

Reliance on Third Party Verification in Bank Supervision

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Abstract

We examine how third party verification of internal controls over financial reporting (ICFR) affects bank supervision by exploiting a change in size thresholds for required FDICIA-related internal control audits. We document that affected banks have higher reported levels of non-performing loans after the removal of internal control audit requirements compared to unaffected banks. This increase in non-performing loans is not accompanied by increases in past due loans, indicating more forthcoming reporting by management rather than operational deterioration. Furthermore, we find that the effects are concentrated in periods of heightened regulatory scrutiny and in banks with less stringent oversight in the pre-period. Examiners increase the length of targeted examinations and downgrade regulatory ratings, indicating an increase in stringency after the elimination of third-party verification of internal controls over financial reporting. Our findings suggest that third-party verification of internal controls is an imperfect substitute for bank supervision and efforts to rely upon externally generated assurance may heighten bank risk.

Keywords: Financial regulation, bank supervision, third-party verification, delegated monitoring, internal controls, FDICIA, CAMELS ratings

JEL Classifications: G21, G28, M41

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1 Introduction

Regulators often rely upon third party verification in order to assess regulated firm risk. This reliance is prevalent across many industries, including pharmaceuticals, oil & gas, insurance, and banking, among others. Current efforts to reform regulatory oversight at the federal level include incorporating more reliance on third party information traditionally sourced by federal regulatory agencies. This increase in reliance could decrease regulated firm risk if third parties provide relevant and unbiased assessments that are then incorporated into regulatory actions. On the other hand, increasing reliance on external parties may decrease the effectiveness of regulatory monitoring because of imperfect substitution of monitoring procedures [Bhaskar et al., 2019, Gopalan et al., 2019].¹ In this paper, we examine how bank examiners respond to the relaxation of internal control over financial reporting audit requirements in the banking industry.

The banking industry has unique institutional features that allow us to separate the effects of regulatory oversight from the influence of third party verification. While prior literature has highlighted the disparate role that third parties and examiners have in affecting bank performance (e.g., Nicoletti, 2018), examiners and third parties are often mandated to perform similar tasks. For example, examiners are required to evaluate the quality of banks' internal controls over financial reporting (ICFR), because proper controls over financial reporting may help bank managers properly measure bank performance and even limit risk-taking [OCC, 2001a]. Given that financial reports are the primary mechanism by which examiners track bank performance between on-site visits, the ability for financial reporting to accurately convey performance is a central concern for bank regulatory agencies.² Moreover, regulatory guidelines from laws such as the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) establish size-based thresholds that mandate certain banks receive financial statement audits, as well as third party attestation of ICFR. The similarity in mandates may increase the reliance that examiners place on third-party sourced information. Furthermore, reliance upon third party information generated by internal controls audits may influence regulatory resource allocation during examinations [OCC, 2001a].

¹We use the terms "third party/parties" and "external party/parties" interchangeably.

²Specifically, the Call Reports are financial reports that are prepared by all banks on a quarterly basis. The reports are filed with bank regulators and are publicly available.

To investigate whether the stringency of bank supervision is sensitive to the ability of examiners to rely on third party information, we take advantage of a 2005 amendment to FDICIA that increased the minimum size threshold for requiring internal control audits from \$500 million to \$1 billion in total assets, effectively removing the ICFR audit requirement for affected banks.

The effect of removing mandated ICFR audits performed by third parties on bank supervisory practices (e.g., regulatory examinations and ratings) is not obvious. It is possible that the elimination of the third party ICFR audit requirement would not affect bank supervision, because the evaluation of internal controls is a constant feature in bank supervision, regardless of third party verification requirements. This view is consistent with prior literature, which implicitly assumes that bank regulatory oversight is held constant during changes in internal control requirements [e.g., [Jin et al., 2013a,b](#)]. Under this assumption, any documented changes in supervisory evaluations would be due to changes in bank operations and real risk-taking.

However, it is possible that the elimination of third party ICFR audit requirements would affect bank supervision. For instance, examiners increase efforts to validate ICFR assessments in the absence of third parties to rely upon. Lifting the requirements may change examiner's supervisory strategies to involve more detailed, transactional testing [[Bhaskar et al., 2019](#)]. In short, removing reliance on third party verification may make bank supervision more rigorous. Management, in anticipation of increased supervisory rigor, may change their ex ante reporting accuracy and timeliness in order to minimize ex post scrutiny that may arise from more rigorous examinations [[Ball et al., 2012](#)].

In order to examine this trade-off, we utilize the 2005 amendment to FDICIA and a difference-in-differences (DD) empirical design, with banks that experience changes in ICFR audit requirements as our treated group and banks with constant ICFR audit requirements as our control group. Importantly, this empirical approach allows us to separate the effects of systemic changes in the economy from the effect of the removal of mandated ICFR audits. With this empirical strategy, we focus on how the change in ICFR audit requirements affect three specific sets of outcome variables: (I) supervisory assessments, (II) the reporting and timing of asset quality ratios, and (III) the length (in days) of bank examinations.

First, we provide novel evidence on how the change in ICFR audit requirements affects bank supervisory assessments. By using CAMELS ratings, a confidential rating system developed and maintained by bank regulatory agencies, we find that the relaxation in ICFR audit requirements lead to higher CAMELS composite ratings (i.e., deterioration in regulatory assessment of bank safety and soundness).³ Specifically, we find that treated banks' CAMELS composite ratings deteriorate by roughly 4.5 percent relative to the unconditional mean. Similarly, we find that CAMELS C (capital adequacy), A (asset quality), M (managerial quality), and E (earnings) component ratings deteriorate by 4 to 7 percent relative to their respective unconditional means. These results alone do not necessarily indicate more stringent supervision. Managers' operating decisions may have deteriorated after the relaxation of the ICFR audit mandate, leading to mechanical deterioration in examiners' assessment of bank performance. In this case, we would also expect that banks' operations should deteriorate across all components of regulator ratings. Instead, our results indicate that the relaxation in ICFR audit requirements is not associated with downgrades in L (liquidity) and S (sensitivity to interest rate risk) component ratings, which is inconsistent with deterioration in operating quality after the removal of mandatory ICFR audits for our treated bank sample.

Next, consistent with prior literature, we provide evidence that the removal of the ICFR audit mandate is associated with lower asset quality [Jin et al., 2013a,b]. Specifically, treated banks increase non-accrual loans by approximately 3.0 percent relative to the unconditional mean of the outcome variable. We also find that while non-accrual loans increase, mechanical operational quality measures such as past due loans (30 - 89 days past due and 90+ days past due) do not statistically change. If the removal of the ICFR audit mandate leads to operational decline resulting in decreases in asset quality, we would predict that to manifest itself in both higher non-accrual and past-due loans. The lack of change in past-due loans suggests that the increase in non-accruals is due to the increase in discretionary classification of loans as non-accrual. The increase in discretionary classification is supported by our analysis of troubled-debt restructured (TDR) loans, in

³CAMELS ratings are the primary quantitative output from on-site bank examinations. They summarize the risk of bank insolvency into an integer from 1 to 5, with 1-rated banks showing low (if any) signs of insolvency and 5-rated banks on the verge of failure. We elaborate on the bank supervisory process and CAMELS ratings in section 2.1.

which we find that there is an increase in discretionary classification of non-accrual TDRs. Thus, our tests present results inconsistent with deterioration in operating quality after the removal of mandatory ICFR audits, but rather point to an increase in the reporting of troubled assets.

We also directly examine whether banks' actions change during periods of heightened regulatory scrutiny (i.e., during the actual examination periods). By utilizing confidential data that provides the precise dates of bank examinations, we find that treated banks' non-accrual loan concentrations are higher during examination periods compared to non-examination periods after the removal of mandatory ICFR audits. We also find evidence that targeted exams conducted by regulators are 13.24 days longer for treated banks following the removal of the ICFR audit mandate. The increase in exam days is consistent with examiners previously relying on the work of third-party auditors in the evaluation of ICFR and increased examiner effort following the removal of the ICFR mandate. If bank examiners do rely upon third party auditors when assessing banks' internal controls over financial reporting, we would also expect reliance on third party assessments may be stronger for banks that are well-managed. Examiners, given their resource constraints, may allocate greater resources to banks with deficient managerial quality, even during the time period in which examiners had access to third party attestation of internal controls over financial reporting. Consistent with this prediction, we find that treated banks' increases in non-accrual loans and discretionary non-accrual TDRs are concentrated among those institutions that were considered to be well-managed in the pre-period.

Collectively, our results indicate that the removal of third party mandatory ICFR audits induced more forthcoming reporting of discretionary problem assets by affected banks. We believe these findings are consistent with banks responding to increased supervisory rigor. Furthermore, our results should inform the regulatory community by demonstrating that third party information may be an imperfect substitute for regulatory scrutiny.

This paper contributes to several streams of literature. We broadly contribute to the literature on the design of regulation and specifically to the literature on regulatory consistency and uncertainty by examining how regulatory bodies rely upon external assurance in the performance of their own duties (e.g., [Brennan and Schwartz 1982](#)). We build upon [Agarwal et al. \[2014\]](#), by introducing

a key factor explaining variation in bank regulatory supervision within bank regulatory agencies rather than across agencies. Identifying the factors affecting regulatory variation is important in gaining a complete understanding of the determinants of regulatory quality and is of interest to regulators and parties responsible for regulatory design. This study expands the literature on the effect of changes and spillover in regulation by providing insight on how changes in rules related to one bank monitor (i.e., the external auditor) may have spillover effects onto other parties with bank supervisory responsibilities (i.e., bank regulators).

We also contribute to the literature that examines the effects of ICFR audits in the banking industry. For example, [Altamuro and Beatty \[2010\]](#) show that the establishment of ICFR audit requirements with the passage of FDICIA was associated with greater financial reporting quality. Later studies find that the absence of ICFR audit requirements for certain banks following the 2005 amendment to FDICIA was associated with increases in bank risk indicators and the likelihood of bank failure during the financial crisis of 2007-2009 [[Jin et al., 2013a,b](#)]. However, these studies focus on a relatively small cross-section of banks, with an emphasis on those banks that failed during the crisis period. Thus, their results do not provide a clear takeaway on the effects of ICFR audit requirements on banks that do not exhibit extreme risk. This is an important limitation, as a thorough analysis necessitates understanding the effect of internal controls on the average bank, and effective policy requires the balancing of the extreme-control risk institutions with the needs of the average institution [[Smith, 2003](#), [Altamuro and Beatty, 2010](#)].

Perhaps most importantly, these studies implicitly hold bank supervision constant and attribute all changes in bank outcomes to mechanical deterioration in operating quality. Using confidential supervisory data, we are able to relax the assumption of a constant level of bank supervision and examine how the removal of ICFR audit requirements affects bank supervision. We also add to the literature examining the complex relationship between bank regulators and external auditors by examining how ICFR audits affect bank supervision (e.g., [Nicoletti 2018](#); [Ghosh et al. 2017](#)). While prior literature has primarily focused on the influence of bank regulators on auditor behavior, we instead focus on the effect of the auditor on bank regulator behavior. Our examination of how CAMELS ratings vary with the presence of the ICFR audit is critical to a more complete understanding of the complexities in these similar, yet clearly distinct monitors that play a crucial role in

the stability of the banking system.

Finally, we expand the literature on the effects of ICFR audits (e.g., [Kinney and Shepardson 2011](#); [Schroeder and Shepardson 2016](#); [Ge et al. 2017](#); [Zhao et al. 2017](#)) by documenting that internal control audits impact not only the banks subject to the audits [[Baugh et al., 2018](#), [Jin et al., 2013b,a](#)] and the effectiveness of the auditor [[Bhaskar et al., 2019](#)], but also have a spillover effect onto an important third party—bank regulators. Thus, we provide novel evidence that regulatory efforts to increase reliance on third party verification as part of delegated regulatory monitoring may affect the quality of monitoring.

2 Background on Bank Regulation and Hypothesis Development

2.1 Background on Bank Regulation

Bank regulation in the United States centers around the laws and regulatory rule-making developed and enforced by the three main federal banking regulators: the Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (FRB), and the Federal Deposit Insurance Corporation (FDIC). While the OCC is the sole safety and soundness regulator for nationally-chartered banks, the FRB and FDIC share responsibilities for supervising state-chartered commercial banks with state regulatory agencies. The actual process by which banks are supervised is similar across all charter types.⁴

Examiners use a combination of off-site monitoring and on-site examinations to decrease the likelihood that banks face solvency risks. Communication between regulatory agencies and commercial banks include both qualitative guidance and quantitative benchmarks that summarize bank performance. The primary quantitative classification system that summarizes bank performance is the CAMELS rating system. CAMELS is an acronym that represents the various aspects of bank performance that examiners focus on while they conduct examinations and perform off-site monitoring. The individual components are: capital adequacy (C), asset quality (A), managerial quality (M), earnings (E), liquidity (L), and sensitivity to interest rate risk (S). Each component,

⁴Throughout the paper we refer to bank supervisors/supervision and bank examiners/examinations interchangeably

as well as the composite CAMELS rating, is rated on an integer scale from 1 to 5. In general, 1-rated banks show low (if any) risks along a particular dimension, while 5-rated banks pose severe risks to their solvency or financial viability [Agarwal et al., 2014, Gopalan, 2018]. These ratings are not publicly available, but are informative to management, as well as related parties such as banks' boards of directors and auditors.⁵

Aside from interactions between regulatory agencies and commercial banks, certain laws reinforce the reliance of bank supervisors on certain third-party generated information. One such law is the Federal Deposit Insurance Corporation Improvement Act of 1992, commonly referred to as FDICIA. Among its many components, FDICIA requires that certain regulated financial institutions provide reports on the effectiveness of internal controls and that third-party auditors attest to these banks' internal controls and reports. At the time of its initial passage, FDICIA specifically required that all banks with greater than \$500 million in assets receive an independent audit of both the financial statements and ICFR [Altamuro and Beatty, 2010, section 363 of FDICIA].

As part of their duty to monitor banks, regulators consider evaluating banks' internal controls to be fundamental to understanding whether banks face solvency risk. Specifically, the OCC states that internal control assessments generated by external auditors "help leverage OCC resources, establish the scopes of other examination activities, and contribute to developing strategies for future supervisory activities" [OCC, 2001a]. Similarly, European bank regulators have emphasized the role of internal control regulation in constraining excessive risk-taking at European financial institutions [Nouy, 2015].

In 2005, section 363 of FDICIA was amended to increase the asset threshold for requiring of an independent audit of internal controls from \$500 million to \$1 billion, while leaving the requirement for an audit of financial statements unchanged [FDIC, 2005a]. In their proposed regulations the FDIC stated that it "has observed that compliance with the audit and reporting requirements of part 363 has and will continue to become more burdensome and costly, particularly for smaller nonpublic covered institutions....The FDIC believes that relieving smaller covered institutions from

⁵While CAMELS downgrades are private and not publicly disclosed, continued delayed recognition of asset deterioration or loan losses may prompt public regulatory enforcement actions that curtail lending and other business activities [Wheeler, 2019].

the burden of internal control assessments, while retaining the financial statement audit and other reporting requirements for all institutions with \$500 million or more in total assets, strikes an appropriate balance in accomplishing this objective” [FDIC, 2005b]. In raising the ICFR audit threshold, the goal of the FDIC was to reduce excessive burden on smaller institutions, without sacrificing safety and soundness. Furthermore, the exemption of non-accelerated filers (i.e., firms with public floats of \$75 million or less) from the ICFR audit provisions of Sarbanes Oxley Section 404 provided additional motivation and support for the threshold increase [United States Code, 2002].⁶

2.2 Hypothesis Development

The evaluation of internal controls is essential to assessing bank risk and conducting bank examinations. According to the Comptroller’s Handbook of the OCC, “The quality and reliability of a bank’s internal control function are a factor in CAMELS ratings (especially for the management component).” (OCC, 2001a, p 8-9).

In the case of banks that receive third-party internal control audits, examiners are explicitly directed to consider the documentation provided by the auditor in assessing a bank’s overall control structure and management competence, suggesting that “documentation associated with [a bank’s] internal control assessment should provide examiners an excellent resource in determining whether bank management performs a satisfactory assessment of bank’s control structure.” (OCC, 2001a, p 12). There are several reasons why we believe reliance on a third-party internal control audit has the potential to affect the effectiveness of bank examinations.

First, reliance will either affect the level of effort, the allocation of effort, or both, with each possibility having different implications for examination outcomes. If the overall level of effort for a given bank examination remains constant and if examinations and ICFR audits are perfect substitutes, then relying on the ICFR audit work may allow examiners to differentially allocate their

⁶Given the extensive lobbying of smaller banks for the removal of the mandate due to their evaluation that the high cost did not outweigh the benefits, we consider it unlikely that banks would retain the external ICFR audit following the amendment. Consistent with this argument related to Sarbanes-Oxley requirements, one survey indicated 80 percent of corporate executives considered the cost of ICFR audits to outweigh the benefits [O’Sullivan, 2006]. Furthermore, we note that less than 10 percent of our sample of banks are publicly traded, and all are smaller community banks, thus our sample is not significantly impacted by the the ICFR audit requirements of SOX. To the extent that any banks in our treated sample chose to continue to receive an ICFR audit, this would bias against results given there would be no change in the ICFR audit status.

resources to higher risk areas of the examination. In this case, bank examiners may effectively use the information provided by the third-party ICFR audit to better focus their examination procedures, resulting in a more effective bank examination. Thus, the *removal* of the ICFR audit mandate could reduce examination effectiveness because examiners re-allocate resources across all areas of the examination rather than focusing specifically on high risk areas.

Additionally, while regulators face resource constraints, they are required to perform examinations for *all* banks in their portfolios. When allocating limited resources across all bank examinations, regulators have economic incentives to reduce the resource allocation to certain banks. Thus, instead of differentially allocating existing resources, regulators may reduce overall resources on examinations where they can rely on third-party ICFR audits. If ICFR audits conducted by auditors and evaluation of ICFR by examiners are perfect substitutes, the third-party ICFR audit mandate will have no effect on the outcome of bank examinations, but will only affect which party bears the responsibility for conducting the ICFR evaluation. In either the case of non-reliance or of perfect substitution, the presence or absence of the ICFR audit would have no observable effect on bank examination effectiveness. This explanation is consistent with assumptions made in prior research that has investigated the role of internal control regulation in the banking industry and largely ignored the effect of such regulation on the regulators [e.g., [Altamuro and Beatty, 2010](#), [Jin et al., 2013a,b](#)].⁷ However, if auditor and regulator assessments are not perfect substitutes, as suggested by [Nicoletti \[2018\]](#), then reduction of overall examiner effort may negatively impact bank examination effectiveness. As a result, the *removal* of the ICFR audit mandate would result in an increase in examiner effectiveness.

One reason evaluation by auditors and examiners may not be perfect substitutes is that effective examiner reliance on the work of third party auditors requires examiners to appropriately integrate the information provided by the ICFR audits into their examination procedures. Prior literature suggests that such integration of third party information is challenging. Specifically, in examining audits of financial statements, literature finds that auditors do not appropriately respond to iden-

⁷These studies maintain an implicit assumption that the stringency of bank supervision is held constant, thus all changes in financial reporting quality or bank risk manifest through changes in ICFR systems themselves or as a result of changes in the auditor behavior.

tified risks and that auditors tend to under-react and insufficiently adjust their testing strategies for changes in inherent, control and fraud risk [Asare et al., 2013]. Additionally, experts do not always respond to external cues from specialists, and may employ a “check the box” mentality rather than carefully considering the implications of the information contained in specialists’ reports (i.e., the independent ICFR audit) [Griffith et al., 2015, Griffith, 2018]. Research consistently finds that firms that disclose weak internal controls are associated with lower quality financial reporting, suggesting that even in cases where significant internal control weaknesses are identified, auditors are not effectively adjusting their testing strategy to reduce overall audit risk [Doyle et al., 2007, Ashbaugh-Skaife et al., 2008, Donelson et al., 2017]. Furthermore, Bhaskar et al. [2019] find that financial statement audit quality is lower for integrated audits relative to stand-alone financial statement audits, largely due to control reliance and issues in appropriately integrating risk assessment findings into substantive audit procedures. While this research is specific to financial statement audits, bank examiners are confronted with the same challenges in incorporating the information from the third-party internal control audit into their risk assessment process, which impacts the overall examination strategy.

Another reason evaluation by auditors and examiners may not be perfect substitutes is that the particular risk-relevant concerns of auditors and examiners differ, which could further complicate integration of auditor-conducted ICFR audit information into bank examinations. The goal of bank regulators is to ensure the safety and soundness of banks, resulting in a focus on the effectiveness of controls to maintain adequate capital and avoid excessive risk-taking. In contrast, external auditors’ objective is to determine whether financial statements are fairly presented and represent the underlying economics of the reporting entity, resulting in a focus on the effectiveness of internal controls to prevent or detect a material misstatement [DeFond and Zhang, 2014, PCAOB 2007]. When assessing internal controls, the differing incentives of external auditors and regulators affect both the design and conclusions of the assessment. For example, when considering controls surrounding the underwriting of bank loans, auditors are primarily concerned with the completeness and the valuation of the loan population. While regulators are certainly interested in whether controls are in place to prevent improperly valued loans, the primary concern of regulators is en-

asuring that the controls appropriately constrain the risk-taking of loan underwriters. Thus, while auditors may assess controls over loans as being adequate for financial reporting purposes, regulators may determine that the processes surrounding loan origination allow the bank to take on excessive risk. In this case, a regulator-performed evaluation would lead to a different conclusion about internal controls and the risks surrounding loans, compared to an auditor-performed assessment. As a result, examiner reliance on a third party ICFR audit may result in a decrease in bank examination effectiveness, whereas the removal of the ICFR mandate may result in an increase in bank examination scrutiny and effectiveness. Given that there is significant overlap in procedures to evaluate controls, yet significant differences in the objectives of the control evaluation for examiners and auditors, it is ex ante unclear how ICFR audits conducted by the external auditor affect bank examinations.

Finally, it is possible that third-party ICFR audits and the change in requirements associated with external ICFR audit requirements would have no effect on bank supervision. While guidance recommends that examiners rely upon externally generated attestation during bank examinations [OCC, 2001c], prior literature documents considerable discretion in examiners' adherence to stated rules and procedures [Agarwal et al., 2014]. Thus, strict examiners may still perform their own internal control testing, over and above what is recommended by examination guidance. Furthermore, regulators have access to considerable private information on the performance of underlying assets. The attestation provided by an external third-party ICFR audit may be subsumed by the wealth of private information available to regulators, as well as regulators' statutory authority to intervene in bank operations.

Given the competing possibilities of the effect of a third party audit of internal controls, we make the following hypothesis, stated in null form:

H1: Third party ICFR audits do not affect bank examiner scrutiny.

3 Sample Selection and Empirical Methodology

3.1 Sample Selection

In order to investigate the impact of the 2005 amendment to FDICIA on bank and supervisory behavior, we construct a panel data set consisting of both publicly-available and proprietary information. Our first data source contains quarterly reports of banks' balance sheets, income statements, asset quality, and capital adequacy. These reports, referred to as the Consolidated Reports of Condition and Income (colloquially referred to as Call reports), are mandatory filings for all regulated financial institutions, regardless of their size, geography, or publicly listed status. These reports are useful for market investors who wish to gather quarterly information on publicly traded banks [Badertscher et al., 2018], as well as for examiners who use Call reports to determine whether reported bank performance meets or exceeds implicit or explicit risk thresholds [Costello et al., 2018, Gopalan, 2018]. For our purposes, we collect information on size, performance, capital structure, loan portfolios, and asset quality from Call reports.

The second data set we utilize includes confidential supervisory assessments gathered directly from bank regulators. As mentioned in section 2.1, CAMELS ratings are the primary numerical output from periodic, on-site bank examinations. The ratings incorporate qualitative and quantitative information on commercial banks and summarize various components of bank risk into an integer ranging from 1 (lowest risk) to 5 (highest risk). CAMELS ratings are updated every 12 to 18 months, depending upon bank performance and are not publicly revealed. CAMELS ratings are housed in the National Information Center (NIC) database, a confidential information repository maintained by the three primary federal bank regulators (i.e., FDIC, OCC, and Federal Reserve). For our analyses, we gather ratings after each on-site examination, as well as the specific dates that examinations occurred.

Our final quarterly panel data set consists of bank-quarter observations of banks with less than \$1 billion in assets from 2000 to 2010. We require that all bank-quarter observations have non-missing total assets at time period t , as well as three consecutive quarter lags of non-missing total assets. We merge supervisory information into bank-quarter Call report data, resulting in a final

sample of 278,309 bank-quarter observations.⁸ Treated bank-quarters comprise 10,524 observations out of this total, while the remainder form bank-quarter observations for our control group.

3.2 Empirical Methodology

Our empirical strategy relies upon comparing banks that were affected by the 2005 amendment to FDICIA relative to unaffected banks. Specifically, we use a generalized difference-in-differences research design to compare bank and supervisory outcomes for banks between \$500 million to \$1 billion in assets at the time of the amendment passage (the treated group) relative to outcomes for banks below \$500 million in assets at the time of the amendment passage (the control banks). We choose banks below \$500 million in assets as the appropriate control group, given that these banks' business models most closely resemble those of treated banks. Conversations with senior regulatory personnel at the Federal Reserve also confirm this choice.⁹ After grouping commercial banks into these categories, we use the following generalized difference-in-differences model to test our hypotheses:

$$Outcomes_{it} = \beta Treat_i \times Post_t + \gamma Controls + \alpha_i + \alpha_{st} + \epsilon_{it} \quad (1)$$

In the equation above, $Outcomes_{it}$ are quarterly outcome variables either generated by banks or bank examiners. Specifically, we investigate performing loans 30-89 days past due $\left(\frac{Past\ 30_{it}}{Assets_{i,t-1}}\right)$, performing loans 90+ days past due $\left(\frac{Past\ 90_{it}}{Assets_{i,t-1}}\right)$, and non-performing loans $\left(\frac{Non-Accruals_{it}}{Assets_{i,t-1}}\right)$, as well as composite and component CAMELS ratings. Our primary independent variable of interest, $Treat_i \times Post_t$, is an indicator variable that equals 1 for year-quarters in 2005, onwards for banks between \$500 million to \$1 billion in assets at the time of the 2005 FDICIA amendment, and zero otherwise. We include control variables for bank loan portfolio size $\left(\frac{Loans_{it}}{Assets_{i,t-1}}\right)$, asset size

⁸We note that there is some slight variation in sample size reported across different analyses in the paper because Stata's REGHDFE command drops singleton observations within a fixed effect class (e.g., state-year-quarter combination). Dropping of these observations is necessary for our empirical strategy and does not affect inferences from our findings.

⁹Specifically, the FDIC's Community Bank Initiative states that most banks under \$1 billion would be considered "community-focused". Our inferences are unchanged when we include banks from \$1 billion to \$1.5 billion in the control group. We discuss alternative control groups in greater detail in section 5.

($\ln[Assets_{i,t-1}]$), tier 1 leverage ratio $\left(\frac{Tier1\ Capital_{it}}{Avg\ Assets_{it}}\right)$, and pre-provision income $\left(\frac{Pre-Provision\ Income_{it}}{Assets_{i,t-1}}\right)$ to mitigate concerns that our results may be driven by changes in bank operations unrelated to the treatment effect. In addition, when examining the relation between mandated ICFR audit removal and supervisory ratings, we include total loan delinquencies $\left(\frac{Delinquencies_{it}}{Assets_{i,t-1}}\right)$ as an additional control variable.

Lastly, we include two classes of fixed effects to control for unobserved heterogeneity in our sample. The first fixed effect, α_i , is a bank-specific fixed effect for every financial institution in our sample. The inclusion of bank-level fixed effects controls for time-invariant bank characteristics. The second fixed effect, α_{st} , is a state by quarter fixed effect that controls for time-varying, state-specific shocks that may affect our inferences. Because we include both bank-level and time-level fixed effects, the base variables $Treat_i$ and $Post_t$ are absorbed into each respective fixed effect category.

Our empirical framework helps allay alternative hypotheses in several ways. First, with the inclusion of bank-level fixed effects, we control for time-invariant bank characteristics that may affect our inferences. For instance, bank risk-taking may be collinear with size (our forcing variable). Moreover, our model specification restricts the comparison of treated and control banks to be within the same state. If economic conditions vary in severity by particular regions or states at a particular time during our sample period, banks' outcome variables may mechanically deteriorate as conditions worsen. The fixed effects absorb the influence of such regional economic shocks that may bias our results. Thus, the documented deterioration in CAMELS ratings is based on a comparison of banks between \$500 million to \$1 billion in assets to banks below \$500 million in assets, within the same state in the same time period.¹⁰ The strength of our research design is that alternative explanations for our empirical findings must be attributable to changes at the same time as our treatment (i.e., in 2005), within the same state, and have a differential effect on banks above and below \$500 million in assets.¹¹

¹⁰See section 5 for discussion of analysis to support the appropriateness of the control group.

¹¹We perform a number of robustness tests to rule out any such alternative explanations. See section 5 for details of analyses.

4 Summary Statistics and Results

4.1 Summary Statistics

Table 1 presents summary statistics of the bank-quarter observations in our sample. The average bank size in our sample is fairly small: \$172.13 million in total assets. Regulators define community banks as those banks with less than \$10 billion in assets, meaning all banks in our sample would be considered community banks and 11.1 percent of our sample is comprised of state member banks. Loans comprise an overwhelming majority of banks' assets. Banks are also profitable; annualized ROA is 0.8 percent and have a low level of loan loss provisions and loan charge-offs, as both annualize to 0.4 percent of lagged assets. Furthermore, our sample banks are well-capitalized; the average tier 1 leverage ratio is 10.7 percent.¹² In terms of asset quality, our sample banks also appear to perform well overall. The mean loan loss reserve is 0.9 percent and mean delinquent assets is 1.7 percent. Sample banks have a low percentage of past-due and non-performing loans with 0.9 (0.2) percent of assets with loans that are 30-89 (90+) days past due and non-accrual loans at 0.7 percent of total assets. On average, examiners rate the banks in our sample as somewhere between strong (rating of 1) and satisfactory (rating of 2) for all components. The mean composite CAMELS rating is 1.792 and individual CAMELS component ratings means range from 1.562 to 1.983. The 75th percentile for the composite CAMELS rating and for all individual components is 2, suggesting that the majority of banks in our sample have at least a satisfactory rating.

4.2 Descriptive Analyses

In order to satisfy the parallel trends identification assumption of the difference-in-differences empirical method, we provide graphical representations of our outcome variables as both univariate averages and as regressions. Graphical evidence in support of our identification assumption would suggest that prior to the 2005 amendment to FDICIA, the slopes in outcome variables for our treated and control groups were parallel. In Figure 1 Panels A and B, we first plot univariate averages of CAMELS composite and component ratings in event time. The time periods 1 - 5 represent

¹²According to Section 324.10(a) of FDIC rules and regulations, FDIC-supervised institutions must maintain a total risk-based capital ratio of 8 percent and a tier 1 risk-based capital ratio of 6 percent.

years 2005 through 2010, while time periods -5 to -1 represent years 2000 to 2004. Trends presented in Figure 1 Panels A and B suggest that slopes in average CAMELS composite and component ratings are parallel in time periods -5 to -1, indicating that our control group serve as a reasonable counterfactual group for banks between \$500 million to \$1 billion at the time of the amendment to FDICIA. Panel A of Figure 1 shows an increase in composite CAMELS ratings for all banks during the post-treatment period; however, the slope of the increase for treated banks is greater compared to that of the control group indicating that downgrades for treated banks occurred at a greater rate than did downgrades of the control group. Figures (a), (b), (c), and (d) in Panel B exhibit a similar trend for CAMELS C, A, M, and E component ratings. In contrast, Figures (e) and (f) in Panel B suggest that slopes for treated and control bank for L and S univariate average remain parallel even in the post period. These figures indicate that the higher rate of CAMELS downgrades for treated banks are isolated to the C, A, M, and E component ratings.

In Figure 1 Panel C we plot the univariate averages for asset quality outcome variables. In Panel C we observe parallel trends in periods -5 to -1 for key asset quality indicators of total loan delinquencies, loans 30-89 days past due, loans 90+ days past due, and non-accrual loans. Together, these charts provide strong support for parallel trends in key observable characteristics of our treatment and control groups in the pre-treatment period. One assertion that we make in section 2.2 is that decreased reliance on third party attestation may result in bank examiners more thoroughly examining whether reported numbers match underlying performance of assets. While total delinquencies (the sum of past due and non-accrual loans) did increase for treated banks relative to control banks in Figure 1 (g), this increase is concentrated among non-accrual loans as shown in Figure (j), while trends for loans 30-89 days past due (h) and greater than 90 days past due (i) are similar in both the pre and post-treatment periods. The difference in the past due and non-accrual trends will be explored in greater detail in section 4.4.2.

4.3 Dynamic Regression Results

The univariate averages presented in section 4.2 provide initial evidence that we are capturing the plausible causal impact of the 2005 FDICIA mandate on bank outcomes. However, univariate

trends are not adequate to control for alternative hypotheses that may affect our inferences. To present more robust graphical evidence of our identification strategy, we estimate equation (1) after splitting $Post_t$ into indicator variables that represent t years to or from treatment using the following regression approach:

$$Outcomes_{i,t} = \sum_{t=-5}^{-1} \Gamma_{it} Treat_i \times Post_t + \sum_{t=1}^5 \Gamma_{it} Treat_i \times Post_t + \alpha_i + \alpha_{st} + \epsilon_{it} \quad (2)$$

where $Outcomes_{i,t}$ is an outcome variable of interest, α_i represents bank fixed effects, α_{st} represents state x year-quarter fixed effects, and the main independent variable $Treat_i \times Post_t$ is broken into specific indicator variables that equal 1 for years t before (or after) the 2005 amendment to FDICIA. The model includes bank-level and state x year x quarter fixed effects in which the year prior to the 2005 FDICIA amendment is left out as the reference year.

In Figure 2, we provide graphical evidence in support of our difference-in-differences identification assumption. Specifically, coefficients in the pre-period are not statistically different from zero and exhibit little if any trend prior to the 2005 amendment. This is consistent across CAMELS composite ratings (Panel A), component ratings (Panel B), as well as asset quality ratios (Panel C). Consistent with our analysis in Figure 1, Panel A of Figure 2 shows that following the removal of the ICFR audit mandate there is a significant increase in the composite CAMELS rating for the treated banks compared to the control banks. Furthermore, Panel B shows a similar increase in component ratings for the C, A, M and E components in figures (a) to (d), but no such pattern in the L and S components.¹³ Again consistent with the results in Figure 1, Panel C shows a significant increase in loan delinquencies (Figure [g]), and that these delinquencies are driven by non-accrual loans (Figure [j]), with no significant increase in accruing loans 30-89 days or more than 90 days past due (Figures [h] and [i]).

Our dynamic regression results show that the effects of removing mandatory ICFR audits do not immediately appear when the ICFR audit requirement was removed, but only manifest at least two years after our event of interest. This is consistent with the inevitable time lag for some banks between the removal of the ICFR audit requirement and the next regulatory examination.

¹³We discuss the null results for the L and S components further in section 4.5.1.

4.4 Static Regression Results

4.4.1 Supervisory Ratings

Table 2 presents results from investigating the relation between the removal of the mandatory ICFR audit requirement and CAMELS composite (component) ratings. As mentioned previously, CAMELS ratings are a summary benchmark produced by bank examiners after the completion of on-site bank examinations. Banks with CAMELS ratings of 5 are on the verge of FDIC receivership, while 1-rated banks exhibit few (if any) signs of weakness. Conversations with bank examiners reveal that ratings changes not only reflect prior performance but also can be used to induce changes in banks that are likelier to face distress. For instance, if a bank is found to be deficient in capital to absorb unexpected loan losses, examiners can downgrade banks' composite (component) ratings in order to elicit changes in bank behavior.

The results from Table 2, Panel A show that our variable of interest, $Treat_i \times Post_t$, is positive and statistically significant below the 0.01 level across all regression specifications. In other words, after the removal of the ICFR audit mandate, treated banks' CAMELS composite ratings incrementally deteriorate relative to those of the control group. The effect is also economically significant. The coefficient 0.0807 in column (4) represents a 4.5 percent increase in CAMELS composite ratings relative to the unconditional mean of the outcome variable.

Panel B of Table 2 presents results from investigating the relation between the removal of the ICFR audit mandate and individual CAMELS component ratings. While the individual component ratings aggregate to the composite rating, the weights that examiners place on specific components are unknown. The coefficient on $Treat_i \times Post_t$ is positive and statistically significant below the 0.01 level for the C, A, and M components, while $Treat_i \times Post_t$ is positive and statistically significant below the 0.10 level for the E component. The results suggest that in response to the 2005 amendment to FDICIA, examiners downgrade assessments of capital, asset quality, management, and earnings.¹⁴ Economically, the coefficients 0.0606, 0.126, 0.0890, and 0.0719 in columns (2), (4), (6), and (8) respectively suggest that C, A, M, and E component ratings deteriorate by 3.8 percent,

¹⁴Results on liquidity are inconclusive, given that we find no statistically meaningful results in a dynamic regression format in Figure 2.

7.3 percent, 4.8 percent, and 3.6 percent, respectively, relative to the unconditional mean of each outcome variable. In contrast, we do not find consistent evidence of deterioration in the L and S component ratings in the post period.

The results suggest that examiners downgrade treated banks' ratings in the post period, relative to control banks. Downgrades in bank CAMELS ratings occur even after including control variables for common credit risk determinants and including bank-level and state-time level fixed effects, which absorb the effects of latent bank characteristics and region-by-region trends in economic deterioration during the financial crisis.

4.4.2 Asset Quality and Financial Reporting Choices

We examine how the 2005 amendment to FDICIA affected banks' supervisory ratings and asset quality. Examiners' evaluation of banks' ICFR focuses on how well reported financial information reflects underlying performance [OCC, 2001a]. Table 3, columns (5) and (6) shows that while the coefficient on $Treat_i \times Post_t$ is positive and statistically significant below the 0.01 level for non-accrual loans, no similar effect exists for past due loans. Economically, the coefficient 0.197 in column (6) suggests that non-accrual loans increase by approximately 28.1 percent relative to the unconditional mean of the outcome variable.

4.5 Distinguishing Between Two Explanations

4.5.1 Operational Deterioration

The results presented in sections 4.4.1 and 4.4.2 show that the 2005 FDICIA amendment is associated with CAMELS ratings downgrades and deterioration in asset quality. While we contend that these results are consistent with increased regulatory scrutiny, these results may be due to mechanical deterioration in operations after the removal of mandatory ICFR audits. Specifically, instead of bank examiners compelling banks to recognize more bad assets, the removal of mandatory ICFR audits may have weakened internal controls, thereby weakening operational decision making. Poorer operational decision-making may then lead to CAMELS downgrades and poorer asset quality. This alternative explanation is supported by evidence presented in prior research

such as [Jin et al. \[2013a\]](#) and [Jin et al. \[2013b\]](#), who find that banks subject to FDICIA internal control audit requirements have lower risk-taking in the pre-crisis period and that those banks no longer subject to FDICIA internal control audit requirements make riskier loans and are more likely to fail.

One prediction consistent with deterioration in operational decision-making quality would suggest that operations across all observable dimensions of bank performance would deteriorate in response to the removal of mandatory ICFR audits. Such deterioration should manifest in all categories of summary benchmarks, such as CAMELS ratings. However, in our results in [Table 2](#), we show that while treated banks' CAMELS composite, C, A, M, and E ratings deteriorate, L and S ratings did not statistically change, inconsistent with the alternative hypothesis of poorer operational decision-making manifesting across all aspects of bank ratings.

Another prediction consistent with deterioration in operational decision-making quality would suggest that poor loan origination decisions would manifest in lower asset quality ratios and increases in loan delinquencies. While we do find economically meaningful increases in non-accrual loans in [Table 3](#), we find no such increases in past-due loans. This is an important distinction because deterioration in loan quality should ordinarily cycle through past-due loans before affecting the non-accrual loan balance. While there is a bright-line rule requiring loans be placed on non-accrual status once a loan is 90 days or more past due, with very limited exceptions, there still remains opportunity for significant bank discretion in the determination of non-accrual loans. According to regulatory guidance, no requirements exist that compel banks to classify loans that are 90 days or more past due as non-accrual, but rather loans should be classified as a non-accrual loan once reasonable doubt exists regarding the ultimate collectability of the loan [[FFIEC, 2019](#), [OCC, 2001b](#)]. The results suggest that the increases non-accrual loans may not be due to loans moving through past due classifications but instead are being classified as non-accrual loans in a more discretionary manner. We explore this explanation further by examining discretion in determining accrual status in a specific class of loans, troubled debt restructures, in [section 4.5.3](#).

4.5.2 Changes in Supervisory Oversight

The prior section suggests that the changes in supervisory ratings are not driven by deteriorating operations. An alternative explanation is that regulators increase scrutiny of bank asset quality after removing the ICFR mandate. In order to provide further evidence that the results are driven by increased regulatory scrutiny, we examine whether asset quality changes differentially around examination dates. These dates provide an indication of when bank examiners are on-site at bank headquarters, testing the ICFR of banks' loan portfolios, and discussing issues with bank management. If our results are driven by a general decline in bank operations, we would expect to see an increase in problem assets during both exam and non-exam periods. On the other hand, if our results stem from increased regulatory scrutiny, then we expect a stronger association between our main variable of interest ($Treat_i \times Post_t$) and outcome variables that we examine during the exam period, compared to the non-exam periods. In order to empirically test whether increases in reported non-accruals are greater during periods of regulatory scrutiny, we use confidential data on specific examination dates and we partition equation (1) into examination and non-examination windows by estimating the following regression:

$$Outcomes_{it} = Exam_{it} + Treat_i \times Post_t + Treat_i \times Post_t \times Exam_{it} + \gamma Controls + \alpha_i + \alpha_{st} + \epsilon_{it} \quad (3)$$

in which $Exam$ is an indicator variable equal to one when the bank-quarter observation occurs in quarters $t-1$, t , or $t+1$ relative to quarters of examinations, and zero otherwise. We then interact the $Exam_{it}$ indicator variable with $Treat_i \times Post_t$. As before, we include control variables consistent with model (1). In columns (5) and (6) of Table 4, we show that non-accrual loans are significantly higher during examination periods relative to non-examination periods for treated banks relative to control banks. The difference across examination and non-examination periods is economically significant. The coefficient of 0.0681 on $Treat_i \times Post_t \times Exam_{it}$ in column (6) suggests that non-accrual loans increase by approximately 10 percent relative to the unconditional mean of the outcome variable. Furthermore, as we documented in Table 3, we find no incremental

association between the removal of the ICFR audit mandate and increases in past due loans during examination periods.

In summary, the results in Tables 4 suggest that bank examinations are primarily responsible for the variation in non-accrual loans that we documented in Table 3. While examination time periods, regardless of when they occur relative to our event, may be correlated with increased scrutiny, our results show that examiners are differentially more rigorous towards treated banks in the post period than in the pre-period, relative to control banks.

Next, we further partition our sample by managerial quality. If examiners relied upon third party attestation of ICFR in the pre-period, this reliance may be concentrated among banks that were deemed by regulatory officials to be satisfactorily managed. As a result, examiners could then devote their energy towards banks that had deficient managerial attributes. Given that banks with deficient managerial quality likely received heightened scrutiny in the pre-period, we expect that increased regulatory scrutiny should be concentrated among banks for which examiners relied on auditor generated ICFR attestations in the pre-period (i.e., the well-managed banks).

In Table 5, we conduct the same tests as presented in Table 4 for two separate groups: banks with M ratings less than or equal to 2 (banks with exemplary or satisfactory management) and banks with M ratings greater than 2 (banks with unsatisfactory management). Our results indicate that the effects we document in Table 4 are concentrated in the sub sample of well-managed banks. Specifically, with respect to non-accrual loans in columns (5) and (6) of Table 4, the coefficient on $Treat_i \times Post_t \times Exam_{it}$ is positive (0.054) and statistically significant below the 0.01 level for well-managed banks, whereas the coefficient is negative (-0.159) and statistically significant below the 0.10 level for banks with unsatisfactory management. This result suggests that well-managed banks, institutions for which ex ante reliance would be greatest, increase their reported non-accrual loans in response to regulatory scrutiny in the post period. Furthermore, these results are also inconsistent with operational deterioration for affected banks, as we would expect that any operational deterioration would be greater in poorly managed banks. Taken together, these results suggest that the effects that we document are likely not driven by mechanical deterioration in operating quality but rather by examiners increasing their scrutiny of loan quality in the absence

of third party attestation of ICFR.

4.5.3 Troubled Debt Restructures

Prior literature generally assumes that non-accrual loans are non-discretionary. One area that highlights some potential discretion involved in determining the accrual status of a loan is the case of loans classified as troubled debt restructures (TDRs). The Bank Accounting Advisory Series states, “Under GAAP, a modification of a loan’s terms constitutes a TDR if the creditor for economic or legal reasons related to the debtor’s financial difficulties grants a concession to the debtor that it would not otherwise consider.” [OCC, 2018, p 22]. While there is guidance on the nature of a restructuring that would classify as a TDR, the discretionary nature of this determination is highlighted in the intensity of debate that often occurs among bank management, auditors, and regulators as to whether a loan does or does not constitute a TDR. Once the decision is made to classify a loan as a TDR it is expected to be classified as a non-accrual loan until a period of satisfactory performance by the borrower has passed. Bank guidance references accounting standard ASC 942-310-35, and suggests that the period of satisfactory performance be at least 6 months for a monthly amortizing loan. The guidance states, that “neither 942-310-35 nor regulatory policy, however, specify a particularly period of performance. This will depend on the individual facts and circumstances of each case.” [OCC, 2018, p 27] Thus, there are two distinct points of discretion involved in determining the accrual status of restructured loans. First, whether the loan should be classified as a troubled debt restructure, and second, whether the borrower has exhibited satisfactory performance to allow for the return of the loan to accruing status. The discretionary nature of TDRs provide an opportunity to examine whether the observed increase in non-accrual loans is due to discretionary or non-discretionary classification.

To examine the discretionary nature of non-accrual TDR classifications, we estimate equation (1) first using the outcome variable of total non-accrual TDRs scaled by lagged assets ($\frac{NACCTDR_{it}}{Assets_{it-1}}$), and second using a measure of discretionary non-accrual TDRs ($\frac{DiscNACCTDR_{it}}{Assets_{it-1}}$), which are TDRs that are on non-accrual status, but are not greater than 90 days past due.¹⁵ Panel A of Table 6

¹⁵Given the explicit regulatory guidance indicating loans greater than 90 days past due should be placed on non-accrual status, we consider the classification of any non-accrual TDR loan under 90 days to be a discretionary decision.

shows the coefficient on $Treat_i \times Post_t$ is positive and statistically significant below the 0.01 level, indicating higher levels of total and discretionary TDRs for the treated banks relative to the control banks following the removal of the ICFR audit mandate, which is consistent with higher levels of discretionary TDR classification by banks in the post period.

In further analysis, we once again examination whether the changes in discretionary TDRs differ by examination period or by managerial quality. In Panel B of Table 6 we do not find a significant coefficient on $Treat_i \times Post_t \times Exam_{it}$, however, in Panel C of Table 6 we do find that changes in discretionary TDRs are concentrated among well managed banks in the exam period. Specifically, in columns (3) and (4) of Table 6 Panel C, we find a positive (0.006) and significant coefficient on $Treat_i \times Post_t \times Exam_{it}$ at the 0.01 level for well managed banks and a negative (-0.048) and significant coefficient on $Treat_i \times Post_t \times Exam_{it}$ at the 0.10 level. Thus, we show that in areas where regulators can effect bank reporting (discretionary TDRs), treated banks' discretionary TDRs increase during examination periods for the well-managed bank subsample, where reliance on external auditors was likely the highest prior to the FDICIA amendment.

4.5.4 Regulator Effort

Our results are consistent with an increase in regulator scrutiny following the removal of the ICFR audit mandate, which is suggestive of regulators exerting more effort in their examinations of treated banks. In our next test, we investigate this channel of increased scrutiny by examining the length and nature of regulatory examinations. Examinations can be either full-scope, targeted or specific to a particular regulation (e.g., Bank Secrecy Act). Full scope examinations occur on a routine basis based on asset size and the complexity of the bank. A targeted exam "is performed on an area or risk within the firm and usually entails determining or validating that controls and processes for the target area or risk are effective" [Federal Reserve Bank, 2019]. If there is an increase in examiner effort as a result of the removal of the ICFR audit mandate, we predict an increase in the frequency or length of examinations, particularly for targeted examinations as those exams are likely to be aimed at addressing internal control risks. In order to empirically test whether increases in reported non-accruals and discretionary TDRs are greater during periods of regulatory scrutiny,

we use confidential data on the type and length of examinations and we partition equation (1) into examination and non-examination windows by estimating the following regression:

$$\begin{aligned} Outcomes_{it} = & Treat_i \times Post_t \times TargetedExam_{it} + Treat_i \times Post_t \times FullExam_{it} \\ & + Treat_i \times Post_t \times OtherExam_{it} + \gamma Controls + \alpha_i + \alpha_{st} + \alpha_e + \epsilon_{it} \end{aligned} \quad (4)$$

In the regression above, we partition the indicator $Exam_{it}$ used in equation (3) into examination sub-categories: $TargetedExam$ (targeted exams), $FullExam$ (full scope exams), or $OtherExam$ (other exams) and multiply each indicator variable by $Treat_i \times Post_t$. We include control variables that mitigate the influence of correlated variables and also include bank-level and state x year-quarter fixed effects to absorb time-invariant and state-specific, time-varying unobserved heterogeneity. Furthermore, we include exam type fixed effects (α_e) that capture the base effect of each examination.

We first estimate equation (4) using the outcome variable of $Days$, which is the number of days to conduct the regulatory examination. In columns (2) of Table 7 Panel A, we find that the coefficient on $Treat_i \times Post_t \times Target_{it}$ is positive and statistically significant below the 0.01 level. Our interpretation of this coefficient is that treated banks' number of days associated with targeted exams increase by approximately 13.24 days in the post period relative to control banks following the removal of the ICFR audit mandate. Consistent with prior results, Panel B of Table 7 shows this result is concentrated among well-managed banks, where regulators were most likely to be relying on the internal controls system and ICFR audit work prior to the FDICIA amendment. These results provide strong evidence of regulator reliance on the work of the external auditor in the pre-period, resulting in an increase in regulator effort, particularly in exams likely to be targeting internal control assessment, following the removal of the ICFR audit mandate.

Next, we examine whether asset quality measures change dependent on the exam type. In Table 8, panel A, column (3) we show that non-accrual loans increase during both targeted and full exams for treated banks relative to control banks, while no such increases are documented for past due loans in columns (1) and (2). Consistent with the expectation that the channel of greater

examiner effort results from the targeted exams, we find that the increase in non-accrual loans related to targeted exams is significantly higher (below the 0.10 level) compared to the increase associated with full exams. Similarly, in Table 8, panel B, we show that both total and discretionary TDRs are significantly higher during the post period for targeted and full exams for treated banks relative to control banks. The increases in total and discretionary TDRs are greater (below the 0.05 significance level) for targeted exams relative to other exam types. The effect of increased scrutiny resulting primarily from the targeted exams is consistent with the delay in the effect of the removal of the ICFR audit mandate, as noted in section 4.3, because the coordination, scheduling, and completion of such targeted exams is unlikely to have occurred concurrently with the removal of the mandate.

Overall, the results are consistent with regulators increasing their examination efforts following the removal of the ICFR audit mandate and the channel of this increased effort is through longer duration targeted examinations. We find that our primary outcome variables of non-accrual loans and discretionary TDRs are both higher during the targeted examinations, consistent with higher regulator scrutiny resulting in banks being more forthcoming about problem assets.

5 Appropriateness of Control Sample

We utilize a difference-in-differences research design and robust fixed effect structure to mitigate concerns that macroeconomic or time series changes influence our results. However, we acknowledge that the time period of our study also coincides with the financial crisis of 2007-2009. To the extent that the crisis differentially affects our treatment and control groups it may be possible that the crisis could explain a portion of our results. In order to further mitigate the potential effect of the financial crisis, rather than the change in FDICIA as the cause of our results, we conduct a number of robustness tests.

Given that the FDICIA amendment is dependent on bank size, the primary observable difference between our treatment and control group is bank size. Nonetheless it is important to consider whether our results are robust to different definitions of our control group. Our primary findings related to the increase in non-accrual loans, and C, A, and M components of the CAMELS ratings

remain consistent when we drop all banks below \$100 million from the control group, making the size of the groups comparable.¹⁶ Banks that are greater than \$1 billion in assets differ significantly from banks that are under the \$1 billion threshold due to additional requirements imposed by FDI-CIA (beyond the ICFR audit) as well as generally increased scrutiny. Additionally, prior research has used similar control groups, thus we consider banks with less than \$500 million in assets to be the most appropriate control group for our sample. Nevertheless, in an untabulated analysis, we use banks with between \$1 billion and \$1.5 billion in assets as a control group. Consistent with our primary results, we find that there is an increase in non-accrual and discretionary TDRs for well-managed banks during exam periods for the treated banks compared to the control banks. Further, we continue to find an increase in the length of targeted exams for the treated banks compared to the control banks. Given the consistency of our primary findings when using different control groups, as well as the strong theoretical reasons for the selection of our control group, it is unlikely that differences in bank size drive our empirical findings.

We next examine whether there are significant changes in the compositions of the loan portfolios of the treatment and control groups during our sample period. To examine this relationship we examine dynamic difference-in-difference charts as discussed in section 4.2 using the following loan portfolio-related outcome variables: total loans/lagged assets, commercial and industrial loans/lagged assets, consumer loans/lagged assets and real estate loans/lagged assets. We observe no significant differences in the trend of any of the loan related outcome variables between our treated and control variables. Additionally, we observe no differences in the trend of income before loan loss provision of the treatment and control groups during the period. Together, these results provide further assurance that the crisis period did not have differential effects on the loan portfolio composition or profitability of the treatment and control groups during our sample period.

While we cannot completely rule out the possibility of an alternative explanation for our results based on an unobservable difference between our treatment and control group; any alternative explanation for our findings must be related to a change concurrent with the removal of the

¹⁶ Additionally, when we tighten both the control and the treatment size thresholds to remove all banks below \$100 million and above \$900 million, our primary results related to past-due and non accrual trends are consistent.

mandatory ICFR audit for the treated group that affected either the treatment or control group, but not both. The fact that there are not differences in the trends of key observable variables provides strong evidence of the appropriateness of the control group and helps to mitigate concerns regarding the existence of such an alternative explanation.

6 Conclusion

In this study we examine how decreased reliance on third party verification of ICFR affects bank supervision. The effect of removing the mandate for third party ICFR audits on bank supervisory practices is not obvious. As the bank examination is separate from the ICFR audit, it is possible that the elimination of the ICFR audit requirement did not have an effect on bank examiners' risk assessment process. However, to the extent that information from the third party ICFR audit was incorporated into the bank regulator's examination risk assessment process, the elimination of the mandate would likely result in the bank examiner performing more procedures to assess ICFR quality and potentially increasing their detailed testing procedures. If this is the case, we would expect the rigor of bank examinations to increase after the removal of the ICFR mandate. Recognizing that bank examination rigor may increase ex post, bank management would have increased incentives to provide more precise accounting estimates resulting in higher quality financial reporting.

We find that non-performing loans increase for affected banks relative to unaffected banks after the removal of the ICFR mandate. Examiners respond by downgrading CAMELS composite and C, A, M, and E component ratings. While these results may be an indication of operational deterioration, we find no increases in past due loans or downgrades in L and S component ratings. Instead, our effects are concentrated in discretionary portions of non-accrual loans (specifically troubled debt restructurings). Also, we find that our results are concentrated among well-managed banks and during periods of heightened regulatory scrutiny. Finally, we find that examiners are increasing the length of targeted examinations for affected banks, indicating an increase in regulatory stringency after the removal of the ICFR mandate. In totality, our results are consistent with well-managed banks responding to heightened regulatory scrutiny by being more forthcoming with

reporting problem assets.

These findings have important implications for the academic literature and for regulators. With respect to the banking literature, we provide evidence that the third party ICFR audit mandate elimination for banks between \$500 million to \$1 billion in total assets resulted in more rigorous bank examinations and constrained some discretionary aspects of financial reports provided by bank management. This suggests that third party verification serves as an imperfect substitute to bank regulatory oversight. Furthermore, we provide greater perspective on how the elimination of the ICFR mandate impacted banks. While prior research has suggested that this resulted in poorer operations of banks (i.e., issuing lower quality loans), our results show that the deterioration of CAMELS ratings is actually due to more forthcoming financial reporting by bank management and as a result of more rigorous bank examinations. Going forward, the results from this study can help bank regulators continue to evaluate the interplay between third party verification and how that information is incorporated in the bank regulatory risk assessment process in order to ensure both efficient and effective regulatory oversight.

References

- Sumit Agarwal, David Lucca, Amit Seru, and Francesco Trebbi. Inconsistent regulators: Evidence from banking. *Quarterly Journal of Economics*, 129(2):889–938, 2014. doi: 10.1093/qje/qju003. URL <http://qje.oxfordjournals.org/content/129/2/889.abstract>.
- Jennifer Altamuro and Anne Beatty. How does internal control regulation affect financial reporting? *Journal of Accounting and Economics*, 49(1-2):58–74, 2010.
- Stephen K Asare, Brian C Fitzgerald, Lynford E Graham, Jennifer R Joe, Eric M Negangard, and Christopher J Wolfe. Auditors' internal control over financial reporting decisions: Analysis, synthesis, and research directions. *Auditing: A Journal of Practice & Theory*, 32(sp1):131–166, 2013.
- H. Ashbaugh-Skaife, D. Collins, W. Kinney, and R. LaFond. The effect of sox internal control deficiencies and their remediation on accrual quality. *The Accounting Review*, 83(1):217–250, 2008.
- Brad A Badertscher, Jeffrey J Burks, and Peter D Easton. The market reaction to bank regulatory reports. *Review of Accounting Studies*, 23(2):686–731, 2018.
- Ray Ball, Sudarshan Jayaraman, and Lakshmanan Shivakumar. Audited financial reporting and voluntary disclosure as complements: A test of the confirmation hypothesis. *Journal of Accounting and Economics*, 53(1-2):136–166, 2012.
- Federal Reserve Bank. Supervision, 2019. URL https://www.newyorkfed.org/aboutthefed/org_banksup.html.
- Matthew Baugh, Matthew Ege, and Christopher G Yust. Internal control quality and bank performance during the financial crisis. Available at SSRN 3302936, 2018.
- Lori Shefchik Bhaskar, Joseph H Schroeder, and Marcy L Shepardson. Integration of internal control and financial statement audits: Are two audits better than one? *The Accounting Review*, 2019.
- Michael J Brennan and Eduardo S Schwartz. Consistent regulatory policy under uncertainty. *The Bell Journal of Economics*, pages 506–521, 1982.
- Anna M Costello, João Granja, and Joseph Weber. Do strict regulators increase the transparency of banks? *Journal of Accounting Research*, 2018.
- Mark DeFond and Jieying Zhang. A review of archival auditing research. *Journal of Accounting and Economics*, 58(2-3):275–326, 2014.
- Dain C Donelson, Matthew S Ege, and John M McInnis. Internal control weaknesses and financial reporting fraud. *Auditing: A Journal of Practice & Theory*, 36(3):45–69, 2017.
- Jeffrey T Doyle, Weili Ge, and Sarah McVay. Accruals quality and internal control over financial reporting. *The accounting review*, 82(5):1141–1170, 2007.
- FDIC. *FDIC: FIL-119-2005: Annual Independent Audits and Reporting Requirements: Amendments to Part 363*. Federal Deposit Insurance Corporation, 2005a.
- FDIC. Proposed rules, 2005b.
- FFIEC. *Instructions for Preparation of Consolidated Reports of Condition and Income*. Federal Financial Institutions Examination Council, 2019.

- Weili Ge, Allison Koester, and Sarah McVay. Benefits and costs of sarbanes-oxley section 404 (b) exemption: Evidence from small firms internal control disclosures. *Journal of Accounting and Economics*, 63(2-3):358–384, 2017.
- A Ghosh, Henry Jarva, and Stephen G Ryan. Do bank regulation and supervision displace bank auditing. *Working Paper*, 2017.
- Radhakrishnan Gopalan, Yadav Gopalan, and Kevin Koharki. Assessing the quality of bank loan ratings. *Available at SSRN 2803608*, 2019.
- Yadav Gopalan. The effects of ratings disclosure by bank regulators. *Indiana University Working Paper*, 2018.
- Emily E Griffith. When do auditors use specialists' work to improve problem representations of and judgments about complex estimates? *The Accounting Review*, 93(4):177–202, 2018.
- Emily E Griffith, Jacqueline S Hammersley, Kathryn Kadous, and Donald Young. Auditor mindsets and audits of complex estimates. *Journal of Accounting Research*, 53(1):49–77, 2015.
- Justin Yiqiang Jin, Kiridaran Kanagaretnam, and Gerald J Lobo. Unintended consequences of the increased asset threshold for fdicia internal controls: Evidence from us private banks. *Journal of Banking & Finance*, 37(12):4879–4892, 2013a.
- Justin Yiqiang Jin, Kiridaran Kanagaretnam, Gerald J Lobo, and Robert Mathieu. Impact of fdicia internal controls on bank risk taking. *Journal of Banking & Finance*, 37(2):614–624, 2013b.
- William R Kinney, Jr and Marcy L Shepardson. Do control effectiveness disclosures require sox 404 (b) internal control audits? a natural experiment with small us public companies. *Journal of Accounting Research*, 49(2):413–448, 2011.
- Allison Nicoletti. The effects of bank regulators and external auditors on loan loss provisions. *Journal of Accounting and Economics*, 2018.
- Daniele Nouy. The role of internal control and internal audit, 09 2015. URL <https://www.bankingsupervision.europa.eu/press/speeches/date/2015/html/se150922.en.html>. Speech by the Chair of the Supervisory Board of the Single Supervisory Mechanism at the European Confederation of Institutes of Internal Auditing Conference [Accessed: 2019 04 28].
- OCC. *Comptroller's Handbook*. Office of the Comptroller of the Currency, March 2001a.
- OCC. *Comptroller's Handbook: Rating Credit Risk*. Office of the Comptroller of the Currency, 2001b.
- OCC. *Comptroller's Handbook: Internal Controls*. Office of the Comptroller of the Currency, 2001c.
- OCC. *Bank Accounting Advisory Series*. Office of the Comptroller of the Currency, 2018.
- K O'Sullivan. The case for clarity. *CFO*, September 1, 2006:64–69, 2006.
- Joseph H Schroeder and Marcy L Shepardson. Do sox 404 control audits and management assessments improve overall internal control system quality? *The Accounting Review*, 91(5):1513–1541, 2016.
- Fred L Smith. Cowboys versus cattle thieves the role of innovative institutions in managing risks along the frontier. 2003.
- United States Code. Sarbanes-oxley act of 2002, pl 107-204, 116 stat 745. Codified in Sections 11, 15, 18, 28, and 29 USC, July 2002.
- Barrett Wheeler. Loan loss accounting and procyclical bank lending: The role of direct regulatory actions. *Journal of Accounting & Economics (JAE)*, *Forthcoming*, 2019.
- Yuping Zhao, Jean C Bedard, and Rani Hoitash. Sox 404, auditor effort, and the prevention of financial report misstatements. *Auditing: A Journal of Practice & Theory*, 36(4):151–177, 2017.

Appendix A: Variable Definitions

Income statement variables are converted from year-to-date to quarterly values.

Balance Sheet-based Variables

- $\ln(Assets_{t-1})$ ($RCFD2170_{t-1}$): Beginning-of-period total assets
- $\frac{Loans_t}{Assets_{t-1}} \left(\frac{RCFD2122_t}{RCFD2170_{t-1}} \right)$: Total loans outstanding at quarter-end scaled by beginning-of-period total assets.
- Tier 1 Leverage Ratio $\left(\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}} \right)$ ($RCFD7204$): Tier 1 capital divided by adjusted total assets
- $\frac{Delinquencies_t}{Assets_{t-1}} \left(\frac{RCFD1406+RCFD1407+RCFD1403}{RCFD2170_{t-1}} \right)$: Total loan delinquencies scaled by beginning-of-period assets
- $\frac{Past\ 30}{Assets_t} \left(\frac{RCFD1406_t}{RCFD2170_{t-1}} \right)$: Loans 30 - 89 days past due and still accruing scaled by beginning-of-period assets
- $\frac{Past\ 90}{Assets_t} \left(\frac{RCFD1406_t}{RCFD2170_{t-1}} \right)$: Loans 90+ days past due and still accruing scaled by beginning-of-period assets
- $\frac{Non-Accruals_t}{Assets_{t-1}} \left(\frac{RCFD1403_t}{RCFD2170_{t-1}} \right)$: Non-accrual loans scaled by beginning-of-period assets
- $\frac{NACCTDR_{it}}{Assets_{it-1}}$: Total performing troubled debt restructured (TDR) loans on non-accrual status scaled by beginning-of-period assets
- $\frac{Disc\ NACCTDR_{it}}{Assets_{it-1}}$: TDR loans that are non-accrual but NOT 90+ days past due (i.e., discretionary) scaled by beginning-of-period assets

Income Statement-based Variables:

- $\frac{Pre-Provision\ Income_t}{Assets_{t-1}} \left(\frac{RIAD4340_t+RIAD4230_t}{RCFD2170_{t-1}} \right)$: Quarterly net income + loan loss provisions scaled by beginning-of-period assets
- $\frac{Net\ Income_t}{Assets_{t-1}} \left(\frac{RIAD4340_t}{RCFD2170_{t-1}} \right)$: Quarterly net income scaled by beginning-of-period assets
- $\frac{Provisions_t}{Assets_{t-1}} \left(\frac{RIAD4230_t}{RCFD2170_{t-1}} \right)$: Quarterly loan loss provisions scaled by beginning-of-period assets
- $\frac{Charge-offs_t}{Assets_{t-1}} \left(\frac{RIAD4635_t}{RCFD2170_{t-1}} \right)$: Quarterly loan charge-offs scaled by beginning-of-period assets

Supervisory Variables:

- CAMELS: CAMELS composite rating outstanding at quarter-end
- C: Capital adequacy component rating outstanding at quarter-end
- A: Asset quality component rating outstanding at quarter-end
- M: Managerial quality component rating outstanding at quarter-end
- E: Earnings component rating outstanding at quarter-end
- L: Liquidity component rating outstanding at quarter-end

- S: Sensitivity to interest rate risk component rating outstanding at quarter-end
- Exam: An indicator variable that equals 1 for the quarter before, quarter of, and quarter after on-site bank examinations. It takes zero in all other time periods.
- Targeted Exam: An indicator variable that equals 1 for the quarter before, quarter of, and quarter after on-site bank examinations. It takes zero in all other time periods.
- Other Exam: An indicator variable that equals 1 for the quarter before, quarter of, and quarter after on-site bank examinations. It takes zero in all other time periods.
- Days: The number of days (duration) of the examination.

Empirical Design-related Variables:

- $Treat_i$: An indicator that equals one if, at the end of 2005, $\$500 \text{ million} < RCFD2170 < \1 billion for bank i . It equals zero otherwise.
- $Post_t$: An indicator variable that equals one for all year-quarters after 2005. It equals zero otherwise.
- $Treat_i \times Post_t$: An indicator variable that equals 1 in the post period for banks that had between \$500 million and \$1 billion in total assets at the end of 2005. It equals zero otherwise.

Figure 1: Univariate Trends: CAMELS Composite Ratings

Panel A: CAMELS Composite Rating

This figure plots the dynamics of the univariate averages in CAMELS composite ratings between treated and control banks plotted in years relative to (from) treatment.

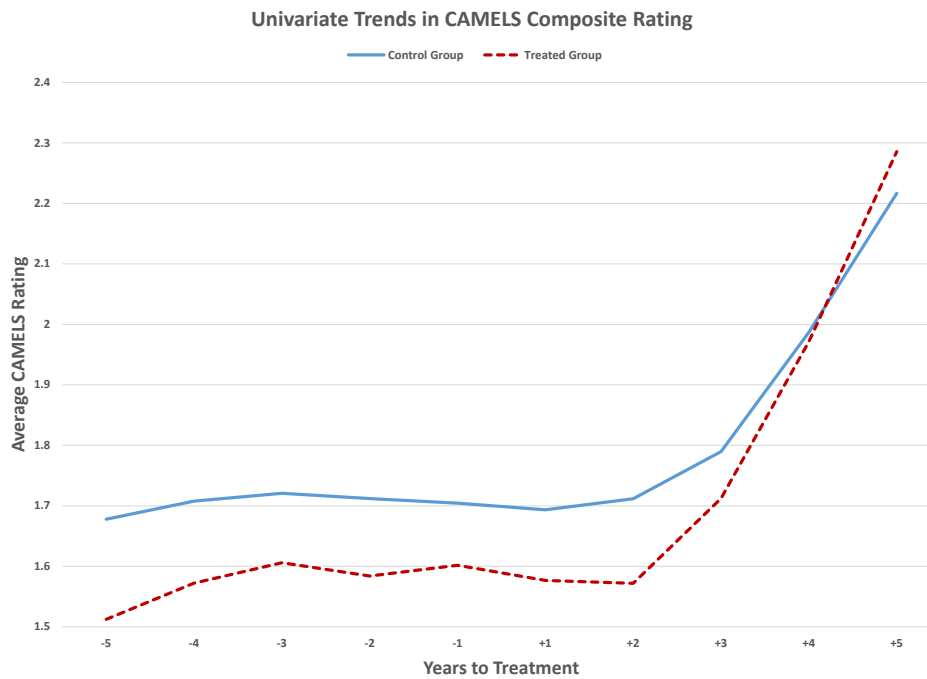
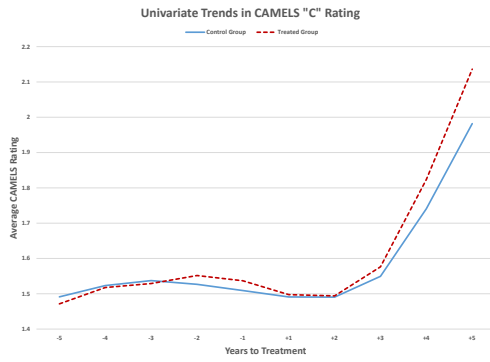


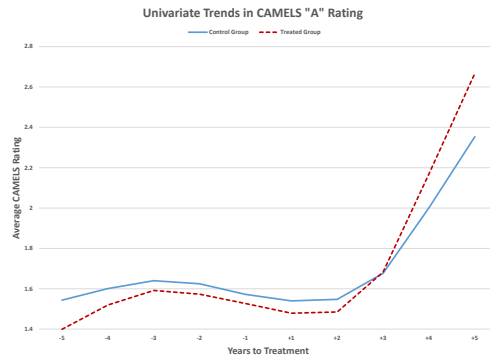
Figure 1 Continued: Univariate Trends of CAMELS Component Ratings

Panel B: CAMELS Component Ratings

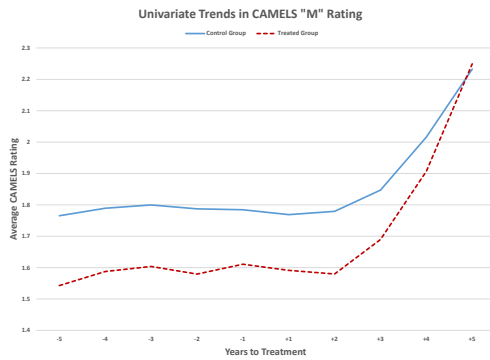
This figure plots the dynamics of the univariate averages in CAMELS component ratings between treated and control banks plotted in years relative to (from) treatment.



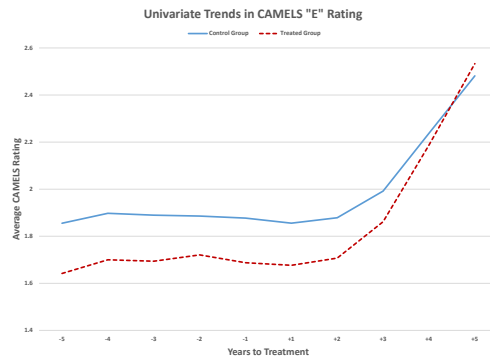
(a) C Component Ratings



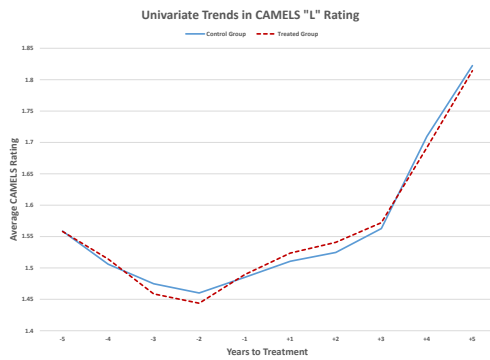
(b) A Component Ratings



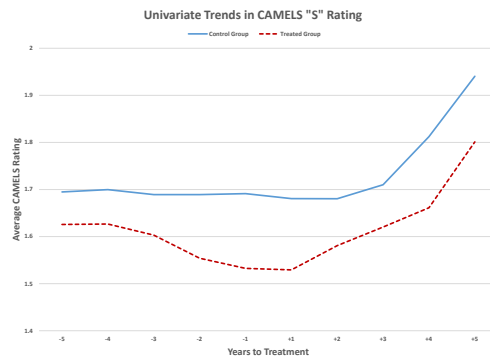
(c) M Component Ratings



(d) E Component Ratings



(e) L Component Ratings

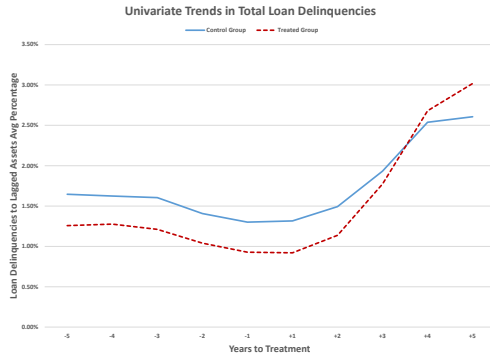


(f) S Component Ratings

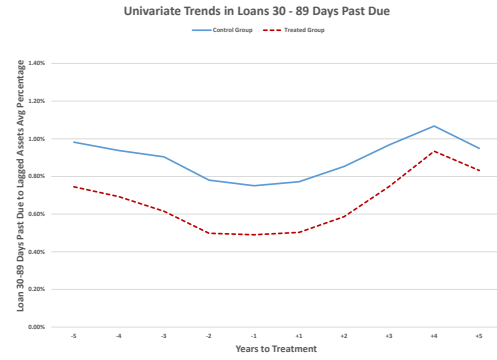
Figure 1 Continued: Univariate Trends of Asset Quality Indicators

Panel C: Asset Quality Ratios

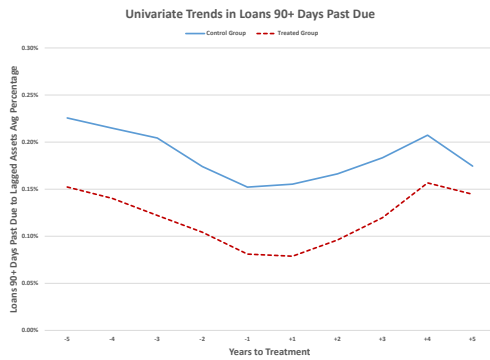
This figure plots the dynamics of the univariate averages in asset quality indicators between treated and control banks plotted in years relative to (from) treatment.



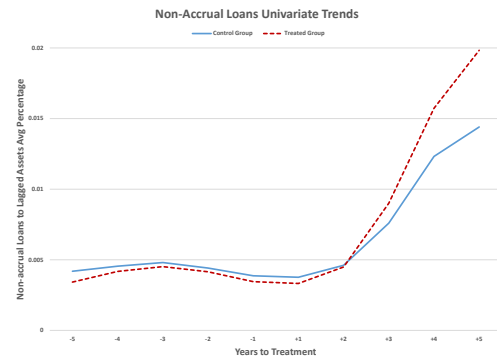
(g) Total Loan Delinquencies



(h) Loans 30 - 89 Days Past Due



(i) Loans 90+ Days Past Due



(j) Non-Accrual Loans

Figure 2: Dynamics of Treatment Effect: CAMELS Composite Ratings

Panel A: CAMELS Composite Rating

This figure plots the dynamics of the regression estimates that examine the relation between the removal of the internal control audit mandate and CAMELS composite ratings. Observations are at the bank-quarter level. No control variables are included other than bank and state \times year-quarter fixed effects. Standard errors are clustered at the state and year-quarter level.

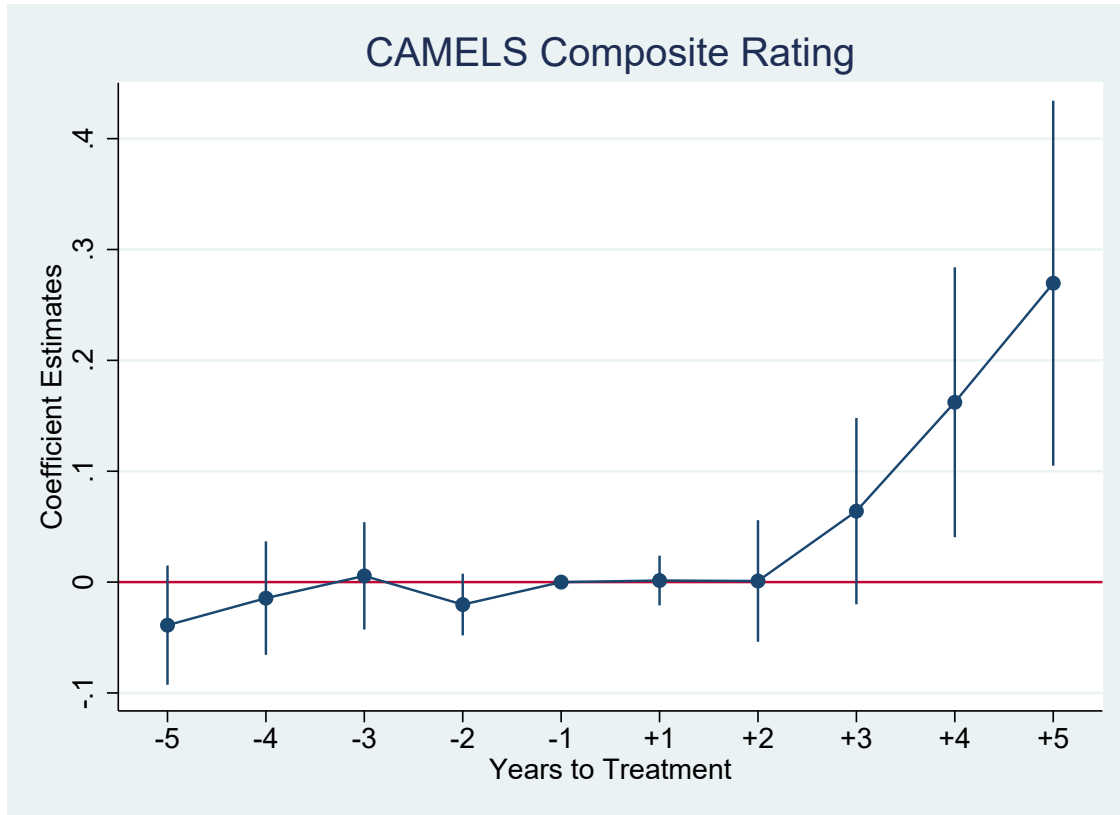
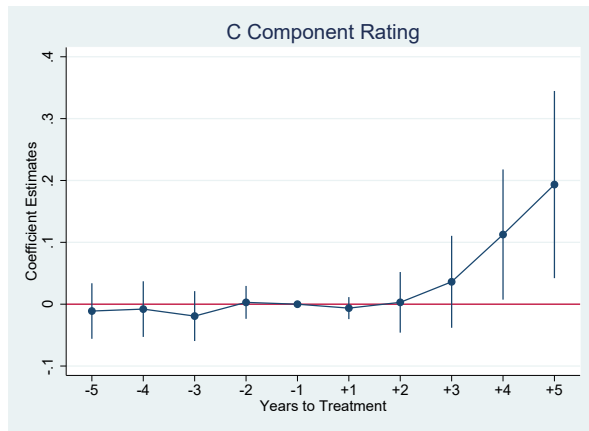


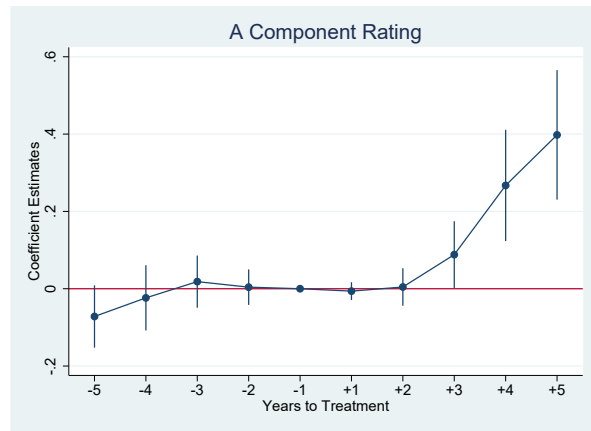
Figure 2 Continued: Dynamics of Treatment Effect for CAMELS Component Ratings

Panel B: CAMELS Component Ratings

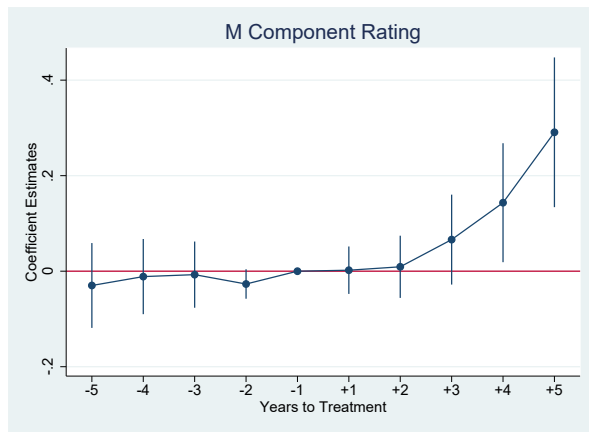
This figure plots the dynamics of the regression estimates that examine the relation between the removal of the internal control audit mandate and CAMELS component ratings. Observations are at the bank-quarter level. No control variables are included other than bank and state \times year-quarter fixed effects. Standard errors are clustered at the state and year-quarter level.



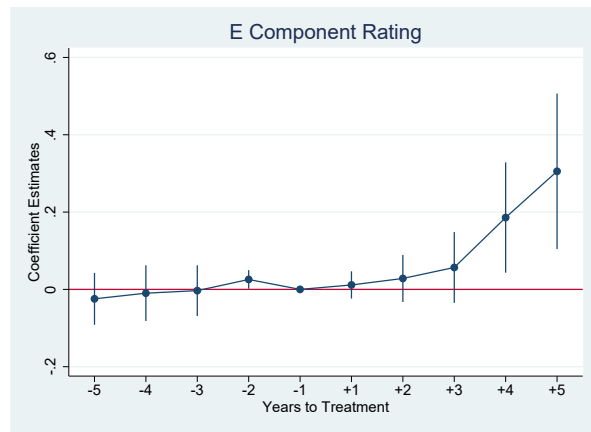
(a) C Component Ratings



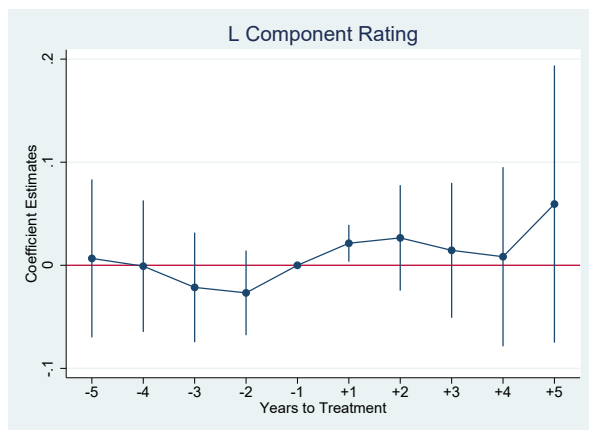
(b) A Component Ratings



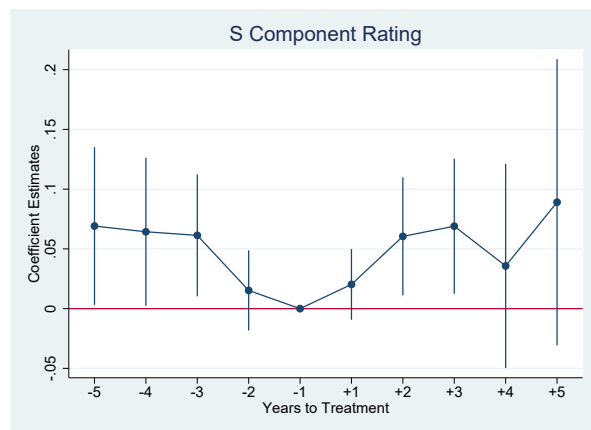
(c) M Component Ratings



(d) E Component Ratings



(e) L Component Ratings

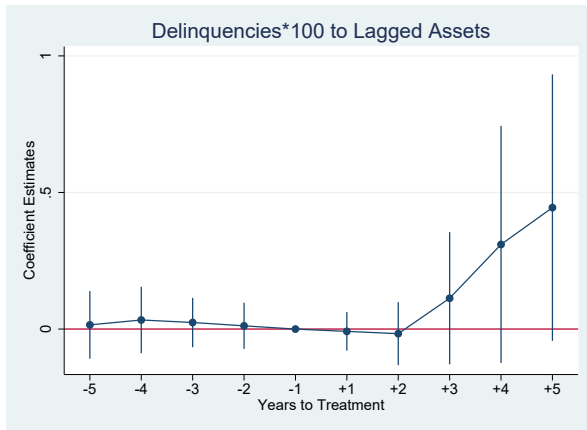


(f) S Component Ratings

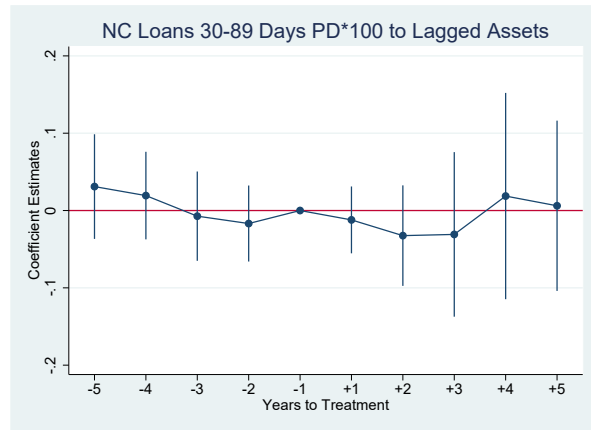
Figure 2 Continued: Dynamics of Treatment Effect for Asset Quality Indicators

Panel C: Asset Quality and Financial Reporting Ratios

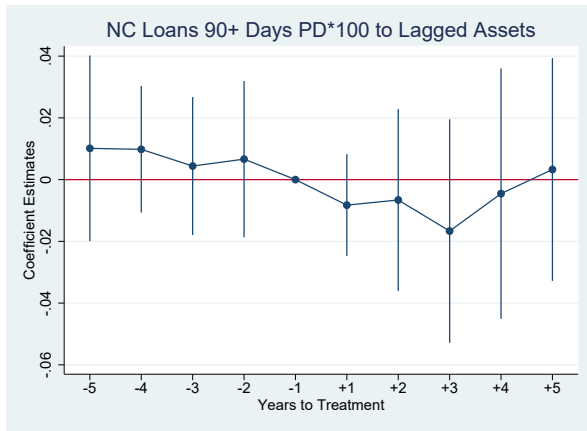
This figure plots the dynamics of the regression estimates that examine the relation between the removal of the internal control audit mandate and CAMELS composite ratings. Observations are at the bank-quarter level. No control variables are included other than bank and state \times year-quarter fixed effects. Standard errors are clustered at the state and year-quarter level.



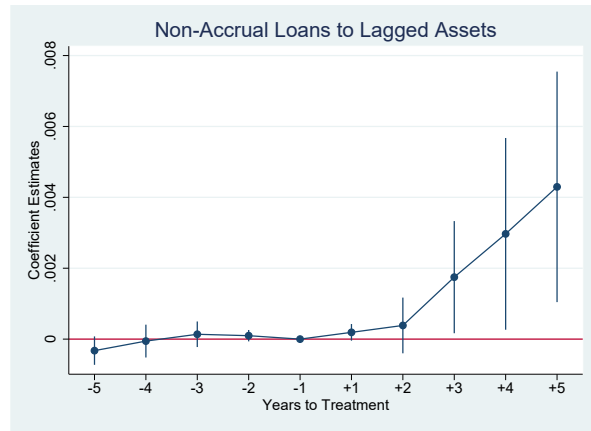
(g) Total Loan Delinquencies



(h) Loans 30 - 89 Days Past Due



(i) Loans 90+ Days Past Due



(j) Non-Accrual Loans

Table 1: Summary Statistics

Panel A: All Bank-Quarter Observations

	N	Mean	SD	P25	P50	P75
Total Assets (\$millions)	278,309	172.13	181.56	52.78	105.22	218.93
$\frac{Loans_t}{Assets_{t-1}}$	278,309	0.652	0.172	0.554	0.673	0.772
$\frac{Net\ Income_t}{Assets_{t-1}}$	278,309	0.002	0.003	0.001	0.002	0.004
$\frac{Provisions_t}{Assets_{t-1}}$	278,309	0.001	0.002	0.000	0.000	0.001
$\frac{Charge-offs_t}{Assets_{t-1}}$	278,309	0.001	0.002	0.000	0.000	0.001
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$	278,309	0.107	0.043	0.082	0.095	0.117
$\frac{Equity_t}{Assets_{t-1}}$	278,309	0.113	0.047	0.086	0.100	0.124
$\frac{LLR_t}{Assets_{t-1}}$	278,309	0.009	0.005	0.006	0.008	0.011
$\frac{Delinquencies_t}{Assets_{t-1}}$	278,309	0.017	0.017	0.005	0.012	0.024
$\frac{Past\ 30_t}{Assets_{t-1}}$	278,309	0.009	0.009	0.002	0.006	0.012
$\frac{Past\ 90_t}{Assets_{t-1}}$	278,309	0.002	0.004	0.000	0.000	0.002
$\frac{Non-Accrual\ Loans}{Assets_{t-1}}$	278,309	0.007	0.010	0.000	0.003	0.008
$\frac{PD\ TDR_{it}}{Assets_{it-1}}$	278,309	0.000	0.0002	0	0	0
$\frac{NACC\ TDR_{it}}{Assets_{it-1}}$	278,309	0.0002	0.0012	0	0	0
$\frac{Disc\ NACC\ TDR_{it}}{Assets_{it-1}}$	278,309	0.0002	0.0012	0	0	0
CAMELS Composite Rating	278,309	1.792	0.703	1	2	2
C Component Rating	278,309	1.589	0.680	1	2	2
A Component Rating	278,309	1.716	0.815	1	2	2
M Component Rating	278,309	1.854	0.710	1	2	2
E Component Rating	278,309	1.983	0.866	1	2	2
L Component Rating	278,309	1.562	0.637	1	1	2
S Component Rating	278,309	1.726	0.591	1	2	2
State Member Bank (0,1)	278,309	0.111	0.314	0	0	0

Table 2: The Effect of Removing the ICFR Audit Mandate on Supervisory Assessments

Panel A: Composite Ratings

Dep. Variable	$CAMELS_{it}$	$CAMELS_{it}$	$CAMELS_{it}$	$CAMELS_{it}$
	(1)	(2)	(3)	(4)
$Treat_i \times Post_t$	0.105*** (2.52)	0.0790*** (2.35)	0.0971*** (2.49)	0.0807*** (2.43)
$\frac{Loans_t}{Assets_{t-1}}$		-0.580*** (-7.15)		-0.529*** (-6.91)
$\frac{Tier1\ Capital_{it}}{Avg\ Assets_{it}}$		-2.270*** (-8.58)		-2.104*** (-7.65)
$\frac{Delinquencies}{Assets_{t-1}}$		12.34*** (12.77)		11.73*** (13.27)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$		-30.24*** (-8.61)		-29.80*** (-8.83)
$Ln(Assets_{t-1})$		-0.0520* (-1.93)		-0.0522* (-1.82)
Bank Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	No	No
State x Year-Quarter Fixed Effects	No	No	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ	State, YQ
N	278239	278229	278176	278166
adj. R-sq	0.594	0.656	0.612	0.663

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on CAMELS composite ratings. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 2 Continued
Panel B: Component Ratings

Dep. Variable	C_{it}	C_{it}	A_{it}	A_{it}	M	M_{it}	E_{it}	E_{it}	L_{it}	L_{it}	S_{it}	S_{it}
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treat_i \times Post_t$	0.0637** (2.08)	0.0606*** (2.40)	0.141*** (2.91)	0.126*** (3.35)	0.103*** (2.81)	0.0890*** (2.70)	0.106** (2.15)	0.0719* (1.80)	0.0346 (1.30)	0.0352* (1.68)	0.0150 (0.45)	0.00693 (0.22)
$\frac{Loans_t}{Assets_{t-1}}$		-0.488*** (-7.75)		-0.716*** (-8.58)		-0.546*** (-7.69)		-0.575*** (-5.49)		0.381*** (5.31)		-0.444*** (-7.58)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$		-3.451*** (-9.10)		-1.072*** (-4.62)		-1.168*** (-6.01)		-2.310*** (-7.22)		-1.458*** (-5.95)		-1.421*** (-6.53)
$\frac{Delinquencies}{Assets_{t-1}}$		10.27*** (11.09)		17.40*** (19.15)		11.12*** (13.19)		10.43*** (11.04)		7.603*** (9.74)		4.688*** (7.12)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$		-24.91*** (-7.04)		-21.78*** (-8.61)		-24.70*** (-8.21)		-54.30*** (-10.30)		-19.69*** (-6.52)		-22.73*** (-8.51)
$Ln(Assets_{t-1})$		-0.0000892 (-0.00)		0.0646** (2.25)		-0.00954 (-0.37)		-0.257*** (-6.63)		0.102*** (4.00)		-0.0484** (-2.21)
Bank Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ
N	278176	278166	278176	278166	278176	278166	278176	278166	278176	278166	278176	278166
adj. R-sq	0.610	0.665	0.580	0.651	0.567	0.611	0.631	0.673	0.608	0.640	0.554	0.575

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on CAMELS component ratings. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 3: The Effect of Removing the ICFR Audit Mandate on Bank Asset Quality

Dep. Variable	$\frac{Past\ 30_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 30_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 90_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 90_t \times 100}{Assets_{t-1}}$	$\frac{Non-Accrual\ Loans_t \times 100}{Assets_{t-1}}$	$\frac{Non-Accrual\ Loans_t \times 100}{Assets_{t-1}}$
	(1)	(2)	(3)	(4)	(5)	(6)
$Treat_i \times Post_t$	-0.0161 (-0.40)	-0.00345 (-0.09)	-0.0123 (-0.80)	-0.00875 (-0.59)	0.178*** (2.34)	0.197*** (2.53)
$\frac{Loans_t}{Assets_{t-1}}$		0.942*** (10.92)		0.221*** (8.15)		-0.0000298 (-0.00)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$		-1.361*** (-5.16)		-0.130 (-1.61)		-2.356*** (-6.05)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$		-1.123 (-0.45)		0.0757 (0.12)		-45.43*** (-7.10)
$Ln(Assets_{t-1})$		0.114*** (3.89)		0.0407*** (3.77)		0.224*** (5.52)
Bank Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ
N	278168	278168	278168	278168	278166	278166
adj. R-sq	0.470	0.477	0.368	0.371	0.502	0.512

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on bank asset quality ratios. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Dependent variables are multiplied by 100 to facilitate coefficient interpretation. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 4: The Effect of Removing the ICFR Audit Mandate on Bank Asset Quality by Exam Periods

Dep. Variable	$\frac{Past\ 30_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 30_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 90_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 90_t \times 100}{Assets_{t-1}}$	$\frac{Non-Accrual\ Loans_t \times 100}{Assets_{t-1}}$	$\frac{Non-Accrual\ Loans_t \times 100}{Assets_{t-1}}$
	(1)	(2)	(3)	(4)	(5)	(6)
$Exam_{it}$	0.0263*** (5.76)	0.0292*** (6.46)	-0.00779*** (-5.05)	-0.00712*** (-4.66)	0.0899*** (6.20)	0.0167 (0.00)
$Treat_i \times Post_t$	-0.00831 (-0.21)	0.00425 (0.11)	-0.0112 (-0.57)	-0.00768 (-0.40)	0.123* (1.97)	0.144** (2.20)
$Treat_i \times Post_t \times Exam_{it}$	-0.0129 (-0.91)	-0.0128 (-0.92)	-0.00158 (-0.18)	-0.00147 (-0.17)	0.0700* (1.93)	0.0681* (1.87)
$\frac{Loans_t}{Assets_{t-1}}$		0.942*** (10.99)		0.220*** (8.11)		0.00521 (0.04)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$		-1.382*** (-5.21)		-0.133 (-1.66)		-2.389*** (-6.11)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$		-0.870 (-0.36)		0.0430 (0.07)		-44.73*** (-7.17)
$Ln(Assets_{t-1})$		0.113*** (3.89)		0.0410*** (3.82)		0.223*** (4.41)
Bank Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ
N	278168	278168	278168	278168	278166	278166
adj. R-sq	0.470	0.478	0.368	0.371	0.505	0.514

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on bank asset quality ratios by examination periods. The main variable of interest, $Treat_i \times Post_t \times Exam_{it}$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise, along with an exam specific indicator. $Exam_{it}$ equals one for the quarter before, quarter of, and the quarter after bank examinations. It equals zero in all other instances. Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Dependent variables are multiplied by 100 to facilitate coefficient interpretation. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 5: The Effect of Removing the ICFR Audit Mandate on Bank Asset Quality by Exam Periods and M Rating

Dep. Variable	$\frac{Past\ 30_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 30_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 90_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 90_t \times 100}{Assets_{t-1}}$	$\frac{Non-Accrual\ Loans_t \times 100}{Assets_{t-1}}$	$\frac{Non-Accrual\ Loans_t \times 100}{Assets_{t-1}}$
<i>M</i> Rating Category	<i>M</i> ≤ 2	<i>M</i> > 2	<i>M</i> ≤ 2	<i>M</i> > 2	<i>M</i> ≤ 2	<i>M</i> > 2
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Exam_{it}</i>	0.00487** (2.51)	0.0614*** (3.96)	-0.0108*** (-8.54)	0.00674 (1.14)	0.0187*** (4.31)	0.0828*** (4.51)
<i>Treat_i × Post_t</i>	0.00414 (0.14)	-0.374** (-2.20)	0.000753 (0.06)	-0.229* (-1.72)	0.0553 (1.54)	0.614*** (2.45)
<i>Treat_i × Post_t × Exam_{it}</i>	-0.0195 (-1.52)	-0.0193 (-0.23)	-0.00638 (-0.77)	0.0180 (0.32)	0.0535*** (2.87)	-0.159* (-1.66)
$\frac{Loans_t}{Assets_{t-1}}$	0.966*** (14.22)	1.389*** (7.92)	0.228*** (10.60)	0.284*** (3.45)	0.317*** (4.32)	0.160 (0.63)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$	-0.688*** (-2.93)	-2.246*** (-3.61)	-0.0365 (-0.59)	-0.213 (-0.82)	-0.157 (-0.76)	-4.251*** (-6.01)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$	7.183*** (4.87)	1.071 (0.24)	1.346** (2.31)	1.086 (1.05)	-8.417** (-2.23)	-50.96*** (-7.73)
<i>Ln(Assets_{t-1})</i>	0.0759*** (2.99)	0.142 (1.51)	0.0333*** (4.02)	0.0648** (2.54)	0.185*** (5.63)	0.306*** (3.71)
Bank Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ	State, YQ
N	244363	33401	244363	33401	244362	33400
adj. R-sq	0.501	0.447	0.400	0.360	0.455	0.691

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on bank asset quality ratios by examination periods. The main variable of interest, *Treat_i × Post_t × Exam_{it}* is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise, along with an exam specific indicator. *Exam_{it}* equals one for the quarter before, quarter of, and the quarter after bank examinations. It equals zero in all other instances. Banks below \$500 million comprise the control group. Regressions are then segmented into CAMELS “M” rating categories. Columns (1), (3), and (5) show results for banks with satisfactory “M” ratings, while columns (2), (4), and (6) show results for banks with unsatisfactory “M” ratings. A full list of variable definitions, including Call Report line items, are in Appendix A. Dependent variables are multiplied by 100 to facilitate coefficient interpretation. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 6: The Effect of Removing the ICFR Audit Mandate on Troubled Debt Restructured Loans

Panel A: On-Average Effects

Dep. Variable	$\frac{NACCTDR_{it} \times 100}{Assets_{it-1}}$	$\frac{NACCTDR_{it} \times 100}{Assets_{it-1}}$	$\frac{Disc NACCTDR_{it} \times 100}{Assets_{it-1}}$	$\frac{Disc NACCTDR_{it} \times 100}{Assets_{it-1}}$
	(1)	(2)	(3)	(4)
$Treat_i \times Post_t$	0.0298*** (2.54)	0.0302*** (2.54)	0.0295*** (2.52)	0.0298*** (2.52)
$\frac{Loans_t}{Assets_{t-1}}$		-0.0318*** (-2.79)		-0.0317*** (-2.80)
$\frac{Tier 1 Capital_{it}}{Avg Assets_{it}}$		-0.0266 (-0.55)		-0.0289 (-0.60)
$\frac{Pre-Provision Income_t}{Assets_{t-1}}$		-2.437*** (-3.86)		-2.363*** (-3.87)
$Ln(Assets_{t-1})$		0.00747* (1.99)		0.00718* (1.94)
Bank Fixed Effects	Yes	Yes	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ	State, YQ
N	278168	278168	278168	278168
adj. R-sq	0.286	0.287	0.284	0.285

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on troubled debt restructured (TDR) loans. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 6 (Continued)

Panel B: Exam Periods

Dep. Variable	$\frac{NACCTDR_{it} \times 100}{Assets_{it-1}}$	$\frac{Disc NACCTDR_{it} \times 100}{Assets_{it-1}}$
	(1)	(2)
$Exam_{it}$	0.00613*** (3.45)	0.00601*** (3.42)
$Treat_i \times Post_t$	0.0240** (2.58)	0.0234** (2.55)
$Treat_i \times Post_t \times Exam_{it}$	0.00813 (1.53)	0.00839 (1.57)
$\frac{Loans_t}{Assets_{t-1}}$	-2.386*** (-3.86)	-2.312*** (-3.87)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$	-0.0277 (-0.57)	-0.0300 (-0.63)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$	-0.0312*** (-2.78)	-0.0311*** (-2.79)
$Ln(Assets_{t-1})$	0.00738* (1.98)	0.00710* (1.93)
Bank Fixed Effects	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ
N	278168	278168
adj. R-sq	0.288	0.286

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on troubled debt restructured (TDR) loans by examination periods. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 6 (Continued)

Panel C: Exam Periods and M Rating

Dep. Variable	$\frac{NACC TDR_{it} \times 100}{Assets_{it-1}}$	$\frac{NACC TDR_{it} \times 100}{Assets_{it-1}}$	$\frac{Disc NACC TDR_{it} \times 100}{Assets_{it-1}}$	$\frac{Disc NACC TDR_{it} \times 100}{Assets_{it-1}}$
<i>M Rating Category</i>	<i>M</i> ≤ 2	<i>M</i> > 2	<i>M</i> ≤ 2	<i>M</i> > 2
	(1)	(2)	(3)	(4)
<i>Exam_{it}</i>	0.00207*** (2.77)	0.00559** (2.16)	0.00204*** (2.72)	0.00539** (2.10)
<i>Treat_i × Post_t</i>	0.00935 (1.63)	0.107 (1.65)	0.00918 (1.63)	0.100 (1.60)
<i>Treat_i × Post_t × Exam_{it}</i>	0.00580*** (3.22)	-0.0502* (-1.93)	0.00594*** (3.12)	-0.0484* (-1.91)
$\frac{Loans_t}{Assets_{t-1}}$	-0.00429 (-0.75)	-0.0434 (-1.57)	-0.00430 (-0.77)	-0.0426 (-1.54)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$	0.0569 (1.46)	-0.139 (-1.14)	0.0533 (1.40)	-0.141 (-1.20)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$	-0.000172 (-0.00)	-2.963*** (-4.02)	0.00888 (0.04)	-2.830*** (-4.15)
<i>Ln(Assets_{t-1})</i>	0.00566** (2.30)	-0.00992 (-0.96)	0.00542** (2.26)	-0.0104 (-1.01)
Bank Fixed Effects	Yes	Yes	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ	State, YQ
N	244363	33401	244363	33401
adj. R-sq	0.238	0.552	0.237	0.549

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on troubled debt restructured (TDR) loans by examination periods, separated by managerial quality ratings. The main variable of interest, $Treat_i \times Post_t \times Exam_{it}$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise, along with an exam specific indicator. $Exam_{it}$ equals one for the quarter before, quarter of, and the quarter after bank examinations. It equals zero in all other instances. Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 7: The Effect of Removing the ICFR Audit Mandate on Bank Exam Duration

Panel A: On-Average Effects

Dep. Variable	$Days_{it}$	$Days_{it}$
	(1)	(2)
$Treat_i \times Post_t \times Full_{it}$	-1.048 (-0.66)	-0.538 (-0.34)
$Treat_i \times Post_t \times Target_{it}$	12.48** (2.27)	13.24*** (2.47)
$Treat_i \times Post_t \times Other_{it}$	2.672 (0.75)	2.984 (0.84)
$\frac{Loans_t}{Assets_{t-1}}$		-2.128 (-1.36)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$		-5.247 (-0.69)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$		-223.6*** (-3.12)
$Ln(Assets_{t-1})$		5.917*** (8.15)
Bank Fixed Effects	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes
Exam Type Fixed Effects	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ
N	277592	277592
adj. R-sq	0.288	0.286

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on exam duration. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. It is separated into sub-groups based upon the the type of bank examination Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 7 (Continued)
Panel B: Exam Duration by M Rating

Dep. Variable	<i>Days_{it}</i>		<i>Days_{it}</i>	
	<i>M</i> ≤ 2	<i>M</i> > 2	<i>M</i> ≤ 2	<i>M</i> > 2
	(1)	(2)	(3)	(4)
$Treat_i \times Post_t \times Full_{it}$	-1.366 (-0.97)	-2.608 (-0.46)	-1.091 (-0.78)	0.837 (0.15)
$Treat_i \times Post_t \times Target_{it}$	6.776*** (3.79)	4.471 (0.46)	6.673*** (4.11)	8.371 (0.88)
$Treat_i \times Post_t \times Other_{it}$	2.032 (0.56)	-8.028 (-0.54)	2.161 (0.60)	-6.207 (-0.51)
$\frac{Loans_t}{Assets_{t-1}}$			1.481 (1.14)	0.294 (0.06)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$			3.012 (0.45)	-24.19 (-1.23)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$			-42.75 (-0.65)	-15.69 (-0.12)
$Ln(Assets_{t-1})$			4.027*** (6.09)	10.13*** (4.90)
Bank Fixed Effects	Yes	Yes	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Exam Type Fixed Effects	Yes	Yes	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ	State, YQ
N	243220	29697	243213	29697
adj. R-sq	0.632	0.723	0.633	0.725

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on exam duration. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. It is separated into sub-groups based upon the the type of bank examination Banks below \$500 million comprise the control group. A full list of variable definitions, including Call Report line items, are in Appendix A. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 8: The Effect of Removing the ICFR Audit Mandate on Bank Asset Quality by Exam Type

Panel A: Asset Quality Ratios

Dep. Variable	$\frac{Past\ 30_t \times 100}{Assets_{t-1}}$	$\frac{Past\ 90_t \times 100}{Assets_{t-1}}$	$\frac{Non-Accrual\ Loans_t \times 100}{Assets_{t-1}}$
	(1)	(2)	(3)
<i>Targeted Exam_{it}</i>	0.0769 (1.26)	-0.00508 (-0.18)	0.284*** (2.97)
<i>Full Exam_{it}</i>	0.0329*** (7.42)	-0.00770*** (-3.86)	0.0742*** (6.23)
<i>Other Exam_{it}</i>	0.0106* (1.86)	-0.00866*** (-5.16)	0.0513*** (5.34)
<i>Treat_i × Post_t</i>	0.00395 (0.10)	-0.00814 (-0.42)	0.141** (2.23)
<i>Treat_i × Post_t × Targeted Exam_{it}</i>	0.0119 (0.10)	-0.0499 (-1.09)	0.414** (2.05)
<i>Treat_i × Post_t × Full Exam_{it}</i>	-0.0223 (-1.21)	-0.00906 (-1.45)	0.0950*** (3.16)
<i>Treat_i × Post_t × Other Exam_{it}</i>	-0.00124 (-0.04)	0.0173 (1.07)	-0.0254 (-0.48)
$\frac{Loans_t}{Assets_{t-1}}$	0.963*** (11.52)	0.224*** (8.39)	0.0891 (0.66)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$	-1.320*** (-5.01)	-0.122 (-1.54)	-2.114*** (-6.18)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$	0.266 (0.11)	0.252 (0.39)	-39.45*** (-7.27)
$Ln(Assets_{t-1})$	0.116*** (3.92)	0.0412*** (3.79)	0.230*** (5.87)
<i>TP × Targeted – TP × Full</i>	0.0343 (0.30)	-0.041 (-0.96)	0.319* (1.66)
<i>TP × Targeted – TP × Other</i>	0.0132 (0.11)	-0.0672 (-1.51)	0.439** (2.09)
<i>TP × Full – TP × Other</i>	-0.0211 (-0.54)	-0.0264 (-1.87)	0.120** (2.13)
Bank Fixed Effects	Yes	Yes	Yes
State × Year-Quarter Fixed Effects	Yes	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ	State, YQ
N	277592	277592	277590
adj. R-sq	0.479	0.371	0.528

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on asset quality ratios by examination type. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. Banks below \$500 million comprise the control group. It is then separated out by examination type. A full list of variable definitions, including Call Report line items, are in Appendix A. Dependent variables are multiplied by 100 to facilitate coefficient interpretation. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 8 (Continued)

Panel B: Troubled Debt Restructured Loans

Dep. Variable	$\frac{NACCTDR_{it} \times 100}{Assets_{it-1}}$	$\frac{Disc NACCTDR_{it} \times 100}{Assets_{it-1}}$
	(1)	(2)
<i>Targeted Exam_{it}</i>	0.0203* (1.93)	0.0196* (1.89)
<i>Full Exam_{it}</i>	0.00582*** (3.56)	0.00570*** (3.51)
<i>Other Exam_{it}</i>	0.00294*** (2.74)	0.00292*** (2.77)
<i>Treat_i × Post_t</i>	0.0239*** (2.57)	0.0234*** (2.55)
<i>Treat_i × Post_t × Targeted Exam_{it}</i>	0.0983** (2.28)	0.0945** (2.21)
<i>Treat_i × Post_t × Full Exam_{it}</i>	0.0135* (1.91)	0.0139* (1.94)
<i>Treat_i × Post_t × Other Exam_{it}</i>	-0.0119* (-1.89)	-0.0114* (-1.88)
$\frac{Loans_t}{Assets_{t-1}}$	-0.0254*** (-2.56)	-0.0254*** (-2.57)
$\frac{Tier\ 1\ Capital_{it}}{Avg\ Assets_{it}}$	-0.00864 (-0.19)	-0.0112 (-0.25)
$\frac{Pre-Provision\ Income_t}{Assets_{t-1}}$	-2.033*** (-3.94)	-1.965*** (-3.97)
$Ln(Assets_{t-1})$	0.00803** (2.16)	0.00774** (2.11)
<i>TP × Targeted – TP × Full</i>	0.085** (2.11)	0.0810** (2.02)
<i>TP × Targeted – TP × Other</i>	0.110*** (2.52)	0.106*** (2.45)
<i>TP × Full – TP × Other</i>	0.0253** (2.19)	0.0253** (2.19)
Bank Fixed Effects	Yes	Yes
State x Year-Quarter Fixed Effects	Yes	Yes
Std Errors Clustered at	State, YQ	State, YQ
N	277592	277592
adj. R-sq	0.293	0.290

This table presents the static difference-in-differences regression estimates for the effect of removing the internal control audit mandate on troubled debt restructured loans by examination type. The main variable of interest, $Treat_i \times Post_t$ is an indicator that equals one for banks between \$500 million and \$1 billion after 2004, zero otherwise. Banks below \$500 million comprise the control group. It is then separated out by examination type. A full list of variable definitions, including Call Report line items, are in Appendix A. Dependent variables are multiplied by 100 to facilitate coefficient interpretation. Standard errors are double clustered at the state and year-quarter level. T-statistics are reported in parentheses. The symbols *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels, respectively.