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Poor Performance and CEO Turnover in Community Banks: The Role of Gender in Managerial Successions[☆]

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Abstract

We examine the association between community bank financial performance and CEO turnover and assess the impact of CEO gender on succession and post-succession actions and outcomes. Using a large sample of U.S. community banks between the years 2008 and 2017, we document that poor performance has a causal impact on CEO turnover. Although poor financial performance is a key determinant of CEO turnovers, it is neither linked to the gender of the bank's dismissed nor incoming CEO. However, we find strong evidence of asymmetric post-turnover operational and balance-sheet adjustments depending on the gender of the incoming CEO, especially for banks undergoing CEO turnover amidst periods of poor performance. These adjustments suggest differential attempts at reducing leverage and risk for banks transitioning to female leadership. We find limited evidence that transitions to female leadership decrease realized risk or improve bank performance post-turnover.

JEL classification: G20, G21, G30, G32, M12, M14

Keywords: banks, community banks, CEO turnovers, CEO gender, female CEOs

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1. Introduction

This paper studies the impact of poor financial performance on community bank CEO turnover and considers the role CEO gender plays both in succession and in subsequent bank actions and outcomes. The antecedents, consequences, and underlying mechanisms of CEO turnover have been extensively examined in the literature over the last four decades. In general, previous studies have documented that a firm's financial performance, level of risk-taking and financial distress, and governance mechanisms are among the key factors that influence CEO turnover (see e.g., Coughlan and Schmidt, 1985; Gilson, 1989; Murphy and Zimmerman, 1993; Farrell and Whidbee, 2003; Arthaud-Day et al., 2006; Bushman, Dai and Wang, 2010; Jenter and Kanaan, 2015; Jenter and Lewellen, 2021; Burns, Minnick and Starks, 2023). Prior literature also suggests that CEO turnover may significantly affect firm's strategic direction, financial and investment policies, and other corporate outcomes, including the potential triggers of CEO turnover such as poor performance or financial distress (e.g., Beatty and Zajac, 1987; Kesner and Dalton, 1994; Weisbach, 1995; Shen and Cannella, 2002; Huson, Malatesta and Parrino, 2004; Fiordelisi and Ricci, 2014; Gao, Harford and Li, 2017; Lin et al., 2020).

While a vast body of literature has examined CEO turnover in public nonfinancial firms, comparatively less attention has been devoted to CEO turnover in banks and in particular community banks, which are fundamentally different from nonfinancial firms in terms of their business models, opaqueness, exposure to regulations and supervision, and societal importance. Furthermore, despite the extensive literature on CEO turnovers, only a few studies have considered the role of CEO gender as a potential factor in influencing managerial turnovers and post-turnover

corporate decisions and outcomes. (see e.g., Adams, Gupta and Leeth, 2009; Elsaid and Ursel, 2011; Rigolini, Gabaldon and Le Bruyn Goldeng, 2021; Ma, 2022).

This paper contributes to the extant literature by considering three interrelated questions associated with CEO turnover in community banks. First, we investigate whether poor financial performance is associated with CEO turnover in community banks and also assess whether such an association is potentially affected by the gender of the incumbent CEO. Second, we examine whether the association between poor financial performance and CEO turnover depends on the gender of the outgoing or incoming CEO. Finally, we explore whether the gender of the incoming CEO, and especially a change in CEO gender, influences the bank's policy decisions, financial performance, and risk-taking in the aftermath of the turnover. In our analysis, we exploit unique data on CEO turnovers covering nearly all U.S. community banks between the years 2008 and 2017 to address these questions.

While a linkage between CEO turnover and poor performance is critical to affirming a degree of managerial discipline in community banks, the question about incoming CEO gender is more timely and considers whether troubled community banks turn to female leadership specifically because they are in trouble, consistent with the so-called glass cliff hypothesis proposed by Ryan and Haslam (2005, 2007). Our empirical findings indicate that poor financial performance has a causal impact on CEO turnover in community banks. In addition, we find that although poor performance is a key determinant of CEO turnovers, it is not linked to the gender of the bank's dismissed nor the incoming CEO. This suggests that troubled, poorly performing banks are not more likely to retain their incumbent female CEOs or to replace male CEOs with a female.

After documenting a positive causal linkage between poor performance and CEO turnovers in community banks, we proceed to examine whether the gender of the incoming CEO affects bank actions and outcomes in the aftermath of executive turnovers. To the extent that the gender of the incoming CEO may influence bank risk-taking preferences and policies, we expect female CEOs to pursue more conservative and less risky strategies based on the well-documented gender-based differences in risk preferences and tolerance of individuals (see e.g., Levin, Snyder and Chapman, 1988; Johnson and Powell, 1994; Powell and Ansic, 1997; Jianakoplos and Bernasek, 1998; Sunden and Surette, 1998; Barber and Odean, 2001; Agnew, Balduzzi and Sunden, 2003; Watson and McNaughton, 2007; Halko, Kaustia and Alanko, 2012).

Consistent with this presumption, we document that a transition from a male CEO to a female CEO leads to post-turnover deleveraging and derisking actions. Among the community banks with executive turnovers, the banks with incoming female CEOs take actions to reduce both assets and liabilities while banks with male CEOs do not. In contrast, when the incoming CEO is male, we observe increases in the amounts of loans and risky assets. These gender-related asymmetries in bank actions following leadership changes are most pronounced for banks in which CEO turnover occurs amidst poor performance. Specifically, our findings indicate that poorly performing community banks with incoming female CEOs pursue reductions in assets, risk-weighted-assets, and the number of employees and bank branches. These banks also exhibit reductions in liabilities, deposits, and brokered deposits in the aftermath of CEO turnover. Poorly performing community banks that do not experience a transition to female leadership either do not have reductions or comparable levels of reductions in their assets and liabilities.

We also examine the role of incoming CEO gender in influencing the bank's financial performance and riskiness after changes in leadership. If the gender of the incoming CEO influences the bank's strategic decisions with respect to asset and liability growth, such decisions could affect post-turnover performance and the level of risk. We find that banks with CEO turnover experience reductions in default risk and earnings volatility, especially if the turnover is concomitant with poor performance. These reductions tend to be greater after a transition from a male CEO to a female CEO. However, the differences are not always economically different from comparable changes in banks that do not undergo a transition to female leadership. In addition, we find no evidence that transitions to female leadership would lead to post-turnover improvements in capital levels or profitability. Our findings suggest that attempts to reduce leverage or risk by poorly performing banks transitioning to female leadership are effective in improving outcomes but may not be consistently superior to other strategies. In other words, the post-turnover strategies used by banks that do not transition to female leadership are often as effective.

Our paper contributes to several strands of literature. First, we extend the extensive literature on CEO turnovers which generally suggests that poor financial performance increases the likelihood of CEO turnover (see e.g., Coughlan and Schmidt, 1985; Gilson, 1989; Murphy and Zimmerman, 1993; Jenter and Kanaan, 2015; Jenter and Lewellen, 2021). Most previous work examines publicly-listed nonfinancial firms, and the few exceptions focusing on CEO turnovers in banks are the studies by Schaeck et al. (2012), Bornemann et al. (2015), Srivastav et al. (2017), Chen and Ebrahim (2018), Sarkar, Subramanian and Tantri (2019), and Bunkanwanicha, Di Giuli and Salvade (2022). In brief, these studies suggest that CEO turnovers in banks are positively related to poor performance, the degree of risk-taking and financial distress, and the stringency of

board and regulatory monitoring. Overall, as contended by Becht, Bolton and Roell (2011), Adams and Mehran (2012), de Haan and Vlahu (2016), and Palvia, Vähämaa and Vähämaa (2020), among others, banks are fundamentally different from nonfinancial firms in terms of their business models, governance structures, and supervision and regulation, and consequently, additional research on the antecedents and consequences of CEO turnovers in the banking industry is warranted.

Second, our paper contributes to the scant literature on community bank governance and, more specifically, on CEO turnovers and the effects of these turnovers on community bank actions and outcomes. While banks, in general, are different from nonfinancial firms, community banks have a unique set of characteristics relative to large, publicly-traded financial institutions, including their business models, risk management strategies, and ownership and governance structures. In community banks, CEOs often have closer ties with the board members, employees, and shareholders, and their governance structures are influenced by personal relationships between the different stakeholders.¹ These characteristics make community banks an interesting setting to examine CEO turnovers.

The only previous studies on CEO turnovers in community banks we are aware of are those of Schaeck et al. (2012), Palvia (2012), and Dahl, Milchanowski and Coster (2018). In terms of factors triggering turnovers, Palvia (2012) documents a linkage between regulatory monitoring and CEO turnovers, while the findings of Schaeck et al. (2012) indicate that increased default risk increases the likelihood of CEO dismissal. Schaeck et al. (2012) also examine the effect of CEO

¹ For example, a single influential executive could potentially have an outsized role as community banks often have limited numbers of executives and board members.

turnovers on community banks' financial performance and risk profile and find no evidence that leadership changes would improve bank performance. Finally, Dahl et al. (2018) focus on the impact of CEO turnovers on regulatory-assessed managerial performance. Their findings suggest that CEO turnovers neither weaken nor improve management performance ratings. Our study is the first to examine the potential role of CEO gender, and specifically the impact of appointing female CEOs, in influencing community bank actions and outcomes after leadership successions.

The third related stream of literature investigates female CEOs and the effects of female leadership on corporate decisions and outcomes. This body of literature shows that firms led by female executives make less risky financing choices and investment decisions, and are more conservative with respect to financial reporting practices (e.g., Peni and Vähämaa, 2010; Huang and Kisgen, 2013; Francis et al., 2015; Faccio, Marchica and Mura, 2016; Adhikaria, Agrawal and Malm, 2019; Hrazdil et al., 2020; Peltomäki et al., 2021). Hence, the existing empirical evidence generally suggests that the behavioral differences between female and male executives are reflected in corporate-level outcomes. In the banking context, the implications of female leadership have been previously examined by Berger, Kick, and Schaeck (2014), Palvia, Vähämaa, and Vähämaa (2015), Skala and Weill (2018), Fan et al. (2019), and Palvia, Vähämaa and Vähämaa (2020). Collectively, the findings of these studies are consistent with the view that female executives and directors may promote more conservative and less risky business strategies and financial decisions in the banking industry. We extend this literature by documenting that a transition to female leadership in community banks leads to post-turnover deleveraging and derisking actions.

Finally, our study contributes to the small body of literature about the role of CEO gender in managerial turnovers. Elsaid and Ursel (2011) and Rigolini, Gabaldon and Le Bruyn Goldeng (2021) document that a transition to a female CEO is associated with a decrease in firm risk, while Ma (2022) finds that female CEOs are more likely than their male counterparts to be dismissed after performance declines. Ryan and Haslam (2005, 2007) argue that women are more likely than men to be appointed to risky leadership positions which they coin the “glass cliff” form of gender discrimination. Consistent with this view, Cook and Glass (2014a) and Elsaid and Ursel (2018) document that companies are more likely to appoint female CEOs after experiencing poor financial performance. On the other hand, the findings of Adams, Gupta and Leeth (2009), Elsaid and Ursel (2011), and Cook and Glass (2014b) suggest that poor performance or pre-turnover financial distress are not associated with the appointment of female CEOs. Given the mixed empirical evidence, it is of interest to examine the role of incoming CEO gender in poorly performing community banks. We document that poorly performing community banks are not more likely to appoint female CEOs, and thereby our empirical findings do not provide support for the glass cliff hypothesis.

The remainder of the paper is organized as follows. Section 2 reviews the related literature and presents our research hypotheses. Section 3 describes the data on U.S. community banks and presents the empirical framework used in our analysis. The empirical findings on the impact of poor financial performance on community bank CEO turnovers and the role of CEO gender in executive turnovers are reported in Section 4. Finally, the last section summarizes our findings and concludes the paper.

2. Background and hypotheses

2.1. Related literature

The two broad strands of literature our study builds upon focus on the antecedents and consequences of CEO turnovers and the influence of CEO gender on firm-level financial decisions and outcomes. The extensive extant literature on CEO turnovers indicates that poor or declining financial performance and increasing levels of riskiness and financial distress increase the likelihood of CEO turnover (e.g., Coughlan and Schmidt, 1985; Gilson, 1989; Murphy and Zimmerman, 1993; Jenter and Kanaan, 2015; Jenter and Lewellen, 2021). As noted by Arthaud-Day et al. (2006), when firms are in trouble, the replacement of the incumbent CEO may be an attractive and powerful means of legitimacy restoration when the firm aims to make a strategic change to recover from a critical situation. In a recent study, Jenter and Lewellen (2021) document that 38 to 55 percent of CEO turnovers are performance driven. The prior literature also demonstrates that CEO turnovers often lead to changes in the firm's strategic direction, financial and investment decisions, and various other outcomes (e.g., Beatty and Zajac, 1987; Kesner and Dalton, 1994; Shen and Cannella, 2002; Huson et al., 2004; Gao et al., 2017; Lin et al., 2020).

CEO turnovers in the banking industry have been previously examined by Palvia (2012), Schaeck et al. (2012), Bornemann et al. (2015), Srivastav et al. (2017), Chen and Ebrahim (2018), Dahl, Milchanowski and Coster (2018), Sarkar et al. (2019), and Bunkanwanicha, Di Giuli and Salvade (2022). Broadly consistent with the studies based on nonfinancial firms, these studies suggest that CEO turnovers in banks are positively related to weak profitability and losses, the degree of risk-taking and financial distress, and the stringency of board and regulatory monitoring. Collectively, the prior literature on CEO turnovers provides motivation to further explore the

antecedents and consequences of CEO turnovers in community banks which are unique in terms of their business models, risk management strategies, and ownership and governance structures.

The motivation for examining the role of CEO gender in managerial turnovers stems from the prior literature on gender-based behavioral differences between women and men and especially from previous studies that have linked CEO gender and female leadership to corporate decisions and outcomes. Over the last few decades, gender-based differences in overconfidence, conservatism, and risk preferences and tolerance of individuals have been extensively documented in the cognitive psychology and behavioral economics literature (see e.g., Levin, Snyder and Chapman, 1988; Feingold, 1994; Johnson and Powell, 1994; Powell and Ansic, 1997; Jianakoplos and Bernasek, 1998; Sunden and Surette, 1998; Fehr-Duda et al., 2006; Charness and Gneezy, 2012).

The effects of female CEOs on firms' business strategies, financial and investment decisions, risk profile and the level of risk-taking, and various other corporate outcomes have been examined, by Peni and Vähämaa (2010), Elsaid and Ursel (2011), Huang and Kisgen (2013), Khan and Vieito (2013), Faccio et al. (2016) Hrazdil et al. (2020), and Peltomäki et al. (2021), among others. Collectively, these studies provide evidence that the gender-based behavioral differences are reflected in corporate decisions that the top executives make. This stream of literature shows that female-led firms make less risky financing choices and investment decisions, have lower risk profiles, are less likely to issue debt and conduct acquisitions, and are more conservative with respect to their financial reporting practices than male-led firms.

In the banking context, the implications of female CEOs have been previously examined by Palvia et al. (2015, 2020) and Skala and Weill (2018). Palvia et al. (2015) document that female-

led banks hold more conservative levels of equity capital and are less likely to fail after controlling for the bank's asset risk and other attributes, and in a similar vein, Skala and Weill (2018) report that banks with female CEOs are associated with higher capital ratios. Palvia et al. (2020) examine the effect of real estate lending exposure and real estate shocks on bank performance and document that female-led banks have lower loan charge-offs and non-accrual loans relative to similar male-led banks.

Finally, the role of CEO gender in managerial turnovers has been previously studied by Ryan and Haslam (2005, 2007), Adams et al. (2009), Elsaid and Ursel (2011, 2018), Cook and Glass (2014a, 2014b), Rigolini et al. (2021), and Ma (2022). The findings of Elsaid and Ursel (2011) and Rigolini et al. (2021) indicate that a transition to a female CEO is associated with a decrease in firm risk, while Ma (2022) finds that female CEOs are more likely than their male counterparts to be dismissed in response to poor financial performance. Cook and Glass (2014a) and Elsaid and Ursel (2018) document that companies are more likely to appoint female CEOs after experiencing poor financial performance, while the findings of Adams et al. (2009), Elsaid and Ursel (2011), and Cook and Glass (2014b) suggest that poor performance or pre-turnover financial distress are not associated with the appointment of female CEOs.

2.2. Hypotheses

Our hypotheses are based on the aforementioned strands of literature. Consistent with the prior CEO turnover literature, we expect that poor financial performance will increase the propensity of CEO turnover. We also explore the possibility of a "glass cliff" given the literature suggesting that women are more likely than men to find themselves in leadership positions of firms with weaker prospects.

Hypothesis 1a: Poor performance causes CEO turnover.

Hypothesis 1b: For banks with CEO turnover, poor performance increases the likelihood of female CEOs replacing male CEOs.

Hypothesis 1c: Poor performance has a weaker impact on CEO turnover if the incumbent CEO is female.

We argue that if Hypothesis 1a holds, it suggests community bank CEOs may leave either due to firing or quitting in response to poor performance. Hypothesis 1b considers the “gender cliff” view. If the gender cliff view holds, we expect that female CEOs are appointed when the bank failure risk is high, thereby setting them up for failure. Hypothesis 1c considers an alternative manifestation of the gender cliff view. Under this view, we expect distressed banks with existing female CEOs to have a reduced propensity for CEO turnover. Specifically, appointing females to leadership positions at times of bank distress is conceptually analogous to the bank being less likely to dismiss an incumbent female CEO when the bank failure risk is high. In the latter case, the female CEO is retained because the bank has a diminished chance of survival, which could adversely affect success record of female CEOs, in aggregate.

Our hypotheses also draw upon the literature documenting gender-based behavioral differences in risk preferences and risk tolerance of individuals suggesting that women are generally more cautious and risk-averse than men regarding their financial decisions. Consistent with previous studies, we expect gender-based differences in conservatism and risk aversion to persist at the executive level and that individual executives may impact banks’ financial decisions. We build upon the streams of literature on female executives and managerial successions by examining the following research hypotheses:

Hypothesis 2a: The gender of the incoming CEO has an impact on the bank's deleveraging and de-risking actions, especially following periods of poor performance.

Hypothesis 2b: The gender of the incoming CEO has an impact on the bank's realized risk and performance outcomes, especially following periods of poor performance.

We contend that if incoming female CEOs are more risk-averse, then hypothesis 2a should hold and we should expect banks with incoming female CEOs to be more likely to take actions to reduce leverage and risk relative to banks with incoming male CEOs. We expect these actions could result in adjustments that reduce assets and favor less risky assets and reduce liabilities while favoring less volatile liabilities. We expect that such divergences should be the strongest in banks whose CEOs changed amidst poor bank financial performance (e.g., very low profitability or high losses).

While conservative actions should unambiguously affect the risk-taking propensity of banks post-turnover, it is unclear if such actions will necessarily result in a lower realized risk profile or improved performance. If incoming female CEOs are more risk averse *and* conservatism is the best strategy for the bank given its operating environment, competition, etc., a lower risk profile and better performance should result. For example, conservatism might allow a bank suffering high losses and limited lending opportunities a better chance to reduce risk and better improve its financial health. Thus, our null hypothesis is that there is a favorable impact on outcomes. On the other hand, an overly cautious approach could miss out on improvement in economic times and result in less robust performance relative to a strategy of staying the course or even increasing risk. Consequently, while we expect gender-based differences to result in risk-reducing actions

(hypothesis 2a), the extent of improvements in the bank's risk-profile and financial performance is an empirical question, our null for hypothesis 2b notwithstanding.

3. The empirical setup

3.1. Data

The study uses data on U.S. community banks which we define as commercial banks with total assets below \$10 billion following the Federal Reserve.² We obtain balance sheet and income statement data for community banks from the bank Call Reports through the Federal Financial Institutions Examination Council (FFIEC). The data on CEO turnovers and the genders of the bank's dismissed and incoming CEOs are constructed from SNL Financial available between 2008 and 2017. Our CEO turnover data covers virtually the entire population of community banks with missing information affecting only about 3.2 percent of bank-quarters. After excluding commercial banks above the size threshold and removing bank-quarters with missing CEO, gender, or other data, we obtain a sample of 6,832 individual community banks and an unbalanced panel of 52,504 bank-year observations over the sample period of 2008 to 2017. The final sample used in our empirical analysis essentially includes all community banks with available data in the U.S., and on average, there are about 5,200 individual banks in the sample in any given year.

Following Palvia et al. (2015, 2020), we deduce the genders of community bank CEOs based on the names of these individuals as reported in SNL Financial. At a given point in time, SNL Financial provides the names of the incumbent bank CEOs. Because historical data on CEO names are unavailable from SNL Financial, we use historical snapshots of the data taken at the end of

² See <https://www.federalreserve.gov/supervisionreg/community-and-regional-financial-institutions.htm> for more details. Our main findings remain unchanged if a stricter threshold of \$1 billion in total assets is used.

June of each individual year included in our sample. For each community bank and for each fiscal year, we manually determine the gender of the bank’s CEO based on their first names. In the case of unisex names, we require that at least 80 percent of the name holders belong to a particular gender to determine the gender of a given CEO.³ For ambiguous first names, we performed an internet search to determine CEO gender. Any unclear cases that could not be gender assigned based on these searches were excluded from the final sample.

3.2. Empirical tests

We begin our empirical analysis by examining the association between CEO turnover and poor financial performance. Specifically, we estimate the following regression specification to test the hypothesis that poor performance leads to CEO turnover in community banks (H1a):

$$CEO\ turnover_{i,t} = \beta_0 + \beta_1 Poor\ performance_{i,t-1} + \alpha_1 (Bank\text{-}specific\ controls)_{i,t-1} + \alpha_2 (Other\ controls)_{i,t-1} + \sum_{y=2009}^{2017} \omega_y Year_i^y + \varepsilon_{i,t} \quad (1)$$

The dependent variable $CEO\ turnover_{i,t}$ is an indicator variable that equals one if there was a CEO turnover in bank i during year t and; β_1 represents the main coefficient of interest and α_1 and α_2 respectively denote coefficient vectors for the bank-specific and other controls. We define CEO turnover as any change in the CEO in the given year, unlike previous studies that typically classify CEO turnovers into forced and unforced turnovers based on various ad-hoc rules. We do so because we do not have access to data to implement such rules for CEO turnovers in community

³ The unclear names were coded to females and males based on <http://www.genderchecker.com> and <http://www.nameplayground.com>. The latter website provides percentages for the popularity of a given name in the U.S. in both genders. For instance, 39.7 percent of individuals named Pat are males and 60.3 percent are females. This doesn’t meet the 80 percent threshold and, consequently, CEOs named Pat were excluded from the sample.

banks which are small and generally private.⁴ However, as argued by Jenter and Lewellen (2021), the commonly used approaches of classifying forced and unforced CEO turnovers by age and other attributes may lead to downwards biased estimates with respect to the linkage between CEO turnover and firm performance. In addition, given that unforced turnovers are unlikely to be correlated with firm performance as suggested by Jenter and Lewellen (2021), the inclusion of unforced CEO turnovers in our sample is likely to generate noise in the estimations rather than bias.

Hypothesis 1a predicts that the coefficient estimate for *Poor performance* will be positive (i.e., $\beta_1 > 0$). Hypotheses 1b and 1c are then tested with a similar regression specification but with various adjustments to the dependent variable and the sample as required in each case. In particular, based on the genders of the bank's outgoing and incoming CEOs, the turnovers are categorized into the following three indicator variables for testing hypothesis 1b: (i) *CEO Change FM* denoting female-to-male CEO turnover, (ii) *CEO Change MA* denoting male-to-female CEO turnover, and (iii) *CEO Change NG* representing same gender CEO turnover.

The main variable of interest in Equation 1 for testing Hypothesis 1a, 1b, and 1c is *Poor performance*. We use two alternative measures of poor financial performance in our regressions: (i) *Low ROA* is defined as a dummy variable which equals one for bank-year observations with return on assets in the bottom decile, and (ii) *High Chg-Off* is a dummy variable which equals one for bank-year observations with the ratio of loan charge-offs to total assets in the top decile.

⁴ For example, criteria such as departing CEO age or usage of certain keywords as an expressed reason for the turnover in news reports are sometimes used to determine turnover reason. Governance characteristics are typically only available for large publicly traded financial institutions and news reports also generally focus on larger publicly traded firms.

We include a number of control variables in the regressions to account for the potentially confounding effects on CEO turnovers. The bank-specific control variables used in Equation (1) include various governance characteristics and bank structural indicators. A central governance control is *Female CEO*, which is a dummy variable set to one if the bank's incumbent CEO in year t is a female; a non-zero value for the respective coefficient would provide preliminary evidence that CEO turnover is linked to outgoing CEO gender. Interactions of poor performance with this indicator form the basis of our tests for hypothesis 1c. We exclude *Female CEO* from specifications testing hypothesis 1b as the dependent variables for those specifications effectively incorporate the gender of both the incoming and outgoing CEOs.

We include other key governance controls in all regressions including (i) *CEO Duality*, which is a dummy variable set to one if the same individual is the bank's CEO and the chairperson of the board, (ii) *Female Chair*, which denotes that the board chair is female, and (iii) *Related Chair*, which proxies for family control and ownership and is a dummy variable which equals one if the bank's CEO and chairperson of the board are different individuals but have the same last names.

Our structural controls include (i) *Log Assets* denotes the logarithm of total assets and measures bank size, (ii) *Assets > \$1B* is a dummy variable which equals one for community banks with total assets in excess of \$1 billion, (iii) *Public* is a dummy variable for publicly traded banks, (iv) *Subchapter S* is a dummy variable assigned to one for closely held banks that are organized under the subchapter-S, (v) *MBHC* is a dummy variable which equals one for banks that are affiliated with a multibank holding company, (vi) *Log Bank Age* denotes the logarithm of the age of the bank, (vii) *Organizational Change* is a dummy variable which equals one for banks that

experienced any kind of a change in holding company structure, and (viii) *Merger activity* is a dummy variable for banks that were involved in a merger during the year preceding CEO turnover. Other controls, which are derived from state-level or other market level information, include: (i) *Number of states* is the number of states the bank operates in, (ii) *HHI* is the Herfindahl-Hirschman Index measuring deposit market concentration in the combined statistical area (CSA) or county, (iii) *State Unemp Rate* is the state unemployment rate, and (iv) *State Real PCI* is the real per-capita income in the state. We also include year fixed-effects in the regressions to account for any systematic variation in the amount of CEO turnovers over time. The definitions of all the variables used in the regressions are provided in Table 1.

After examining the linkage between poor bank performance and CEO turnover, we proceed by studying community bank actions and outcomes following the turnovers and especially the role of the gender of the incoming CEO. To test hypotheses 2a and 2b, we regress changes in bank assets and liabilities as well as various performance and risk outcome measures on three different CEO turnover variables that are constructed based on the genders of the bank's outgoing and incoming CEOs. Specifically, we estimate various alternative versions of the following regression specification:

$$\begin{aligned}
 \Delta y_{i,t} = & \beta_0 + \beta_1 \text{Poor performance}_{i,t-1} + \beta_2 \text{Male-to-female CEO turnover}_{i,t-1} \\
 & + \beta_3 \text{Female-to-male CEO turnover}_{i,t-1} + \beta_4 \text{Same gender CEO turnover}_{i,t-1} \\
 & + \alpha_1 (\text{Bank-specific controls})_{i,t-1} + \alpha_2 (\text{Other controls})_{i,t-1} \quad (2)
 \end{aligned}$$

$$+ \sum_{b=1}^{N-1} \omega_b \text{Bank}_b + \sum_{y=2009}^{2017} \omega_y Y_e$$

$\varepsilon_{i,t}$

The dependent variable $\Delta y_{i,t}$ represents the annual change in a specific balance sheet indicator, measuring bank assets or liabilities, or a specific financial outcome measure, measuring default risk or performance. Our tests effectively consider the one-year evolution in these balance sheet and outcome measures to gauge bank actions and financial outcomes following turnover. The four different bank asset measures used in the regressions are (i) *Total Assets*, (ii) *Loans*, (iii) *Employees*, and (iv) *Branches*; the four bank liability measures include (i) *Total Liabilities*, (ii) *Deposits*, (iii) *Brokered Deposits*, and (iv) *Non-Deposit Liabilities*. All the asset and liability measures are measured in logs and form the dependent variable, y , in equation (2). The various outcome measures include three measures of realized default or asset risk, (i) Z-score, (ii) *Equity/Assets*, and (iii) return on assets (*ROA*) and earnings volatility (*ROA Volatility*) as a measure of performance.

Similar to Equation (1), poor performance is measured either with *Low ROA* or *High Chg-Off Ratio*. The variables of interest in Equation (2) for testing Hypotheses 2a and 2b are (i) *CEO Change FM* or male-to-female CEO turnover, (ii) *CEO Change MA* or female-to-male CEO turnover, and (iii) *CEO Change NG* or same gender CEO turnover which are dummy variables constructed based on the genders of the bank's outgoing and incoming CEOs. Thus, β_1 - β_4 represent the main coefficients of interest and α_1 and α_2 , as in equation 1, respectively denote coefficient vectors for the bank-specific and other controls.

In addition to the bank and other control variables included in Equation (1), we augment the set of controls depending on the specifications.⁵ For specifications considering the evolution of assets, we include three additional controls representing bank liquidity or asset risk. These are *Loans/Assets*, *Cash Balances/Total Assets*, and *RWA/Assets*. For specifications considering the evolution of liabilities, we include the following three additional controls representing bank funding risk: *Deposits/Liabilities*, *Brokered Deposits/Liabilities*, *Avg Dep Interest Rate*. For specifications considering the evolution of outcomes, which depict realized risk or performance for the bank as a whole, we include all six of these controls. Lastly, we include bank fixed-effects and year fixed-effects in Equation (2) to control for unobserved heterogeneity across banks and any systematic variation in the different dependent variables over time.

(Insert Table 1 about here)

3.3. Descriptive statistics

The descriptive statistics for the variables used in the empirical analysis are presented in Table 2. As can be noted from Panel A, our sample of 52,504 bank-year observations includes 5,270 community bank CEO turnovers. In most of these turnovers, the genders of the bank's outgoing and incoming CEOs are the same. Our sample includes 330 CEO turnovers (6.3 percent of the turnover observations) in which a male is replaced by a female (i.e., *CEO Change FM*) and 214 turnovers (4.1 percent of turnovers) in which a female CEO is replaced by a male CEO (i.e., *CEO Change MA*).

⁵ Similar to tests of hypothesis 1b, all tests based on equation (2) exclude *Female CEO* as the key explanatory variables, Male-to-female CEO turnover (*CEO Change FM*), Female-to-male CEO turnover (*CEO Change MA*), and Same gender CEO turnover (*CEO Change NG*), effectively incorporate both the incoming and outgoing CEO gender.

The descriptive statistics in Panel B of Table 2 indicate that there is considerable dispersion in our sample with respect to bank performance as measured by return on assets (ROA) and loan charge-offs. The mean value of ROA is 0.7 percent with the 10th to 90th percentile range being from –0.03 percent to 1.7 percent. The 10th percentile *Chg-Off Ratio* is essentially zero and the 90th percentile is about 0.2 percent. Regarding the control variables, it can be noted from Table 2 that there is a wide variation in our bank-years in terms of size, funding and asset structure, growth, and financial performance. The logarithm of total assets has a mean of 12.10, which implies total assets of \$200 Million; similarly, the 5th percentile to 95th percentile range varies from 10.34 to 14.20, or \$31 Million to \$1.47 Billion.⁶ The average bank in a given year holds about 70 percent of its loan portfolio in residential real estate loans, thereby suggesting a very substantial exposure to real-estate price shocks. The statistics also show substantial variation in our distributions for the various balance sheet controls for assets (*Loans/Assets*, *Cash Balances/Total Assets*, and *RWA/Assets*) and liabilities (*Deposits/Liabilities*, *Brokered Deposits/Liabilities*, *Avg Dep Interest Rate*).

In approximately 35 percent of our sample, the positions of the CEO and board chair are held by the same individual. Interestingly, in 6 percent of the sample, the board Chair is related to the CEO of the bank (i.e., they have the same last name). Finally, the descriptive statistics indicate that 18 percent of the bank-years in our sample are publicly traded, about 37 percent are subchapter-S banks, and approximately 15 percent of the banks are affiliated with a multibank holding company. Lastly, the overwhelming majority of banks operate in a single state with the mean being 1.12 and the 75th percentile being 1.

⁶ Data from Call Reports are reported in thousands.

(insert Table 2 about here)

4. Results

4.1. Poor performance and CEO turnovers

We begin our analysis by looking at the extent of CEO turnover across community banks. Figure 1a shows that CEO turnover ranges from about 13 percent of total annual observations in 2008 to less than 8 percent in 2017; this suggests more turnover during the financial crisis, where bank performance is expected to be the worst on average. We then classify banks as being poorly performing based on the 10th percentile of ROA and the 90th percentile of *Chg-Off Ratio*, respectively. We focus on these non-continuous measures as we are interested in identifying very poor performance rather than the entire distribution of our performance measures. Figures 1b and 1c show that turnover rates were substantially higher in the subpopulations of banks with poor versus not poor performance and the divergence remains throughout the 10 years of the sample and not just during the crisis and its immediate aftermath.

(Insert Figure 1 about here.)

Our formal analysis utilizes panel regressions of CEO changes. We regress bank leadership (i.e. CEO) changes from $t-1$ to t on indicators of poor bank performance and a set of control variables at time $t-1$. We analyze model specification (1) without *Poor Performance* in the model, whereas the other model specifications include one of the performance indicators, i.e. *Low ROA* (i.e. 10th Percentile *ROA*) or *High Chg-Off Ratio* (90th Percentile *Chg-Off Ratio*), which corresponds to our two measures of poor performance. Following our univariate analysis, we focus

on poor performance rather than the continuous measures as we are focused on CEO turnover following adverse performance. These results are reported in Table 3.

(insert Table 3 about here)

As can be seen from the table, our financial stress indicator variables, *Low ROA* and *High Chg-Off Ratio* are positive and are highly statistically significant in all the model specifications where they are included, thereby indicating that poorly performing banks are more likely to change CEOs than their peers. The coefficient of *Female CEO* is near zero suggesting that incoming CEO gender does not affect CEO turnover. *CEO Duality*, *Related Chair*, *Bank Age*, and size (*Log Assets*) have statistically significant negative coefficients, thereby suggesting that these variables are negatively associated with the CEO change. We also find no evidence that chair gender is linked to CEO turnover.

The coefficients of *CEO Duality* and *Related Chair* suggest greater CEO power vis-à-vis the board is linked to a reduced turnover likelihood. The signs of *Bank Age* suggest more stable or established banks are less likely to have turnover. The variables *MBHC*, *Organizational Change*, *Unemployment*, *Assets > \$ 1B*, and *Log Assets* are positively associated with the CEO change. The coefficients on *Log Assets* and *Assets > \$1B* suggest a non-monotonic relation between bank size and CEO turnover; larger banks are less likely to experience CEO turnover but when a bank becomes a large enough community bank (i.e. assets > \$1 Billion), the CEO turnover is becomes more probable.

4.2. Endogeneity

Although our analysis considers the link between community bank CEO turnover and adverse bank performance controls for various bank-specific characteristics as well as other controls including state-based economic indicators, it is possible that we have omitted correlated variables or some unobservable bank characteristics that simultaneously affect both the level of financial distress and the appointment of CEOs. We attempt to alleviate possible endogeneity concerns by performing instrumental variable analyses.

Our strategy relies on exploiting exogenous geographically and time-varying housing price shocks, based on a state-based housing price index (HPI) obtained from the FHFA, for identification. We employ two alternative versions of a shock to HPI as instrumental variables for poor performance in our two-stage regressions: *HPI 10 percent Shock* is defined as a year-over-year decline of at least 10 percent in the HPI during the two years prior to the leadership change in the regions in which the bank operates and *HPI 20 percent Shock* is a similar measure but with at least 20 percent decrease in the HPI.⁷ We presume that HPI shocks should be positively associated with poor bank performance while not being directly correlated with the CEO changes in community banks. The first stage of the IV analysis is not tabulated for the sake of brevity. However, tests for under-identification and weak identification are rejected in all model specifications, thereby confirming the validity of the chosen instrument.⁸ The second stage of the IV analysis is depicted in Table 4; the specifications are identical to the models presented in Table 3, but utilize our instrument for poor performance.

⁷ A bank is classified as having been exposed to a 20 percent or a 10 percent HPI shock if the state in which a bank operates suffers a decline in HPI by these amounts. For banks operating in multiple states, we use a deposit-weighted HPI based on the states from where the bank has deposits to estimate bank-level HPI.

⁸ Reported underidentification and weak identification tests stats in Table 4 are Klieibergern-Paap rank LM and Cragg-Donald Wald F-Statistics, respectively.

(insert Table 4 about here)

Columns (1), (3), (5), and (7) of Table 4 present results for both performance measures and both IVs. Columns (2), (4), (6), and (8) report results based on the subset of bank observations with higher RE exposure (75th percentile of residential real estate loans ratio just before the beginning of the RE shock, i.e. 3 years out). We use low ROA and high *Chg-Off* Ratio in columns from (1) to (4) and (5) to (8) respectively as our measures of poor performance. Results are estimated using the IV based on a 10 percent HPI decline (IV1) in columns (1), (2), (5), and (6) and using the IV based on a 20 percent HPI decline (IV2) in the other columns.

As can be seen from the table, the instrumented poor performance variables have statistically significant positive coefficients in all the model specifications. The results show an economically strong relation between poor performance and CEO changes. Columns (1) and (5) suggest that poor performance leads to an 11 percent and 9 percent increase in the likelihood of CEO change, respectively. This is roughly as high as the unconditional mean CEO change of 10 percent reported in the descriptive statistics for the total sample. Note that the IV estimates for the poor performance are somewhat higher but in the same general range as the OLS estimates. The estimates using the subsample of banks more exposed to the real estate (RE) price shocks, i.e. those with higher shares of ex ante residential RE loans, have substantially higher coefficients. Overall, the IV analyses confirm the findings of the main regressions reported in Table 3, thereby indicating that there is a causal relationship between bank performance and CEO turnover.

4.3. The role of gender in CEO turnover

We further analyze the relationship between CEO changes and poor performance by examining if the incoming CEO gender depends on performance. Previous literature has suggested the possibility of a “glass cliff” whereby women are more likely than men to be appointed to leadership positions that are risky which would then set them up for failure (Ryan and Haslam, 2005 & 2007). As a precursor to considering the effect of gender on bank activities following CEO changes, we consider whether incoming CEO gender transitions are themselves potentially driven by poor performance. We focus on the subsample of banks for which the CEO changed during the sample period ($n = 5,270$). Figure 2 panels A and B show unconditional means of CEO changes in subpopulations of poor and non-poor performance. The proportions of CEOs in each subcategory are similar in subsamples of new male incoming CEO, new female incoming CEO, and new incoming CEO with no gender change.

(Insert Figure 2a and 2b about here.)

Regression analysis assessing the possibility of a “glass cliff” is conducted and the results are tabulated in Table 5 panels A and B. In panel A of the table the analysis is restricted to bank-years where we observe a CEO turnover. As can be seen from the table, changes in the gender of the new CEO are *not* statistically related to bank performance. Columns (3)-(6) present OLS results suggesting no link between poor performance and a change in incoming CEO gender, conditional on succession; similarly, columns (7)-(12) present second-stage IV results further documenting no association between bank performance and incoming gender, regardless of a change in gender of outgoing and incoming CEOs. Furthermore, the gender of the new CEO seems unrelated to most factors beyond the prior CEO’s gender. However, banks with female chairs are more likely to replace CEOs with an opposite gender and as part of such change, they are more likely to replace

a female CEO with a male CEO. Also, it appears smaller community banks are less likely to have incoming CEOs of a different gender than outgoing CEOs.

Importantly, the results reported in Panel A of Table 5 suggest that poor performance of banks is not a major factor in the gender choice of a new CEO. In general, there is no statistical association between our performance measures and incoming CEO gender with the exception of column (1) suggesting a lack of change in incoming CEO gender is associated with poor performance; however, this result is not robust as it does not hold up in the corresponding IV regression (column 7). Thus, our analysis does not support the gender cliff view. Moreover, the results indicate that the gender of the incoming CEO is random, i.e. that it is not related to prior bank performance.

We also consider a further manifestation of the gender cliff theory by estimating the likelihood of CEO turnover conditional on the existing CEO being female. The results, shown in Table 5 Panel C, show that banks with female CEOs are not more or less likely to have a CEO turnover. Importantly, the interaction term of *Poor Performance* and *Female CEO* is small and not statistically significant. While the coefficient is negative in both columns (2) and (4), denoting interactions with *Low ROA* and *High Chg-Off Ratio* respectively, the insignificant negative relation between the interaction term and CEO turnover is contrary to hypothesis 1c which suggests female CEOs are not less likely to depart amidst poor performance. Thus the results in Table 5 Panel C are also inconsistent with the gender-cliff view.

(Insert Table 5 about here.)

4.4. Bank actions after CEO turnovers

To the extent poor performance causes CEO turnover, it is important to understand the degree to which incoming CEO characteristics influence subsequent bank deleveraging and derisking. Specifically, our focus is the extent to which the incoming CEO gender is a factor in the evolution of bank balance sheets towards a reduced and less risky asset and liability composition. We analyze bank actions after the leadership changes with univariate and multivariate analyses. We begin with univariate analyses depicted in Figures 3A and 3B. These figures clearly show that CEO changes resulting in female CEOs are associated with a decrease both in asset growth and in liability growth. For example, Figure 3b shows the unconditional mean for employee and office growth is negative for changes to female leadership, (*CEO Change FM*) while these are positive for all other categories—*No CEO change*, *CEO Change NG*, and *CEO Change MA*; asset and loan growth also appear to be lower for banks with changes to female leadership. Similar patterns can be seen in Figure 3b; for example, total liabilities and deposit growth are smaller for banks with changes to female leadership.

(insert Figure 3 about here)

We report our more formal multivariate analysis in Table 6. These results further depict how assets and liabilities evolve for banks with a CEO turnover with and without gender changes. As can be seen from Panel A of Table 6, CEO changes in which a male CEO is replaced by a female are associated with lower asset growth than the CEO changes resulting in male CEOs.

(insert Table 6 about here)

Moreover, as can be seen from Panel A of Table 6, the banks where a female CEO replaces a male are associated with decreased risk-weighted assets, number of employees, and number of branches. These results are both statistically and economically significant. For example, column

(1) suggests that a change to a female CEO is associated with asset declines of about 1.7 percent; this number represents about 1/10th of one standard deviation and about half of the median change in log assets. The impact on assets and liabilities of CEO changes where the gender of the CEO remains the same and changes where a female CEO is replaced by a male appear to be lower in magnitude and not statistically significant.

Next, we examine the impact of CEO changes further by considering subsequent changes in bank liabilities and deposits. These findings are reported in Panel B of Table 6. As can be seen from the table, the banks where a male CEO was replaced by a female are associated with lower growth in liabilities and deposits. The relation is statistically significant and economically meaningful; column (1), for example, shows female leadership changes associated with a 2.4 percent decline in liabilities which corresponds to about 1/10th of one standard deviation and more than half of the median for liabilities growth. We do not find any statistical relation with brokered deposits or non-deposit liabilities.

Next, we consider the impact of poor performance on incoming CEO deleveraging actions. Figures 4a–d present the impact of CEO change on asset and liabilities' evolution depending on the performance prior to CEO turnover. The differences are striking; for example, in the poor performance scenarios, changes to female leadership are shown to be associated with large declines in all sub-categories of assets whereas male CEO changes are related to increases in asset subcategories. For total assets, there is a substantially smaller increase in total assets when leadership changes to a female CEO than in the cases of incoming male CEOs. As can be seen from Figures 4c and 4d, a similar story is evident for liabilities. There is a large decline in brokered

deposits and non-deposit liabilities for banks that change to female leadership but not for the banks changing to male leadership.

(Insert Figures 4a-d about here.)

Next, we evaluate bank actions following leadership changes amidst poor performance in a regression framework. We re-estimate the results presented in Table 6 while interacting the CEO change indicators with binary indicators of poor performance and not poor performance. Tables 7a and 7b report these results based on the two alternative measures of poor performance. In model specifications (1) to (5), we define poor performance by *Low ROA*, while in model specifications (6) to (10) the poor performance is proxied by *High Chg-Off Ratio*.

The results reported in Panels A and B of Table 7 indicate that new female CEOs are likely to take more substantial actions to reduce their assets and liabilities, especially riskier assets and liabilities when the bank is in more severe financial trouble. This finding also holds when the CEO gender does not change using the *High Chg-Off Ratio* measure of poor performance in Panel A of Table 7 and for both poor performance measures in some specifications in Panel B of Table 7. The magnitude of the coefficients and the number of specifications with statistically significant results, however, is generally higher in the subset of banks with incoming female CEOs; this is especially true for assets (Panel A of Table 7).

In summary, we find that poorly performing banks with incoming female CEOs have significantly lower asset growth, loan growth, risk-weighted-asset growth, employee growth, and branch growth. Similarly, we find that poor-performing banks with incoming female CEOs have lower liabilities growth, deposit growth, and brokered deposit growth. Importantly, we find no

evidence of reductions in assets and liabilities in banks with incoming male CEOs for either performance measure.

(Insert Table 7 about here.)

4.5. Risk profile and performance changes after CEO turnovers

Finally, we examine the evolution of risk and performance after leadership changes at one and two year horizons following turnover. Panels A and B of Table 8 show the change in bank risk profiles for a one-year period after the CEO change. We measure realized risk using measures of default risk (*Z*-score), solvency (Equity/Assets), asset risk (ROA Volatility), and performance (ROA). We regress 1-year changes in these measures (year *t* to *t*+1) on indicators of bank CEO changes from *t*-1 to *t* and controls at time *t*. Panel A and B differ in that the latter includes interactions between the CEO change indicators and poor performance measures. Panel A shows that while poorly performing banks subsequently perform better, likely due to a variety of factors including mean reversion, banks with new incoming female CEOs perform even better, at least with respect to improvements in *Z*-score and reduction in earnings volatility, whereas there is no discernible positive impact for banks with new incoming male CEOs.

Panel B shows that the impact of a male CEO being replaced by a female is generally more prominent in poorly performing banks; these coefficients are both statistically and economically significant in most specifications. In column (1) of panel B of Table 8, for example, we see the relation between poor-performing bank Female CEO change and non-poor-performing bank Female CEO change to be 0.87; the improvements are qualitatively similar for incoming Male CEO banks and incoming no CEO gender change banks (0.66 and 0.71). Similar observations can be made in column (5) for the other measure of poor performance but with a somewhat larger

difference between male and female incoming CEO coefficients. We also observe similar results with our measure of realized asset risk (earnings volatility) and performance. We do not find gender-based differences in the propensity to increase capital ratios irrespective of distress.

(Insert Table 8 about here.)

To examine the risk profile changes further, we also run similar regressions using a longer window, two years, to examine if the reported findings result from a short-term phenomenon or if the risk profile changes persist over a longer time period. These results are similar to the results reported for the 1-year period in Table 8 but with larger and more significant coefficients. The additional results are reported in panels A and B of Table 9.

(Insert Table 9 about here.)

Table 9 panel A provides evidence that CEO changes are related to improvement in risk profile and performance regardless of incoming CEO gender even as the results are somewhat stronger for incoming female CEO banks. Banks with changes to female CEOs have higher Z-scores, and lower ROA volatility whereas banks with changes to male CEOs also have higher Z-scores but not lower ROA volatility.

Taken together, the results of Tables 6-7 and 8-9 suggest that, while female-led banks clearly take actions to reduce risk when a new CEO takes the helm, the actual impact on financial outcomes arising from gender-based differences in risk-taking are mixed and possibly short-lived. The lack of consistently superior reductions in risk or performance improvements for banks for incoming female CEOs relative to banks with CEO turnover more generally suggests that conservatism is not necessarily a superior strategy for banks facing financial difficulties.

4.6. Limitations

We acknowledge several limitations in our empirical analyses that should be considered when interpreting our results. To address endogeneity of a central variable in our analysis, poor performance, we utilize instrumental variable analysis. In addition, because CEO gender assignment following turnover is shown to be random in Table 5, we expect the endogeneity biases arising from our gender-based CEO turnover indicators in the second part of our analysis to be substantially mitigated. Nevertheless, similar to most empirical corporate governance studies, our analysis is still subject to endogeneity concerns arising from other variables.

In our regressions, we use lagged independent variables to mitigate endogeneity concerns further. We also control for a number of bank-specific characteristics that are known to affect bank performance and CEO turnover likelihood. However, due to data unavailability, we are unable to fully control for banks' corporate governance attributes such as board size and independence, ownership structure, and managerial compensation incentives in our regressions; unlike studies of public firms, our data allows for limited governance variables. In our regressions, we have attempted to control for differences in ownership and governance structures by including dummy variables for CEO Duality, CEO/Chair family linkages (*Related Chair*), chair gender, publicly traded banks (*Public*), closely-held banks (*Subchapter-S*), and multibank holding companies (*MBHC*).

Finally, we acknowledge that our sample of U.S. commercial banks is severely unbalanced towards male-led banks as female-led banks comprise only about 6 percent of the observations. This low proportion of banks with changes in CEO gender is an evident limitation of this study. It is also important to recognize that female CEOs are more common in smaller, privately-held banks

(see e.g. Palvia et al., 2020) which may have different business strategies and face less stringent regulatory oversight compared to large banks. Due to these limitations, our findings should be viewed as suggestive and causal interpretations, for analysis considering actions following leadership changes, should be made cautiously.

5. Conclusions

This paper studies the impact of poor financial performance on community bank CEO turnovers and the role of CEO gender in these successions. Specifically, we examine three interrelated questions. First, we investigate whether poor financial performance is associated with CEO turnover in community banks and also assess whether such an association is potentially affected by the gender of the incumbent CEO. Second, we examine whether the association between poor financial performance and CEO turnover depends on the gender of the outgoing or incoming or outgoing CEO. Finally, we explore the role of the incoming CEO gender in influencing the bank's policy decisions, financial performance, and risk-taking in the aftermath of the turnover. In our empirical analysis, we use unique CEO turnover data that covers nearly all U.S. community banks over the period 2008-2017.

Our empirical findings indicate that poor financial performance has a causal impact on CEO turnover in community banks. Although weak performance is a key determinant of CEO turnovers, it is not linked to the gender of the bank's dismissed nor the incoming CEO. This suggests that troubled, weakly performing banks are not more likely to retain their incumbent female CEOs or

to replace male CEOs with a female. Furthermore, we document that a transition to female leadership leads to post-turnover deleveraging and derisking actions. Banks with incoming female CEOs take actions to reduce both assets and liabilities while male-led banks do not. In contrast, when the incoming CEO is male, we observe increases in the amounts of loans and risky assets. These gender-related asymmetries in bank actions following leadership changes are most pronounced for banks in which CEO turnover occurs amidst periods of poor performance. Our findings also indicate that managerial successions are associated with reductions in default risk and earnings volatility, especially if CEO turnover is concomitant with poor performance. We find limited evidence that transitions to female leadership would ultimately lead to greater post-turnover reductions in realized risk or improvements in bank performance. Overall, our findings suggest that CEO gender meaningfully influences community bank decisions in the aftermath of executive turnovers.

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FIGURE 1a. CEO turnover by year

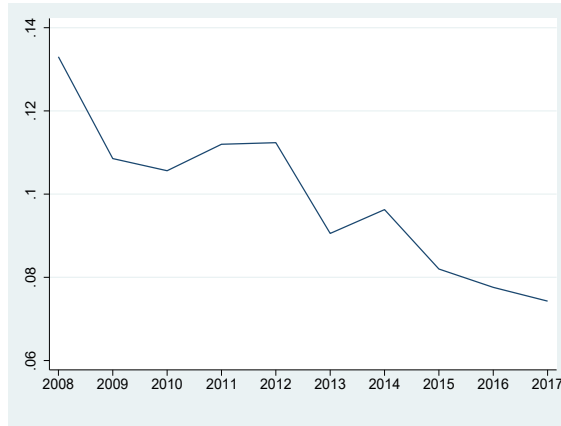


FIGURE 1b. CEO turnover by poor performance - ROA

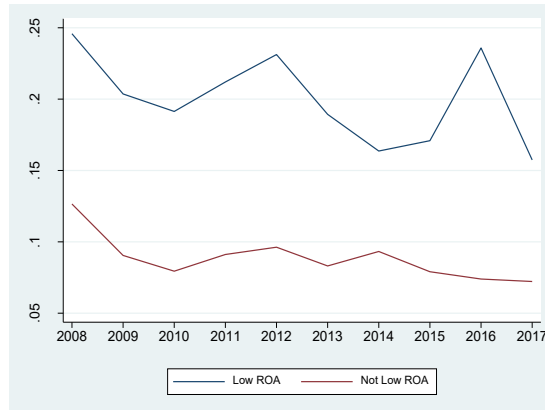
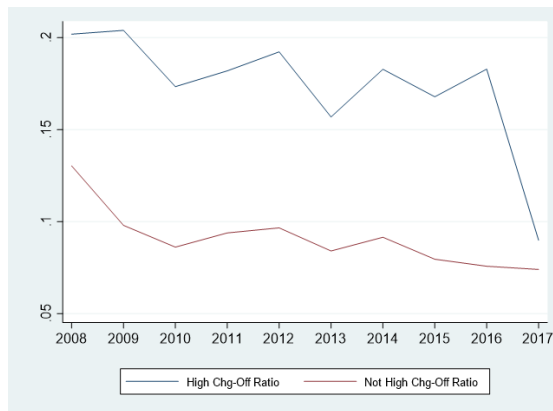


FIGURE 1c. CEO turnover by poor performance – Chg-Off Ratio



The figures describe CEO turnover variations over the sample period of 2008-2017. Figure 1a depicts all CEO turnover variations and figures 1b and 1c show turnover variations depending on classification of poor performance based on Low ROA and High Chg-Off Ratio respectively.

FIGURE 2a. Performance by CEO change type - ROA

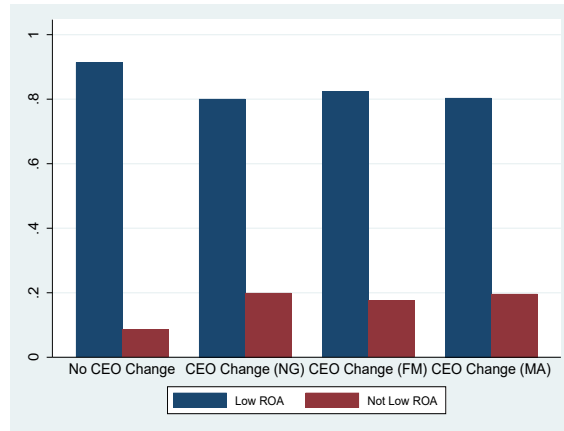
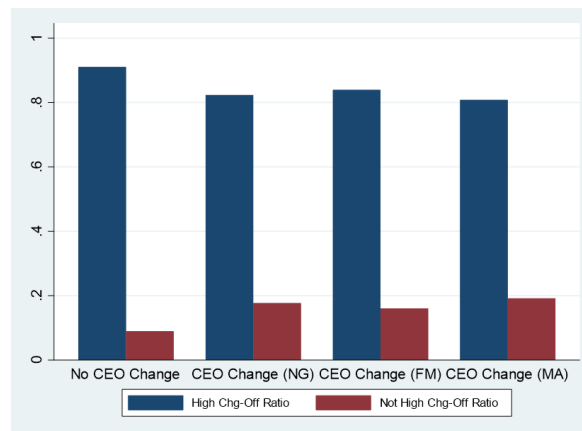


FIGURE 2b. Performance by CEO change type – Chg-Off Ratio



The figures highlight performance depending on gender of the incoming CEO for banks with CEO turnovers. Figure 2a shows the percentage of banks with low ROA and not Low ROA depending on the incoming CEO gender; figure 2b presents the same information using High Chg-Off Ratio as the measure of poor performance.

FIGURE 3a. Asset evolution for all banks

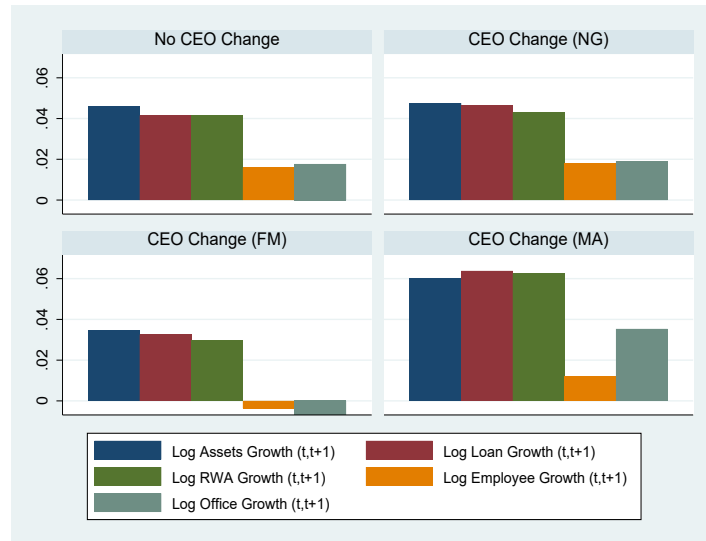
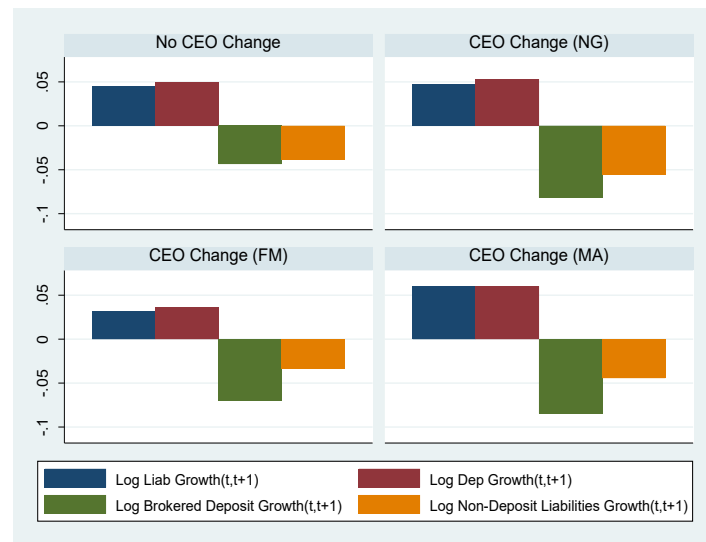


FIGURE 3b. Liabilities' evolution for all banks



Figures 3a and 3b show how assets and liabilities evolve for banks depending on CEO turnover with and without gender changes.

FIGURE 4a. Impact of CEO change on assets – Low ROA banks

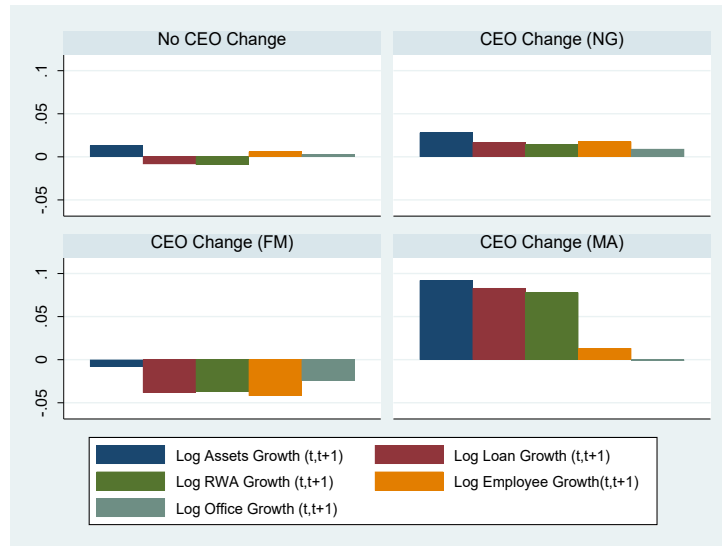
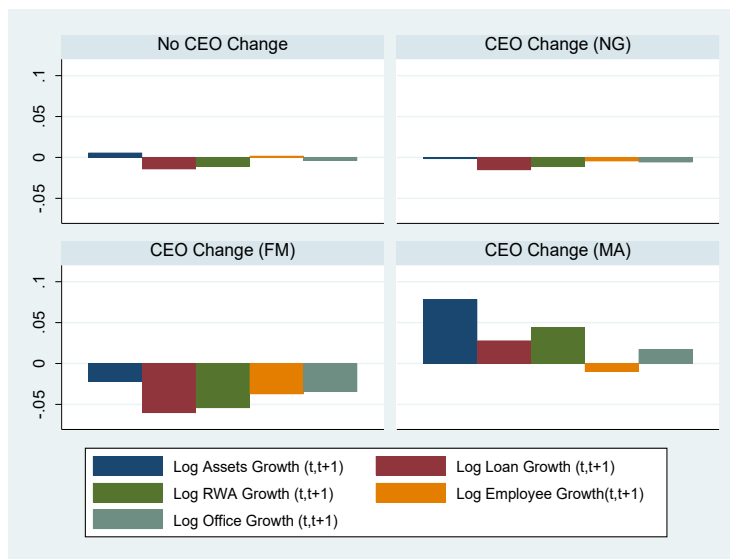


FIGURE 4b. Impact of CEO change on assets – High Chg-Off ratio banks



Figures 4a and 4b show how assets evolve for banks depending on CEO turnover with and without gender changes for the subset of banks with poor performance as defined as low ROA and high Chg-Off ratio, respectively.

FIGURE 4c. Impact of CEO change on liabilities – Low ROA banks

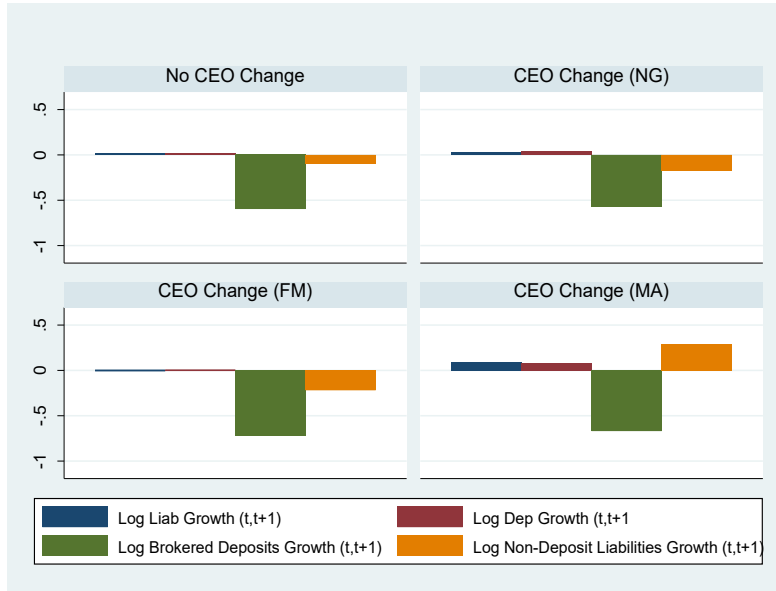
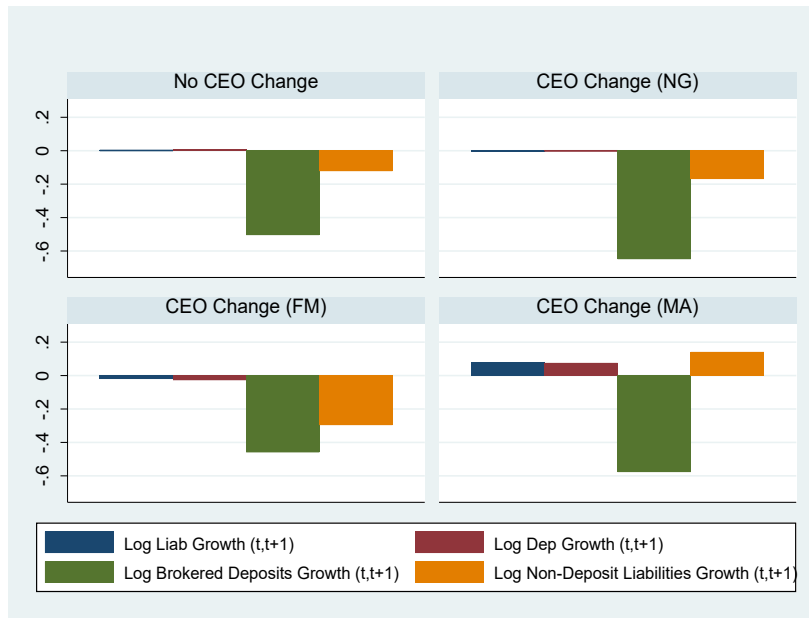


FIGURE 4d. Impact of CEO change on liabilities – High Chg-Off ratio banks



Figures 4c and 4d show how liabilities evolve for banks depending on CEO turnover with and without gender changes for the subset of banks with poor performance as defined as low ROA and high Chg-Off ratio respectively.

TABLE 1. Variable definitions

Variable	Definition
CEO Change NG	Denotes CEO change NOT resulting in change in gender
CEO Change FM	Denotes CEO change resulting in change in gender to female
CEO Change MA	Denotes CEO change resulting in change in gender to male
Change in Log(Assets)	Assets = ASSET*
Change in Log(Loans and Leases)	Loans and Leases = LNLS*
Change in Log(RWA)	RWA (Risk Weighted Assets) = RWA*
Change in Log(Employees)	Employees = NUMEMP*
Change in Log(Offices)	Offices = OFFSOD*
Change in Log(Liab)	Liabilities = LIAB*
Change in Log(Deposits)	Deposits = DEP*
Change in Log(Brokered Deposits)	Brokered Deposits = BRO*
Change in Log(Non-Deposit Liabilities)	Non-Deposit Liabilities = LIAB* - DEP*
Change in Log(Z-Score)	Z-Score = (ROA + EQ*/ASSET*)/SD(ROA); Standard Deviation (SD) measured over 4 quarters.
Change in Equity/Assets	Equity/Assets = EQ*/ASSET*
Change in ROA	ROA = Annualized(QNETINC*)/ASSET*
Change in ROA Volatility	ROA Volatility = SD(ROA); Standard Deviation (SD) measured over 4-quarters
Low ROA	Return on Assets below 10th percentile of sample bank ROAs
High Chg-Off	Charge-offs to assets above 90th percentile of sample banks charge-offs
Log Assets	Assets = ASSET*
Assets > \$ 1B	Assets = ASSET*
Loans/Assets	Loans = LNLS*, Assets = ASSET*
Cash Balances/Total Assets	Cash Balances = CHBAL*, Total Assets = ASSET*
RWA/Assets	RWA (Risk Weighted Assets) = RWA*, Assets = ASSET*
Deposits/Liabilities	Deposits = DEP*, Liabilities = LIAB*
Brokered Deposits/Liabilities	Brokered Deposits = BRO*, Liabilities = LIAB*
Avg Dep Interest Rate	Annualized Quarterly EINTEXP*/DEP*
Female CEO	CEO Flagged as Female
Female Chair	Chair Flagged as Female
CEO Duality	CEO and Chair same person
Related Chair	CEO and Chair have same last name
Public	Bank Flagged as public based on FEDNY PERMCO RSSD Match Data ⁹
Sub-Chapter-S	Subchapter S Selection = SUBCHAPS*
MBHC	Multi-Bank Holding Company (MBHC) = More than 1 Institution under RSSDHCR using Call Report data

⁹ CRSP-FRB Link FEDERAL RESERVE BANK of NEW YORK

(https://www.newyorkfed.org/research/banking_research/crsp-frb)

Bank Age	Years since bank established date
Organizational Change	A change in top-level holding company status of any kind
Merger Activity	A dummy variable which equals one if the bank was involved in any merger during the year.
Number of States	The number of states the bank operates in
HHI	The Herfindahl-Hirschman Index measures deposit market concentration
State Unemp Rate	Unemployment rate in state(s) where bank operates.
State Real PCI	Per-Capita Income in state(s) where bank operates
Residential RE Loan Share	Share of residential real estate loans:(LNRE*-LNCOMRE*)/LNLS*

The table reports variable definitions. Data for variable construction are from various sources; most variables are derived from Call Report data obtained from the FDIC Research Information System (RIS) and, where applicable, RIS variable names are referenced with an asterisk. The link <https://www7.fdic.gov/DICT/app/templates/Index.html#!/Main> provides more details on the RIS variables.

TABLE 2. Panel A. Descriptive statistics – CEO turnover data

	N	mean	count	mean*
CEO Change	52504	0.100	5270	1.000
CEO Change NG	52504	0.090	4726	0.897
CEO Change FM	52504	0.006	330	0.063
CEO Change MA	52504	0.004	214	0.041

The table reports the descriptive statistics for the variables. The variables are defined in Table 1. Mean* denotes mean conditional on a CEO change occurring. Count denotes the number of banks with indicator variable equal to 1.

TABLE 2. Panel B. Descriptive statistics – all other variables

	N	mean	sd	p10	p25	p50	p75	p90
ROA	52504	0.007	0.011	-0.003	0.004	0.009	0.012	0.017
Chg-Off Ratio	52504	0.001	0.001	0.000	0.000	0.000	0.001	0.002
Change in Log(Assets)	50301	0.046	0.125	-0.051	-0.006	0.033	0.080	0.145
Change in Log(Loans and Leases)	50289	0.042	0.157	-0.089	-0.024	0.035	0.094	0.167
Change in Log(RWA)	50301	0.042	0.144	-0.085	-0.020	0.035	0.092	0.163
Change in Log(Employees)	50283	0.016	0.141	-0.087	-0.034	0.000	0.049	0.119
Change in Log(Offices)	50301	0.018	0.142	0.000	0.000	0.000	0.000	0.020
Change in Log(Liab)	50301	0.045	0.135	-0.058	-0.010	0.033	0.082	0.152
Change in Log(Deposits)	50301	0.050	0.151	-0.054	-0.008	0.036	0.086	0.159
Change in Log(Brokered Deposits)	50301	-0.047	2.197	-0.662	0.000	0.000	0.000	0.432
Change in Log(Non-Deposit Liabilities)	50290	-0.040	0.842	-0.769	-0.287	-0.023	0.201	0.659
Change in Log(Z-Score)	50134	-0.005	1.123	-1.355	-0.631	0.011	0.641	1.310
Change in Equity/Assets	50301	0.000	0.017	-0.012	-0.005	0.001	0.006	0.012
Change in ROA	50301	0.000	0.012	-0.005	-0.002	0.000	0.002	0.006
Change in ROA Volatility	50301	0.000	0.015	-0.006	-0.002	0.000	0.002	0.006
Log Assets	52504	12.104	1.163	10.702	11.315	12.014	12.779	13.632
Assets > \$ 1B	52504	0.079	0.269	0.000	0.000	0.000	0.000	0.000
Loans/Assets	52504	0.621	0.158	0.399	0.524	0.644	0.739	0.806
Cash Balances/Total Assets	52503	0.089	0.085	0.020	0.033	0.062	0.116	0.191
RWA/Assets	52504	0.678	0.134	0.494	0.593	0.689	0.773	0.840
Deposits/Liabilities	52504	0.945	0.062	0.864	0.917	0.966	0.992	0.997
Brokered Deposits/Liabilities	52504	0.035	0.083	0.000	0.000	0.000	0.034	0.111
Avg Dep Interest Rate	52504	0.002	0.002	0.001	0.001	0.002	0.003	0.005
Female CEO	52504	0.059	0.236	0.000	0.000	0.000	0.000	0.000
Female Chair	52504	0.058	0.233	0.000	0.000	0.000	0.000	0.000
CEO Duality	52504	0.351	0.477	0.000	0.000	0.000	1.000	1.000
Related Chair	52504	0.060	0.238	0.000	0.000	0.000	0.000	0.000
Public	52504	0.175	0.380	0.000	0.000	0.000	0.000	1.000
Sub-Chapter-S	52504	0.372	0.483	0.000	0.000	0.000	1.000	1.000
MBHC	52504	0.148	0.356	0.000	0.000	0.000	0.000	1.000
Bank Age	52504	3.935	1.028	2.251	3.359	4.421	4.677	4.804
Organizational Change	52504	0.069	0.254	0.000	0.000	0.000	0.000	0.000
Merger Activity	52504	0.080	0.271	0.000	0.000	0.000	0.000	0.000
Number of States	52504	1.117	0.569	1.000	1.000	1.000	1.000	1.000
HHI	52504	0.234	0.127	0.113	0.147	0.204	0.285	0.394

State Unemp Rate	52504	0.064	0.022	0.038	0.046	0.061	0.081	0.095
State Real PCI	52504	0.043	0.006	0.036	0.039	0.043	0.046	0.051
Residential RE Loan Share	52504	0.699	0.185	0.437	0.598	0.737	0.834	0.900

The table reports the descriptive statistics for the variables. The variables are defined in Table 1.

TABLE 3. Impact of poor performance on community bank CEO turnover

	(1) CEO Change	(2) CEO Change	(3) CEO Change	(4) CEO Change	(5) CEO Change	(6) CEO Change
Low ROA		0.112*** (0.01)			0.108*** (0.01)	
High Chg-Off Ratio			0.084*** (0.01)			0.082*** (0.01)
Female CEO				0.001 (0.01)	-0.000 (0.01)	-0.000 (0.01)
CEO Duality				-0.019*** (0.00)	-0.019*** (0.00)	-0.019*** (0.00)
Female Chair				0.006 (0.01)	0.005 (0.01)	0.005 (0.01)
Related Chair				-0.039*** (0.00)	-0.039*** (0.00)	-0.040*** (0.00)
Public				-0.001 (0.00)	-0.003 (0.00)	-0.002 (0.00)
Sub-chapter-S				-0.004 (0.00)	-0.003 (0.00)	-0.004 (0.00)
MBHC				0.024*** (0.00)	0.025*** (0.00)	0.024*** (0.00)
Log Bank Age				-0.007*** (0.00)	-0.000 (0.00)	-0.005*** (0.00)
Organizational Change				0.061*** (0.01)	0.056*** (0.01)	0.061*** (0.01)
Merger Activity				-0.005 (0.01)	-0.005 (0.01)	-0.003 (0.01)
Number of States	0.004 (0.00)	0.003 (0.00)	0.003 (0.00)	0.003 (0.00)	0.002 (0.00)	0.002 (0.00)
HHI	-0.013 (0.01)	0.007 (0.01)	-0.005 (0.01)	0.001 (0.01)	0.009 (0.01)	0.005 (0.01)
State Unemp Rate	0.771*** (0.10)	0.396*** (0.10)	0.586*** (0.10)	0.584*** (0.10)	0.344*** (0.10)	0.439*** (0.10)
State Real PCI	-0.251 (0.27)	-0.249 (0.26)	-0.113 (0.26)	-0.251 (0.26)	-0.186 (0.26)	-0.093 (0.26)
Log Assets	-0.002 (0.00)	0.000 (0.00)	-0.003** (0.00)	-0.004** (0.00)	-0.002 (0.00)	-0.005*** (0.00)
Assets > \$ 1B	0.015** (0.01)	0.014** (0.01)	0.015** (0.01)	0.017** (0.01)	0.015** (0.01)	0.017** (0.01)
Time FE	YES	YES	YES	YES	YES	YES
N	52504	52504	52504	52504	52504	52504
R ² A	0.0048	0.0158	0.0111	0.0107	0.0205	0.0167
F	15.501	32.317	25.673	19.089	28.163	24.657

This table shows bank CEO changes from (t,t+1) regressed on indicators of distress and controls at time t. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

TABLE 4. Impact of poor performance on community bank CEO turnover: IV

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	CEO	CEO	CEO	CEO	CEO	CEO	CEO	CEO
	Change	Change	Change	Change	Change	Change	Change	Change
	IV-1	IV-1	IV-2	IV-2	IV-1	IV-1	IV-2	IV-2
		Sig RE		Sig RE		Sig RE		Sig RE
	All	Exp	All	Exp	All	Exp	All	Exp
Low ROA	0.112**	0.198**	0.087**	0.148**				
	(0.05)	(0.08)	(0.04)	(0.06)				
High Chg-Off Ratio					0.090**	0.159**	0.083**	0.166**
					(0.04)	(0.06)	(0.03)	(0.07)
Female CEO	0.005	-0.021*	0.005	-0.019*	0.005	-0.019	0.005	-0.019
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
CEO Duality	0.020***	0.018***	0.019***	0.018***	0.020***	0.016***	0.019***	-0.016**
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
Female Chair	-0.000	-0.001	-0.000	-0.001	-0.001	-0.000	-0.000	-0.001
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Related Chair	0.039***	-0.014	0.039***	-0.015	0.040***	-0.013	0.040***	-0.013
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
Public	-0.003	-0.007	-0.003	-0.007	-0.002	-0.005	-0.002	-0.005
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
Sub-chapter-S	-0.003	-0.011	-0.003	-0.012	-0.004	-0.015**	-0.004	-0.015**
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
MBHC	0.024***	0.031***	0.024***	0.031***	0.023***	0.028***	0.023***	0.027***
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
Log Bank Age	-0.001	0.005	-0.002	0.003	-0.004**	-0.002	-0.005**	-0.002
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Organizational Change	0.056***	0.052***	0.057***	0.053***	0.060***	0.054***	0.060***	0.054***

	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Merger Activity	-0.004	-0.004	-0.005	-0.005	-0.003	-0.002	-0.003	-0.002
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Number of States	0.002	0.003	0.002	0.003	0.002	0.004	0.002	0.004
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
HHI	0.008	0.062**	0.007	0.057**	0.005	0.059**	0.005	0.059**
	(0.01)	(0.03)	(0.01)	(0.03)	(0.01)	(0.03)	(0.01)	(0.03)
State Unemp Rate	0.316**	0.223	0.378***	0.374	0.396***	0.360	0.412***	0.339
	(0.15)	(0.34)	(0.13)	(0.30)	(0.13)	(0.30)	(0.12)	(0.32)
State Real PCI	-0.164	0.087	-0.179	-0.022	-0.077	0.222	-0.089	0.248
	(0.26)	(0.48)	(0.26)	(0.45)	(0.27)	(0.50)	(0.26)	(0.50)
Log Assets	-0.003	-0.008**	-0.003	-0.009**	0.006***	0.019***	0.006***	0.019***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Assets > \$ 1B	0.016**	0.027**	0.016**	0.028**	0.017***	0.040***	0.017***	0.040***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Time FE	YES	YES	YES	YES	YES	YES	YES	YES
N	52502	13368	52502	13368	52502	13368	52502	13368
R ² A	0.0160	0.0042	0.0166	0.0141	0.0131	0.0084	0.0134	0.0071
F	19.100	5.262	19.022	5.347	18.726	5.147	18.694	5.139
RMSE	0.30	0.31	0.30	0.31	0.30	0.31	0.30	0.31
Underidentification (Kleibergen-Paap)	272.74	86.51	324.40	108.88	392.66	146.63	356.39	97.16
Weak Identification (Cragg-Donald)	645.55	167.06	1279.89	300.92	974.10	295.16	1366.15	271.61

The second stage of the IV analysis is depicted in this table. We employ RE shock as an instrumental variable in our two-stage instrumental variable regressions. RE shock is defined as a decline of at least 10 or 20 percent (depending on the model) in the House Price Index (HPI) during the two years prior to CEO turnover in the regions in which the bank operates. IV1 denotes an HPI 10 percent Shock over 2 years in year prior to turnover and IV2 denotes an HPI 20 percent Shock over 2 years in year prior to turnover. Columns 2, 4, 6, and 8 of the table include the subset of observations with higher RE exposure (75th percentile of

residential real estate loans just before the beginning of the RE shock, i.e. 3 years out). The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

TABLE 5. Panel A. Incoming CEO gender and performance - OLS regressions.

	(1)	(2)	(3)	(4)	(5)	(6)
	No change in CEO gender		Incoming female CEO		Incoming male CEO	
Low ROA	0.025** (0.01)		-0.014 (0.01)		-0.012 (0.01)	
High Chg-Off Ratio		0.006 (0.01)		-0.005 (0.01)		-0.001 (0.01)
CEO Duality	0.008 (0.01)	0.007 (0.01)	0.001 (0.01)	0.001 (0.01)	-0.009 (0.01)	-0.009 (0.01)
Female Chair	-0.194*** (0.03)	-0.194*** (0.03)	0.026 (0.02)	0.026 (0.02)	0.168*** (0.02)	0.168*** (0.02)
Related Chair	0.010 (0.02)	0.010 (0.02)	-0.009 (0.02)	-0.009 (0.02)	-0.001 (0.02)	-0.001 (0.02)
Other controls	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES
N	5270	5270	5270	5270	5270	5270
R ² A	0.0339	0.0331	0.0054	0.0050	0.0441	0.0437
F	5.146	4.955	2.209	2.095	5.066	5.032

TABLE 5. Panel B. Incoming CEO gender and performance - IV regressions.

	(7)	(8)	(9)	(10)	(11)	(12)
	No change in CEO gender		Incoming female CEO		Incoming male CEO	
Low ROA	0.091 (0.15)		-0.055 (0.11)		-0.036 (0.09)	
High Chg-Off Ratio		0.073 (0.12)		-0.045 (0.09)		-0.029 (0.07)
CEO Duality	0.009 (0.01)	0.008 (0.01)	0.001 (0.01)	0.001 (0.01)	-0.009 (0.01)	-0.009 (0.01)
Female Chair	-0.197*** (0.03)	-0.195*** (0.03)	0.028 (0.02)	0.027 (0.02)	0.169*** (0.02)	0.168*** (0.02)
Related Chair	0.011 (0.02)	0.011 (0.02)	-0.010 (0.02)	-0.010 (0.02)	-0.001 (0.02)	-0.001 (0.02)
Other controls	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES
N	5269	5269	5269	5269	5269	5269
R ² A	0.0281	0.0270	0.0017	0.0017	0.0423	0.0412
F	4.938	4.887	2.078	2.060	5.021	4.988

TABLE 5. Panel C. CEO turnovers, outgoing CEO gender, and performance

	(1) CEO Change	(2) CEO Change	(3) CEO Change	(4) CEO Change
Low ROA	0.108*** (0.01)	0.110*** (0.01)		
High Chg-Off Ratio			0.082*** (0.01)	0.083*** (0.01)
Female CEO	0.005 (0.01)	0.008 (0.01)	0.005 (0.01)	0.007 (0.01)
Low ROA X Female CEO		-0.029 (0.02)		
High Chg-Off Ratio X Female CEO				-0.017 (0.02)
Other Controls	YES	YES	YES	YES
Time FE	YES	YES	YES	YES
N	52504	52504	52504	52504
R ² A	0.0205	0.0205	0.0167	0.0167
F	28.163	27.122	24.657	23.809

This table examines the impact of gender of incumbent CEO on turnover and gender of succeeding CEO. Panel A considers the impact of poor performance on incoming CEO gender for the subsample of banks where CEO turnovers have occurred; panel B conducts the same regressions using our two-stage IV approach which instruments for poor performance. Panel C focuses on the full sample and considers the link between outgoing CEO gender and CEO changes especially in the presense of poor performance. Untabulated controls include Female Chair, CEO Duality, Related Chair, Public, Subchapter-S, MBHC, Log Bank Age, Organizational Change, Merger Activity, Log Assets, Log Asset Change, Assets >1B, Loans/Asset, Cash/Assets, RWA/Assets, Number of States, HHI, State Unemp Rate, and State Real PCI. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

TABLE 6, Panel A. Multivariate analysis: Bank actions after CEO turnovers -Role of Gender – Poor performance

	(1)	(2)	(3)	(4)	(5)
	Δ Log Assets	Δ Log Loans	Δ Log RWA	Δ Log # Employees	Δ Log # Branches
Low ROA	-0.020*** (0.00)	-0.026*** (0.00)	-0.024*** (0.00)	-0.006 (0.00)	-0.015*** (0.00)
High Chg-Off Ratio					
CEO Change NG	-0.002 (0.00)	0.001 (0.00)	-0.002 (0.00)	-0.002 (0.00)	-0.002 (0.00)
CEO Change FM	-0.017** (0.01)	-0.014 (0.01)	-0.018** (0.01)	-0.027*** (0.01)	-0.026*** (0.01)
CEO Change MA	-0.005 (0.01)	-0.002 (0.02)	-0.004 (0.02)	-0.021 (0.02)	0.010 (0.01)
Female Chair	-0.001 (0.01)	-0.013* (0.01)	-0.009 (0.01)	0.002 (0.01)	0.003 (0.01)
CEO Duality	-0.004 (0.00)	-0.003 (0.00)	-0.003 (0.00)	0.001 (0.00)	0.002 (0.00)
Related Chair	-0.007 (0.00)	-0.004 (0.01)	-0.009 (0.01)	-0.006 (0.00)	-0.002 (0.01)
Other controls	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES
N	50254	50242	50254	50237	50254
R ² A	0.158	0.155	0.147	0.047	0.048
R ² W	0.158	0.155	0.147	0.048	0.049
	45.333	91.039	81.155	15.947	13.982

TABLE 6, Panel A cont.

	(6)	(7)	(8)	(9)	(10)
	Δ Log Assets	Δ Log Loans	Δ Log RWA	Δ Log # Employees	Δ Log # Branches
Low ROA					
High Chg-Off Ratio	-0.021*** (0.00)	-0.027*** (0.00)	-0.026*** (0.00)	-0.007** (0.00)	-0.017*** (0.00)
CEO Change NG	-0.002 (0.00)	0.001 (0.00)	-0.002 (0.00)	-0.002 (0.00)	-0.002 (0.00)
CEO Change FM	-0.017** (0.01)	-0.014 (0.01)	-0.018** (0.01)	-0.027*** (0.01)	-0.026*** (0.01)
CEO Change MA	-0.005 (0.01)	-0.002 (0.02)	-0.004 (0.02)	-0.021 (0.02)	0.010 (0.01)
Female Chair	-0.001 (0.01)	-0.013* (0.01)	-0.008 (0.01)	0.002 (0.01)	0.003 (0.01)
CEO Duality	-0.004 (0.00)	-0.003 (0.00)	-0.003 (0.00)	0.001 (0.00)	0.002 (0.00)
Related Chair	-0.007 (0.00)	-0.004 (0.01)	-0.009 (0.01)	-0.006 (0.00)	-0.002 (0.01)
Other controls	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES
N	50254	50242	50254	50237	50254
R ² A	0.158	0.155	0.147	0.047	0.048
R ² W	0.159	0.156	0.148	0.048	0.049
	45.477	88.331	77.324	15.946	14.245

This table shows changes between $(t, t+1)$ in Log Assets, Log Loans, Log Risk-Weighted Assets, Log Number of Employees, and Log Number of Branches regressed on indicators of bank leadership changes from $(t-1, t)$ and controls at time t . Untabulated controls include Female Chair, CEO Duality, Related Chair, Public, Sub-chapter-S, MBHC, Log Bank Age, Organizational Change, Merger Activity, Log Assets, Log Asset Change, Assets > 1B, Loans/Asset, Cash/Assets, RWA/Assets, Number of States, HHI, State Unemp Rate, and State Real PCI. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

TABLE 6, Panel B. Bank actions after CEO turnovers – The role of gender

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Δ Log Liabilities	Δ Log Deposits	Δ Log Brokered Deposits	Δ Log Non- deposit Liabilities	Δ Log Liabilities	Δ Log Deposits	Δ Log Brokered Deposits	Δ Log Non- deposit Liabilities
Low ROA	-0.027*** (0.003)	-0.025*** (0.004)	-0.417*** (0.052)	-0.053*** (0.018)				
High Chg-Off Ratio					-0.030*** (0.003)	-0.029*** (0.003)	-0.338*** (0.048)	-0.068*** (0.016)
CEO Change NG	-0.003 (0.002)	-0.002 (0.002)	0.003 (0.041)	-0.010 (0.014)	-0.003 (0.002)	-0.002 (0.002)	-0.002 (0.041)	-0.010 (0.014)
CEO Change FM	-0.024*** (0.008)	-0.024*** (0.009)	0.004 (0.122)	-0.025 (0.050)	-0.024*** (0.008)	-0.024*** (0.009)	-0.000 (0.122)	-0.025 (0.050)
CEO Change MA	-0.007 (0.015)	-0.008 (0.015)	-0.123 (0.212)	-0.082 (0.079)	-0.007 (0.016)	-0.008 (0.015)	-0.128 (0.211)	-0.082 (0.079)
Female Chair	-0.004 (0.007)	-0.001 (0.007)	-0.063 (0.082)	-0.009 (0.034)	-0.004 (0.007)	-0.001 (0.007)	-0.060 (0.082)	-0.009 (0.034)
CEO Duality	-0.004 (0.003)	-0.004 (0.004)	-0.040 (0.048)	-0.011 (0.018)	-0.004 (0.003)	-0.004 (0.004)	-0.040 (0.048)	-0.011 (0.018)
Related Chair	-0.007 (0.005)	-0.007 (0.005)	-0.042 (0.079)	0.011 (0.033)	-0.007 (0.005)	-0.007 (0.005)	-0.042 (0.079)	0.012 (0.033)
Other controls	YES	YES	YES	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES	YES	YES
N	50255	50255	50255	50244	50255	50255	50255	50244
R ² A	0.121	0.124	0.032	0.111	0.122	0.125	0.032	0.112
R ² W	0.122	0.125	0.033	0.112	0.123	0.126	0.033	0.112
F	33.362	41.658	22.924	64.210	31.497	41.949	22.662	64.424

This table shows changes between $(t, t+1)$ in Log Liabilities, Log Deposits, Log Brokered Deposits, and Log Non-deposits Liabilities regressed on indicators of bank leadership changes from $(t-1, t)$ and controls at time t . Untabulated controls include Female Chair, CEO Duality, Related Chair, Public, Sub-chapter-S, MBHC, Log Bank Age, Organizational Change, Merger Activity, Log Assets, Log Asset Change, Assets >1B, Deposits/Liabilities, Brokered Deposits/Deposits, Deposit Interest Rate, Number of States, HHI, State Unemp Rate, and State Real PCI. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 7 Panel A: Actions by banks following CEO turnovers -Role of Gender – Poorperformance

	(1)	(2)	(3)	(4)	(5)
	Δ Log Assets	Δ Log Loans	Δ Log RWA	Δ Log # Employees	Δ Log # Branches
Poor Performance= Low ROA					
Poor Performance X CEO Change NG	-0.011 *	-0.008	-0.009	-0.001	-0.007
	-(0.01)	-(0.01)	-(0.01)	-(0.01)	-(0.01)
Not Poor Performance X CEO Change NG	-0.002	0.001	-0.001	-0.003	-0.002
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Poor Performance X CEO Change FM	-0.049 *	-0.062 **	-0.058 **	-0.080 **	-0.058 **
	-(0.03)	-(0.03)	-(0.03)	-(0.03)	-(0.03)
Not Poor Performance X CEO Change FM	-0.012 *	-0.00589	0.01162	-0.018 *	-0.021 **
	-(0.01)	-(0.01)	-(0.01)	-(0.01)	-(0.01)
Poor Performance X CEO Change MA	0.023	0.023	0.014	-0.022	-0.026
	-(0.06)	-(0.07)	-(0.07)	-(0.05)	-(0.04)
Not Poor Performance X CEO Change MA	-0.013	-0.010	-0.009	-0.021	0.016
	-(0.01)	-(0.02)	-(0.01)	-(0.02)	-(0.01)
Controls	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES
N	50254	50242	50254	50237	50254
R ² A	0.156	0.153	0.145	0.047	0.048
R ² W	0.157	0.154	0.146	0.048	0.048
F	41.983	82.874	72.381	14.968	12.979

Table 7 Panel A cont: Actions by banks following CEO turnovers -The role of gender

	(6)	(7)	(8)	(9)	(10)
	Δ Log Assets	Δ Log Loans	Δ Log RWA	Δ Log # Employees	Δ Log # Branches
Poor Performance = High Chg-Off Ratio					
Poor Performance X CEO Change NG	-0.026 *** (-0.01)	-0.026 *** (-0.01)	-0.026 *** (-0.01)	-0.015 ** (-0.01)	-0.014 ** (-0.01)
Not Poor Performance X CEO Change NG	0.001 (0.00)	0.004 (0.00)	0.001 (0.00)	0.000 (0.00)	-0.001 (0.00)
Poor Performance X CEO Change FM	-0.052 * (-0.03)	-0.097 *** (-0.04)	-0.077 *** (-0.03)	-0.085 ** (-0.03)	-0.058 * (-0.03)
Not Poor Performance X Change FM	-0.012 * (-0.01)	-0.001 (-0.01)	-0.009 (-0.01)	-0.017 * (-0.01)	-0.021 ** (-0.01)
Poor Performance X CEO Change MA	0.045 (-0.06)	0.009 (-0.07)	0.015 (-0.06)	-0.027 (-0.05)	0.010 (-0.04)
Not Poor Performance X Change MA	-0.017 (-0.01)	-0.007 (-0.02)	-0.010 (-0.01)	-0.020 (-0.02)	0.008 (-0.01)
Controls	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES
N	50254	50242	50254	50237	50254
R ² A	0.157	0.154	0.145	0.047	0.048
R ² W	0.157	0.154	0.146	0.048	0.048
F	42.425	82.670	72.380	15.175	12.860

This table shows changes between $(t, t+1)$ in Log Assets, Log Loans, Log Risk-Weighted Assets, Log Number of Employees, and Log Number of Branches regressed on interaction variables of bank leadership changes from $(t-1, t)$ and a distress measure. The control variables are measured at time t . Untabulated controls include Female Chair, CEO Duality, Related Chair, Public, Sub-chapter-S, MBHC, Log Bank Age, Organizational Change, Merger Activity, Log Assets, Log Asset Change, Assets >1B, Loans/Asset, Cash/Assets, RWA/Assets, Number of States, HHI, State Unemp Rate, and State Real PCI. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 7, Panel B. Actions by banks following CEO turnovers -Role of Gender – Poor performance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Δ Log	Δ Log	Δ Log	Δ Log	Δ Log	Δ Log	Δ Log	Δ Log
	Liabilities	Deposits	Brokered Deposits	Non- deposit Liabilities	Liabilities	Deposits	Brokered Deposits	Non- deposit Liabilities
	Poor Performance = Low ROA				Poor Performance = High Chg-Off Ratio			
Poor Performance X CEO Change NG	-0.018** (0.01)	-0.013 (0.01)	-0.250** (0.12)	-0.117*** (0.04)	-0.037*** (0.01)	-0.036*** (0.01)	-0.374*** (0.11)	-0.096*** (0.03)
Not Poor Performance X CEO Change NG	-0.001 (0.00)	-0.001 (0.00)	0.032 (0.04)	0.009 (0.02)	0.002 (0.00)	0.003 (0.00)	0.050 (0.04)	0.003 (0.02)
Poor Performance X CEO Change FM	-0.049* (0.03)	-0.051* (0.03)	-0.412 (0.31)	-0.122 (0.13)	-0.062** (0.03)	-0.096** (0.04)	-0.255 (0.33)	-0.220** (0.10)
Not Poor Performance X Change FM	- 0.020*** (0.01)	- -0.020** (0.01)	- 0.062 (0.13)	- -0.011 (0.05)	- -0.018** (0.01)	- -0.012* (0.01)	- 0.028 (0.13)	- 0.006 (0.06)
Poor Performance X CEO Change MA	0.021 (0.06)	0.012 (0.06)	-0.699 (0.60)	0.209 (0.19)	0.042 (0.06)	0.038 (0.05)	-0.532 (0.64)	0.124 (0.19)
Not Poor Performance X Change MA	-0.015 (0.01)	-0.015 (0.01)	-0.024 (0.22)	-0.153* (0.09)	-0.020 (0.01)	-0.021 (0.01)	-0.060 (0.21)	-0.134 (0.09)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES	YES	YES

N	50255	50255	50255	50244	50255	50255	50255	50244
R ² A	0.119	0.123	0.031	0.112	0.121	0.124	0.031	0.111
R ² W	0.120	0.123	0.032	0.112	0.121	0.124	0.032	0.112
F	29.944	39.023	20.821	60.855	30.929	39.737	20.782	60.604

This table shows changes between $(t, t+1)$ in Log Liabilities, Log Deposits, Log Brokered Deposits, and Log Non-deposits Liabilities regressed on interaction variables of bank leadership changes from $(t-1, t)$ and a distress measure. The control variables are measured at time t . Untabulated controls include Female Chair, CEO Duality, Related Chair, Public, Sub-chapter-S, MBHC, Log Bank Age, Organizational Change, Merger Activity, Log Assets, Log Asset Change, Assets >1B, Deposits/Liabilities, Brokered Deposits/Deposits, Deposit Interest Rate, Number of States, HHI, State Unemp Rate, and State Real PCI. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 8. Panel A. Bank outcomes following CEO turnovers: Risk profile changes (1-year horizon)

	(1)	(2)	(3)	(4)	(5)	(6)	(6)	(8)
	Δ Log Z-score	Δ Equity to assets	Δ ROA	Δ ROA volatility	Δ Log Z-score	Δ Equity to assets	Δ ROA	Δ ROA volatility
Low ROA	0.823*** (0.03)	0.003*** (0.00)	0.006*** (0.00)	-0.011*** (0.00)				
High Chg-Off Ratio					0.588*** (0.03)	0.003*** (0.00)	0.004*** (0.00)	-0.008*** (0.00)
CEO Change NG	0.077*** (0.02)	-0.000 (0.00)	0.000 (0.00)	-0.001* (0.00)	0.089*** (0.02)	-0.000 (0.00)	0.000 (0.00)	-0.001** (0.00)
CEO Change FM	0.185*** (0.07)	0.000 (0.00)	0.001 (0.00)	-0.003** (0.00)	0.194*** (0.07)	0.000 (0.00)	0.001 (0.00)	-0.003** (0.00)
CEO Change MA	0.134 (0.09)	0.001 (0.00)	0.004 (0.00)	-0.002 (0.00)	0.148 (0.09)	0.001 (0.00)	0.004 (0.00)	-0.002 (0.00)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES	YES	YES
N	50087	50254	50254	50254	50087	50254	50254	50254
R ² A	0.071	0.033	0.047	0.044	0.061	0.033	0.041	0.029
R ² W	0.072	0.034	0.047	0.044	0.061	0.034	0.041	0.029
F	104.003	43.382	38.268	27.145	98.352	41.669	34.976	23.902

This table shows changes in *Z-score*, *Equity to assets*, *ROA*, and *ROA volatility* between t , and $t+1$ regressed on indicators of bank leadership changes from $t-1$ to t and controls at time t . Untabulated controls include Female Chair, CEO Duality, Related Chair, Public, Sub-chapter-S, MBHC, Log Bank Age, Organizational Change, Merger Activity, Log Assets, Log Asset Change, Assets >1B, Loans/Assets, Cash/Assets, RWA/Assets, Deposits/Liabilities, Brokered Deposits/Deposits, Deposit Interest Rate, Number of States, HHI, State Unemp Rate, and State Real PCI. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 8. Panel B. Bank outcomes following CEO turnovers: Risk profile changes (1-year horizon) - interactions

	(1)	(2)	(3)	(4)	(5)	(6)	(6)	(8)
	Δ Log Z-score	Δ Equity to assets	Δ ROA	Δ ROA volatility	Δ Log Z-score	Δ Equity to assets	Δ ROA	Δ ROA volatility
	Poor Performance = Low ROA				Poor Performance = High Chg-Off Ratio			
Poor Performance X CEO Change (NG)	0.707*** (0.06)	0.002 (0.00)	0.004*** (0.00)	-0.011*** (0.00)	0.595*** (0.06)	0.003*** (0.00)	0.002** (0.00)	-0.009*** (0.00)
Not Poor Performance X CEO Change (NG)	-0.004 (0.02)	-0.001** (0.00)	-0.000 (0.00)	0.001*** (0.00)	0.027 (0.02)	- (0.00)	0.001*** (0.00)	0.000 (0.00)
Poor Performance X CEO Change (FM)	0.870*** (0.22)	-0.004 (0.00)	0.010 (0.01)	-0.018** (0.01)	0.858*** (0.22)	0.001 (0.00)	0.014* (0.01)	-0.019** (0.01)
Not Poor Performance X Change (FM)	0.095 (0.07)	0.001 (0.00)	-0.000 (0.00)	-0.001 (0.00)	0.103 (0.08)	0.000 (0.00)	-0.001 (0.00)	-0.001 (0.00)
Poor Performance X CEO Change (MA)	0.664** (0.29)	0.001 (0.01)	0.007** (0.00)	-0.015* (0.01)	0.465 (0.30)	-0.001 (0.00)	0.010*** (0.00)	-0.007 (0.01)
Not Poor Performance X Change (MA)	0.072 (0.09)	0.001 (0.00)	0.004 (0.00)	0.000 (0.00)	0.113 (0.09)	0.001 (0.00)	0.003 (0.00)	-0.001 (0.00)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES	YES	YES

N	50087	50254	50254	50254	50087	50254	50254	50254
R ² A	0.051	0.032	0.037	0.022	0.049	0.032	0.037	0.019
R ² W	0.051	0.032	0.038	0.023	0.050	0.033	0.038	0.020
F	77.397	37.481	29.836	19.757	75.622	37.443	29.648	18.975

This table shows changes in *Z-score*, *Equity to assets*, *ROA*, and *ROA volatility* between *t*, and *t+1* regressed on indicators of bank leadership changes from *t-1* to *t* and controls at time *t*. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 9, Panel A. Long-term bank outcomes following CEO turnovers: Risk profile changes (2-year horizon).

	(1)	(2)	(3)	(4)	(5)	(6)	(6)	(8)
	Δ Log Z-score	Δ Equity to assets	Δ ROA	Δ ROA volatility	Δ Log Z-score	Δ Equity to assets	Δ ROA	Δ ROA volatility
Low ROA	1.026*** (0.03)	0.005*** (0.00)	0.007*** (0.00)	-0.013*** (0.00)				
High Chg-Off Ratio					0.703*** (0.03)	0.005*** (0.00)	0.005*** (0.00)	-0.009*** (0.00)
CEO Change (NG)	0.104*** (0.02)	-0.000 (0.00)	0.001** (0.00)	-0.001*** (0.00)	0.119*** (0.02)	-0.000 (0.00)	0.001*** (0.00)	-0.001*** (0.00)
CEO Change (FM)	0.156** (0.08)	-0.000 (0.00)	0.000 (0.00)	-0.003** (0.00)	0.165** (0.08)	-0.000 (0.00)	0.001 (0.00)	-0.003** (0.00)
CEO Change (MA)	0.193* (0.10)	0.000 (0.00)	0.004 (0.00)	-0.002 (0.00)	0.200* (0.11)	0.000 (0.00)	0.004 (0.00)	-0.002 (0.00)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES	YES	YES
N	47947	48085	48085	48085	47947	48085	48085	48085
R ² A	0.100	0.048	0.065	0.069	0.084	0.047	0.054	0.049
R ² W	0.100	0.049	0.066	0.070	0.084	0.048	0.055	0.050
F	103.979	51.420	39.239	31.630	92.686	49.044	37.098	28.252

This table shows changes in *Z-score*, *Equity to assets*, *ROA*, and *ROA volatility* between t , and $t+2$ regressed on indicators of bank leadership changes from $t-1$ to t and controls at time t . Untabulated controls include Female Chair, CEO Duality, Related Chair, Public, Sub-chapter-S, MBHC, Log Bank Age, Organizational Change, Merger Activity, Log Assets, Log Asset Change, Assets >1B, Loans/Assets, Cash/Assets, RWA/Assets, Deposits/Liabilities, Brokered Deposits/Deposits, Deposit Interest Rate, Number of States, HHI, State Unemp Rate, and State Real PCI. The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 9, Panel B. Long-term bank outcomes following CEO turnovers: Risk profile changes (2-year horizon) – Interactions

	(1)	(2)	(3)	(4)	(5)	(6)	(6)	(8)
	Δ Log Z-score	Δ Equity to assets	Δ ROA	Δ ROA volatility	Δ Log Z-score	Δ Equity to assets	Δ ROA	Δ ROA volatility
	Poor Performance = Low ROA				Poor Performance = High Chg-Off Ratio			
Poor Performance X CEO Change (NG)	0.799*** (0.07)	0.003 (0.00)	0.007*** (0.00)	-0.011*** (0.00)	0.669*** (0.07)	0.004*** (0.00)	0.004*** (0.00)	-0.010*** (0.00)
Not Poor Performance X CEO Change (NG)	0.023 (0.02)	-0.000 (0.00)	-0.000 (0.00)	0.001* (0.00)	0.056** (0.02)	-0.001 (0.00)	0.000 (0.00)	0.000 (0.00)
Poor Performance X CEO Change (FM)	0.910*** (0.22)	0.000 (0.00)	0.006* (0.00)	-0.023*** (0.01)	1.072*** (0.21)	0.007* (0.00)	0.006** (0.00)	-0.023*** (0.01)
Not Poor Performance X Change (FM)	0.060 (0.08)	0.000 (0.00)	-0.000 (0.00)	0.000 (0.00)	0.034 (0.08)	-0.001 (0.00)	-0.000 (0.00)	0.000 (0.00)
Poor Performance X CEO Change (MA)	0.853** (0.37)	-0.004 (0.01)	0.007 (0.00)	-0.015* (0.01)	0.664** (0.33)	-0.003 (0.01)	0.004 (0.00)	-0.011 (0.01)
Not Poor Performance X Change (MA)	0.114 (0.11)	0.001 (0.00)	0.004 (0.00)	0.000 (0.00)	0.146 (0.11)	0.001 (0.00)	0.004 (0.00)	-0.000 (0.00)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Bank FE	YES	YES	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES	YES	YES

N	47947	48085	48085	48085	47947	48085	48085	48085
R ² A	0.070	0.045	0.049	0.038	0.068	0.045	0.046	0.035
R ² W	0.071	0.045	0.049	0.038	0.069	0.046	0.047	0.036
F	72.184	43.932	29.751	21.837	70.280	44.004	29.592	21.461

This table shows changes in *Z-score*, *Equity to assets*, *ROA*, and *ROA volatility* between t , and $t+2$ regressed on indicators of bank leadership changes from $t-1$ to t and controls at time t . The variables are defined in Table 1. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respective.