2.780) | | (2.773) |
| Disclosure Regime (1998–2007) x Employment Growth | | | -4.205* | | 3.225 |
| | | | (-1.916) | | (1.623) |
| Disclosure Regime (Q4 1989–1997) x Per Capita Income | | | 1.143*** | | -1.329*** |
| | | | (2.892) | | (-3.190) |
| Disclosure Regime (1998–2007) x Per Capita Income | | | 1.206*** | | -1.513*** |
| | | | (2.838) | | (-3.621) |
| Disclosure Regime (Q4 1989–1997) x Urbanization | | | 5.608*** | | -5.353*** |
| | | | (4.041) | | (-3.346) |
| Disclosure Regime (1998–2007) x Urbanization | | | 4.877*** | | -3.292** |
| | | | (3.580) | | (-2.376) |
| Observations | 961,035 | 961,035 | 961,035 | 961,035 | 961,035 |
| Wald $\chi^2$ | 3025*** | 3024*** | 3109*** | 1527*** | 1643*** |
| Reg Type | Cox Hazard | Cox Hazard | Cox Hazard | Weibull AFT | Weibull AFT |
| Strata | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–07 | 1983–07 | 1983–07 | 1983–07 | 1983–07 |
| Period | All | All | All | All | All |

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Table OA9: Likelihood of receiving an enforcement action during a crisis

This table presents the coefficients from estimating models of the regulators' decision to issue an enforcement action during the period of 1983 to 1997. Columns (1)–(5) present the results from the estimation of a Cox proportional-hazards model, while column (6) presents the results from the estimation of an accelerated-time model. *S&L Crisis Resolution* equals 1 for the quarters in Q4 1989–Q4 1992 and 0 otherwise. *Post S&L Crisis* equals 1 for the quarters Q1 1993–Q4 1997 and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript. $z$-statistics are presented in parentheses. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| S&L Crisis Resolution | 3.121*** | 2.018*** | 1.475** | 1.615** | 1.831*** | -4.256*** |
| | (21.535) | (3.123) | (2.229) | (2.417) | (2.856) | (-12.913) |
| Post S&L Crisis | 3.415*** | | | | | -3.673*** |
| | (18.664) | | | | | (-10.227) |
| Size | -0.027 | -0.029 | -0.030 | -0.032 | -0.030 | 0.015 |
| | (-1.122) | (-1.207) | (-1.245) | (-1.293) | (-1.246) | (0.427) |
| Capital Ratio | -16.897*** | -12.053*** | -17.570*** | -16.994*** | -17.151*** | 26.508*** |
| | (-9.074) | (-4.881) | (-9.413) | (-9.200) | (-9.274) | (8.660) |
| Nonperforming Assets | 19.961*** | 20.778*** | 15.883*** | 20.699*** | 20.640*** | -28.045*** |
| | (19.084) | (19.654) | (11.188) | (19.848) | (19.399) | (-12.298) |
| Return On Assets | -33.564*** | -34.576*** | -34.522*** | -19.042*** | -34.101*** | 34.803*** |
| | (-10.064) | (-10.252) | (-10.269) | (-4.083) | (-10.004) | (7.483) |
| Liquidity Ratio | -1.763*** | -1.736*** | -2.066*** | -1.819*** | -2.174** | 2.869*** |
| | (-2.732) | (-2.605) | (-3.067) | (-2.741) | (-2.003) | (2.917) |
| Change in Capital Ratio | -0.396** | -0.465*** | -0.486*** | -0.488*** | -0.399** | 0.443* |
| | (-2.244) | (-2.588) | (-2.697) | (-2.709) | (-2.261) | (1.679) |
| Change in Liquidity Ratio | 0.087 | 0.076 | 0.085 | 0.072 | 0.084 | -0.125 |
| | (1.299) | (1.111) | (1.226) | (1.037) | (1.235) | (-1.238) |
| Change in Loans | -0.974*** | -0.937*** | -0.840*** | -0.852*** | -0.928*** | 1.859*** |
| | (-3.907) | (-3.818) | (-3.581) | (-3.624) | (-3.774) | (4.230) |
| Distance | 0.134*** | 0.134*** | 0.135*** | 0.133*** | 0.132*** | -0.193*** |
| | (4.746) | (4.768) | (4.862) | (4.795) | (4.726) | (-4.193) |
| Employment Growth | -4.033*** | -3.008*** | -3.014*** | -2.808** | -3.050*** | 6.699*** |
| | (-3.949) | (-2.758) | (-2.719) | (-2.543) | (-2.798) | (4.280) |
| Capital Ratio x S&L Crisis Resolution | | -5.033* | | | | |
| | | (-1.861) | | | | |
| Capital Ratio x Post S&L Crisis | | -10.014* | | | | |
| | | (-1.851) | | | | |
| Nonperforming Assets x S&L Crisis Resolution | | | 3.799** | | | |
| | | | (2.496) | | | |
| Nonperforming Assets x Post S&L Crisis | | | 23.065*** | | | |
| | | | (10.160) | | | |
| Return On Assets x S&L Crisis Resolution | | | | -13.386*** | | |
| | | | | (-2.842) | | |
| Return On Assets x Post S&L Crisis | | | | -81.115*** | | |
| | | | | (-9.740) | | |
| Liquidity Ratio x S&L Crisis Resolution | | | | | -0.370 | |
| | | | | | (-0.266) | |
| Liquidity Ratio x Post S&L Crisis | | | | | 4.033** | |
| | | | | | (2.319) | |
| Observations | 685,346 | 685,346 | 685,346 | 685,346 | 685,346 | 685,346 |
| Wald $\chi^2$ | 3227 | 3000 | 3304 | 3246 | 2841 | 458 |
| Reg Type | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Cox Hazard | Weibull AFT |
| Strata | None | Year | Year | Year | Year | None |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983-97 | 1983-97 | 1983-97 | 1983-97 | 1983-97 | 1983-97 |
| Period | All | All | All | All | All | All |

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Table OA10: Changes in the textual content of enforcement actions during a crisis (EDO banks only)

This table presents the change in the content of enforcement orders using an OLS model. Column (5) has fewer observations due to its focus on severe enforcement actions issued by FDIC. The variable *Crisis* takes the value of 1 for the quarters during the financial crisis in Q4 2007–Q2 2009 and 0 otherwise; *Post Crisis* is an indicator variable that equals 1 in Q3 2009–2017 and 0 otherwise. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript; *t*-statistics are presented in parentheses; $*p < 0.1$; $**p < 0.05$; $***p < 0.01$ (two-tailed).

| | Number of Words | Gunning FOG | Flesch Grade Level Readability | Numeric Intensity | Boilerplate |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Crisis | 0.619*** | -0.617** | -0.679** | -0.641 | -0.086*** |
| | (3.165) | (-2.792) | (-2.994) | (-0.877) | (-3.297) |
| Post Crisis | 0.440* | -0.904*** | -0.874*** | -1.800 | -0.089** |
| | (2.076) | (-3.749) | (-3.763) | (-1.341) | (-3.021) |
| Size | -0.042* | 0.216*** | 0.252*** | 0.085 | 0.005** |
| | (-2.002) | (3.256) | (3.485) | (0.815) | (2.565) |
| Return On Assets | -1.087 | 2.991 | 3.350 | 27.916 | -0.019 |
| | (-0.419) | (1.252) | (1.582) | (0.798) | (-0.045) |
| Liquidity Ratio | -1.208** | -3.245* | -3.350* | 60.833 | 0.138* |
| | (-2.861) | (-1.949) | (-2.169) | (0.978) | (1.856) |
| Employment Growth | -0.431 | 8.812** | 8.814* | -1.832 | 0.204 |
| | (-0.460) | (2.213) | (2.176) | (-0.190) | (0.755) |
| Intercept | 8.174*** | 21.805*** | 16.735*** | -1.712 | 0.106** |
| | (25.576) | (32.264) | (22.679) | (-0.435) | (2.936) |
| | | | | | |
| Observations | 1,222 | 1,222 | 1,222 | 1,222 | 1,136 |
| Adjusted R-squared | 0.043 | 0.034 | 0.039 | 0.038 | 0.053 |
| Reg Type | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | No | No | No | No | No |
| Bank FE | No | No | No | No | No |
| Cluster | Year | Year | Year | Year | Year |
| Years | 2003–17 | 2003–17 | 2003–17 | 2003–17 | 2003–17 |
| Period | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime |

Table OA11: Disclosure and bank failure (competition from thrifts)

This table presents the coefficients from estimating hazard models of bank failure. Columns (1), (3), (5), and (7) of Panel A and Panel B present the results from the estimation of a Cox proportional-hazards model, while columns (2), (4), (6), and (8) present the results from estimating an accelerated-time model. The variable *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989 and 0 otherwise; *Thrifts' Share of Risky Lending* (*Thrifts' Share of Deposits*) is a proportion of risky loans (deposits) held by thrifts in a given county where an EDO bank is headquartered lagged by 1, 2, 3, or 4 quarters. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. All variables are lagged by one quarter and defined in Appendix C of the manuscript; *z*-statistics are presented in parentheses; $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

(Panel A): Likelihood of failure, competition from thrifts in risky lending

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| Disclosure Regime | 0.181 | -0.327* | 0.183 | -0.328* | 0.191 | -0.332* | 0.186 | -0.325* |
| | (0.705) | (-1.748) | (0.710) | (-1.759) | (0.741) | (-1.779) | (0.724) | (-1.747) |
| Treatment | -1.448*** | 1.465*** | -1.449*** | 1.465*** | -1.448*** | 1.463*** | -1.448*** | 1.463*** |
| | (-6.833) | (5.039) | (-6.842) | (5.049) | (-6.840) | (5.052) | (-6.839) | (5.048) |
| Treatment x Disclosure Regime | 1.403*** | -1.356*** | 1.398*** | -1.347*** | 1.393*** | -1.341*** | 1.397*** | -1.351*** |
| | (6.088) | (-4.651) | (6.069) | (-4.641) | (6.052) | (-4.631) | (6.071) | (-4.656) |
| Size | -0.223*** | 0.220*** | -0.223*** | 0.220*** | -0.224*** | 0.221*** | -0.224*** | 0.221*** |
| | (-8.578) | (6.468) | (-8.596) | (6.497) | (-8.627) | (6.516) | (-8.630) | (6.502) |
| Capital Ratio | -78.761*** | 81.274*** | -78.779*** | 81.101*** | -78.827*** | 81.045*** | -78.767*** | 81.080*** |
| | (-29.858) | (8.462) | (-29.939) | (8.487) | (-29.944) | (8.505) | (-29.937) | (8.491) |
| Nonperforming Assets | 13.827*** | -14.361*** | 13.799*** | -14.317*** | 13.803*** | -14.300*** | 13.775*** | -14.281*** |
| | (17.418) | (-7.695) | (17.400) | (-7.719) | (17.402) | (-7.736) | (17.376) | (-7.717) |
| Return On Assets | -22.658*** | 20.443*** | -22.777*** | 20.455*** | -22.769*** | 20.430*** | -22.819*** | 20.437*** |
| | (-10.001) | (6.293) | (-10.061) | (6.321) | (-10.061) | (6.328) | (-10.084) | (6.324) |
| Liquidity Ratio | -3.400*** | 3.847*** | -3.400*** | 3.851*** | -3.390*** | 3.830*** | -3.377*** | 3.810*** |
| | (-5.321) | (4.905) | (-5.320) | (4.928) | (-5.313) | (4.925) | (-5.303) | (4.905) |
| Interest on Risky Lending | 0.161*** | 8.455*** | 0.162*** | 8.571*** | 0.162*** | 8.498*** | 0.162*** | 8.428*** |
| | (13.470) | (3.844) | (13.526) | (3.899) | (13.535) | (3.882) | (13.517) | (3.853) |
| Commercial and Industrial Loans | 0.209*** | -0.149*** | 0.207*** | -0.148*** | 0.207*** | -0.148*** | 0.208*** | -0.148*** |
| | (4.673) | (-4.755) | (4.583) | (-4.762) | (4.543) | (-4.761) | (4.598) | (-4.765) |
| Real Estate Loans | -0.607*** | 0.394** | -0.605*** | 0.395** | -0.605*** | 0.391** | -0.603*** | 0.388** |
| | (-3.572) | (2.471) | (-3.566) | (2.484) | (-3.571) | (2.472) | (-3.557) | (2.445) |
| Employment Growth | -2.496*** | 3.489*** | -2.494*** | 3.456*** | -2.469*** | 3.430*** | -2.466*** | 3.456*** |
| | (-2.866) | (3.708) | (-2.868) | (3.691) | (-2.839) | (3.678) | (-2.834) | (3.699) |
| Thrifts' Share of Risky Lending | 0.095 | -0.105 | | | | | | |
| | (0.529) | (-0.609) | | | | | | |
| Thrifts' Share of Risky Lending$_{(t-2)}$ | | | 0.112 | -0.156 | | | | |
| | | | (0.630) | (-0.908) | | | | |
| Thrifts' Share of Risky Lending$_{(t-3)}$ | | | | | 0.105 | -0.133 | | |
| | | | | | (0.586) | (-0.780) | | |
| Thrifts' Share of Risky Lending$_{(t-4)}$ | | | | | | | 0.069 | -0.115 |
| | | | | | | | (0.384) | (-0.670) |
| Observations | 629,935 | 629,935 | 630,431 | 630,431 | 630,913 | 630,913 | 631,390 | 631,390 |
| Wald $\chi^2$ | 4828*** | 369.1*** | 4812*** | 370*** | 4806*** | 370.6*** | 4824*** | 371.9*** |
| Reg Type | Cox Hazard | Weibull AFT | Cox Hazard | Weibull AFT | Cox Hazard | Weibull AFT | Cox Hazard | Weibull AFT |
| Strata | Year | Year | Year | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All | All |

# Disclosure and bank failure, continued

## (Panel B): Likelihood of failure, competition from thrifts in deposit market

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| Disclosure Regime | 0.182 | -0.328* | 0.183 | -0.329* | 0.191 | -0.334* | 0.187 | -0.329* |
| | (0.707) | (-1.753) | (0.713) | (-1.762) | (0.742) | (-1.789) | (0.730) | (-1.765) |
| Treatment | -1.449*** | 1.470*** | -1.451*** | 1.470*** | -1.450*** | 1.468*** | -1.449*** | 1.467*** |
| | (-6.841) | (5.043) | (-6.849) | (5.052) | (-6.847) | (5.057) | (-6.846) | (5.053) |
| Treatment x Disclosure Regime | 1.401*** | -1.351*** | 1.397*** | -1.344*** | 1.392*** | -1.337*** | 1.396*** | -1.347*** |
| | (6.079) | (-4.630) | (6.065) | (-4.625) | (6.047) | (-4.614) | (6.064) | (-4.638) |
| Size | -0.222*** | 0.221*** | -0.223*** | 0.221*** | -0.224*** | 0.221*** | -0.224*** | 0.221*** |
| | (-8.555) | (6.487) | (-8.589) | (6.507) | (-8.612) | (6.526) | (-8.598) | (6.507) |
| Capital Ratio | -78.771*** | 81.461*** | -78.790*** | 81.295*** | -78.837*** | 81.216*** | -78.776*** | 81.215*** |
| | (-29.852) | (8.453) | (-29.933) | (8.474) | (-29.940) | (8.494) | (-29.932) | (8.482) |
| Nonperforming Assets | 13.828*** | -14.395*** | 13.802*** | -14.350*** | 13.805*** | -14.331*** | 13.776*** | -14.305*** |
| | (17.413) | (-7.685) | (17.400) | (-7.705) | (17.399) | (-7.724) | (17.370) | (-7.706) |
| Return On Assets | -22.675*** | 20.422*** | -22.779*** | 20.435*** | -22.776*** | 20.402*** | -22.829*** | 20.397*** |
| | (-10.010) | (6.283) | (-10.061) | (6.308) | (-10.064) | (6.316) | (-10.089) | (6.310) |
| Liquidity Ratio | -3.401*** | 3.876*** | -3.395*** | 3.869*** | -3.386*** | 3.851*** | -3.379*** | 3.830*** |
| | (-5.326) | (4.912) | (-5.321) | (4.931) | (-5.315) | (4.931) | (-5.306) | (4.911) |
| Interest on Deposits | 0.162*** | 8.384*** | 0.162*** | 8.553*** | 0.162*** | 8.462*** | 0.162*** | 8.370*** |
| | (13.506) | (3.807) | (13.533) | (3.885) | (13.551) | (3.861) | (13.547) | (3.824) |
| Commercial and Industrial Loans | 0.208*** | -0.149*** | 0.207*** | -0.148*** | 0.206*** | -0.148*** | 0.207*** | -0.148*** |
| | (4.635) | (-4.789) | (4.555) | (-4.782) | (4.507) | (-4.782) | (4.559) | (-4.789) |
| Real Estate Loans | -0.609*** | 0.401** | -0.607*** | 0.402** | -0.608*** | 0.399** | -0.605*** | 0.395** |
| | (-3.587) | (2.521) | (-3.582) | (2.525) | (-3.588) | (2.518) | (-3.568) | (2.490) |
| Employment Growth | -2.466*** | 3.435*** | -2.464*** | 3.410*** | -2.439*** | 3.382*** | -2.444*** | 3.410*** |
| | (-2.837) | (3.651) | (-2.840) | (3.636) | (-2.812) | (3.624) | (-2.817) | (3.648) |
| Thrifts' Share of Deposits | 0.178 | -0.272 | | | | | | |
| | (0.873) | (-1.543) | | | | | | |
| Thrifts' Share of Deposits$_{(t-2)}$ | | | 0.148 | -0.253 | | | | |
| | | | (0.726) | (-1.440) | | | | |
| Thrifts' Share of Deposits$_{(t-3)}$ | | | | | 0.155 | -0.257 | | |
| | | | | | (0.756) | (-1.460) | | |
| Thrifts' Share of Deposits$_{(t-4)}$ | | | | | | | 0.154 | -0.258 |
| | | | | | | | (0.751) | (-1.432) |
| Observations | 629,935 | 629,935 | 630,431 | 630,431 | 630,913 | 630,913 | 631,390 | 631,390 |
| Wald $\chi^2$ | 4847*** | 366.5*** | 4829*** | 368.7*** | 4824*** | 369.1*** | 4842*** | 370.4*** |
| Reg Type | Cox Hazard | Weibull AFT | Cox Hazard | Weibull AFT | Cox Hazard | Weibull AFT | Cox Hazard | Weibull AFT |
| Strata | Year | Year | Year | Year | Year | Year | Year | Year |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All | All |

## Table OA12: Disclosure regime and bank outcomes (matched sample)

This table presents changes in bank outcomes for the full sample of banks that received an EDO (*Treatment*) and those that did not (matched control banks). The variable *Post EDO* takes the value of 1 for twelve quarters after the EDO was received for treatment banks and for the same quarters for matched banks, and 0 for the twelve quarters prior; *Disclosure Regime* takes the value of 1 for the quarters after the introduction of FIRREA in Q3 1989. Panel A shows the covariate balance for treatment (EDO banks) and control (non-EDO banks) using a two-step matching procedure: entropy balance using four quarters prior to the receipt of an EDO for treatment banks followed by the propensity score matching (nearest neighbor). Panel B presents the results of the estimation using the matched control sample for deposits in the disclosure regime only. It also presents the $\chi^2$ statistic for the significance of the difference of the coefficient on the interaction term between insured and uninsured deposits using seemingly unrelated regressions method. Panel C presents the results of the estimation using the matched control sample for the whole sample. Bank-level control variables are lagged by one quarter. To mitigate the effects of extreme observations, all continuous variables are winsorized at the 1% and 99% tails of their respective distributions in each sample year. The full sample period is 1983–1997. All variables are defined in Appendix C of the manuscript; $t$-statistics are presented in parentheses; $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed).

### (Panel A): Entropy-matched covariate balance

| | | Before Disclosure Regime (Entropy Matched) | | | | | | After Disclosure Regime (Entropy Matched) | | | | | |
| | | EDO Banks | | Non-EDO banks | | | | | EDO Banks | | Non-EDO banks | | | |
| Variable | N | Mean | Sd | Mean | Sd | Difference | (t-statistic) | N | Mean | Sd | Mean | Sd | Difference | (t-statistic) |
| | | (1) | | (2) | | (1) - (2) | | | (3) | | (4) | | (3) - (4) | |
| Size | 1,049 | 10.2800 | 1.0035 | 10.2700 | 1.0035 | 0.010 | (0.228) | 3,564 | 11.1200 | 1.2418 | 11.1200 | 1.2418 | 0.0000 | (0.000) |
| Return On Assets | 1,049 | -0.0050 | 0.0136 | -0.0050 | 0.0136 | 0.0000 | (0.003) | 3,564 | -0.0025 | 0.0108 | -0.0025 | 0.0108 | 0.0000 | (0.043) |
| Capital Ratio | 1,049 | 0.0673 | 0.0227 | 0.0674 | 0.0229 | -0.0001 | (-0.081) | 3,564 | 0.0736 | 0.0329 | 0.0737 | 0.0330 | 0.0000 | (-0.026) |
| Liquidity Ratio | 1,049 | 0.0795 | 0.0434 | 0.0795 | 0.0434 | 0.0000 | (-0.005) | 3,564 | 0.0674 | 0.0422 | 0.0674 | 0.0422 | 0.0000 | (-0.010) |

Disclosure regime and bank outcomes (matched sample), continued

(Panel B): Disclosure regime and deposits (entropy and propensity score matched sample, disclosure regime)

| | Total Deposits | Insured Deposits | Uninsured Deposits | Total Deposits | Insured Deposits | Uninsured Deposits |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Post EDO | 0.070*** | 0.056*** | 0.112*** | 0.006 | -0.005 | 0.030* |
| | (4.793) | (3.056) | (5.093) | (0.719) | (-0.280) | (1.777) |
| Treatment x Post EDO | -0.180*** | -0.139*** | -0.327*** | -0.026** | 0.006 | -0.132*** |
| | (-8.744) | (-5.913) | (-10.903) | (-1.963) | (0.200) | (-5.752) |
| Size | | | | 0.854*** | 0.799*** | 1.039*** |
| | | | | (16.621) | (8.387) | (26.615) |
| Return On Assets | | | | 0.294 | -0.444 | 1.500*** |
| | | | | (1.215) | (-1.076) | (2.973) |
| Liquidity Ratio | | | | -0.015 | -0.166 | 0.159 |
| | | | | (-0.170) | (-0.813) | (0.894) |
| Employment Growth | | | | 0.020 | -0.041 | 0.103 |
| | | | | (0.425) | (-0.554) | (0.427) |
| Test of difference of coefficients on Treatment x Post EDO ($\chi^2$) | | 76.88*** | | | 52.94*** | |
| Observations | 24,799 | 24,798 | 24,644 | 24,672 | 24,671 | 24,519 |
| Adjusted R-squared | 0.974 | 0.967 | 0.949 | 0.992 | 0.986 | 0.964 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 | 1991–97 |
| Period | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime | Disclosure Regime |

Disclosure regime and bank outcomes (matched sample), continued

(Panel C): Disclosure regime and bank outcomes (entropy and propensity score matched sample)

| | Loans | Total Deposits | Capital Ratio | Nonperforming Assets | Loans | Total Deposits | Capital Ratio | Nonperforming Assets |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Treatment x Post EDO | -0.047*** | -0.184*** | -0.011*** | 0.013*** | -0.035*** | -0.006 | -0.014*** | 0.009*** |
| | (-6.311) | (-9.489) | (-6.056) | (3.779) | (-4.941) | (-1.280) | (-7.771) | (2.885) |
| Treatment x Disclosure Regime | -0.002 | -0.020 | -0.012*** | 0.008*** | -0.002 | -0.005 | -0.011*** | 0.005*** |
| | (-0.345) | (-1.174) | (-7.411) | (4.567) | (-0.331) | (-0.849) | (-8.385) | (3.230) |
| Post EDO x Disclosure Regime | 0.008 | -0.020 | -0.001 | -0.001 | 0.009 | 0.003 | -0.002 | -0.002 |
| | (1.146) | (-1.040) | (-0.960) | (-0.620) | (1.492) | (0.758) | (-1.467) | (-0.970) |
| Treatment x Post EDO x Disclosure Regime | -0.017** | 0.005 | 0.012*** | -0.009** | -0.018** | -0.009* | 0.010*** | -0.005 |
| | (-2.000) | (0.222) | (5.830) | (-2.491) | (-2.254) | (-1.758) | (5.187) | (-1.446) |
| Size | | | | | 0.039*** | 0.910*** | -0.028*** | 0.005*** |
| | | | | | (5.534) | (50.247) | (-11.854) | (3.499) |
| Return On Assets | | | | | 0.263*** | 0.197 | 0.410*** | -0.852*** |
| | | | | | (3.401) | (1.513) | (16.092) | (-27.035) |
| Liquidity Ratio | | | | | -0.296*** | -0.087** | 0.009 | -0.004 |
| | | | | | (-9.593) | (-2.534) | (1.072) | (-0.559) |
| Employment Growth | | | | | -0.071*** | 0.079*** | -0.004 | -0.090*** |
| | | | | | (-3.224) | (3.264) | (-0.821) | (-8.946) |
| Observations | 47,548 | 47,543 | 47,548 | 47,530 | 47,268 | 47,264 | 47,268 | 47,253 |
| Adjusted R-squared | 0.807 | 0.973 | 0.775 | 0.576 | 0.827 | 0.995 | 0.823 | 0.616 |
| Reg Type | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |
| Year-Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster | Bank | Bank | Bank | Bank | Bank | Bank | Bank | Bank |
| Years | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 | 1983–97 |
| Period | All | All | All | All | All | All | All | All |

# 2   Anecdotal evidence: Examples of banks suing regulators

In this section, we provide examples of banks suing regulators. These examples provide anecdotal evidence in support of our argument that regulators' behavior could also be influenced by the threat of lawsuits by banks. The public disclosure of enforcement actions imposes greater costs on banks as depositors withdraw their funds in response. Therefore, regulators might include more legal and boilerplate language in post-FIRREA enforcement orders to prevent lawsuits or challenges by banks.

> MCorp, the Texas bank holding company stripped of 20 of its 25 banks by federal regulators, filed suit Friday against the government agencies on grounds that 10 to 14 of the banks seized were not insolvent. The lawsuit, filed against the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corp., added another twist to the already complicated case that may not be resolved for months and could cost the government more than \$2 billion. —"**MCorp Sues Bank Regulators,**" *Los Angeles Times*, **April 01, 1989.**

> A former chairman of Madison National Bank of Washington yesterday filed suit against federal regulators, alleging that they unlawfully shut down the bank in 1991. "I want to restore the reputation of the bank and the directors and the officers and the employees," Norman F. Hecht Sr. said in an interview. . . . Hecht's suit argues that federal regulators unnecessarily caused Madison to fail by requiring the bank to set aside excessive amounts of cash as reserves against bad loans. It seeks return of not only the banks' assets but also their charters. . . . Ellen Stockdale, a spokeswoman for the OCC, said, "The only comment we have is we think this does not have any merit." —"**Former Madison Bank Chief Sues Regulators,**" *The Washington Post*, **April 17, 1993.**

> Bank United of Texas filed suit against the FDIC, the FSLIC Resolution Fund, the RTC, the Thrift Depositor Protection Oversight Board and the director of the OTS, accusing them of breaching promises connected with the bank's 1988 acquisition of the insolvent United Savings Association of Texas. . . . The lawsuit includes 20 specific complaints against regulators, including allegations that the government reneged on promised tax benefits and changed other contracts that were part of the 1988 deal. —"**Bank United of Texas: Bank sues U.S. regulators over acquisition of thrift,**" *The Wall Street Journal*, **August 04, 1993.**

> Bank United of Texas has filed a lawsuit against federal bank regulators claiming the agencies trampled on their rights in an acquisition pact. The 98-page complaint details 20 complicated issues, such as the secretary of the Treasury's decision not to allow tax benefits that the Federal Savings and Loan Insurance

Corp. had promised at the time investors took over. "No tactic has seemed beyond the pale," including "take-it-or-sue ultimatums, threats of retaliation, unfounded accusations of improper conduct," the lawsuit said. —**"Bank United sues regulators," *Austin American Statesman*, August 05, 1993.**

Gerald J. Garner, ousted chairman of failed American Commerce National Bank has sued federal regulators in an effort to recover his Anaheim bank and win $75 million in damages.... The banker filed a three-page, bare-bones lawsuit last month to meet a statutory deadline. The suit, which has been expected since regulators closed the bank on April 30, now alleges that the regulators wrongly took over a healthy bank, depriving shareholders and customers of their property without due process. –**"Ousted Chairman of Failed Bank Sues Regulators," *Los Angeles Times*, November 18, 1993.**

A group of Meritor Savings Bank stockholders yesterday sued federal and state bank regulators in an effort to have the 1992 takeover of the former Philadelphia Savings Fund Society's parent company declared invalid. The stockholders, who include Philadelphia businessmen Samuel Rappaport and Raymond Perelman, argue that the Dec 11, 1992, seizure violated their constitutional rights and agreements that the regulators had made as far back as 1982. —**"Meritor Bank Stockholders Sue Regulators," *Philadelphia Inquirer*, April 15, 1994.**

The Bank of New York says Massachusetts state regulators violated federal laws when they rejected the bank's bid to boost its investment in Boston-based State Street Bank Corp., a competitor in the corporate trust industry ... the New York bank said only the Federal Reserve Board has the authority to make those decisions, and that its petition before state regulators was merely a formality. —**"BONY Sues Massachusetts, Charging Federal Violations," *The Bond Buyer*, April 17, 1997.**

Almost 350 banks have failed since the financial crisis erupted. Now one of them, United Western Bancorp. (UWBK), is believed to be the first among them to sue its regulator, claiming it could have survived. The Denver bank-holding company wants its bank back. It filed a lawsuit against the Office of Thrift Supervision, the primary regulator of its main subsidiary United Western Bank, which was seized by the OTS on Jan. 21, and the Federal Deposit Insurance Corp., which sold the bank to Citizens BancShares (FCNCA) of Raleigh, N.C. In the suit filed Friday afternoon in federal court in Washington, D.C., the company claimed its bank was "economically viable" and the seizure was "arbitrary and capricious." It demanded that the court force the OTS to remove the FDIC as receiver of United Western Bank. —**"Former Owner Of Failed United Western Bank Sues Regulators," *Dow Jones Institutional News*, February 18, 2011.**

A failed Kansas bank is suing state regulators alleging that they had insufficient grounds to close it. Columbian Bank & Trust Co. was adequately capitalized,

profitable and liquid when regulators seized it on Aug. 22, 2008, according to a lawsuit filed by the bank and its holding company, Columbian Financial Corp. The Office of the State Bank Commissioner of Kansas "seized the bank based on speculative projections of future illiquidity and thereby deprived Columbian Financial Corp., the bank's sole shareholder, of millions of dollars in equity," according to the lawsuit filed April 10 in a Kansas City U.S. district court. — **"Failed Kansas Bank Sues Regulators, Claiming Closure Was Unjust," *American Banker*, April 24, 2014.**

# 3 Accelerated time models

Accelerated time models are parametric models where instead of assuming a distribution for the survival time $t_j$, it is assumed for $\tau_j$ where

$$\tau_j = exp(-x_j\beta_x)t_j \ . \tag{1}$$

The factor $exp(-x_j\beta_x)$ is called the acceleration parameter. If $exp(-x_j\beta_x) = 1$, then $\tau_j = t_j$ and time passes at its normal rate. However, if $exp(-x_j\beta_x) > 1$ then $\tau_j > t_j$ and time passes more quickly for $j$, i.e., the event is expected to occur sooner. Similarly, if $exp(-x_j\beta_x) < 1$ then time is decelerated and the event is expected to occur later.

From Equation 1 it follows that

$$
\begin{aligned}
t_j &= \frac{\tau_j}{exp(-xj\beta_x)} \\
&\implies t_j = \tau_j exp(x_j\beta_x) \\
&\implies log(t_j) = x_j\beta_x + log(\tau_j) \ .
\end{aligned}
\tag{2}
$$

We estimate the above log-linear specification using the maximum likelihood principle. Our estimation of Equation 2 includes both EDO and non-EDO observations. The non-EDO observations are censored observations because the event (EDO) does not occur for these banks during the study period, i.e., these banks have unknown event times. For each interval (quarter), we know the probability of event occurrence as well as nonoccurence. Therefore, the estimated survival probability in quarter $q$ is the estimated survival probability in the previous quarter multiplied by the probability of event occurrence:

$$\hat{S}(t_q) = \hat{S}(t_{q-1})[1 - \hat{h}(t_q)] \ , \tag{3}$$

where $\hat{S}$ is the estimated survival function and $\hat{h}$ is the estimated hazard probability.

For more details, please see Anbil (2018); Cleves et al. (2008); Singer & Willett (2003).

# 4 Text comparison of a random sample of C&D orders

In this section, we present a comparison of the text of a randomly selected sample (by year) of cease and desist enforcement orders. We classify these enforcement orders into broad topics based on their content. *Percent overlap* is the number of orders that contain the specified topic as a percent of the total number of orders. For example, there is a 60% overlap across banks in management-related issues—that is, of the ten C&D orders in the sample, six raised issues related to bank management. Overall, the overlap is 60% for all topics, indicating a significant amount of homogeneity in the broad topics covered in C&D orders.

| | Random bank 1 (Non-disclosure regime) | Random bank 2 (Non-disclosure regime) | State Bank & Trust Company | Eastland Savings Bank | Key Bank of Florida | Bay Bank of Commerce | Bank of Coffey | Kent Bank | Citizens State Bank | Hampton Bank | Total | Percent overlap (Both Regimes) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Management** | **0** | **1** | **0** | **1** | **1** | **1** | **0** | **1** | **0** | **1** | **6** | **60%** |
| Management—Qualifications Specified; Review | | | | 1 | 1 | 1 | | 1 | | 1 | | |
| Management—Management Plan—Minimum Requirements | | 1 | | 1 | | 1 | | 1 | | | | |
| **Governance** | **1** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **6** | **60%** |
| Board of Directors—Election—Outside Directors Added | | | | 1 | | | | 1 | | | | |
| Board of Directors—Meetings—Frequency | | | | 1 | | | | | | | | |
| Board of Directors—Committee to Review Compliance with Cease and Desist Order | | | | | | | | 1 | | | | |
| Compensation—Directors—Restricted | | | | | | 1 | | | | | | |
| Internal Audit Procedures—Written/Develop | 1 | 1 | | | | | | | | 1 | | |
| **Shareholders** | **0** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **9** | **90%** |
| Dividends—Restricted | | 1 | | 1 | 1 | 1 | | | 1 | 1 | | |
| Shareholders—Disclosure—Cease and Desist Order | | | 1 | 1 | 1 | | | 1 | 1 | 1 | | |

| | Random bank 1 (Non-disclosure regime) | Random bank 2 (Non-disclosure regime) | State Bank & Trust Company | Eastland Savings Bank | Key Bank of Florida | Bay Bank of Commerce | Bank of Coffey | Kent Bank | Citizens State Bank | Hampton Bank | Total | Percent overlap (Both Regimes) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Loans and other assets** | **1** | **1** | **0** | **1** | **1** | **1** | **0** | **1** | **0** | **1** | **7** | **70%** |
| Loan and Lease Losses—Eliminate/Reduce | 1 | 1 | | | | | | | | 1 | | |
| Loan and Lease Losses—Adequate Allowance Required; Establish/Maintain/Increase | 1 | 1 | | 1 | 1 | 1 | | 1 | | 1 | | |
| Loans—Risk Position—Reduce—Written Plans Required | | 1 | | 1 | | | | 1 | | 1 | | |
| Loans—Extensions of Credit—Existing Borrowers—Curtail | 1 | | | 1 | 1 | 1 | | 1 | | 1 | | |
| Loans—Special Mention—Correct Deficiencies | | | | 1 | 1 | | | 1 | | | | |
| Loans—Overdue—Accrual of Interest | | | | 1 | 1 | | | | | 1 | | |
| Loan Policy—Written Revision; Minimum Requirements | | | | | 1 | 1 | | 1 | | 1 | | |
| Loans Policy—Internal Review and Grading—Establish | | | | | | | | | | 1 | | |
| Loan Committee—Responsibilities | | | | | | | | 1 | | | | |
| Loans—Concentration of Credit—Reduction Plan | | | | 1 | | | | | | 1 | | |
| Loans—Real Estate Development—Review Required | | | | | 1 | | | | | | | |
| Assets—Adversely Classified—Eliminate/Reduce; Timetable | 1 | 1 | | | 1 | 1 | | 1 | | | | |
| Assets—Total Assets—Limit on Increase | | | | | | | | 1 | | | | |
| Collections Policy—Minimum Requirements | | 1 | | | | 1 | | 1 | | | | |
| **Capital** | | | **0** | **1** | **1** | **1** | **0** | **1** | **0** | **1** | **5** | **50%** |
| Capital—Tier 1 Capital—Increase/Maintain | 1 | 1 | | 1 | 1 | 1 | | 1 | | 1 | | |

| | Random bank 1 (Non-disclosure regime) | Random bank 2 (Non-disclosure regime) | State Bank & Trust Company | Eastland Savings Bank | Key Bank of Florida | Bay Bank of Commerce | Bank of Coffey | Kent Bank | Citizens State Bank | Hampton Bank | Total | Percent overlap (Both Regimes) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Violations of the law and compliance** | **1** | **1** | **1** | **1** | **1** | **0** | **1** | **1** | **1** | **1** | **9** | **90%** |
| Violations of Law—Eliminate and/or Correct—Preventive Procedures | | | 1 | | 1 | | 1 | 1 | 1 | 1 | | |
| Community Reinvestment Act—Compliance Officer Required | | | | | | | 1 | | | | | |
| Community Reinvestment Act—Compliance Program—Minimum Requirements | | | | | | | 1 | | | | | |
| Consumer Laws—Compliance Program—Minimum Requirements | | | | | | | 1 | | | | | |
| Compliance—Compliance Officer—Compliance Program | | | 1 | | | | | | | | | |
| Advertising—Compliance | | | 1 | | | | | | | | | |
| Compliance—Progress Reports—Frequency; Reports required | | | 1 | 1 | | | | | 1 | | | |
| Compliance Program—Develop/Implement | | | | | | | | | 1 | | | |
| Regulation Z—Compliance Required | | | | | | | | | 1 | | | |
| Regulation B—Compliance Required | | | | | | | | | 1 | | | |
| Regulation X—Compliance Required | | | | | | | | | 1 | | | |
| Regulation C—Compliance Required | | | | | | | | | 1 | | | |
| Regulation CC—Compliance Required | | | | | | | | | 1 | | | |
| Interest—Rates Charged Male and Female Borrowers—Review and Restitution Required | | | | | | | 1 | | | | | |
| Insurance—Flood Insurance—Review and Notification to Borrowers; Compliance with FDIC Regulations Required | | | | | | | 1 | | 1 | | | |
| Written Progress Reports Required | 1 | 1 | | | | | | | | 1 | | |
| **Liquidity and funds management** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **0** | **3** | **30%** |
| Funds Management—Written Policy Required | | | | | 1 | | | | | | | |
| Liquidity and Funds Management—Policy Required | | | | | | | | 1 | | | | |
| Asset/Liability Management—Written Policy—Minimum Requirements | | | | | | 1 | | | | | | |

| | Random bank 1 (Non-disclosure regime) | Random bank 2 (Non-disclosure regime) | State Bank & Trust Company | Eastland Savings Bank | Key Bank of Florida | Bay Bank of Commerce | Bank of Coffey | Kent Bank | Citizens State Bank | Hampton Bank | Total | Percent overlap (Both Regimes) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Profitability** | **0** | **0** | **0** | **1** | **1** | **0** | **0** | **1** | **0** | **1** | **4** | **40%** |
| Budget and Earnings Forecast—Preparation Required | | | | | 1 | | | | | | | |
| Profit Plan—Develop/Adopt; Minimum Requirements | | | | 1 | | | | 1 | | 1 | | |
| **Misc** | **0** | **0** | **0** | **1** | **1** | **0** | **0** | **1** | **1** | **1** | **5** | **50%** |
| Technical Exceptions—Eliminate/Correct | | | | | 1 | | | 1 | | | | |
| Interest—Rates Paid—Market Average | | | | | | | | 1 | | | | |
| Interest Rates—Demand Deposits—Limits on Interest Rates Paid | | | | | | | | | 1 | | | |
| Affiliated Organizations—Transactions With—Restricted | | | | 1 | | | | | | | | |
| Legal Services—Contracts | | | | | | | | | | 1 | | |
| **Total broad issues** | **3** | **5** | **2** | **8** | **8** | **6** | **2** | **9** | **3** | **8** | **54** | **60%** |

# 5 Anecdotal evidence: News media coverage of enforcement actions

This section provides descriptive evidence related to the content of the press articles that cover EDOs. These articles contain details about the enforcement actions and the specific actions banks are required to take to exit the EDO successfully. More importantly, the articles have bank managers' comments and opinions and indicate the steps the bank is taking to resolve the issues stated in the enforcement action.

> Citizens Western Bank, the county's smallest bank, was issued a cease and desist order from the Federal Deposit Insurance Corp. last month, confirmed FDIC spokesman David Barr. . . . Local bankers contacted for this story were not surprised Citizens Western was hit with a cease and desist order, saying the bank has not been growing or making much money for several years. "They don't have any momentum. They don't have any niche, and they don't know where they are going," said one banker who preferred not to be named. "Now all of a sudden their loan programs are getting worse." When informed that the bank had been hit with the regulatory sanction, another banker said, "Cease and desist from what? They haven't made a loan in about five years." — **"Mo's Favorite Bank Put on Restriction,"** *San Diego Daily Transcript*, **June 18, 1991.**

> Federal regulators have slapped restrictions on Urban National Bank, requiring the small Franklin Lakes bank to refurbish its loan-management procedures, tighten rules on overdrafts by insiders, and report monthly on its progress, executives said Thursday. . . . "Apparently, the OCC wasn't satisfied with the depth of the management to supervise the bank's operations, particularly the loan activities," said George E. Stock, who is serving as interim chief of the bank. "They [the board] brought me in to spearhead the additions to the staff and get the best talent in the right places." The 71-year-old Stock, who retired as vice chairman of Midlantic Corp. in 1987, said he initially planned to explain the agreement to shareholders at the annual meeting in April, but decided to answer questions after release of the regulatory report. Stock arrived at Urban in November, after President and Chief Executive Theodore V. Kruckel retired after 29 years at the bank. "The whole bank isn't falling apart," Stock said. "There are just certain areas that have to be strengthened." — **"Feds rein in Urban National insider overdrafts, loan rules cited,"** *The Record*, **March 13, 1992.**

> Jim Brown, BSD's chairman and chief executive officer, said that while he is not happy with the sanction, the company should be able to comply with its conditions. "Obviously I'm not pleased with having the order, but in the regulatory environment we're faced with, I think we're going to be OK," Brown said. "The order is one that is certainly achievable." — **"BSD Bancorp must increase capital ratios,"** *San Diego Daily Transcript*, **September 3, 1992.**

Edwin F. Hale Sr., chairman of the board, said, "We have already taken steps to address many of the requirements of the agreement and the order. The current board has been responding to the conditions which existed at the time of the proxy contest, and the recent improvements in the bank's earnings and financial condition reflect those efforts. Based on present projections from the previously adopted plan, the board currently expects that the company and the bank will be able to meet the requirements of the agreement and the order. The successful raising of capital in the public offering and reduction in classified assets will, of course, be dependent upon a number of factors beyond our control, including future market and economic conditions and upon the cooperation and success of our borrowers." Hale emphasized, "We fully recognize that we have our work cut out for us to achieve these goals and that there is little margin for error in our projections." — **"Baltimore Bancorp reports increased earnings; signs agreement and order with regulators,"** *PR Newswire*, **July 15, 1992.**

Siggi B. Wilzig, The Trust Co.'s chairman and chief executive officer, on Monday called the FDIC's order "a bit of a hangover from a previous situation." He added: "We have an excellent compliance department, and we have an ethics policy. It may not have been complete or formalized, but nothing went wrong here."...The FDIC was highly critical of Trust Co. employees working in the bank's lending division and questioned the bank's criteria for approving loans. The regulatory agency asked the bank to set up a committee to evaluate each Trust Co. officer "to determine whether these individuals possess the ability, experience, and other qualifications to perform present and anticipated duties, including adherence to the Bank's established policies and practices..." . . . Wilzig Monday characterized his bank's loan portfolio as "healthy," with a low number of bad loans and unwanted real estate. At the same time, he said The Trust Co. takes very seriously its motto, "The Bank With Heart Since 1896." "This is a 99-year old bank," he said. "We are very close to the community. You can't take the customers who made this bank and foreclose on their property. We can't throw women and children out on the street." If there's something wrong with us, then why would we be given permission to open five branches in the last 10 months?" — **"Trust Co. is accused of violations. FDIC orders critical changes,"** *The Record*, **November 01, 1994.**

Under orders from federal regulators, Founders has less than a month to raise at least $1.5 million of capital. But bank officials say Founders should raise at least $5 million to bring the bank into full compliance with a federal cease-and-desist order requiring a Tier 1 leverage capital ratio of 6%. That would also allow the bank to address its nonperforming loan portfolio, which currently stands at $5.7 million, or 7.23% of total assets. . . . "We think this is a very much an opportunity for investors," Mr. Connors [President and Chief Executive] said. "We believe, given the writeoffs the bank has taken, that it is now in a position to move forward. That's the proposition that we make to investors, that they are dealing with a bank that has had a very thorough review and has still intact a very high

level of earnings." — **"Another Conn. Bank Scrambling for Capital,"** *American Banker*, **July 11, 1995.**

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