

POLITICAL IDEOLOGY AND CEO PERFORMANCE UNDER CRISIS

Katherine Campbell, Cullen F. Goenner*, Matthew Notbohm, and Adam Smedema

Katherine Campbell, PhD
Professor and Chair of Accountancy
293 Centennial Drive Stop 8097
University of North Dakota
Grand Forks, ND 58202, USA
katherine.campbell@UND.edu

*Corresponding Author
Cullen F. Goenner, PhD
Professor of Economics & Finance
293 Centennial Drive Stop 8369
University of North Dakota
Grand Forks, ND 58202, USA
cullen.goenner@UND.edu

Matthew Notbohm, PhD
Associate Professor of Accountancy
UND Accountancy Legacy Professor
293 Centennial Drive Stop 8097
University of North Dakota
Grand Forks, ND 58202, USA
matthew.notbohm@UND.edu

Adam R. Smedema, PhD
Lecturer of Finance
5725 Grainger Hall
University of Wisconsin – Madison
Madison, WI 53706, USA
arsmedema@wisc.edu

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Abstract

Management quality is known to influence depository institution performance, but less understood are the characteristics of managers that influence performance. We empirically examine how the political ideology of a credit union's CEO influenced decision making and performance during the financial crisis. Our results indicate that the return on assets of credit unions run by conservative CEOs are 22 basis points lower during the crisis relative to liberal CEOs. Returns are shown to be lower as a direct result of credit unions with conservative CEOs applying more conservative accounting practices for loan losses than their counterparts during the crisis, despite similar loan quality. (JEL G21, G28)

Keywords: Credit unions; accounting practices; performance; conservatism; financial crisis

I. INTRODUCTION

Managers of depository institutions play an important role in establishing the institution's organizational culture, which can affect its decision making and performance. Cultural differences across banks have been increasingly identified by regulators as contributing to unethical behavior that led to financial instability and billions of dollars in fines subsequent to the financial crisis of 2008. Culture, though, is a nebulous concept (Thakor, 2016), not easily measured, and its effect on bank performance is not necessarily well understood. Principles of bank management teach that differences in credit culture influence lending activity and the assessment of risk. According to Koch and MacDonald (2014), a values-driven or conservative approach emphasizes credit quality and bank safety over higher returns. Other cultures may focus on maximizing current profits or market share.¹ Culture is closely related to a bank's management quality, which is one of the six areas in the acronym (CAMELS) that regulators use

¹ Koch and MacDonald (2014) describe a credit culture that maximizes current profits as *moderately aggressive* and that which maximizes market share as *aggressive*.

to monitor a bank's conditions.² Like culture, management quality is difficult to empirically measure and is instead assessed by regulators during on-site exams via confidential interviews with management.³ A firm's CEO and their personality traits we posit are key to setting the tone for the firm's culture and management quality, which influence the firm's response during a crisis. In this study we specifically examine whether variation in decisions and outcomes at credit unions during the financial crisis can be explained by differences in CEOs' political ideologies.

Previous research (Ellul and Yerramilli, 2013; Erkens et al., 2012; Fahlenbrach et al., 2012) has shown that poor bank performance during the great financial crisis was driven by risk-seeking policies prior to the crisis. Ho et al. (2016) directly link risk-seeking behavior to differences in CEO traits, where overconfident bank CEOs took on more risk in the pre-crisis period by adding to their loan portfolios and increasing leverage, relative to other banks.⁴ This resulted in more nonperforming loans and lower overall returns during the crisis. Whereas these previous studies (Ellul and Yerramilli, 2013; Erkens et al., 2012; Fahlenbrach et al., 2012; Ho et al., 2016), consider differences in the pre-crisis management decisions of depository institutions, our paper examines differences in the decisions made by firms in response to the crisis. We contribute to the literature by finding that differences in CEO political ideologies also influence

² The other CAMELS components include measures of capital adequacy, asset quality, earnings, liquidity, and sensitivity to market risk. The Office of the Comptroller of the Currency, the FDIC, and the Federal Reserve use all six components in their evaluation of banks, whereas the NCUA applies the first five to credit unions.

³ Typical statistical models (e.g., FDIC SCOR model, Federal Reserve FIMS model) used to understand risk exposure control for CAEL (capital adequacy, asset quality, earnings, liquidity); for a discussion of the FDIC's Statistical CAMELS Off-Site Rating (SCOR) model see Collier et al. (2003), and for more details on the Federal Reserve's Financial Institutions Monitoring System (FIMS) model see Cole et al. (1995).

⁴ The measure of a CEO's overconfidence is based on a CEO's delay in the exercise of deep in-the-money stock options.

depository institutions' decisions during the crisis.⁵ We utilize political contributions data from the Federal Elections Commission to identify a credit union CEO's political ideology.

Differences in political ideology are shaped by differences in key personality traits and have been found to influence managerial behaviors and outcomes in several non-depository institution settings (Christensen et al., 2015; Di Giuli and Kostovetsky, 2014; Hong and Kostovetsky, 2012; Hutton et al., 2014, 2015; Notbohm et al., 2019). We posit differences in CEO's ideologies result in different bases of judgement during the crisis, which affect the observable decisions made by credit unions led by conservative CEOs, relative to their liberal counterparts.

Credit unions provide a natural context for such a study, because in the commercial bank setting, it is inherently challenging to isolate the effects on decisions of individual CEO characteristics from constraints imposed by the board of directors. A board of directors can constrain a bank CEO's decision making and potentially resolve agency problems.⁶ Large banks in the United States with stronger corporate governance mechanisms, for example, are shown by Peni and Vähämaa (2012) to outperform their counterparts (higher return on assets and Tobin's q) during the period 2005–2008, with the effect magnified during the financial crisis of 2008.⁷ Bank holding companies with more experienced board members, where board members serve on three or more boards, have also been found by Elyasiani and Zhang (2015) to improve performance (higher returns and lower risk) for the period 2001–2010. Similar to Peni and Vähämaa (2012), they find the experience of the board has a stronger effect on returns during the

⁵ Jost (2006) discusses the history of the use of the term *ideology*. We adopt a definition of ideology that he describes as “an interrelated set of moral and political attitudes that possess cognitive, affective, and motivational components.”

⁶ Beltratti and Stulz (2012) is a notable exception in that they find that banks with shareholder-friendly boards performed worse during the crisis. Their sample consisted of 503 banks from thirty-two countries with sixty-three banks from the United States.

⁷ The measure of strength of governance is based on firm-specific factors covering the areas of auditing practices, the board of directors, director education, and executive compensation among others (Brown and Caylor, 2009).

crisis years (2008–2010), though in this period a more experienced board had less of an effect on risk. The independent flow of information between insiders and the board is also shown (Aebi et al., 2012) to improve the performance of banks during the crisis.

Credit unions differ from commercial banks in that they have a board of directors made up of unpaid volunteers, who are members of the credit union elected by the membership.⁸ Therefore the perception (DeYoung et al., 2016) is that CEOs of credit unions are subject to less monitoring and constraint in their decision making, relative to other depository institutions. This implies CEOs of credit unions are more able to shape their firms' culture in their own image and base decisions on their own judgement. This effect is further strengthened, as credit unions' smaller size tends to make their firm's shared culture stronger than that of larger organizations (Van den Steen, 2010). The result of this combination of characteristics is that observed differences in credit union decisions and outcomes are more likely due to differences in CEOs' traits, than a similar study of commercial banks.

We find here that observed differences in the political ideologies of credit union CEOs prior to the financial crisis explain variations in their firms' decisions and performance during the crisis. Using a difference-in-difference framework, we find that the return on assets of credit unions managed by conservative CEOs were 22 basis points lower than their liberal counterparts during the financial crisis (2008–2009), relative to the difference in their returns prior to the crisis. The magnitude of the effect is substantial, given returns on assets averaged 63 basis points in the five years prior. We further show that the channel reducing returns is due to conservative accounting behavior during the crisis by credit unions led by CEOs with conservative ideologies. Credit unions managed by conservative CEOs use more conservative

⁸ Credit Union Membership Access Act, Pub. L. No. 105-219 (1998). Members each have an equal vote regardless of their level of deposits.

accounting practices, evidenced by larger discretionary provisions for loan losses when controlling for similar observed loan quality. This difference in provisioning reduces returns by 15 basis points during the crisis. We also demonstrate that these additional provisions proved timelier than those of their counterparts.

The remainder of the paper is organized as follows: Section 2 reviews the relevant literature on personality, political ideology, and decision making. Section 3 describes construction of our proxy measure for a CEO's ideology based on Federal Elections Commission (FEC) records of personal political contributions. In Section 4, we examine the effects of conservatism on returns during crisis; in Section 5 we look at the channel that led to lower returns and show the cause to be conservative behavior of credit unions run by conservative CEOs. We then provide concluding thoughts in Section 6.

II. PERSONALITY, POLITICAL IDEOLOGY, AND DECISION MAKING

A. Managerial Heterogeneity and Business Outcomes

Recent studies in accounting and finance demonstrate that manager-specific characteristics help to explain a variety of decisions and business outcomes. Brochet and Welch (2011) show that the previous work experience of top executives affects the discretion they use in their financial reporting of impairments to goodwill following an acquisition. Earnings forecasts have also been shown to be affected by differences in experience. Forecasts are made less frequently and more narrowly among managers with careers in accounting and finance, with those with military experience also reporting narrower forecasts (Bamber et al., 2010). Benmelech and Frydman (2015) also find that firms with CEOs who have military experience display more conservative corporate policies (investment, R&D) and behave more ethically. The

effect is such that firms with a CEO with a military background outperform their counterparts (Benmelech and Frydman, 2015) during a crisis.

Differences in managers' demographic characteristics also play a role (Bertrand and Schoar, 2003; Bamber et al., 2010) in corporate decisions and performance. Bertrand and Schoar (2003) find that CEOs with MBAs produce higher returns on their firms' assets, when controlling for differences in firm-specific characteristics. They also examine the effects of CEOs' age and find that older CEOs tend to favor lower investment and leverage, behaviors they consider to be more financially conservative. The age of managers also contributes to less frequent forecasts of earnings (Bamber et al., 2010).

Differences in political ideology have also been shown (Christensen et al., 2015; Di Giuli and Kostovetsky, 2014; Hong and Kostovetsky, 2012; Hutton et al., 2014, 2015; Notbohm et al., 2019) to explain corporate decision making and firm performance. These studies use the pattern of partisan political contributions to identify managers' political affiliation and ideology. Managers who contribute to Democrats tend to be both more socially responsible and liberal in decision making. Hong and Kostovetsky (2012) show that mutual fund managers who are net contributors to the Democratic Party are more likely to underweight stocks of socially irresponsible firms (e.g., guns and defense, tobacco, and natural resources) in their portfolios relative to other fund managers. In addition, firms run by Democrats are more socially responsible (Di Giuli and Kostovetsky, 2014) and are subject to less litigation on civil rights, labor, and environmental matters (Hutton et al., 2015). Companies with Republican managers tend to have more conservative corporate behaviors. Hutton et al. (2014) find that Republican CEOs operate less leveraged firms with investments in corporate assets that are less risky. Their estimates further indicate that firms run by Republican managers have a higher return on assets.

Risk aversion may also explain why firms with Republican managers are less likely to avoid corporate taxes (Christensen et al., 2015) and make more conservative accounting judgements (Notbohm et al. 2019). Together, the results of these studies suggest that Republican managers tend to be more risk averse.

B. Personality Traits and Ideology

Underlying many of the differences in managerial characteristics are key personality traits. Personality traits play an important role in determining how individuals respond to stimuli by shaping their attitudes and behaviors (Denissen and Penke, 2008). Psychologists classify an individual's core, or higher-order personality, traits across five dimensions, referred to as the Big Five —openness to experience, conscientiousness, extraversion, agreeableness, emotional stability. These core traits are established early in life and can be traced, in part, to genetic factors (see Verhulst et al., 2012 for discussion). Individual traits tend to be stable over time, as there is a tendency of individuals to choose environments (friendships, marriages, workplaces) that compliment one's traits. When faced with situations that are psychologically similar, an individual behaves consistently over time and across settings (Sherman et al., 2010). Studies have shown this consistency extends to decisions at home and the workplace, tying managers' personal debt (Cronqvist et al., 2012), tax avoidance (Chyz, 2013), and criminal behavior (Davidson et al., 2015) to their firms' corporate decisions in these areas. Differences in personality traits explain why responses to similar stimuli differ by individual and contribute to differences in education, health, and career outcomes (Caspi et al., 2005).

An individual's political ideology and party affiliation, whether they identify themselves as conservative (Republican) or liberal (Democrat), has also been shown to be associated with their personality traits. Individuals who are more open to experience tend to be imaginative,

creative, with a tendency toward unconventional ways of thinking and are more likely to self-identify as being liberal (Gerber et al., 2010; Mondak and Halperin, 2008) and Democrats (Mondak and Halperin, 2008; Verhulst et al., 2012). Individuals who identify as conservatives (Gerber et al., 2010; Mondak and Halperin, 2008) and Republicans (Mondak and Halperin, 2008; Verhulst et al., 2012) tend to be more conscientious. Conscientious individuals are described as being responsible, attentive, and careful, while feeling a need for order and an intolerance for uncertainty. When faced with uncertainty, conscientious individuals tend to fear that life is changing for the worst (Jost et al., 2003). Conservative (Gerber et al., 2010) and Republican (Verhulst et al., 2012) individuals also exhibit more emotional stability. Emotional stability is a trait reflecting an individual's predisposition toward negative emotions (Caspi et al., 2005), such that conservatives and Republicans feel less anxiety and guilt.

Personality traits also determine whether individuals respond to stressful events with coping mechanisms that are emotion-focused or problem-focused (Lazarus and Folkman, 1984). Emotion-focused coping includes behaviors that regulate the emotions caused by stress, and problem-focused coping involves behaviors that attempt to alter or find a solution to a stressful situation. Individuals who are conservative and Republican tend to be more conscientious and are therefore less likely to use emotion-coping skills, such as escape avoidance and disengagement (O'Brien and DeLongis, 1996; Watson and Hubbard, 1996), and are more likely to use problem-focused coping skills that include deliberate action and planning (Penley and Tomaka, 2002; Watson and Hubbard, 1996). Due to their emotional stability, conservatives and Republicans are less prone to anxiety, which also strengthens their ability to cope by problem solving. The ability of liberals and Democrats to cope is less clear, as openness to experience has a relatively weak relation to coping behaviors, with results (McCrae and Costa, 1986;

O'Brien and DeLongis, 1996; Watson and Hubbard, 1996) showing both positive and negative associations to emotion-focused responses.

C. CEO Ideology and credit union decision making

We examine here how the variation in personality traits, coping mechanisms, and attitudes of CEOs, based on their ideology, affects the decision making of conservative (Republican) CEOs, relative to their liberal (Democratic) counterparts, in response to the great financial crisis. Decision making within credit unions is constrained by their institutional context. Credit unions operate in a heavily regulated industry, which may limit a CEO's ability to make decisions based on their ideology, relative to CEOs of firms in other sectors (Christensen et al., 2015; Di Giuli and Kostovetsky, 2014; Hutton et al., 2014). Commercial banks though operate in a similar regulatory environment and have been found (Ho et al., 2016) to have significant variation in their pre-crisis risk-taking and post-crisis performance based on a CEO's traits (e.g. overconfidence). Credit unions though differ from banks, as they are non-profit cooperatives that are owned by their members, which reduces managers' incentives for variation in risk taking and managing earnings. In addition, credit unions were unable to engage in the non-traditional banking activities (e.g. asset securitization, investment banking, and venture capital) that put banks at higher risk during the crisis (Bhagat et al., 2015; De Young and Torna, 2013).⁹ Traditional banking activities are also constrained, as a credit union's choice of assets in their loan portfolio is limited by their requirement of a unique membership bond that allows the credit union to only extend credit to members. This bond between members constrains a credit union's ability to grow and enter into alternative loan markets where there isn't member demand (Kane and Hendershott, 1996). CEOs of credit unions therefore have a

⁹ For example, credit unions are limited in their exposure to risk taking with off-balance sheet activities, as credit unions, unlike banks, are unable to act as dealers for over the counter swaps.

small choice set in which their ideology and variation in judgement can influence strategic decision making.

When faced with a negative financial shock (e.g. economic recession, financial crisis) and an increase in credit risk, lenders typically respond by tightening their credit standards, provisioning for higher future losses, increasing collections efforts, and reducing headcount. The degree to which depends on the perceived magnitude of the shock and the uncertainty in one's prediction. The effects of these changes though are not always immediately apparent on the bottom line. For example, tightening lending standards will only change the growth rate of new loans and will have little effect on the composition of the loan portfolio and net interest income. Provisions for loan losses though require decision makers to be forward looking and use their best judgement of future loan default rates. Credit unions in normal times adopt provisions based largely on their historic losses that tend to be very low, whereas during downturns there exists variation in judgement of how high defaults will rise. This variation in the evaluation of the effects on credit risk and need for provisions has an immediate effect on net interest income and the return on assets. The great financial crisis (2008-2009) provides a natural experiment to test whether management's ideology and variation in judgement affects this decision making, as the magnitude of the crisis would become the worst in our CEOs' adult lifetimes.¹⁰ From the beginning of 2008 to year-end 2009, credit union member bankruptcies doubled from 158,114 to 323,733, loan charge-offs increased from 0.51% to 1.21%, the return on average assets declined from 0.63% to 0.18%, and net worth declined from 11.4% to 9.9% (NCUA, 2010).

We predict CEOs of credit unions use a more subjective basis for judging their decisions when facing a more uncertain environment. This basis of judgement, we believe, is influenced

¹⁰ Hutton et al. (2014) also use the September 2008 Lehman Brothers bankruptcy as a natural experiment to evaluate investment behavior of conservative managers due to the increase in uncertainty of future economic policy.

by differences in their ideology and associated personality traits. Personality traits, in part, influence how individuals respond to stressors, where we noted those with conservative ideologies tend to be more likely than liberals to take direct actions in response to stress and uncertainty (Penley and Tomaka, 2002; Watson and Hubbard, 1996). Differences in coping mechanisms and problem solving associated with ideology also suggest that credit unions managed by conservatives CEOs are more likely to have a stronger response, due to their CEOs' greater dislike for uncertainty. We therefore hypothesize there is variation in decision making such that:

Hypothesis 1: Credit unions managed by conservative CEOs respond more strongly than their liberal counterparts to the great financial crisis.

The difference in response we theorize is shaped by our CEO's subjective view of an uncertain future. Conservative individuals tend to be more conscientious, which leads them towards stronger judgements that conditions are changing for the worse when faced with an increase in uncertainty, relative to their liberal counterparts. We expect this variation in behavior and judgement results in decisions where conservative-led credit unions perceive, on the basis of the same observables, there to be a larger increase in credit risk, relative to their liberal counterparts. We therefore hypothesize:

Hypothesis 2: Decisions made by credit unions managed by conservative CEOs during the great financial crisis reflect a greater perceived increase in credit risk than their counterparts managed by liberal CEOs.

III. PROXY MEASURE OF CEO IDEOLOGY

Our empirical analysis examines the treatment effect of the financial crisis on credit unions that were managed by conservatives in the period prior to the crisis. Differences in

personal ideology are associated with differences in core beliefs and methods of coping, which result in variations in judgment and decisions during crises. In the context of the firm, we believe that CEOs' ideologies not only directly influences their own business decisions, but also shape a corporate culture that influences their employees' decisions (Davidson et al., 2015).¹¹¹² Corporate cultures, in general, change slowly over time (for discussion see Peni and Vähämaa, 2012). We measure the CEO's ideology prevalent at each credit union based on the ideologies of their CEOs in the four-year period (2004–2007) prior to the crisis. Our sample consists of 11,831 unique CEOs included in the directory information contained in December NCUA Call Reports. The personal ideologies of CEOs are not directly observable, therefore we construct a proxy measure based on the pattern of individual political contributions to candidates of the Democratic and Republican parties. Our approach, similar to that of Hong and Kostovetsky (2012), interprets CEOs as having a conservative ideology if they primarily gave to the Republican Party and liberal if they primarily gave to the Democratic Party.

A. Political Contribution Data

Data on individual political contributions are publicly available from the Federal Election Commission (FEC).¹³ Political candidates, candidate committees, political parties, and political action committees are required by law to provide an itemized record of contributors who give

¹¹ Davidson et al. (2015) find that different characteristics of CEOs may have an effect on fraudulent practices at their firm via either channel. CEOs convicted of prior legal infractions are also more likely to commit fraud at their firm, while there is no effect on other employees' behavior (propensity channel). Firms run by "unfrugal" CEOs though are more likely to have employees who commit fraud, despite their being no difference in CEO's behavior in this regard (corporate channel).

¹² Practitioner articles include references to the importance of credit union CEOs in shaping the credit union's culture. Examples of these include "If the (credit union's) culture is not being led by the CEO with strong support from the head of HR, it may be time to hit the reset button." (Shanley, <https://www.jmfa.com/News-Events/Articles-Posts/does-your-credit-union-really-have-a-member-centric-culture>), and "When Harbin took the helm (of Commonwealth Credit Union) in early 2012, she had her eyes set on creating a culture..." (Simpson, <https://www.creditunions.com/articles/how-to-foster-a-new-culture-across-the-credit-union/>).

¹³ The records are available for download at <http://www.fec.gov/finance/disclosure/ftpdet.shtml>.

\$200 or more in total per calendar year.¹⁴ Included in the “contributions by individual” record are the contributor’s self-reported full name (first and last without initials), address, employer, and occupation. Also included are the contribution date, the amount, and aggregate year-to-date total contributions. A separate data file includes each candidates’ party affiliation, which is merged with contributions to identify partisan contributions to candidates. We matched contributions data from the FEC database with data from the December credit union Call Reports using CEO name and credit union name (i.e., their employer).¹⁵

Our measure of a CEOs’ political ideology is based on the pattern of their “lifetime” contributions to candidates, as ideology is relatively stable over time (Gerring, 1997). The challenge is that we lack the complete employment history of our CEOs, thus our measure is based on a CEO’s lifetime contributions while employed with the same credit union.¹⁶ Lifetime contributions include those made during the 1979–1980 election cycle through the 2005–2006 election cycle. We purposely use contribution data prior to the period we examine to identify pre-treatment characteristics of ideology and eliminate the possibility of including contributions that may have been made in response to the financial crisis. While the direction of any potential bias is ambiguous, a CEO’s political contributions during the financial crisis could be correlated with his or her credit union’s performance during the period. Basing our analysis on pre-crisis contributions avoids the potential for endogeneity.

¹⁴ See 52 U.S.C. § 30104. Prior to 1989, contributions of \$500 or more were required to be reported <https://www.fec.gov/campaign-finance-data/contributions-individuals-file-description/>.

¹⁵ We used a combination of SASs fuzzy matching and manual reviews. Many matches were a perfect match and for those that were not (typically involving abbreviations), we conducted a manual review to find the matching credit union and eliminate cases that contained the relevant strings but were not credit unions.

¹⁶ We impose this restriction on previous employment as it is impossible for us to identify whether individuals with the same name, but a different employer in an earlier period are the same contributors in question. The contributor in an earlier period is not necessarily the CEO.

Approximately 3.3% (390) of our sample of 11,831 CEOs contributed to political candidates or candidate campaign committees.¹⁷ The aggregate amount of their contributions totaled \$624,662, which was split between candidates of the Republican Party (62.5%), Democratic Party (37.4%), and third-party candidates (0.1%). The observed pattern of partisan contributions by credit union CEOs is consistent with those of trade groups that represent commercial banks and credit unions. During the 2005–2006 election cycle, the American Bankers Association made 63.2% of their \$3,009,397 in political contributions to Republican candidates, while the Credit Union National Association (CUNA) made 54.0% of their \$2,696,968 in contributions to Republicans.¹⁸ This pattern is also consistent with political contributions of CEOs from other industries. Di Giulia and Kostovetsky (2014) report that CEOs of the 3,000 largest publicly traded firms in the United States (Russell 3000) made 59% of their contributions to Republicans. In our dataset, the mean (median) number of contributions and their amount by CEO was 3.23 (2) and \$1,602 (\$503), respectively.

Most of the 390 credit union CEOs (83%) that made political contributions gave exclusively to candidates of one party—205 CEOs gave only to Republicans, 119 gave only to Democrats, and one gave only to a third-party candidate.¹⁹ Contribution amounts were similar across the two parties, with the mean (median) level of contributions from CEOs giving only to Republicans equal to \$921 (\$500) and those giving to Democrats equal to \$1,064 (\$500). Of the

¹⁷ This is significantly less than the 29% of mutual fund managers (Hong and Kostovetsky, 2012) and the 70% of managers of firms in the Russell 3000 (Di Giuli and Kostovetsky, 2014) that made partisan contributions. Compensation of credit union CEOs though is significantly lower than these other managers. The median total compensation for credit union CEOs was \$176,371 in 2008 (Bankston, 2008), whereas median compensation of fund (equity) managers was \$456,000 in 2007 (CFA Institute, 2007), and median compensation was 2,885,000 for CEOs of the Russell 3000 in 2010 (Tonello and Reda, 2015).

¹⁸ Data is from the Center for Responsive Politics which is available online at <https://www.opensecrets.org/industries/contrib.php?ind=F03&Bkdn=DemRep&cycle=2006>

¹⁹ Di Giuli and Kostovetsky (2014) find a similar pattern of exclusive giving among CEOs of firms in the Russell 3000.

remaining sixty-five CEOs that gave to multiple parties, sixty-four gave to both the Republican and Democratic Parties, and one CEO made contributions to Republicans and a third-party.

The mean and median contributions of the group with mixed contributions were higher at \$4,747 and \$2,250. Looking at the pattern of mixed contributions, we find six of our CEOs gave exactly the same amount to Democrats as they did Republicans, whereas thirty-three CEOs gave more to Republicans and twenty-six gave more to Democrats. The data shows a slightly stronger ideological affinity among CEOs who gave primarily to Republicans. For each dollar this group of CEOs gave to Democrats, they also gave \$2.51 to Republicans based on the median CEO's contributions, whereas the typical CEO that contributed more to Democrats contributed \$1.63 to Democrats for each dollar they contributed to Republicans.

B. Proxy Measures of CEO Ideologies

Based on their contributions, we define as conservative the 238 CEOs who gave more to Republican candidates and as liberal the 145 CEOs who gave more to Democrats.²⁰ The vast majority of our CEOs are defined as having a nonpartisan or unidentified ideology. These CEOs include the six who gave equally to both parties and those who did not give at all. Each CEO's ideology is used to classify the ideology of the CEO prevalent at each credit union in the years prior to the crisis (2004–2007). We define credit unions with conservative CEOs, as those that had at least one CEO during the pre-crisis period whose lifetime personal contributions were made predominately to candidates of the Republican Party and did not have a CEO who primarily gave to Democratic Party candidates. These credit unions managed by conservative

²⁰ Others (Di Giuli and Kostovetsky, 2014; Hutton et al., 2014) have used a continuous measure of ideology based on the pattern of giving. We chose to use an indicator-based measure of ideology (Hong and Kostovetsky, 2012) given that 83% of our CEOs gave exclusively to one party and those who did not had strong partisan giving. This also avoids the need to arbitrarily code the ideology of CEOs that do not give—the vast majority of our CEOs.

CEOs represent our treatment group, i.e., the set of credit unions we believe to be uniquely influenced by the crisis. Our primary control group is made up of liberal credit unions. Credit unions defined as having a liberal CEO satisfied the exact opposite conditions: at least one CEO that contributed primarily to candidates of the Democratic Party and no CEO that gave primarily to Republicans in the pre-crisis (2004-2007) period. Based on their pre-crisis leadership and these criteria, 220 credit unions are classified as having conservative CEOs, 136 as liberal, and the remaining 7,435 have what we refer to as a nonpartisan or unidentified ideology. Credit unions that have a CEO with a nonpartisan ideology will be used as alternative control group in our robustness checks.

IV. CONSERVATISM AND THE EFFECTS ON RETURNS

A. Identification and Estimation Strategy

Prior to the crisis, credit unions managed by conservative and liberal CEOs were quite similar in terms of their performance, balance sheets, and market segments (see Table 1). The return on assets at year-end 2007, for example was 0.70% for credit unions with conservative managers and 0.57% for those with liberal managers. The normalized difference in these returns (0.11) indicates their similarity, as values less than 0.25 are interpreted (Imbens and Rubin, 2015) as small.²¹ Leverage ratios were also similar, averaging 11.64% (11.57%) for credit unions with conservative (liberal) managers. Given the similarity of risk and returns, we also find asset and liability management to be similar across a number of measures. Covariate balance between the two groups is important in our setting, as imbalance can result in difference-

²¹ The normalized difference for covariate X_k is equal to $\Delta_{X,k} = \frac{\bar{X}_{cons,k} - \bar{X}_{non-cons,k}}{\sqrt{(S_{X,cons,k}^2 + S_{X,non-cons,k}^2) / 2}}$ where we have the difference in the mean of covariate X_k between conservative and liberal credit unions in the numerator and their standard deviations in the denominator.

in-difference estimates that are sensitive to model specification (Imbens and Rubin, 2015) and increase the possibility of time-varying unobserved differences influencing the variation in returns observed between periods and groups.

[Insert Figure 1 about here]

Figure 1 shows that in the period leading up to the 2008 financial crisis, credit unions led by conservative CEOs had returns similar to their liberal counterparts, but the returns of the two groups subsequently diverged. In 2008, returns at conservative credit unions fell 77 basis points and became negative, whereas returns at their liberal counterparts decreased by only 53 basis points. This divergence grew in 2009 as returns continued downward for conservative-led credit unions and began to improve for liberals. Return on assets then reverted to pre-crisis levels in 2010. To determine the role ideology played in the divergence in returns during the crisis (2008–2009), we need to identify what would have happened to returns of credit unions if they had not been managed by conservative CEOs, i.e., the true counterfactual. Here we use a difference-in-difference estimation approach to compare returns, prior to and during the crisis, for our credit unions managed by conservative and liberal CEOs. Using this approach, the difference in returns between periods for liberal credit unions represents what would have happened to returns among conservative-led credit unions during the crisis if they had not been managed by conservative CEOs. By comparing the difference in returns between periods and groups we are able to identify the effect a CEO's conservative ideology has on decision making and firm outcomes during crisis.

The divergence in 2008 returns on assets illustrated in Figure 1 could potentially be explained by differences in observed time-varying conditions between conservative and liberal credit unions. It is possible the shock created by the financial crisis, along with differences in the

credit unions' pre-existing financial conditions (size, asset and liability management, solvency, productivity), contributed to the divergence in returns, rather than the conservatism of managers' personal ideologies during the crisis. Unobserved heterogeneity may also play a role, as unobserved factors specific to a credit union (e.g., political ideology and risk aversion of members, strength of board oversight) may be correlated with managers' ideology, which would confound identification of the effect from being conservative. We assume these unobserved institutional differences in credit unions do not vary over the short period of time examined. Accordingly, we use a two-way fixed effects model to control for time invariant credit union specific factors (observed and unobserved), with covariates added to control for differences in time-varying observed factors.

The linear regression framework for this approach is specified in equation 1 by a two-way fixed effects model as follows:

$$y_{it} = \alpha T_{it} + \beta x_{it} + \delta_t + \theta_i + \varepsilon_{it} \quad (1)$$

where, x_{it} represents a matrix of covariates that vary by credit union $i = 1:N$ and time $t = 1:T$, with time and credit union fixed effects given by δ_t and θ_i , respectively. The time period covered by the baseline model includes the years 2007 to 2009. An indicator variable, T_{it} , is equal to 1 if credit union i meets our definition of conservative and the year is 2008 or 2009 (i.e., the crisis period). Our estimate of the treatment effect, α , captures the average difference in the return on assets between conservative and liberal credit unions during the crisis, relative to the difference between the two groups for the baseline year 2007. Similarity in the trends of pre-crisis returns is crucial for identification of the effect of conservatism during the crisis, as this allows us to determine what would have happened had these credit unions not been led by conservatives. While returns in Figure 1 appear similar in the periods prior to the crisis, we formally test

whether returns differed in the pre-crisis period (2004-2007) using a similar specification where we conduct a F-test on whether the pre-treatment interactions with year are jointly equal to zero and report the corresponding p-value with our results.

Our model estimates include clustered standard errors to allow for the presence of heteroscedasticity and the correlation of errors over time for credit unions within the same state. Controlling for panel-robust, or cluster-robust, standard errors has been noted by Cameron and Miller (2015) to be important in fixed effects models, and particularly relevant in determining the statistical significance of treatment effects in difference-in-difference settings (see Bertrand et al., 2004).

Included in the model specification is a credit union specific fixed effect that captures differences in observed factors, such as geographic location (rural vs. urban, red vs. blue states), field of membership (labor union or industry affiliation), and charter type, which are assumed to time-invariant for a given credit union. The time-varying controls included in our model specification of returns are drawn from measures used in previous studies (Ely, 2014; Goenner, 2016, 2018) and primarily reflect differences in the management of assets and liabilities, which vary across credit unions and time. Ely (2014) shows that at different points in the business cycle, various categories of credit union loans either outperform or underperform others. Ely finds the loan shares of unsecured loans (including credit cards) and auto loans have no effect on returns for the pre-crisis period 2004–2007, relative to the share of real estate loans. Yet for the period 2008–2011, the effect differs across loan type, with the share of unsecured loans contributing to lower returns than the share of real estate loans, and the share of auto loans contributing to higher returns. Our specification includes separate loan shares for credit card

debt, unsecured loans, and car loans (new and used), with real estate loans as the omitted category.

Two variables are included in the specification to control for the mix of assets between liquid assets (cash and securities), loans, and other investments, with the latter category omitted to avoid multi-collinearity. Typically one would expect liquid assets to offer lower returns, yet given the crisis period examined here, it is plausible that credit unions with more liquidity and fewer loans could outperform. Our model also includes the loan-to-deposit ratio to capture the relation between asset and liability management. Core deposits have a low cost, therefore, the more loans are supported by deposits the stronger net interest margins and earnings will be. Returns may also be affected by a credit union's risk management practices. Goddard et al. (2008) suggest a high ratio of net worth to total assets may indicate a credit union's choice to forgo higher earnings in exchange for lower risk. However, Goddard et al. (2008) note that higher capitalization reduces insurance expenses, which may lead to higher returns, and they empirically find mean returns on credit union assets are in fact higher for the period 1993–2004. To control for exposure to interest rate risk, we include the share of net long-term assets to total assets. In the pre-financial-crisis period (2004–2007), Ely (2014) found that this measure is associated with lower returns, whereas in the period after (2008–2011) it increased returns.

Our specification also controls for differences in scale across credit unions, which may affect returns. The NCUA controls for scale by developing peer groups for performance comparisons based on each credit union's total assets. Economies of scale may allow larger credit unions to lower their average expenses and offer a wider array of services that increase profitability through opportunities to earn non-interest income.²² Ely's (2014) estimates show

²² Navy Federal Credit Union is systemically relevant with \$73 billion in assets as of December 2015.

larger credit unions earn higher returns in the periods 2004–2007 and 2008–2011. Similar to Ely (2014), we use the natural logarithm of total assets to control for size. The number of credit union members is an alternative measure of scale. Glass and McKillop (2006) empirically demonstrate that a higher penetration of members within a common bond lowers expenses among credit unions. They note that this result is likely due to a reduction of asymmetric information from lower self-selection effects. We use a ratio of current members to potential members identified by the credit union’s common bond as a measure of productivity. We control for differences in local economic conditions by the unemployment rate in the geographic area where each credit union is headquartered. The unemployment rate is measured using Bureau of Labor Statistics data at the Metropolitan Statistical Area (MSA) or county level, depending on whether the credit union is within a MSA.²³

Each of the financial ratios we use is derived from end of year Call Report (5300) data reported to the NCUA and formulas from the NCUA’s financial performance reports. All financial data is adjusted to real 2014 dollars. In addition, we adjust the data to account for the significant impact that mergers can have on financial statement items. Similar to previous studies (DeYoung and Roland, 2001; Esho et al., 2005; Goenner, 2016) for credit unions that merge within our period of analysis, we combine financial data in pre-merger periods to construct pro-forma ratios that will be consistent across all periods included in our analysis. That is to say, two credit unions that merge in 2007 would have a single combined return on assets for 2006, which would equal their combined net incomes for the year divided by their combined average total assets. In Table 1, we report summary statistics of the mean and standard error of

²³ We also considered, similar to Ely (2014), whether the local banking environment had an impact on performance and found inclusion of a Herfindahl–Hirschman Index of deposit concentration and/or measure of local deposits were never statistically significant in any of our specifications.

our covariates for both conservative and non-conservative credit unions prior to the crisis. Our credit unions managed by conservative and liberal CEOs are well balanced, with each variable less than the 0.25 cutoff recommended by Imbens and Rubin (2015), other than the share of share of auto loans which is 0.29.

[Insert Table 1 about here]

B. Effect on Returns of being Conservative During Crisis

In Table 2 (Column 1), we report the effect conservative-led CEOs had on the difference in credit union returns during the crisis (2008–2009), relative to the previous year (2007), while controlling for differences in asset and liability management. The coefficient of -0.22 indicates that returns among conservative-led credit unions were lower than their liberal counterparts by 22 basis points as a result of the crisis, with the effect statistically significant at the 5% level. In order to identify the effect as being due to the crisis and conservatism, we need similarity in the trends of returns prior to the crisis. We use the pre-crisis (pre-treatment) period 2004 to 2007 to evaluate whether there is a difference in returns between conservative and liberal credit unions. Estimates in column 2 of the F-statistic indicate there is similarity in the trends, as we fail to reject the null that the coefficients are statistically different from zero.²⁴ Our results thus support our first hypothesis that credit unions managed by conservative credit unions respond more strongly than their liberal counterparts during a crisis.

[Insert Table 2 about here]

The coefficients of our other covariates in column 1 are in line with previous findings, and consistent with expectations. More solvent credit unions earned higher returns. Examining

²⁴ One could also view this as a falsification test, i.e., if we believe conservative credit unions only behave differently under crisis than using the periods in which there wasn't a crisis we should find there to be no observed effect.

the mix of assets, a higher share of assets in loans led to lower returns in relation to the share in investments (omitted category), as delinquencies and charge-offs rose during the period. Liquid assets (cash and securities), however did not have an effect on returns. With regard to the mix of loans, we find a higher share of unsecured loans actually outperformed real estate loans (omitted category) in the period examined, whereas credit card loans and auto loans performed similarly to real estate. The negative effect of housing on returns is also captured in the negative coefficient for the share of long-term assets, which are comprised primarily of fixed residential mortgages. We find that credit unions with higher loans relative to deposits also performed better, while not surprisingly weaker local economic conditions as measured by unemployment reduced returns.

C. Robustness and Falsification Tests for Returns

Our results suggest that the performance of credit unions led by conservative CEOs differs from those led by liberals during crisis. A natural question raised by this finding is whether it is conservative CEOs who are in fact performing uniquely during crisis, rather than their liberal counterparts. To test this assertion we examine the sensitivity of our estimated treatment effect to using an alternative control group that consists of a sample of credit unions managed by CEOs with a nonpartisan ideology. If during crisis credit unions run by liberals are no different than their nonpartisan counterparts, then our estimate of the treatment effect should remain robust when comparing (Table 3, columns 1-2) the returns of our treated group (conservatives) to those of our alternative control (nonpartisan). In addition, we should find that there is no difference in returns between a treated group we believe is unaffected (liberals) by the crisis, relative to our alternative control group (nonpartisan). This latter set of estimates (Table

3, columns 3-4) can be thought of as a traditional falsification test as it uses two groups we believe behaved similarly.

The population of credit unions with a nonpartisan ideology differs significantly from our conservative credit unions in terms of their characteristics. Balance in our covariates between groups is achieved by using nearest-neighbor matching on the set of observations with common support. The common support is found by eliminating observations from each group where there are few similar observations to match with in the other group. Similarity is measured via a propensity score, where the propensity score is the probability of being conservative, controlling for observed covariates. The propensity score is estimated with stepwise probit regression on a pre-crisis cross section of conservative and nonpartisan credit unions. Credit unions with propensity scores less than the first percentile of scores among conservatives are trimmed, as are observations with scores above the ninety-ninth percentile for those with nonpartisan ideologies. This elimination makes our results less sensitive to the choice of matching algorithm (Dehejia and Wahba, 2002). We match with replacement each of our conservative credit unions with the closest observation from the population of nonpartisan credit unions.²⁵ After trimming and matching we have a well-balanced sample of 220 conservative and 191 nonpartisan credit unions where our covariates have normalized differences well below 0.25.

The results in Table 3 (column 1) indicate that conservatives also performed differently in the crisis, relative to 2007, than credit unions led by CEOs with a nonpartisan ideology. The returns of credit unions led by conservatives are 16 basis points lower during the crisis, relative to the difference in returns between their counterparts with a nonpartisan ideology. Estimates in column 2 reveal a similarity of pre-treatment trends between the two

²⁵ The match is based on minimizing the standardized Euclidean distance between two vectors of covariates.

groups. The results from our falsification test (Table 3) indicate that there is no difference in the returns of credit unions led by liberal CEOs relative to credit unions led by nonpartisan CEOs, either during the crisis (column 3) or during the pre-treatment period (column 4). Our sensitivity analysis reveals that based on differences in ideology, conservatives behave differently than other credit union leaders during crisis.

[Insert Table 3 about here]

V. CONSERVATIVE MANAGEMENT IN CRISIS

A. Channel to Lower Returns

Our estimates indicate that in terms of the returns on assets, credit unions with conservative CEOs performed significantly worse during the financial crisis than their counterparts. Returns were lower by 22 basis points when controlling for similarity of assets and other measures. In this section, we investigate the channel that led to these lower returns and suggest that a causal mechanism linked to conservative behavior explains the difference.

With seemingly similar assets and liabilities (see Table 1), we look to variation of income statement items to uncover the source of lower returns. Net income in the Call Report is made up of four main components: interest income, interest expense, non-interest income, and non-interest expense, with each consisting of several sub-components. Each of the 23 income statement items represents a potentially different channel to lower returns. Therefore we re-estimate equation 1 using each of the separate items measured relative to average assets as the dependent variable to isolate the channel of the treatment effect. We find that three of these items were significantly impacted, in a statistical sense, among conservative-led credit unions during the crisis (see Table 4).²⁶ The 22 basis point reduction in returns among credit unions led

²⁶ Results for each of the statistically insignificant items not reported are available upon request.

by conservative CEOs during the crisis is attributed to their provisions for loan losses that are 15 basis points higher, employee compensation and benefits that are 5 basis points higher, and loan servicing expenses that are 1 basis point higher. We focus our discussion on the channel with the largest observed effect, which is the provision for loan losses.

[Insert Table 4 about here]

B. Discretionary Provisions for Loan Losses

Loan-loss provisions reflect the current period change in managers' future expectations of their loan portfolios' probable credit losses. The probable impairment of loans is an estimate that requires judgment, therefore generally accepted accounting principles (GAAP) allow credit union managers discretion in determining the amount that is recorded each period. This implies that conditioning on the same loan portfolio fundamentals, managers may set aside different levels of provisions due to variation in their sentiment toward economic events. Managers who overstate their provisions are in effect understating their earnings, which reflects a more cautious or conservative approach toward evaluating loan impairment (Balla and Rose, 2011) and allows for the ability to absorb greater unexpected losses without affecting future earnings. We therefore hypothesize that conservative managers, given their cautious nature and dislike for uncertainty, perceive the financial crisis to be worse than their counterparts, and therefore engage in active coping during the financial crisis by increasing provisions for loan losses relative to their counterparts (hypothesis 2).

To investigate this, we use a strategy similar to Beatty et al. (2002) and Cohen et al. (2014) to determine the discretion that credit unions apply to their provisions for loan losses. The strategy uses fundamentals of the credit union's loan portfolio to specify the portion of provisions that are non-discretionary, with the residuals reflecting discretionary provisions. We

model the expected level of provisions for loan losses using a specification (Beatty et al., 2002; Cohen et al., 2014) that controls for variation in credit unions' size and solvency, loan performance, mix of loan categories, and economic environment.²⁷

Credit unions that are larger in size (natural log of total assets) are better able to bear risk, as are more solvent (net worth/total assets) credit unions, which all else equal implies less of a need for provisions. We use three measures in our specification to control for the impairment associated with nonperforming loans: the change in the share of loans that are nonperforming, the previous period's share of allowances for loan losses to average assets, and the share of nonperforming loans in fixed-rate mortgages. One might expect the need for provisions to rise from an increase in the share of loans that are nonperforming in a portfolio. This, though, would not occur if provisions had been previously set aside to account for a probable change in performance. Past provisions are accounted for on the balance sheet in the previous period as allowances made for loan losses. A higher share of allowances relative to assets would suggest there is less need for current provisions when conditioning on a change in loan performance. Changes in the performance of different loan categories though are not equal, as variation in the performance of unsecured credit is expected through the stages of the business cycle, while the precipitous decline seen in the performance of mortgages during the crisis was unprecedented. Fixed-rate mortgages are the credit union industry's largest asset (20% of assets in 2007) and as such their performance is a bellwether of overall performance. An increase in the share of nonperforming loans made up of mortgages would indicate a clear need for additional provisions.

²⁷ Beatty et al. (2002) and Cohen et al. (2014) include in their specifications of provisions for loan losses by banks: size, the change in nonperforming loans, lagged allowances, various asset categories, and region indicators.

The mix of assets in the loan portfolio also influences the risk of probable losses associated with the economic downturn. We include the loan shares in several different loan categories to control for variation in credit risk—separate shares in auto loans, credit cards, and unsecured credit are included with real estate as the omitted category. Another measure was added to control for variation in loan origination. Indirect loans, i.e., loans that were arranged by a third party (e.g., auto dealer, furniture store), historically have had higher default rates than other loans during downturns. This may be a result of adverse selection, as third parties fail to adequately screen risks at the point of sale and origination of the loan. Therefore, when credit unions hold a larger share of indirect loans in their loan portfolios, we expect provisions to be higher. The ratio of loans to total assets is also included in the specification to control for a credit union’s concentration in lending. Credit unions with a high concentration in loans have net worth that is more sensitive to changes in the performance of the loan portfolio, which might result in higher provisions to counteract.

The final set of measures control for local variation in the economic environment. These measures include indicator variables for four of the five NCUA regions, the unemployment rate at the MSA or county level (for rural areas), and membership penetration. A higher membership penetration may reduce information asymmetries and the need for provisions as a share of loans.

Our model of expected provisions is estimated separately by year for cross sections of all credit unions.²⁸ The residuals from these models’ estimates represent abnormal accruals that are not explained by fundamentals and are the discretionary component of loan-loss provisions. Positive residuals indicate a discretionary provision that is viewed as evidence of credit unions behaving conservatively in their accounting practices. The second step then models the

²⁸ We do not report the results from the first stage. A complete table of results is available upon request.

discretionary provisions (our residuals) using the same specification in equation 1, where the treatment effect captures whether credit unions led by conservative CEOs made larger, i.e., more conservative, discretionary provisions during the crisis relative to their counterparts. Results reported in Table 5 (column 1) indicate conservative credit unions increased their discretionary provisions by 18% of average loans, relative to their liberal counterparts during the crisis (2008–2009). Column 2 shows there is no statistically significant difference in discretionary provisions prior to the crisis, which indicates a similarity in pre-treatment trends. This finding supports our second hypothesis, as credit unions judged the effects of the financial crisis to be worse than their counterparts based on the observables, and responded by making larger discretionary provisions.

[Insert Table 5 about here]

C. Robustness and Falsification Tests for Discretionary Provisions

Similar to the analysis of returns, we consider the effect on discretionary provisions when using the alternative control group of matched nonpartisan credit unions. Comparing credit unions with conservative to nonpartisan CEOs, we find (Table 6, column 1) that conservative-led credit unions have provisions that are 22% higher as a share of their loans during the crisis, relative to their nonpartisan counterparts. This effect is statistically significant at the 5% level and similar in magnitude as to the comparison with liberals. Column 2 indicates a similarity in the pre-treatment trends for discretionary provisions. Implementing the falsification test, where we compare liberal CEOs (fake treated group) to the matched nonpartisans, we find there to be no difference in their discretionary provisions during the crisis (column 3) or prior, and the pre-crisis trends were similar (column 4). These results suggest that conservative-led credit unions

behave differently than other credit unions during the crisis by using greater discretion to add to their provisions for loan losses.

[Insert Table 6 about here]

D. Loan Portfolio Performance Comparisons

Credit unions managed by conservative CEOs used more discretion in setting aside provisions for loan losses during the crisis, which contributed to higher provisions and lower earnings relative to their counterparts. The question is then whether the discretion shown by conservatives and their additional provisions were more timely during the crisis in the sense that they were in advance of loans becoming non-performing (Beatty and Liao, 2011; Ng and Roychowdhury, 2014; Nichols et al., 2009). The measure of the timeliness (i.e. less delay) of provisions used here is Beatty and Liao's (2011) metric, which is based on a bank's ability to forecast quarterly current and future non-performing loans. This measure compares the difference in the adjusted R-squared between the two regression equations ((3) - (2))

$$Provision_t = \alpha_0 + \alpha_1 \Delta NPL_{t-2} + \alpha_2 \Delta NPL_{t-1} + \alpha_3 Capital_t + \alpha_4 EBP_t + \varepsilon_t \quad (2)$$

$$Provision_t = \alpha_0 + \alpha_1 \Delta NPL_{t-2} + \alpha_2 \Delta NPL_{t-1} + \alpha_3 \Delta NPL_t + \alpha_4 \Delta NPL_{t+1} + \alpha_5 Capital_t + \alpha_6 EBP_t + \varepsilon_t \quad (3)$$

where *provision* is the loan loss provision divided by lagged total loans, ΔNPL is the change in non-performing loans (i.e. loans reported as more than 60 days delinquent) divided by lagged total loans, *capital* is the capital to total assets ratio, and *EBP* is earnings before loss provisions scaled by lagged total loans. We run the two regressions for each credit union using quarterly data for the post-crisis period 2008 – 2010 (Q2). Similar to Beatty and Liao (2011), we create an indicator variable equal to one for credit unions having less delay in their provisions than the

median for the period, which implies a higher than median value for the difference in their adjusted R-squared.

When comparing the timeliness of credit unions provisions during the crisis, we find that there are significant differences based on the ideology of the CEO. Credit unions managed by conservative CEOs have a mean value of the delay indicator of 0.63, compared to 0.46 for their liberal counterparts. This indicates 63% of conservative credit unions were timelier and had less delays in their provisions than the median, whereas 46% of liberal credit unions had less delay. A two-tailed difference in means test with unequal variances reveals the difference is statistically significant at the 1% level (p-value 0.002). Our matched sample of non-partisan credit unions had a mean delay equal to 0.53, and the difference in the means with conservatives was significant at the 5% level (p-value .034). There was no statistically significant difference (p-value 0.226) in the timing though between credit unions managed by liberal CEOs and our non-partisan sample. Credit unions managed by conservative CEOs made larger provisions during the crisis and these provisions proved to be timelier than those of their liberal and non-partisan counterparts.

E. A CEO's ideology and the culture of an institution

We include in our model specifications a fixed effect for each credit union. Inclusion of this fixed effect allows us to account for heterogeneity in the selection of CEOs, which may differ based on a credit union's location, as differences in selection may be influenced by the political tendencies of the state (Red vs Blue) or county (rural vs urban) where the credit union is located. Our credit union level fixed effect controls for both observed factors and other unobserved factors that differ by credit union (i.e. individual heterogeneity) and is potentially correlated with the treatment (CEO affiliation). If the institution effect is time invariant over the

period we examine (2007-2009), then the potential selection bias is eliminated by using a fixed effects estimator. A concern is whether it is reasonable to assume this effect is time invariant. For example, a credit union may in the run-up to the 2008 presidential election look to change its cultural alignment by hiring a CEO with a different ideology if they perceive a political change in the White House.²⁹ In such a case the heterogeneity influencing selection might no longer be time invariant, which would introduce bias into our estimates of the treatment effect.

Examining the turnover of credit union CEOs, we observe that turnover rates followed a downward trend over time between 1997 and 2008. In the 1997-2000 election cycle, where President Bush was elected in what was essentially a random draw, the turnover rate averaged 14.6%. President Bush was then easily re-elected in the 2001-2004 election cycle and the turnover rate averaged 12.2%. During the 2005-2008 election we saw a change in the party in the White House as President Obama tallied 365 electoral votes to John McCain's 173. Turnover rates averaged 11.1% for this period. On average, it doesn't appear that credit unions are any more likely to change their CEOs based on expectations of shifts in the political party in the White House. Among individual credit unions in our sample, we find that only one had a change in their CEO's ideological alignment from one political party to the other during the pre-treatment period (2004-2007). We therefore find no evidence to suggest a credit union's choice of CEO based on their ideology is influenced by the election cycle, i.e. is time varying in the period we examine.

A limitation in our data is that we are only able to measure the ideology of our credit unions' CEOs and not those of other high level decision makers.³⁰ The strength of the firm's

²⁹ We thank an anonymous referee for their suggestion.

³⁰ Call report data does not provide management information beyond the CEO and the President of the board. It is not possible to uniquely match the President's name with the FEC data based on their name alone, as this requires either their employment or address and neither are available.

ideological culture is therefore unobserved, relative to that of the CEO. Culture is slow to change over time, thus we posit that credit unions with longer tenured CEOs are more likely to exhibit decision making based on differences in their CEO's ideologies, relative to firms with shorter tenured CEOs. To test this theory, we split our data into samples of credit unions whose CEOs in 2007 were the same throughout the pre-crisis period 2004 – 2007 (long-tenure) vs the alternative (short-tenure). We find (Table 7, column 1) for the sample of credit unions with CEOs who are tenured longer, that our results are consistent with our previous findings. The returns of credit unions led by conservative CEOs with long-tenures are 24 basis points lower during the crisis, relative to their liberal counterparts with similarly long-tenures. We find (Table 7, column 3) no difference though in returns between the two groups among the sample of CEOs with shorter tenures. Similarly, we find (Table 8, column 1) that credit unions led by conservative CEOs increased their discretionary provisions by 27% of their average loans, relative to their liberal counterparts during the crisis, while there was no difference between the two groups among the sample of CEOs with shorter tenures. Our findings suggest a CEOs ideology and personality traits have a stronger effect on an institution's decision making the longer their tenure.

[Insert Tables 7 and 8 about here]

VI. CONCLUSION

We report results that demonstrate credit unions managed by conservative CEOs had returns similar to their liberal counterparts in the period prior to the 2008 financial crisis, but the returns of the two groups subsequently diverged. During the crisis (2008–2009) returns were lower by 22 basis points among credit unions managed by conservative CEOs. Our empirical results suggest this heterogeneity in credit union performance during the crisis is tied in large

part to variation in CEO ideology that affects their credit union's decision making. Differences in accounting choices that are consistent with differences in CEOs' ideologies help to explain the differences in returns. Specifically, we find credit unions led by ideologically conservative CEOs accrued relatively higher discretionary provisions for loan losses during the crisis, thereby increasing expenses and reducing returns relative to their counterparts.

Individuals respond to similar stressors, such as the financial crisis, differently depending on their key traits. Our results are consistent with conservative-led credit unions behaving uniquely during crisis due to discomfort from uncertainty and a need for more deliberate responses to re-establish order. Provisions for loan losses are a natural channel for their response as generally accepted accounting practices require a credit union's management to use substantial judgment when making provisions. Conservative managers made stronger judgements that conditions were changing for the worse and used greater discretion through larger loan-loss provisions. These higher provisions proved to be timelier than those of their counterparts. The implication is that personal traits of leaders of depository institutions can explain heterogeneity in observed firm behaviors and performance.

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Table 1. Summary statistics of conservative and non-conservative credit unions pre-crisis (2007)

	(1)	(2)	(3)	(4)	(5)
	Conservative	Liberal	Normalized difference	Nonpartisan	Normalized difference
ROA (%)	0.70 (0.91)	0.57 (0.79)	0.11	0.54 (0.58)	0.15
Net Worth/Total Assets (%)	11.57 (4.21)	11.64 (3.69)	-0.01	11.77 (3.25)	-0.04
Loans/Total Assets (%)	71.88 (13.17)	71.29 (12.76)	0.03	71.04 (12.72)	0.05
Member Percent	26.12 (24.16)	27.41 (25.18)	-0.04	25.53 (25.09)	0.02
Cash & ST Invest./Total Assets (%)	14.66 (9.09)	14.74 (8.75)	-0.01	15.82 (8.84)	-0.09
Size	19.28 (1.57)	19.44 (1.53)	-0.07	19.04 (1.41)	0.11
Unsecured Loan Share (%)	5.63 (7.36)	5.86 (9.1)	-0.02	5.29 (5.51)	0.04
Credit Card Loan Share (%)	4.71 (4.7)	4.48 (4.37)	0.04	4.88 (3.79)	-0.03
Auto Loan Share (%)	37.92 (17.28)	30.65 (17.26)	0.29	37.15 (16.12)	0.03
Long Term Assets/Total Assets (%)	29.07 (14.35)	32.08 (18.15)	-0.13	28.00 (12.12)	0.06
Loans/Deposits (%)	85.52 (19.44)	85.38 (17.82)	0.01	83.56 (15.92)	0.08
Unemployment (%)	4.51 (1.27)	4.55 (0.93)	-0.02	4.52 (1.12)	-0.01
Observations	220	136		191	

This table presents in columns 1-3 the mean and standard deviation (in parenthesis below), along with the normalized difference, between conservative and liberal credit unions for the year 2007. Conservative credit unions are defined as having had at least one CEO in the period (2004–2007) who in the past made contributions primarily to candidates in the Republican Party and did not have a CEO who primarily gave to Democratic Party candidates. Liberal credit unions meet the exact opposite conditions. Column 4 provides the mean and standard deviation for a matched sample of nonpartisan credit unions, where the match was made with propensity score matching and replacement using the nearest neighbor. The normalized difference in column 5 compares conservative to the sample of matched nonpartisan credit unions. Variable definitions and formulas are found in the NCUA’s financial performance reports.

Table 2: Impact of a conservative CEO on returns during and prior to the crisis

	(1)	(2)
α Treatment Effect	-0.2174** (0.1018)	
Pre-treatment trend (2005)		0.0417 (0.0487)
Pre-treatment trend (2006)		0.0786 (0.0554)
Pre-treatment trend (2007)		0.1121 (0.0699)
Net Worth/Total Assets (%)	0.5944*** (0.0655)	0.3938*** (0.0565)
Loans/Total Assets (%)	-0.0242* (0.0137)	0.0193** (0.0088)
Member Percent	0.0027 (0.0055)	-0.0006 (0.0022)
Cash & S.T. Investments/Total Assets (%)	-0.0021 (0.0083)	0.0051 (0.0033)
Size	4.0025*** (0.6809)	2.0026*** (0.5158)
Unsecured Loan Share (%)	0.0636*** (0.0138)	0.0273 (0.0207)
Credit Card Loan Share (%)	-0.0061 (0.0366)	-0.0278 (0.0255)
Auto Loan Share (%)	-0.0048 (0.0088)	-0.0122*** (0.0045)
Net Long Term Assets/Total Assets (%)	-0.0044 (0.0107)	0.0024 (0.0037)
Loans/Deposits (%)	0.0191** (0.0074)	-0.0137* (0.0068)
Unemployment (%)	-0.0204 (0.0286)	-0.0727 (0.0612)
Constant	-83.5712*** (12.5510)	-41.4768*** (10.5265)
Observations	1059	1424
Adjusted R ²	0.662	0.580
P-value of F-test of pre-treatment trend		0.337

The treatment effect in column 1 estimates the DID in the average return on assets in the crisis years (2008–2009) between credit unions led by conservative and liberal CEOs, relative to those in 2007. Column 2 tests the similarity in pre-crisis trends in returns between conservative and liberal credit unions between the years 2004 and 2007. Each specification includes time and credit union level fixed effects, which are omitted to save space. Standard errors clustered at the state level appear in parentheses. *, **, and *** indicate coefficients are statistically different from zero at the 10%, 5%, and 1% levels, respectively.

Table 3: Robustness and falsification check of returns

	(1)	(2)	(3)	(4)
α Treatment Effect	-0.1569** (0.0753)		0.0297 (0.0709)	-0.1833 (-0.1378)
Pre-treatment trend (2005)		-0.0757 (0.0539)		-0.0952* (0.0561)
Pre-treatment trend (2006)		-0.0699 (0.0560)		-0.1251* (0.0655)
Pre-treatment trend (2007)		-0.0350 (0.0968)		-0.1258 (0.0883)
Net Worth/Total Assets (%)	0.6457*** (0.0537)	0.3977*** (0.0509)	0.6127*** (0.0418)	0.3439*** (0.0474)
Loans/Total Assets (%)	-0.0444*** (0.0103)	-0.0074 (0.0067)	-0.0016 (0.0166)	0.0109 (0.0155)
Member Percent	0.0073** (0.0033)	0.0032** (0.0016)	0.0019 (0.0039)	0.0013 (0.0016)
Cash & S.T. Investments/Total Assets (%)	-0.0039 (0.0073)	0.0005 (0.0049)	-0.0012 (0.0068)	0.0050 (0.0059)
Size	3.9470*** (0.6198)	1.9309*** (0.4964)	3.4726*** (0.6431)	1.8461*** (0.4248)
Unsecured Loan Share (%)	0.0604*** (0.0109)	0.0194 (0.0302)	-0.0372 (0.0419)	0.0139 (0.0128)
Credit Card Loan Share (%)	0.0097 (0.0327)	-0.0436 (0.0274)	0.0045 (0.0564)	-0.0576*** (0.0148)
Auto Loan Share (%)	-0.0104 (0.0074)	-0.0124** (0.0060)	-0.0067 (0.0088)	-0.0122* (0.0065)
Net Long Term Assets/Total Assets (%)	-0.0081 (0.0086)	0.0000 (0.0033)	-0.0122*** (0.0044)	-0.0005 (0.0032)
Loans/Deposits (%)	0.0316*** (0.0063)	0.0016 (0.0054)	0.0033 (0.0114)	-0.0129 (0.0093)
Unemployment (%)	-0.0119 (0.0226)	-0.0683 (0.0586)	0.0093 (0.0396)	0.0230 (0.0410)
Constant	-81.9048*** (11.5464)	-39.1668*** (9.8405)	-72.7923*** (12.7991)	-37.6152*** (8.2351)
Observations	1227	1644	976	1308
Adjusted R ²	0.580	0.545	0.657	0.518
P-value of F-test of pre-treatment trend		0.397		0.215

The robustness test (columns 1-2) compares the annual return on average assets of a credit union led by a conservative CEO, relative to a matched sample of credit unions with non-partisan CEOs. Column 1 reports the DID estimate of the treatment effect in the crisis years (2008–2009), relative to 2007. Column 2 tests the similarity in pre-crisis (treatment) trends for the period 2004–2007. Columns 3-4 presents the estimates of our falsification test, which compares the DID estimate of returns between liberal and nonpartisan-led credit unions for the pre-post-crisis years (column 3) and the pre-crisis years (column 4). Each specification includes time and credit union level fixed effects, which are omitted to save space. Standard errors clustered at the state level appear in parentheses. *, **, and *** indicate coefficients are statistically different from zero at the 10%, 5%, and 1% levels, respectively.

Table 4. Exploration of net income components

	(1)	(2)	(3)
α Treatment Effect	0.1507*	0.0531**	0.0115*
	(0.0831)	(0.0222)	(0.0066)
Net Worth/Total Assets (%)	-0.3396***	-0.0170	-0.0040
	(0.0653)	(0.0184)	(0.0030)
Loans/Total Assets (%)	0.0264**	0.0024	0.0021**
	(0.0120)	(0.0044)	(0.0008)
Member Percent	-0.0040	0.0009	0.0000
	(0.0041)	(0.0012)	(0.0003)
Cash & ST Invest./Total Assets (%)	0.0127*	-0.0015	0.0007*
	(0.0071)	(0.0039)	(0.0004)
Size	-2.6856***	-0.1758	-0.0764*
	(0.5392)	(0.1265)	(0.0417)
Unsecured Loan Share (%)	-0.0476***	-0.0170***	-0.0034***
	(0.0132)	(0.0025)	(0.0007)
Credit Card Loan Share (%)	0.0494*	0.0128**	0.0028
	(0.0279)	(0.0057)	(0.0029)
Auto Loan Share (%)	0.0115	0.0009	0.0025***
	(0.0091)	(0.0028)	(0.0009)
Long Term Assets/Total Assets (%)	0.0122*	-0.0010	0.0008*
	(0.0068)	(0.0018)	(0.0004)
Loans/Deposits (%)	-0.0176**	0.0007	-0.0005
	(0.0068)	(0.0017)	(0.0004)
Unemployment (%)	0.0692*	0.0119	0.0018
	(0.0391)	(0.0086)	(0.0021)
Constant	54.8083***	5.3042**	1.4891*
	(10.2902)	(2.3245)	(0.8298)
Observations	1059	1059	1059
Adjusted R ²	0.683	0.927	0.913

The results present DID estimates of the treatment effect in the crisis years (2008–2009) between credit unions led by conservative and liberal CEOs, relative to those in 2007. The dependent variable in column 1 is the ratio of provisions for loan losses to average assets, whereas column 2 represents the ratio of employee compensation and benefits to average assets, and column 3 is the ratio of loan servicing expense to average assets. Each specification includes time and credit union level fixed effects, which are omitted to save space. Standard errors clustered at the state level appear in parentheses. *, **, and *** indicate coefficients are statistically different from zero at the 10%, 5%, and 1% levels, respectively.

Table 5: Impact of conservatism on discretionary provisions during and prior to the crisis

	(1)	(2)
α Treatment Effect	0.1796** (0.0796)	
Pre-treatment trend (2006)		0.0636 (0.0818)
Pre-treatment trend (2007)		-0.0047 (0.1505)
Net Worth/Total Assets (%)	-0.3949*** (0.0837)	-0.4941*** (0.1317)
Loans/Total Assets (%)	0.0056 (0.0160)	-0.0211 (0.0184)
Member Percent	0.0019 (0.0056)	0.0014 (0.0032)
Cash & S.T. Investments/Total Assets (%)	0.0062 (0.0099)	-0.0042 (0.0096)
Size	-2.7932*** (0.7017)	-2.8960** (1.4189)
Unsecured Loan Share (%)	-0.1115*** (0.0144)	-0.1050* (0.0570)
Credit Card Loan Share (%)	-0.0018 (0.0549)	-0.0090 (0.0602)
Auto Loan Share (%)	0.0099 (0.0158)	0.0249** (0.0105)
Net Long Term Assets/Total Assets (%)	0.0151 (0.0111)	0.0033 (0.0078)
Loans/Deposits (%)	-0.0176** (0.0077)	0.0076 (0.0116)
Unemployment (%)	-0.0163 (0.0348)	0.0513 (0.0659)
Constant	59.5376*** (13.4184)	61.7176** (28.5092)
Observations	1057	1061
Adjusted R ²	0.503	0.391
P-value of F-test of pre-treatment trend		0.226

The treatment effect in column 1 estimates the DID in the discretionary provisions for loan losses as a share of average loans in the crisis years (2008–2009) between credit unions led by conservative and liberal CEOs, relative to those in 2007. Column 2 tests the similarity in pre-crisis trends in returns between conservative and liberal-led credit unions between the years 2005–2007. Each specification includes time and credit union level fixed effects, which are omitted to save space. Standard errors clustered at the state level appear in parentheses. *, **, and *** indicate coefficients are statistically different from zero at the 10%, 5%, and 1% levels, respectively.

Table 6: Robustness and falsification check of discretionary provisions

	(1)	(2)	(3)	(4)
α Treatment Effect	0.2249** (0.0878)		0.1000 (0.0684)	
Pre-treatment trend (2006)		0.0672 (0.0983)		-0.0368 (0.0728)
Pre-treatment trend (2007)		0.0148 (0.1538)		0.0149 (0.0867)
Net Worth/Total Assets (%)	-0.4566*** (0.0694)	-0.4959*** (0.1261)	-0.4135*** (0.0590)	-0.2518*** (0.0828)
Loans/Total Assets (%)	0.0209 (0.0136)	0.0061 (0.0217)	0.0037 (0.0103)	0.0148 (0.0216)
Member Percent	-0.0006 (0.0034)	-0.0038 (0.0037)	0.0106* (0.0056)	-0.0019 (0.0031)
Cash & S.T. Investments/Total Assets (%)	0.0159** (0.0063)	0.0022 (0.0111)	0.0050 (0.0080)	-0.0005 (0.0104)
Size	-3.0468*** (0.7467)	-2.2291 (1.3578)	-2.6399*** (0.5417)	-0.9228* (0.5207)
Unsecured Loan Share (%)	-0.1080*** (0.0116)	-0.0892 (0.0668)	0.0446 (0.0378)	-0.0134 (0.0216)
Credit Card Loan Share (%)	-0.0091 (0.0542)	-0.0082 (0.0656)	-0.0377 (0.0715)	0.0017 (0.0364)
Auto Loan Share (%)	0.0127 (0.0132)	0.0340** (0.0148)	0.0059 (0.0105)	0.0258* (0.0137)
Net Long Term Assets/Total Assets (%)	0.0239*** (0.0075)	0.0028 (0.0056)	0.0182*** (0.0052)	-0.0037 (0.0032)
Loans/Deposits (%)	-0.0267*** (0.0061)	0.0005 (0.0125)	-0.0057 (0.0087)	-0.0059 (0.0105)
Unemployment (%)	-0.0387 (0.0299)	0.0590 (0.0897)	-0.0195 (0.0341)	0.0212 (0.0458)
Constant	64.0072*** (14.1273)	46.7207* (27.0207)	54.8376*** (10.6685)	19.2664* (11.4593)
Observations	1218	1221	969	972
Adjusted R ²	0.532	0.421	0.486	0.347
P-value of F-test of pre-treatment trend		0.566		0.653

Columns 1-2 report the results of our robustness check. The treatment effect in column 1 estimates the DID in discretionary provisions for loan losses as a share of average loans in the crisis years (2008–2009) between credit unions led by conservative and a matched sample of nonpartisan CEOs, relative to those in 2007. Column 2 tests the similarity in pre-crisis trends between conservative and non-partisan-led credit unions between the years 2005–2007. Columns 3-4 report the results of our falsification test. The treatment effect in column 3 estimates the DID in discretionary provisions for loan losses as a share of average loans in the crisis years (2008–2009) between credit unions led by liberal and nonpartisan CEOs, relative to those in 2007. Column 4 tests the similarity in pre-crisis trends between liberal and non-partisan-led credit unions between the years 2005–2007. Each specification includes time and credit union level fixed effects, which are omitted to save space. Standard errors clustered at the state level appear in parentheses. *, **, and *** indicate coefficients are statistically different from zero at the 10%, 5%, and 1% levels, respectively.

Table 7: The effects of CEO tenure on returns

	(1)	(2)	(3)	(4)
α Treatment Effect	-0.2398** (0.1136)		-0.2416 (0.1969)	
Pre-treatment trend (2005)		0.0564 (0.0560)		-0.1318 (0.1208)
Pre-treatment trend (2006)		0.1008 (0.0615)		-0.1166 (0.1659)
Pre-treatment trend (2007)		0.0703 (0.0637)		0.0366 (0.1734)
Net Worth/Total Assets (%)	0.5382*** (0.0815)	0.3743*** (0.0410)	0.8437*** (0.1118)	0.3657*** (0.0855)
Loans/Total Assets (%)	-0.0275* (0.0141)	0.0252* (0.0132)	0.0065 (0.0587)	0.0150 (0.0167)
Member Percent	0.0037 (0.0061)	0.0022 (0.0024)	-0.0006 (0.0084)	-0.0058** (0.0028)
Cash & S.T. Investments/Total Assets (%)	-0.0053 (0.0081)	0.0045 (0.0042)	0.0179 (0.0178)	0.0182 (0.0257)
Size	3.6322*** (0.9762)	2.0970*** (0.4256)	5.1018*** (1.4358)	0.8139** (0.3626)
Unsecured Loan Share (%)	0.0653*** (0.0142)	0.0960*** (0.0263)	0.0161 (0.0742)	-0.0133 (0.0112)
Credit Card Loan Share (%)	0.0093 (0.0366)	-0.0255 (0.0185)	-0.1023 (0.1180)	-0.0404 (0.0534)
Auto Loan Share (%)	-0.0070 (0.0081)	-0.0156*** (0.0033)	0.0078 (0.0281)	-0.0104 (0.0168)
Net Long Term Assets/Total Assets (%)	-0.0100 (0.0078)	0.0122*** (0.0039)	0.0321 (0.0248)	-0.0142 (0.0118)
Loans/Deposits (%)	0.0210** (0.0084)	-0.0166* (0.0094)	-0.0142 (0.0248)	-0.0049 (0.0176)
Unemployment (%)	-0.0273 (0.0330)	-0.0368 (0.0587)	-0.0558 (0.1163)	-0.2582 (0.1557)
Constant	-75.5736*** (18.7245)	-44.0839*** (8.7334)	-107.2854*** (30.5321)	-16.8578** (7.8603)
Observations	847	1140	212	284
Adjusted R ²	0.673	0.663	0.653	0.411
P-value of F-test of pre-treatment trend		0.390		0.675

The treatment effect reported in columns 1 and 3 estimates the DID in the average return on assets in the crisis years (2008–2009) between credit unions led by conservative and liberal CEOs, relative to those in 2007 for CEOs in 2007 who were hired prior to 2005 (column 1) and those hired after (column 3). Columns 2 and 3 tests the similarity in pre-crisis trends in returns between conservative and liberal credit unions between the years 2004 and 2007 for CEOs in 2007 who were hired prior to 2005 (column 1) and those hired after (column 3).. Each specification includes time and credit union level fixed effects, which are omitted to save space. Standard errors clustered at the state level appear in parentheses. *, **, and *** indicate coefficients are statistically different from zero at the 10%, 5%, and 1% levels, respectively.

Table 8: The effects of CEO tenure on discretionary provisions

	(1)	(2)	(3)	(4)
α Treatment Effect	0.2700*** (0.0910)		-0.0635 (0.2163)	
Pre-treatment trend (2006)		0.0924 (0.0808)		0.1629 (0.1252)
Pre-treatment trend (2007)		0.1145 (0.1225)		-0.2773 (0.2093)
Net Worth/Total Assets (%)	-0.3709*** (0.0743)	-0.5306*** (0.1010)	-0.5123** (0.1877)	-0.1210* (0.0645)
Loans/Total Assets (%)	0.0196 (0.0137)	-0.0274 (0.0179)	-0.0385 (0.0659)	-0.0444 (0.0399)
Member Percent	0.0034 (0.0069)	-0.0004 (0.0025)	-0.0084 (0.0116)	0.0033 (0.0034)
Cash & S.T. Investments/Total Assets (%)	0.0152 (0.0138)	0.0078 (0.0135)	-0.0196 (0.0228)	-0.0446 (0.0491)
Size	-2.2276** (0.8723)	-3.2446*** (1.0625)	-4.6369** (1.7668)	0.1017 (0.6182)
Unsecured Loan Share (%)	-0.1152*** (0.0172)	-0.1712*** (0.0477)	-0.0487 (0.0685)	0.1072*** (0.0370)
Credit Card Loan Share (%)	-0.0149 (0.0678)	0.0028 (0.0307)	0.0399 (0.0787)	-0.1222 (0.1283)
Auto Loan Share (%)	0.0077 (0.0199)	0.0340*** (0.0078)	0.0275 (0.0232)	-0.0044 (0.0242)
Net Long Term Assets/Total Assets (%)	0.0156 (0.0126)	-0.0130** (0.0058)	0.0079 (0.0140)	-0.0016 (0.0157)
Loans/Deposits (%)	-0.0223*** (0.0079)	0.0205 (0.0134)	0.0089 (0.0372)	0.0090 (0.0191)
Unemployment (%)	-0.0092 (0.0443)	0.0405 (0.0648)	0.0123 (0.0693)	-0.0244 (0.1609)
Constant	47.7034*** (17.0157)	68.6109*** (21.5446)	96.4085** (37.6650)	2.5527 (10.0645)
Observations	845	848	212	213
Adjusted R ²	0.515	0.517	0.449	0.391
P-value of F-test of pre-treatment trend		0.522		0.235

The treatment effect reported in columns 1 and 3 estimates the DID in the discretionary provisions for loan losses in the crisis years (2008–2009) between credit unions led by conservative and liberal CEOs, relative to those in 2007 for CEOs in 2007 who were hired prior to 2005 (column 1) and those hired after (column 3). Columns 2 and 3 tests the similarity in pre-crisis trends in the discretionary provisions for loan losses between conservative and liberal credit unions between the years 2004 and 2007 for CEOs in 2007 who were hired prior to 2005 (column 1) and those hired after (column 3). Each specification includes time and credit union level fixed effects, which are omitted to save space. Standard errors clustered at the state level appear in parentheses. *, **, and *** indicate coefficients are statistically different from zero at the 10%, 5%, and 1% levels, respectively.

Figure 1: Credit Union Return on Assets by CEO Political Ideology

