



WORKING PAPERS IN RESPONSIBLE BANKING & FINANCE

Stakeholder Orientation and Bank Payout Policy: Evidence from US Constituency Statutes

By Dimitris K. Chronopoulos, John O.S. Wilson, Muhammed H. Yilmaz

Abstract: We investigate the impact of stakeholder orientation on bank payout policy. As a quasi-experimental setting, we exploit the staggered enactment of constituency statutes across US states, which broaden the scope of managerial duties to an extended group of stakeholders. The results of a difference-in-differences analysis suggest that bank holding companies (BHCs) incorporated in states enacting constituency statutes experience significant declines in total payouts, which is driven by a decline in share repurchases. This observed decline in share repurchases is stronger for banks with sizeable implicit claims, lower transparency and substantial agency conflicts. These findings remain intact following a myriad of robustness checks and alternative estimation techniques.

WP Nº 22-011

 3^{rd} Quarter 2022



Stakeholder Orientation and Bank Payout Policy: Evidence from US Constituency Statutes

Dimitris K. Chronopoulos

Centre for Responsible Banking & Finance, School of Management, The Gateway, North Haugh, St Andrews, Fife, KY16 9RJ, dc45@st-andrews.ac.uk

John O.S. Wilson

Centre for Responsible Banking & Finance, School of Management, The Gateway, North Haugh, St Andrews, Fife, KY16 9RJ, jsw7@st-andrews.ac.uk (corresponding author)

Muhammed H. Yilmaz

Centre for Responsible Banking & Finance, School of Management, The Gateway, North Haugh, St Andrews, Fife, KY16 9RJ, mhy1@st-andrews.ac.uk

Abstract

We investigate the impact of stakeholder orientation on bank payout policy. As a quasi-experimental setting, we exploit the staggered enactment of constituency statutes across US states, which broaden the scope of managerial duties to an extended group of stakeholders. The results of a difference-in-differences analysis suggest that bank holding companies (BHCs) incorporated in states enacting constituency statutes experience significant declines in total payouts, which is driven by a decline in share repurchases. This observed decline in share repurchases is stronger for banks with sizeable implicit claims, lower transparency and substantial agency conflicts. These findings remain intact following a myriad of robustness checks and alternative estimation techniques.

The authors thank Anna Sobiech, Linh Nguyen, Christian Engels, Marcel Lukas, Kais Bouslah, Mao Zhang, Song Zhang for useful comments and suggestions.

Introduction

Maximizing shareholder value has long been recognised as the dominant objective of US firms (Friedman, 1970; Bebchuk and Tallarita, 2020). This suggests that the fiduciary duties of managers are to minimise claims from other stakeholders that may restrain shareholder wealth (Friedman, 2007). However, the relevance of other stakeholders to corporate norms and managerial duties has captured the attention of management practitioners and policymakers in recent years with increased calls for firms to pursue long-term sustainable value-creation strategies to the benefit of shareholders, customers, workers, communities, and suppliers (Business Roundtable, 2019; World Economic Forum, 2020; Freudenreich et al., 2020; Harrison et al, 2020). (1) Stakeholder orientation in corporate governance emphasizes the need to transform the corporate purpose from a shareholder-centric perspective to an alternative approach, which serves a myriad of stakeholder interests. Although the implications of stakeholderism on various firm-level outcomes such as performance, innovation, riskiness, and earnings management (Gao and Zhang, 2015; Flammer and Kacperczyk, 2019; Bae et al., 2021) for non-financial firms has been the subject of vibrant debate in existing management and finance literature, the relevance of stakeholder orientation in the banking industry has been for the most part overlooked. Consequently, this study fills this evidence gap by investigating the impact of stakeholderism on the payout decisions of banks.

Stakeholderism and corporate governance may have a particular resonance in the banking industry (Cumming et al., 2021). Banks operate with a more heterogeneous group of stakeholders than non-financial firms including, but not limited to: depositors, households, small and medium enterprises (SMEs), corporate and sovereign borrowers, employees, regulators, supervisors, shareholders, debtholders, other banks, and monetary authorities (Mehran et al., 2011; Hopt, 2013; Berger et al., 2020). In contrast to industrial firms, banks operate with high leverage, rapidly changing risk profiles, inherent opacity and complexity, dispersed ownership structure and severe agency problems that limit traditional internal (board monitoring) and external control mechanisms (Bliss and Flannery, 2002; Levine, 2004; Becht et al., 2011; Bushman and Williams, 2012; Jones et al., 2012; Berger and Bouwman, 2013; John et al., 2016; Calomiris and Carlson, 2016; De Haan and Vlahu, 2016; Hagendorff, 2019). Consequently, bank management faces unique challenges in balancing the conflicting interests of stakeholders in an effective manner (Adams and Mehran, 2003).

The allocation of wealth generated by an organization, via payouts conveys useful information regarding the relative importance of shareholders and other stakeholders. In this

study, we investigate the impact of stakeholderism on the payout policy of bank holding companies. Prior literature suggests that organisations may choose to return funds to shareholders at the expense of other stakeholders, especially when the interests of owners and outsiders diverge considerably (Acharya and Lambrecht, 2015; Acharya et al., 2017; Chu, 2018; Ni et al., 2020). In the banking industry, payouts facilitate the transfer of wealth to owners, which shifts risk from shareholders to depositors and other creditors (Kanas 2013; Srivastav et al., 2014 Acharya et al., 2017). As such, payout policy has direct implications for the extent to which banks can retain earnings to build capital buffers as a cushion against adverse balance sheet shocks, and comply with regulations designed to ensure the safety and soundness of the financial system (Acharya et al. 2011). Existing theory also suggests that payouts to shareholders are often detrimental to the implicit non-contractual claims (which have weak legal standing and can be reneged on by the firm) of non-investor stakeholders (Cornell and Shapiro, 1987; Shapiro, 1990; Holder et al., 1998). Examples of such implicit claims include, among others verbal commitments and statements regarding: working conditions and career progression to employees; prudent risk management to depositors and supervisors; and liquidity provisions to the public. In this study, we investigate how the total payout, and its constituent components of dividends and repurchases of banks respond to a change in stakeholder orientation brought about via legislative change. In order to do so, we use the US banking industry as a setting and exploit the staggered state-level adoption of constituency statutes as a quasi-experimental setting to conduct an extensive empirical analysis using regulatory data for US bank holding companies (BHCs) covering the period 1986 to 2012. (2)

In the US, state-level legal changes via the introduction of constituency statutes have provided a legal basis for managers to consider the interests of other stakeholders when taking decisions. Prior literature posits that constituency statutes represent a meaningful deviation from the dominant shareholder-centric view of managing firms (Orts, 1992; Stout, 2012). Evidence suggests that corporate governance and corporate social responsibility improve, and litigation risks decline in firms following the enactment of constituency statutes (Luoma and Goodstein, 1999; Geczy et al., 2015; Flammer and Kacperczyk, 2016; Cheng et al., 2018). In this paper, we exploit the exogenous variation provided by the enactment of constituency statutes to circumvent possible endogeneity issues and present evidence suggestive of a causal impact of stakeholder orientation on payout policy. The estimated relationship between corporate governance and payout policy could be spurious if driven by latent firm-level characteristics, which simultaneously prompt stakeholder orientation and payout decisions

(Flammer and Kacperczyk, 2016).⁽³⁾ The variation derived from constituency statutes is likely to overcome such endogeneity concerns given that these laws are passed at the state rather than the corporate level (Bertrand and Mullainathan, 2003). Furthermore, the adoption of constituency statutes was not rooted in payout dynamics, but rather materialised in the 1980s following a wave of hostile takeovers that were accompanied by an increased emphasis on attending to the interests of stakeholders.

Our methodology entails a difference-in-differences (DiD) analysis, where we compare the payouts of banks incorporated in states with constituency statutes (treatment group) against counterparts incorporated in states not implementing legislative change (control group). Treatment assignment is determined based on BHC state of incorporation. We collect and use regulatory data for US BHCs spanning the period 1986 to 2012. (4) Our results suggest that the shift in stakeholder orientation triggered by the enactment of stakeholder statutes has a negative impact on the total payout of BHCs. While the effect on dividends is inconclusive, we find that the decline in share repurchases following the introduction of stakeholder statutes is both statistically and economically significant. The results of an extensive cross-sectional regression analysis suggest that the observed negative impact is more pronounced in banks that face sizeable implicit claims, display more opacity (proxied by higher earnings management) and operate with a higher level of agency conflicts. (5) Overall, our findings suggest that managerial perceptions regarding shareholder-stakeholder trade-offs influence how the generated earnings of banks are distributed. Moreover, the impact on payout policy is not uniform, and depends upon bank level characteristics.

Our results are robust to: alternative measures and definitions of payout; model specifications; sub-sample periods; as well as estimators that account for the potential bias of the two-way fixed effect estimator in staggered DiD designs. Moreover, we also examine the internal validity of the estimations to establish a causal interpretation of our findings. We do so, by ruling out that the enactment of constituency statutes can ex-ante be predicted by payout policy via verification of the parallel trends assumption and performing placebo tests. An extensive online supplementary file comprising eight appendices provides details of these additional tests (as well as details regarding data collection, variable definitions, descriptive statistics, and timing of the adoption of constituency statutes by states).

The contribution of our study to existing literature is manifold. First, we extend the literature on stakeholderism by adding to the limited evidence base regarding how stakeholder orientation impacts bank behaviour. Prior evidence suggests that stakeholder orientation is an

important determinant of non-financial firm value (Cremers et al, 2019); innovation (Flammer and Kacperczyk, 2016); cost of debt (Gao et al., 2020); stock price crash risk (Li and Zhang, 2020); cash holdings (Chowdury et al., 2021); earnings management (Radhakrishnan et al., 2018; Ni, 2020); and payout policy (Ni et al., 2020). For the banking industry, Leung et al. (2019) present evidence that the adoption of stakeholder constituency statutes reduces risk taking and improves financial stability. We contribute to this branch of literature by providing empirical evidence regarding the impact of constituency statutes on bank payout policy. Our work is most closely related to that of Ni et al. (2020) who investigate whether the enactment of constituency statutes affects the payout policy of non-financials. The authors find that non-financial firms incorporated in states enacting constituency statutes reduce share repurchase activity.

Our study extends and complements the work of Ni et al. (2020) in several ways. We focus directly on the banking industry and the payout policy of BHCs. While the underlying drivers of dividend policy decisions are somewhat similar across financial and non-financial firms (Baker et al., 2001; Cohen and Yagil, 2010), prior evidence suggests that managers at banks place particular importance on payout policy (Baker and Powell, 2000; Baker et al., 2001). Floyd et al., (2015) document that the payout policy of industrials and BHCs has evolved differently since the 1980s with BHCs relying more on dividends than repurchases as a payment mechanism. BHCs are large and complex legal entities that are core to the financial system and facilitate credit provision to households, small- and medium-sized firms, corporations and governments (Berger, Molyneux and Wilson, 2020). Moreover, BHCs face capital regulation and are required to serve as a source of strength to their subsidiary commercial banks, thus they are of crucial importance to the operation and stability of the US financial services industry. As such, an analysis and understanding of the payout behaviour of BHCs provides a significant incremental contribution to the literature. In addition, given that some legal scholars argue that constituency statutes are another type of antitakeover legislation (Murray 2000; Karpoff and Wittry, 2018), focusing on the banking industry, where the threat of hostile takeovers is absent (Adams and Mehran, 2003), allows us to separate out any anti-takeover provisions embedded within constituency statutes and measure the influence of stakeholder orientation on payout policy. We also provide evidence regarding the influence of underlying agency conflict, signalling and implicit claims mechanisms in driving the observed link between stakeholder orientation and share repurchases. Finally, Ni et al. (2020) do not account for potential bias of DiD estimation in the case of staggered empirical designs (Goodman-Bacon, 2021; De

Chaisemartin and D'Haultfoeuille, 2022). As the timing of constituency statute adoption differs across states, we undertake a dedicated robustness analysis with alternative DiD estimators in order to ensure that baseline inferences are not driven by the potential bias in staggered DiD designs.

Second, we present additional empirical evidence regarding the determinants of payout policy in the banking sector. Recent literature suggest that: the financial crisis (Abreu and Gulamhussen, 2013); economic policy uncertainty (Tran, 2020); shareholder protection and creditor rights (Ashraf and Zheng, 2015); managerial ownership (Collins et al., 2009); CEO power (Onali et al., 2016); signalling (Forti and Schiozer, 2015); deposit insurance (Johari et al., 2020); risk (Tripathy et al., 2021); and capital structure (Acharya et al., 2017) play important roles in determining the frequency and level of bank payouts. However, prior work mostly considers shareholder-focused characteristics (managerial and board-related aspects) when describing the association between corporate governance and bank payout. Our analysis augments these aforementioned studies by documenting a significant role for managerial stakeholderism in driving bank payout policy.

Third, we implement a disaggregated approach to understand the impact of constituency statutes on two main payout components comprising repurchases and dividends. As noted by Grullon and Michaely (2002), Skinner (2008), and Floyd et al. (2015), repurchases have emerged as a sizeable alternative mechanism of payout for US firms. BHCs in the US have also increasingly preferred share repurchases as a method to return and distribute earnings and capital to shareholders (Hirtle, 2014). In this context, we add to the literature via a dynamic analysis of share repurchases in a changing legislative environment (Von Eije and Megginson, 2008; Chen and Wang, 2012; Bonaimé et al., 2016). Our findings suggest that share repurchases are subject to variation after the implementation of statutes. In contrast, the persistence and stickiness in dividends possibly prevent managers from undertaking sizeable reduction in this form of payout.

Institutional Background

The traditional view of corporate purpose to maximise shareholder value (and perceiving corporations merely as vehicles to enhance shareholder interests) historically held sway as the prevalent rule in courts and business life in Anglo-American jurisdictions (Friedman, 1970; Keay, 2011). Given the risk of litigation, managers often avoid diverting attention from fiduciary responsibilities to attend to the concerns of other stakeholders. In the

literature, suitable corporate governance practices tend to be associated with shareholder primacy (Bénabou and Tirole, 2010). Attention to the interests of other stakeholders should only be given if it contributes to shareholder wealth (Berle, 1931, 1932). The earlier critiques of the assumptions and core values of this shareholder primacy view were later questioned more formally via the introduction of stakeholder theory. Freeman (1984) defines a general stakeholder approach in terms of strategic management. According to this view, stakeholders are defined as any group with the capability to contribute to, or be affected by firm decisions (Freeman et al., 2010). Therefore, stakeholder orientation requires managers to operate firms in line with the principle of balancing the interests of all constituent parties (Donaldson and Preston, 1995; Freeman et al, 2010). Instead of having the sole function of value maximisation, this approach envisages managers and directors adopting a broader interpretation of corporate goals in order to serve as trustees of non-shareholding stakeholders. Supporters of this idea intended to alter corporate law to permit and encourage firms to operate in a more socially responsible manner (Dodd, 1932; Bainbridge, 1991).

Resurfacing of the shareholder primacy/stakeholderism debate in the 1980s coincided with an era of hostile takeovers and mergers in the US. The common interpretation of shareholder primacy view in courts combined with the existence of the business judgement rule permitted managers to execute takeover deals to the detriment of other stakeholders. Most takeovers involved a premium and resulted in a wealth transfer from stakeholders to shareholders (Bainbridge, 1991). Hostile takeovers often resulted in layoffs, plant closures, and restructuring efforts imposing costs on debtholders, employees, customers and local communities (Pontiff et al., 1990; Orts, 1992). Against this backdrop, and in an attempt to enhance managers' ability to resist hostile takeovers, states began introducing anti-takeover statutes. Although the introduction of constituency statutes (which commenced in 1984 in Ohio) was in part a response to an increasing number of hostile takeovers, their relevance goes beyond takeover activity (Leung et al., 2019). The main principle of constituency statutes extends the scope of fiduciary duties to allow managers to consider the interests of a broader group of stakeholders (Barzuza, 2009; Karpoff and Wittry, 2018). The majority of constituency statutes classify employees and customers as stakeholders. Suppliers, creditors, local community, society, and the environment are also often listed (Bebchuk and Tallarita, 2020). As of 2020, 35 US states had implemented constituency statutes. (6)

The design of constituency statutes and past research evidence tends to support the notion that this wave of legislation represents a meaningful shift from the shareholder primacy

view toward a robust legal basis for stakeholder orientation. First, statutes adopted only in nine states were designed to broaden managerial discretion specifically in the context of takeovers. Statutes enacted in all other states enable managers to consider stakeholder interests in the context of all decision-making processes (Oswald, 1998; Barzuza, 2009). Second, the institutionalist view endorses the broader interpretation of statutes by referring to improved board authority to coordinate economic activities to serve stakeholder interests in conjunction with the aim of maximizing long-term firm value (Bratton, 1993; Keay, 2011). Given that guidance formulated in the statutes regarding fiduciary duties is permissive in nature and does not dismiss efforts to maximise shareholder value, it also corresponds to a legally enforceable mechanism and marks a significant deviation from traditional shareholder view, which designated shareholder wealth as a sole corporate performance objective (Orts, 1992; Stout, 2012). Third, existing literature supports the improved stakeholder orientation in terms of business behaviour, corporate governance practices, and court rulings after the implementation of constituency statutes. Luoma and Goodstein (1999) show that the representation of other constituents on corporate boards is improved for firms incorporated in states which initiated legal changes in order to comply with constituency statutes. Flammer and Kacperczyk (2016) and Cheng et al. (2018) utilize readily available and frequently used corporate social responsibility indices to measure the change in firm attention towards different stakeholders following the enactment of statutes. The results indicate that firms incorporated in states with constituency statutes improved their stakeholder-friendly policies. Geczy et al. (2015) examine and categorize state and federal court cases related to constituency statutes for a longer sample period. They note that a minority of cases carry a negative tone, and statutes indeed reflect an expansion of fiduciary duties.

Hypothesis Development

The role of stakeholderism in the banking industry has attracted attention in the existing literature. Macey and O'Hara (2003) argue that the scope of fiduciary duties in bank boards should be extended beyond shareholders. Particularly, during the global financial crisis of 2007-2009, poor corporate governance coupled with excessive risk-taking, accelerated securitization, insufficient provisioning, inadequate liquidity and capital buffers, deficient executive compensation mechanisms and risk management functions all cast doubt on existing bank regulation and supervision as well as governance and management practices at banks (Freixas, 2010; Bruner, 2010; Hopt, 2013). Beltratti and Stulz (2012) find that banks with a more shareholder-orientated board structure pre-crisis experience inferior stock return performance

during the crisis. Using cross-country data on post-crisis bank governance reforms, Maxfield et al. (2018) document an improvement in stakeholder-oriented performance measures such as the net interest margin. Ertürk (2016) claims that post-crisis reform attempts should deviate from shareholder-driven banking models. In line with this argument, Petrick (2011) and Laeven (2013) suggest that the demands of stakeholders be taken as a basis of regulatory reforms aimed at preserving financial stability. The principles laid out by Basel Committee on Bank Supervision state that bank operations should be aligned with the aim of protecting depositors and other recognized stakeholders (Basel Committee on Bank Supervision, 2010; Dermine, 2013).

The banking industry provides an ideal setting to analyse fiduciary duties and governance issues. Within this framework, we argue that greater managerial attention to stakeholders causes a decline in the funds allocated to shareholders, which is manifested in lower payout ratios. We base our argument on the premise of stakeholder theory, which contends that corporates, including banks, have incentives to honour both explicit and implicit claims made to stakeholders via appropriate payout policy (Cornell and Shapiro, 1987; Holder et al, 1998). Reneging on an explicit contractual claim (such as interest or coupon bond payments) would have significant legal ramifications for a bank that could potentially extend to a change in the control of its assets. However, implicit claims are not legally binding, and consequently can be reneged upon by a bank, albeit this could have a negative impact on bank valuation (Clarkson, 1995). Adopting a conservative payout policy (where a bank either reduces dividends, buys back fewer shares, or both) would indicate a commitment to honour the implicit claims of non-investor stakeholders (Holder et al. 1998). Consequently, we expect that a change in legislation, which shifts the orientation of managerial duties would have implications for decisions regarding wealth allocation across shareholders and other stakeholders. Thus, our central hypothesis can be formulated as follows:

H1: Banks incorporated in states adopting constituency statutes decrease payouts relative to counterparts incorporated in states without constituency statutes.

We expect that the variation induced by constituency statutes influences bank payout policy via underlying signalling and agency conflict mechanisms. The banking industry traditionally operates with an inherent opaqueness stemming from the inability of outsiders to value bank assets accurately (Flannery et al., 2004, 2013; Becht et al., 2011). This informational asymmetry between investor stakeholders, including shareholders, bondholders and depositors

(outsiders), and the management of the bank (insiders) can be further aggravated by the quality of information disclosed by banks (Bushman and Smith, 2001). Prior literature suggests that in common with corporates, banks engage in managing financial statements for a myriad of reasons including: debt covenant compliance (Watts and Zimmerman, 1990); capital management (Moyer, 1990; Curcio and Hasan, 2015); project selection (Adams and Ferreira, 2007); and expropriation of resources at the expense of investor stakeholders. Irrespective of motive, such actions further increase bank opacity (Jiang et al., 2016).

Managers may use payout mechanisms as a signalling device to ameliorate problems associated with informational asymmetries (between insiders and investor stakeholders) and convey a low likelihood of managerial expropriation of resources. (Bessler and Nohel, 1996; Lepetit et al., 2017). Therefore, a shift in stakeholder orientation following the enactment of constituency statutes would benefit those banks facing greater informational asymmetries between insiders and outside investors (due to earnings management). Given that these banks tend to use payouts as signalling tools, they could make sizeable cuts to payouts as information asymmetry between insiders and investor stakeholders diminishes following a shift in stakeholder orientation. Recent evidence for non-financial firms suggests that the implementation of constituency statutes results in a profound improvement of financial reporting quality as well as a decline in earnings management activities and information asymmetry (Ni, 2020). From a theoretical perspective, the enactment of constituency statutes further supports the alignment of board member preferences with those of CEOs, which facilitates an improvement in information sharing between managers and directors (Adams and Ferreira, 2007). Thus, changes in managerial incentives following a change in legislation could reduce frictions related to information asymmetries. Based upon insights from the aforementioned literature, our second hypothesis can be formulated as follows:

H2: The negative impact of constituency statutes on payouts is stronger for banks facing sizeable informational asymmetries.

A second mechanism relates to agency issues. Modern corporate structures (assuming the separation of ownership from control) are likely to result in agency problems among managers, controlling shareholders, minority shareholders and other stakeholders if adequate control mechanisms are not established (Jensen and Meckling, 1976, Myers, 1977). Payout policy is traditionally utilized as a tool to ameliorate agency conflicts by limiting managerial discretion through a reduction in free cash flow (Rozeff, 1982; Jensen, 1986). It also serves as

a commitment mechanism providing an alternative to other corporate governance measures (John and Knyazeva, 2006; Onali et al., 2016). Sustaining payouts can further direct firm management to obtain more financing from external capital markets by imposing an additional layer of monitoring to minimise agency problems (Easterbrook, 1984; Gugler, 2003). La Porta et al. (2000) develop the substitution hypothesis asserting that paying dividends can be considered as a replacement for weaker governance. Previous studies argue that the mitigation role of payout mechanism on agency conflicts is not unique to non-financial firms, but also evident for banks (Allen et al., 2012; Srivastav and Hagendorff, 2016).

We conjecture that the decline in payout ratio following constituency statutes would be stronger for banks that already face prominent agency conflicts. The stakeholder orientation in managerial norms is expected to restrict agency costs, such that payout policy will no longer play an important role in resolving governance issues (Freeman, 1984; Freeman et al., 2010). In a study analysing non-financial firms, Chowdhury et al. (2021) suggest that constituency statutes ameliorate agency costs by mitigating overinvestment problems and increasing the value of cash holdings. Therefore, our third hypothesis stated in the alternate, is as follows:

H3: The negative impact of constituency statutes on bank payouts is stronger for banks facing prominent agency conflicts

Data

Our sample period covers 1986 through 2012 and is determined by the availability of financial information in regulatory data sources for BHCs and the adoption of the last constituency statute in Nebraska. Focusing on this period also prevents any possible overlap with the enactment and revocation of first-generation anti-takeover statutes. We begin our sample formation process with the universe of BHCs filing FRY-9C forms. (7) We supplement this data with state of incorporation information collected from the National Information Centre (NIC) of the Federal Reserve System. (8)

To form our sample, we initially identify top-tier BHCs. We merge our sample with the CRSP-FRB link table to preserve publicly traded BHCs based on regulatory bank identifiers. ⁽⁹⁾ Banks with missing or non-applicable state of incorporation information are excluded. The sample of banks is further reduced by excluding observations belonging to BHCs incorporated in non-US territories. In a final step, we implement several filters. We omit bank-years with missing key balance sheet and income statement items (including total assets, total loans, total equity, and net income). We further remove observations associated with negative total equity.

Our selection procedure ultimately yields 483 unique BHCs with 6740 bank-year observations. In this final sample, 298 BHCs are treated (at some point) during the sample period. Table 1 presents the distribution of these banks across states which enacted constituency statutes.

[Insert Table 1 Here]

Methodology

In order to analyse the causal impact of stakeholder orientation on bank payout policy, we utilize a difference-in-differences model following, among others, Flammer and Kacperczyk (2016). Our baseline model is formulated as follows:

$$Payout_{isr,t} = \beta CS_{s,t} + \gamma X_{isr,t-1} + f_i + \delta_{r,t} + \varepsilon_{isr,t}$$
 (1)

where i indexes BHC, s represents state of incorporation, r indexes region (following the US Census Bureau classification) in which the headquarters of the BHC is located and t denotes the year. $Payout_{isr,t}$ denotes either dividends, repurchases or the aggregate of the two means of cash flow payment to shareholders. Dividends is defined as cash dividends declared on common stock divided by the book value of equity (Onali, 2014; Johari et al., 2020). Repurchases is defined as the ratio of net repurchases to total equity (Hirtle, 2004; 2014). $Total\ Payout$ is an aggregate measure of total payouts comprising both Dividends and Repurchases. The indicator variable $CS_{s,t}$ takes the value of one if the passage of constituency statute has already been completed in state s by time t, and zero otherwise.

 $X_{isr,t-1}$ is the vector of time-varying bank-level control variables that are likely to alter bank payout. These controls are lagged one year and include seven covariates that capture factors related to bank size (Size), asset quality (NPL), loan provisioning (Provisions), capital adequacy (Capital), profitability (Earnings), liquidity (Liquidity) and charter value (Charter). These variables are selected based on previous empirical studies of bank payout policy (Kanas, 2013; Johari et al., 2020; Tripathy et al., 2021). All continuous outcome and control variables are winsorized at the 2^{nd} and 98^{th} percentiles to limit the effect of outliers. Variable definitions and summary statistics are provided in Supplementary Appendix 1 and 2 respectively.

Our specification includes bank fixed effects (f_i) to account for the possible influence of time-invariant unobserved bank characteristics on payout policy. High dimensional region-by-year ($\delta_{r,t}$) fixed effects are also added to control time-varying local shocks, such as regional macroeconomic outlook, financial conditions, or government policies that might correlate with bank payouts and treatment (Leung et al., 2019). In alternative specifications, we further consider division-by-year and state-by-year fixed effects to accommodate time-varying regional forces. $\varepsilon_{isr,t}$ is a stochastic error term.

Equation (1) is estimated using Ordinary Least Squares (OLS) with standard errors that are robust to heteroscedasticity and clustered at the same level of treatment (state of incorporation) to insulate our results from serial correlation (Abadie et al., 2017). The main coefficient of interest (β) gauges the impact of constituent statutes on bank payout policy.

Results

Baseline Results

Table 2 presents the baseline estimation results obtained from (different specifications of) Equation (1). With the parsimonious DiD specifications covered in columns (1) and (3) controlling for bank and region-by-year fixed effects, but excluding other controls, we find that the impact of *CS* on dividend payout is inconclusive, while the coefficient on *CS* policy variable is negative and statistically significant when repurchases are considered. According to the results in columns (2) and (4), these findings hold when we control for other bank-specific variables. Furthermore, in column (6), we document that the coefficient for *CS* is negative and statistically significant at 1% level for aggregate payouts. This suggests that state-level legal changes toward stronger stakeholder orientation led to a decline in overall bank payouts, in line with hypothesis (H1). This is driven by a significant reduction in repurchases.

Our results are economically significant since the magnitude of the estimated coefficient produced by the enactment of statutes is associated with a sizeable 62% (=0.544/0.873) decline in the ratio *Repurchases* compared to the overall sample average value. Considering that the average bank maintains total equity of \$1721.3 million (in terms of book value), the aforementioned effect corresponds to reduced annual share repurchases of \$9.36 million (=1721.3 x 0.544/100) for the average bank in our sample. Prior research suggests that non-financial corporates reduce share repurchases by 21% or \$2.99 million as a result of a shift in stakeholder orientation (Ni et al., 2020). This is lower than the corresponding estimate for

BHCs. The economic significance of the impact on share repurchases is also evident given that relative to non-financials, banks rely less on repurchases as a means of returning value to shareholders (Floyd et al., 2015). The downward effect is also economically significant, albeit more modest for *Total Payout* corresponding to a 15% (=0.646/4.223) reduction in overall payouts. Overall, this suggests that managerial attention to a broader range of stakeholders following the enactment of constituency statutes has a negative impact on bank payout, which is driven by the negative impact on share repurchases. In other words, the enactment of constituency statutes affects share repurchases, but has no impact on the more persistent and stickier bank dividends (Floyd et al. 2015). This finding is in line with the view that share repurchases, due to their flexible nature, are more likely to be influenced by the shift in fiduciary attention to other stakeholders (Ni et al., 2020).

[Insert Table 2 Here]

With regard to the importance of other control variables, a number of empirical relationships are evident. In the case of the total payout ratio, we observe that larger (Size), more profitable (Earnings) banks with lower credit risk (NPL) and loan loss provisioning (Provisions) undertake larger payouts. The coefficient signs on Capital, Liquidity and Charter are in line with expectations, but not significant at conventional levels. In terms of dividend payments, the effect of controls is broadly similar to that on the total payout ratio. Provisions and Capital emerge as significant determinants of repurchases.

Given the importance of share repurchases in the overall observed decline in bank payouts, we conduct numerous sensitivity checks regarding the effect of constituency statutes on share repurchases (see Supplementary Appendix 3). These checks cover: different approaches concerning time effects; the composition of standard errors; data processing; sample period coverage; unique characteristics of constituency statutes across states; selection of organizational form for tax purposes; state-level corporate income tax rates; regulatory filing requirements; coincidental banking regulations; the enactment of other anti-takeover laws; and alternate payout ratio definitions.

We further corroborate our findings using alternative estimators that are robust to possible biases arising from the staggered nature of the legislation change we investigate (see Supplementary Appendix 4). In this context, we utilize the flexible conditional DiD approach, which also implements a matching procedure to contain the observable heterogeneities between treated and control BHCs. In another case, we use the doubly robust DiD technique to ensure

that the baseline findings do not suffer from considerable bias due to the staggered research design.

As another component of our empirical analysis, we conduct various tests to assess the internal validity and alleviate endogeneity concerns by evaluating reverse causality, dynamics of the treatment effects and placebo tests (see Supplementary Appendix 5). These estimations suggest a link between constituency statutes and bank payout policy, particularly with share repurchases.

Cross-Sectional Analysis of Share Repurchases

The results of our empirical analysis suggest that banks affected by the passage of constituency statutes adjust payout policy by reducing share repurchases. In this section, we consider whether the impact of constituency statutes on share repurchases differs among subsamples of banks based on balance sheet characteristics.

Given that stakeholder theory predicts that banks with higher implicit claims from non-investor stakeholders are likely to pursue a more conservative financing policy (Cornell and Shapiro, 1987; Shapiro, 1990; Holder et al., 1998), we investigate how the prevalence of implicit claims among BHCs facilitates the observed reduction in share repurchases following a shift in the scope of managerial duties to stakeholders as a result of the adoption of constituency statutes. Unfortunately, quantifying implicit claims issued by corporates (including banks) to non-investor stakeholders is challenging, given these are not directly observable. Holder et al. (1998) overcome this problem by relying on a measure of corporate diversification to proxy for firms with high implicit claims. In the same spirit, we assume that higher implicit claims issued by BHCs are associated with lower levels of activity diversification. (11)

We, collect information regarding the extent to which our sample BHCs engage in underwriting or dealing securities from FRY-9C regulatory reports. BHCs engaging in these aforementioned activities are assumed to be significantly diversified. Since this data is only available after the enactment of the Gramm-Leach-Bliley Act of 1999, we extend the classification of activity diversification to an earlier sample period to examine whether our sample BHCs established Section 20 subsidiaries to perform investment banking activities (Cornett et al., 2002). To ensure that the results of this analysis are not driven by the choice of implicit claims proxy, we also classify banks on the basis of asset diversification. We construct a conventional proxy of asset diversification, which measures the concentration of

activities across traditional bank asset classes. In line with prior literature, we use the Herfindahl-Hirschman Index (HHI) (Hirschman, 1945; Herfindahl, 1950) calculated as the sum of squared shares of individual asset items in total assets (Stiroh and Rumble, 2006; Deng et al., 2007; Stiroh, 2015). In order to construct our HHI measure we collect information on the following asset items: cash and balances; securities; Fed funds sold and repurchase transactions; loans secured by real estate; agriculture loans; commercial and industrial loans; personal loans; trading assets; premises and fixed assets; investments in subsidiaries; and other assets. Subsequently, we classify BHCs into two groups with high and low asset-based diversification based upon the pre-treatment median threshold value of the HHI measure.

The signalling function of the payout mechanism could interact with stakeholder orientation to create the dynamics that enhance the impact of statutes for banks operating with higher opacity. To the extent that the shift in managerial approach to stakeholders is expected to improve financial quality and alleviate information asymmetry (Ni, 2020), the signalling role of payouts could be rendered obsolete, thus paying the way for sizeable cuts for banks with significant opacity. Bank opacity is proxied via the degree to which banks engage in earnings management. Although banks utilize provisioning tools to perform earnings management, prior literature shows that provisioning can be separated into discretionary and non-discretionary components (Beatty et al., 2002). Therefore, to extract the discretionary component of a bank's earnings management, we follow both Beatty and Liao (2014) and Jiang et al. (2016) in using an auxiliary model enhanced with the *CS* policy indicator. Following the estimation of the auxiliary regression model, as specified in Supplementary Appendix 6, we extract residuals, where the absolute values (*Discretionary EMI*) serve to classify banks as having high or low opacity (above or below the sample's median value during the pre-treatment period).

Our third hypothesis posits that stakeholder orientation could connect with the agency conflict channel. Since a crucial function of payouts is to mitigate costs arising from agency problems, adopting a stakeholder-oriented governance approach could create room for banks already facing prominent agency problems to cut payouts in a more sizeable way. Recent evidence for non-financial firms suggests that the possibility of agency conflicts diminishes after the passage of statutes (Chowdhury et al., 2021). To test this hypothesis, we classify banks into two groups based on whether they have high or low operating cash flows relative to growth prospects (Lang et al., 1991). The classification is based on whether banks have both high cash flow (FCF is above median value of the pre-treatment period) and low growth prospects (Loan Growth is below median value of the pre-treatment period). We expect such banks to

be more likely to face agency problems. Banks characterized by weaker cash flow streams together with ample growth opportunities are expected to face a lower level of agency issues.

The results of the cross-sectional analysis are provided in Table 3. Panel A summarises the role of implicit claims in driving share repurchases at BHCs. Columns (1) and (2) suggest that the impact of CS on repurchases is only significant for banks with a low level of activitybased diversification. These banks are essentially expected to sustain lower payouts given the importance assigned to the implicit claims of stakeholders. This finding is further corroborated with the use of the asset-based diversification measure. Columns (3) and (4) of Panel B suggest that the CS variable is only significant for the low asset-based diversification group. This provides further support to the role of implicit claims in facilitating the association between stakeholder orientation and payout policy. Panel C presents the heterogeneity of the impact of the statutes on *Repurchases* with respect to bank opacity. As observed in columns (5) and (6), the coefficient on CS, is significant for banks implementing a high level of earnings management. This finding renders support to hypothesis (H2), validating the interaction of stakeholder orientation with the signalling aspect of payout vehicles. Moreover, Panel D offers evidence regarding the impact of the statutes on repurchases via the agency conflicts channel. As seen in columns (7) and (8), CS, is significant for banks experiencing substantial agency problems. This finding confirms the validity of hypothesis (H3) by showing that stakeholder orientation substitutes for the role played by payouts in mitigating agency issues, thus creating more flexibility for banks facing considerable agency problems to decrease their payout ratio.

[Insert Table 3 Here]

Conclusion

The structure of modern corporations is designed to embody several stakeholders with varied interests, which potentially leads to agency conflicts and governance problems. Constituency statutes provide a legal basis that allows executives to extend their fiduciary duties to other stakeholders instead of serving shareholders' interests exclusively. In this study, we investigate the impact on the payout policy of US banks following the adoption of these statutes by various US states at different points in time. Using the exogenous variation in stakeholder orientation due to the staggered adoption of constituency statutes to overcome identification concerns, we investigate the causal impact of stakeholder orientation on the payout policy and the different methods used by banks to return cash flows to shareholders.

The results of an extensive empirical analysis using US BHCs data for the period 1986-2012 suggest that banks incorporated in states adopting constituency statutes decrease their total payout ratio more than counterparts incorporated in other states. Our analysis finds that share repurchases (rather than dividends) are more impacted by a shift in stakeholder orientation. We find that the downward pressure on repurchases is more prominent in banks facing more substantial implicit claims, a higher degree of opacity and significant agency conflicts. Our results are also validated against several robustness checks and alternative estimators.

Our results have implications for managerial practice and public policy. We demonstrate a more balanced allocation of wealth generated by BHCs between bank shareholders and stakeholders, which is made possible via changes in corporate norms. Hence, redesigning corporate governance frameworks with a stakeholder-orientation can potentially improve the balancing of interests across different stakeholder groups. Specifically, extending the fiduciary duties of bank management beyond maximising shareholder wealth could alleviate externalities caused by excessive payouts and contribute to enhancing the stability and sustainability of financial intermediaries.

Our findings open interesting avenues for further research regarding the implications of stakeholderism for lending, investment and risk management decisions made by bank managers. For example, understanding whether banks with a stakeholder orientation consider climate-related risks in their lending and risk management decisions could inform ongoing debates regarding the role of financial institutions in allocating capital efficiently to mitigate the worst impact of climate change.

Endnotes

- (1) Contrary to the stockholder theory, stakeholder theory places multi- fiduciary duties of firm officers and directors at its centre (Freeman, 1984). Since its initial introduction and development, a number of influential studies have provided refinements (Freeman, 1994; Phillips et al., 2003; Freeman et al., 2004; Miles, 2017) and extensions (Dunham et al. 2006; Russo and Perrini, 2010; Harrison and Wicks, 2013) to stakeholder theory, as well as providing useful insights to its implications for firm level outcomes including: environmental strategy (Rueda-Manzanares et al., 2008), managerial accountability (Aguilera, 2005), board composition (Brammer et al., 2009; Jain and Zaman, 2020), organisational reputation (West et al., 2016), financial performance (Apaydin et al., 2021) and innovation (Bornay-Barrachina et al., 2012).
- (2) We use the terms bank holding company and bank interchangeably throughout the text.
- (3) Additionally, banks with a higher propensity to engage in payout distributions might have superior performance in corporate governance as their ability to invest generated funds to risky loans or securities is restricted and the monitoring by external capital markets is more pronounced (Francis et al., 2011).
- (4) The start of the sample period is determined by the availability of regulatory data sources for BHCs, while the end of the sample is five years after the adoption of the last constituency statute
- (5) In the context of organisations where the roles of ownership and management are separated, agency conflicts refer to the divergence of interests of different parties with a stake in the organisation (Jensen and Meckling, 1976; Rozeff, 1982; Easterbrook, 1984; Bøhren et al., 2012). Such conflicts could arise between: managers and owners; controlling shareholders and minority shareholders; or more relevant to our study, shareholders and stakeholders.
- (6) The state-level geographical and historical depiction of adoption process is provided in the Supplementary Appendix.
- (7) The regulatory database can be accessed at: https://www.chicagofed.org/banking/financial-institution-reports/bhc-data.

FR Y-9C forms are used to analyse and monitor the financial institutions operating in the US. It embodies financial data on a consolidated basis regarding balance sheet, income statement and supporting schedules involving off-balance sheet items. The report also serves as the main analytical tool between on-site inspections. Bank holding companies, savings and loan holding companies, intermediate and securities holding companies are required to fill this form on a quarterly basis. In 2018, the filing threshold for FR Y-9C forms regarding consolidated total asset size was increased to \$3 billion.

Details of the form can be accessed at:

 $\underline{https://www.federalreserve.gov/apps/reportforms/reportdetail.aspx?sOoYJ+5BzDal8cbqnRxZRg==$

- (8) The attributes file from NIC can be accessed at: https://www.ffiec.gov/npw/FinancialReport/DataDownload
- (9) CRSP-FRB link table is published by the Federal Reserve Bank of New York and can be accessed at: https://www.newyorkfed.org/research/banking_research/datasets.html
- (10) All payout ratios normalized by total equity are multiplied by 100 to ease the interpretation.

- (11) Historically, the regulatory framework introduced by the Glass-Steagall Act of 1933 and the Bank Holding Company Act of 1956 placed limitations on the extent to which BHCs could engage in non-banking activities (Kroszner and Strahan, 2014). However, the passing of the Gramm-Leach-Bliley Act of 1999 allowed BHCs to diversify activities to include investment banking, merchant banking and insurance underwriting activities alongside traditional commercial banking functions (Yeager et al., 2007; Filson and Olfati, 2014).
- (12) We collect the item BHCKC252 from FRY-9C form to monitor this bank characteristic.
- (13) In 1987, the Federal Reserve allowed banks to establish so-called Section 20 subsidiaries. These subsidiaries were permitted to engage in securities trading and underwriting subject to certain revenue limitations and firewalls (Walter, 2006). BHCs were also afforded leeway to acquire existing investment banks and re-organise the acquired institution as a Section 20 subsidiary.

References

- Abadie, A., S. Athey, G. W. Imbens and J. Wooldridge (2017). 'When should you adjust standard errors for clustering?', *National Bureau of Economic Research Working Paper*, No. w24003.
- Abreu, J. F. and M. A. Gulamhussen (2013). 'Dividend payouts: Evidence from US bank holding companies in the context of the financial crisis', *Journal of Corporate Finance*, **22**, pp. 54-65.
- Acharya, V. V. and B. M. Lambrecht (2015). 'A theory of income smoothing when insiders know more than outsiders', *Review of Financial Studies*, **28**, pp. 2534-2574.
- Acharya, V. V., H. T. Le and H. S. Shin (2017). 'Bank capital and dividend externalities', *Review of Financial Studies*, **30**, pp. 988-1018.
- Adams, R. B. and H. Mehran (2003). 'Is corporate governance different for bank holding companies?'. Available at SSRN: https://ssrn.com/abstract=387561
- Adams, R. B. and D. Ferreira (2007). A theory of friendly boards, *The Journal of Finance*, 62, pp. 217-250.
- Aguilera, R. V. (2005). 'Corporate governance and director accountability: An institutional comparative perspective', *British Journal of Management*, **16**, pp. 39-53.
- Allen, L., A. Gottesman, A. Saunders and Y. Tang (2012). 'The role of banks in dividend policy', *Financial Management*, **41**, pp. 591-613.
- Andriosopoulos, D. and M. Lasfer (2015). 'The market valuation of share repurchases in Europe', *Journal of Banking & Finance*, **55**, 327-339.
- Apaydin, M., G. F. Jiang, M. Demirbag and D. Jamali (2021). 'The importance of corporate social responsibility strategic fit and times of economic hardship', *British Journal of Management*, **32**, pp. 399-415.
- Ashraf, B. N. and C. Zheng (2015). 'Shareholder protection, creditor rights and bank dividend policies', *China Finance Review International*.
- Bae, K. H., S. El Ghoul, Z. J. Gong and O. Guedhami (2021). 'Does CSR matter in times of crisis? Evidence from the COVID-19 pandemic', *Journal of Corporate Finance*, **67**, art. 101876.
- Bainbridge, S. M. (1991). 'Interpreting non-shareholder constituency statutes', *Pepperdine Law Review*, **19**, pp. 971-1025.
- Baker, H. K. and G. E. Powell (2000). 'Determinants of corporate dividend policy: A survey of NYSE firms', *Financial Practice and Education*, **10**, pp. 29-40.
- Baker, H.K., E. T. Veit and G. E. Powell (2001). 'Factors influencing dividend policy decisions of NASDAQ firms', *Financial Review*, **36**, pp. 19-37.
- Barzuza, M. (2009). 'The state of state antitakeover law', Virginia Law Review, 95, pp. 1973-2052.
- Basel Committee on Bank Supervision, 2010. 'Principles for Enhancing Corporate Governance'. Bank of International Settlements.
- Beatty, A. L., B. Ke and K. R. Petroni (2002). 'Earnings management to avoid earnings declines across publicly and privately held banks', *The Accounting Review*, **77**, pp. 547-570.
- Beatty, A. and S. Liao (2014). 'Financial accounting in the banking industry: A review of the empirical literature', *Journal of Accounting and Economics*, 58, pp. 339-383.
- Bebchuk, L. A., K. Kastiel and R. Tallarita (2021). 'For whom corporate leaders bargain'. Available at SSRN: https://ssrn.com/abstract=3677155
- Bebchuk, L. A. and R. Tallarita (2020). 'The illusory promise of stakeholder governance'. Available at SSRN: https://ssrn.com/abstract=3544978
- Becht, M., P. Bolton and A. Röell (2011). 'Why bank governance is different?', *Oxford Review of Economic Policy*, **27**, pp. 437-463.

- Beltratti, A. and R. M. Stulz (2012). 'The credit crisis around the globe: Why did some banks perform better?', *Journal of Financial Economics*, **105**, pp. 1-17.
- Bénabou, R. and J. Tirole (2010). 'Individual and corporate social responsibility', Economica, 77, pp. 1-19.
- Berger, A. N., P. Molyneux and J. O. S. Wilson (2020). 'Banks and the real economy: An assessment of the research', *Journal of Corporate Finance*, **62**, art. 101513.
- Berger, A. N. and C. H. Bouwman (2013). 'How does capital affect bank performance during financial crises?', *Journal of Financial Economics*, **109**, pp. 146-176.
- Berle, A. A. (1931). 'Corporate powers as powers in trust', Harvard Law Review, 44, pp. 1049-1074.
- Berle, A. A. (1932). 'For whom corporate managers are trustees: a note', *Harvard Law Review*, **45**, pp. 1365-1372.
- Bertrand, M. and S. Mullainathan (2003). 'Enjoying the quiet life? Corporate governance and managerial preferences', *Journal of Political Economy*, **111**, pp. 1043-1075.
- Bessler, W. and T. Nohel (1996). 'The stock-market reaction to dividend cuts and omissions by commercial banks', *Journal of Banking & Finance*, **20**, pp. 1485-1508.
- Bhattacharya, S. (1979). 'Imperfect information, dividend policy, and "the bird in the hand" fallacy', *The Bell Journal of Economics*, **10**, pp. 259-270.
- Bliss, R. R. and M. J. Flannery (2002). 'Market discipline in the governance of US bank holding companies: Monitoring vs. influencing', *Review of Finance*, **6**, pp. 361-396.
- Bøhren, Ø., M. G. Josefsen and P. E. Steen (2012). 'Stakeholder conflicts and dividend policy', *Journal of Banking & Finance*, **36**, pp. 2852-2864.
- Boldin, R. and K. Leggett (1995). 'Bank dividend policy as a signal of bank quality', *Financial Services Review*, **4**, pp. 1-8.
- Bonaimé, A. A., K. W. Hankins and B. D. Jordan (2016). 'The cost of financial flexibility: Evidence from share repurchases', *Journal of Corporate Finance*, **38**, pp. 345-362.
- Bornay-Barrachina, M., D. De la Rosa-Navarro, A. López-Cabrales and R. Valle-Cabrera (2012). Employment relationships and firm innovation: the double role of human capital, *British Journal of Management*, **23**, pp. 223-240.
- Brammer, S., A. Millington and S. Pavelin (2009). 'Corporate reputation and women on the board', *British Journal of Management*, **20**, pp. 17-29.
- Bratton, W. W. (1993). 'Confronting the ethical case against the ethical case for constituency rights', *Washington & Lee Law Review*, **50**, pp. 1449-1475.
- Bruner, C. M. (2010). 'Corporate governance reform in a time of crisis', *The Journal of Corporation Law*, **36**, pp. 309-342.
- Bushman, R. M. and C. D. Williams (2012). 'Accounting discretion, loan loss provisioning, and discipline of banks' risk-taking', *Journal of Accounting and Economics*, **54**, pp. 1-18.
- Business Roundtable (2019). 'Statement on the Purpose of a Corporation'. Available at: https://opportunity.businessroundtable.org/ourcommitment/ (Accessed: 1 March 2021).
- Calomiris, C. W. and M. Carlson (2016). 'Corporate governance and risk management at unprotected banks: National banks in the 1890s', *Journal of Financial Economics*, **119**, pp. 512-532.
- Chen, S. S. and Y. Wang (2012). 'Financial constraints and share repurchases', *Journal of Financial Economics*, **105**, pp. 311-331.
- Cheng, C. S., X. Li, Z. Sun and J. Xie (2018). 'Corporate social responsibility and shareholder-stakeholder conflict: Evidence from a quasi-natural experiment'. Presented at the *Asian Finance Association 2017 Conference*.
- Cheng, Q., T. Warfield and M. Ye (2011). 'Equity incentives and earnings management: Evidence from the banking industry', *Journal of Accounting, Auditing & Finance*, **26**, pp. 317-349.

- Chowdhury, R., J. A. Doukas and J. C. Park (2021). 'Stakeholder orientation and the value of cash holdings: Evidence from a natural experiment', *Journal of Corporate Finance*, **69**, art. 102029.
- Chu, Y. (2018). 'Shareholder-creditor conflict and payout policy: Evidence from mergers between lenders and shareholders', *Review of Financial Studies*, **31**, pp. 3098-3121.
- Clarkson, M. E. (1995). 'A stakeholder framework for analyzing and evaluating corporate social performance', *Academy of Management Review*, **20**, pp. 92-117.
- Cohen, G. and Y. Yagil (2010). 'Sectorial differences in corporate financial behaviour: An international survey', *European Journal of Finance*, **16**, pp. 245-262.
- Collins, M. C., D. W. Blackwell and J. F. Sinkey Jr (1994). 'Financial innovation, investment opportunities, and corporate policy choices for large bank holding companies', *Financial Review*, **29**, pp. 223-247.
- Collins, M. C., A. S. Dutta and J. W. Wansley (2009). 'Managerial ownership and dividend policy in the US Banking Industry', *Journal of Business & Economics Research*, 7, pp. 33-38.
- Cornell, B. and A. C. Shapiro (1987). 'Corporate stakeholders and corporate finance', *Financial Management*, **16**, pp. 5-14.
- Cornett, M. M., E. Ors and H. Tehranian (2002). 'Bank performance around the introduction of a Section 20 subsidiary', *The Journal of Finance*, **57**, pp. 501-521.
- Cremers, M., S. B. Guernsey and S. M. Sepe (2019). 'Stakeholder orientation and firm value'. Available at SSRN: https://ssrn.com/abstract=3299889
- Cumming, D., C. Girardone and M. Śliwa (2021). 'Corporate governance in extreme institutional environments', *British Journal of Management*, **32**, pp. 919-946.
- Curcio, D. and I. Hasan (2015). Earnings and capital management and signaling: The use of loan-loss provisions by European banks, *The European Journal of Finance*, **21**, pp. 26-50.
- De Chaisemartin, C. and X. D'Haultfoeuille (2022). 'Two-way fixed effects and differences-in-differences with heterogeneous treatment effects: A survey', *National Bureau of Economic Research Working Paper*, No. w29691
- De Haan, J. and R. Vlahu (2016). 'Corporate governance of banks: A survey', *Journal of Economic Surveys*, **30**, pp. 228-277.
- Deng, S. E., E. Elyasiani and C. X. Mao (2007). 'Diversification and the cost of debt of bank holding companies', *Journal of Banking & Finance*, **31**, pp. 2453-2473.
- Dermine, J. (2013). 'Bank corporate governance, beyond the global banking crisis', *Financial Markets, Institutions & Instruments*, **22**, pp. 259-281.
- Dodd Jr, E. M. (1932). For whom are corporate managers trustees, 'Harvard Law Review', 45, pp. 1145-1163.
- Donaldson, T. and L. E. Preston (1995). 'The stakeholder theory of the corporation: Concepts, evidence, and implications', *Academy of Management Review*, **20**, pp. 65-91.
- Dunham, L., R. E. Freeman and J. Liedtka (2006). 'Enhancing stakeholder practice: A particularized exploration of community', *Business Ethics Quarterly*, **16**, pp. 23-42.
- Easterbrook, F. H. (1984). 'Two agency-cost explanations of dividends', *American Economic Review*, **74**, pp. 650-659.
- Ertürk, I. (2016). 'Financialization, bank business models and the limits of post-crisis bank regulation', *Journal of Banking Regulation*, **17**, pp. 60-72.
- Filson, D. and S. Olfati (2014). 'The impacts of Gramm–Leach–Bliley bank diversification on value and risk', *Journal of Banking & Finance*, **41**, pp. 209-221.
- Flammer, C. and A. Kacperczyk (2016). 'The impact of stakeholder orientation on innovation: Evidence from a natural experiment', *Management Science*, **62**, pp. 1982-2001.

- Flammer, C. and A. Kacperczyk (2019). 'Corporate social responsibility as a defense against knowledge spillovers: Evidence from the inevitable disclosure doctrine', *Strategic Management Journal*, **40**, pp. 1243-1267.
- Flannery, M. J., S. H. Kwan and M. Nimalendran (2004). 'Market evidence on the opaqueness of banking firms' assets', *Journal of Financial Economics*, **71**, pp. 419-460.
- Flannery, M. J., S. H. Kwan and M. Nimalendran (2013). 'The 2007–2009 financial crisis and bank opaqueness', *Journal of Financial Intermediation*, **22**, pp. 55-84.
- Floyd, E., N. Li and D. J. Skinner (2015). 'Payout policy through the financial crisis: The growth of repurchases and the resilience of dividends', *Journal of Financial Economics*, **118**, pp. 299-316.
- Forti, C. and R. F. Schiozer (2015). 'Bank dividends and signaling to information-sensitive depositors', *Journal of Banking & Finance*, **56**, pp. 1-11.
- Francis, B. B., I. Hasan, K. John and L. Song (2011). 'Corporate governance and dividend payout policy: A test using antitakeover legislation', *Financial Management*, **40**, pp. 83-112.
- Freeman, R. E. (1994). 'The politics of stakeholder theory: Some future directions', *Business Ethics Quarterly*, **4**, pp. 409-421.
- Freeman, R. E., A. C. Wicks and B. Parmar (2004). 'Stakeholder theory and the corporate objective revisited', *Organization Science*, **15**, pp. 364-369.
- Freeman, R. E. (1984). Strategic Management: A Stakeholder Approach. Cambridge: Cambridge University Press.
- Freeman, R. E., J. S. Harrison, B. L. Parmar, A. C. Wicks, L. Purnell and S. De Colle (2010). 'Stakeholder theory: The state of the art', *Academy of Management Annals*, **4**, pp. 403-445.
- Freixas, X. (2010). 'Post-crisis challenges to bank regulation', Economic Policy, 25, pp. 375-399.
- Freudenreich, B., F. Lüdeke-Freund and S. Schaltegger (2020). 'A stakeholder theory perspective on business models: Value creation for sustainability', *Journal of Business Ethics*, **166**, pp. 3-18.
- Friedman, M. (1970). 'A Friedman doctrine: The social responsibility of business is to increase its profits', *New York Times Magazine*, **13**, pp. 32-33.
- Friedman, M. (2007). 'The social responsibility of business is to increase its profits'. In W. C. Zimmerli, M. Holzinger and K. Richter (eds), *Corporate Ethics and Corporate Governance*, pp. 173-178. Berlin, Heidelberg: Springer.
- Gao, H., K. Li and Y. Ma (2020). 'Stakeholder orientation and the cost of debt: Evidence from a natural experiment'. Available at SSRN: https://ssrn.com/abstract=2878415
- Gao, L. and J. H. Zhang (2015). 'Firms' earnings smoothing, corporate social responsibility, and valuation', *Journal of Corporate Finance*, **32**, pp. 108-127.
- Geczy, C., J. S. Jeffers, D. K. Musto and A. M. Tucker (2015). 'Institutional investing when shareholders are not supreme', *Harvard Business Law Review*, **5**, pp. 73-139.
- Goodman-Bacon, A. (2021). 'Difference-in-differences with variation in treatment timing', *Journal of Econometrics*, **225**, pp. 254-277.
- Grullon, G. and R. Michaely (2002). 'Dividends, share repurchases, and the substitution hypothesis', *Journal of Finance*, **57**, pp. 1649-1684.
- Grullon, G., R. Michaely and B. Swaminathan (2002). 'Are dividend changes a sign of firm maturity?', *Journal of Business*, **75**, pp. 387-424.
- Gugler, K. (2003). 'Corporate governance, dividend payout policy, and the interrelation between dividends, R&D, and capital investment', *Journal of Banking & Finance*, **27**, pp. 1297-1321.
- Hagendorff, J. (2019). 'Corporate governance and culture in banking'. In A. Berger, P. Molyneux and J. O. S. Wilson (eds), *The Oxford Handbook of Banking*, 3rd edn, pp. 131–152. Oxford: Oxford University Press.
- Harrison, J. S. and A. C. Wicks (2013). 'Stakeholder theory, value, and firm performance', *Business Ethics Quarterly*, **23**, pp. 97-124.

- Harrison, J. S., R. A. Philips and R. E. Freeman (2020). 'On the 2019 Business Roundtable Statement on the Purpose of a Corporation', *Journal of Management*, **46**, pp. 1223 –1237.
- Herfindahl, O. C. (1950). *Concentration in the US steel industry*. PhD thesis, Berkeley, CA: University of California.
- Hirtle, B. (2004). 'Stock repurchases and bank holding company performance', *Journal of Financial Intermediation*, **13**, pp. 28-57.
- Hirtle, B. (2014). 'Bank holding company dividends and repurchases during the financial crisis', *Federal Reserve Bank of New York Staff Report*, No. 666.
- Hirschman, A. O. (1945). *National Power and the Structure of Foreign Trade*. Berkeley, CA: University of California Bureau of Business and Economic Research
- Holder, M. E., F. W. Langrehr and J. L. Hexter (1998). 'Dividend policy determinants: An investigation of the influences of stakeholder theory', *Financial Management*, **27**, pp. 73-82.
- Hong, Y. and M. L. Andersen (2011). 'The relationship between corporate social responsibility and earnings management: An exploratory study', *Journal of Business Ethics*, **104**, pp. 461-471.
- Hopt, K. J. (2013). 'Corporate governance of banks and other financial institutions after the financial crisis', Journal of Corporate Law Studies, 13, pp. 219-253
- Jain, T. and R. Zaman, R (2020). 'When boards matter: The case of corporate social irresponsibility', *British Journal of Management*, **31**, pp. 365-386.
- Jensen, M. C. (1986). 'Agency costs of free cash flow, corporate finance, and takeovers', *American Economic Review*, **76**, pp. 323-329.
- Jensen, M. C. and W. H. Meckling (1976). 'Theory of the firm: Managerial behavior, agency costs and ownership structure', *Journal of Financial Economics*, **3**, pp. 305-360.
- Jiang, L., R. Levine and C. Lin (2016). 'Competition and bank opacity', Review of Financial Studies, 29, pp. 1911-1942.
- Johari, E. E. C. D. K. Chronopoulos, B. Scholtens, A. L. Sobiech and J. O. S. Wilson (2020). 'Deposit insurance and bank dividend policy', *Journal of Financial Stability*, **48**, art. 100745.
- John, K., S. De Masi, S. and A. Paci (2016). 'Corporate governance in banks', *Corporate Governance: An International Review*, **24**, pp. 303-321.
- John, K. and A. Knyazeva, (2006). 'Payout policy, agency conflicts, and corporate governance'. Available at SSRN: http://ssrn.com/abstract=841064
- John, K. and J. Williams (1985). 'Dividends, dilution, and taxes: A signalling equilibrium', *Journal of Finance*, **40**, pp. 1053-1070.
- Jones, J. S., W. Y. Lee and T. J. Yeager (2012). 'Opaque banks, price discovery, and financial instability', *Journal of Financial Intermediation*, **21**, pp. 383-408.
- Kanas, A. (2013). 'Bank dividends, risk, and regulatory regimes', Journal of Banking & Finance, 37, pp. 1-10.
- Karpoff, J. M. and M. D. Wittry (2018). 'Institutional and legal context in natural experiments: The case of state antitakeover laws', *Journal of Finance*, **73**, pp. 657-714.
- Kauko, K. (2012). 'Why is equity capital expensive for opaque banks?', Bank of Finland Research Discussion Paper, No. 4.
- Keay, A. (2011). 'Moving towards stakeholderism-constituency statutes, enlightened shareholder value, and more: Much ado about little', *European Business Law Review*, **22**, pp. 1-49.
- Kim, Y., M. S. Park and B. Wier, B. (2012). 'Is earnings quality associated with corporate social responsibility?', *The Accounting Review*, **87**, pp. 761-796.

- Kroszner, R. S. and P. E. Strahan (2014). 'Regulation and deregulation of the US banking industry: causes, consequences, and implications for the future'. In Rose, L. N. (eds), *Economic Regulation and Its Reform:* What Have We Learned? pp. 485-544. Chicago: University of Chicago Press.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. W. Vishny (2000). Agency problems and dividend policies around the world, *Journal of Finance*, **55**, pp. 1-33.
- Laeven, L. (2013). 'Corporate governance: what's special about banks?', *Annual Review of Financial Economics*, **5**, pp. 63-92.
- Lang, L. H., R. Stulz and R. A. Walkling (1991). 'A test of the free cash flow hypothesis: The case of bidder returns', *Journal of Financial Economics*, **29**, pp. 315-335.
- Lepetit, L., C. Meslier and L. I. Wardhana (2017). 'Reducing agency conflicts through bank dividend payout decisions: the role of opacity and ownership structure', *Applied Economics*, **49**, pp. 4999-5026.
- Leung, W. S., W. Song and J. Chen (2019). 'Does bank stakeholder orientation enhance financial stability?', *Journal of Corporate Finance*, **56**, pp. 38-63.
- Levine, R. (2004). 'The corporate governance of banks: A concise discussion of concepts and evidence', World Bank Policy Research Working Paper, No. 3404.
- Li, Y. and J. Zhang (2020). 'Stakeholder orientation and stock price crash risk', *Finance Research Letters*, **37**, art. 101370.
- Luoma, P. and J. Goodstein (1999). 'Stakeholders and corporate boards: Institutional influences on board composition and structure', *Academy of Management Journal*, **42**, pp. 553-563.
- Macey, J. R. and M. O'Hara (2003). 'Solving the corporate governance problems of banks: A proposal', *Banking Law Journal*, **120**, pp. 326-347.
- Maxfield, S., L. Wang and M. M. de Sousa (2018). 'The effectiveness of bank governance reforms in the wake of the financial crisis: A stakeholder approach'. *Journal of Business Ethics*, **150**, pp. 485-503.
- Mehran, H., A. D. Morrison and J. D. Shapiro (2011). 'Corporate governance and banks: What have we learned from the financial crisis?', *Federal Reserve Bank of New York Staff Report*, No. 502.
- Miles, S. (2017). 'Stakeholder theory classification: A theoretical and empirical evaluation of definitions', *Journal of Business Ethics*, **142**, pp. 437-459.
- Moyer, S. E. (1990). Capital adequacy ratio regulations and accounting choices in commercial banks, *Journal of Accounting and Economics*, **13**, pp. 123-154.
- Murray, R. G. (2000). 'Money talks, constituents walk: Pennsylvania's corporate constituency statute can maximize shareholders' wealth', *Buffalo Law Review*, **48**, pp. 629-661.
- Myers, S. C. (1977). 'Determinants of corporate borrowing', *Journal of Financial Economics*, 5, pp. 147-175.
- Ni, X. (2020). 'Does stakeholder orientation matter for earnings management: Evidence from non-shareholder constituency statutes', *Journal of Corporate Finance*, **62**, art. 101606.
- Ni, X., W. Song and J. Yao (2020). 'Stakeholder orientation and corporate payout policy: Insights from state legal shocks', *Journal of Banking & Finance*, **121**, art. 105970.
- Onali, E. (2014). 'Moral hazard, dividends, and risk in banks', *Journal of Business Finance & Accounting*, **41**, pp. 128-155.
- Onali, E., R. Galiakhmetova, P. Molyneux, G. Torluccio (2016). 'CEO power, government monitoring, and bank dividends', *Journal of Financial Intermediation*, **27**, pp. 89-117.
- Orts, E. W. (1992). 'Beyond shareholders: Interpreting corporate constituency statutes', *George Washington Law Review*, **61**, pp. 14-135.
- Oswald, L. J. (1998). 'Shareholders v. stakeholders: Evaluating corporate constituency statutes under the takings clause', *Journal of Corporation Law*, **24**, pp. 1-28.

- Petrick, J. A. (2011). 'Sustainable stakeholder capitalism: A moral vision of responsible global financial risk management', *Journal of Business Ethics*, **99**, pp. 93-109.
- Phillips, R., R. E. Freeman and A. C. Wicks (2003). 'What stakeholder theory is not', *Business Ethics Quarterly*, **13**, pp. 479-502.
- Pontiff, J., A. Shleifer and M. S. Weisbach (1990). 'Reversions of excess pension assets after takeovers', *The RAND Journal of Economics*, **21**, pp. 600-613.
- Radhakrishnan, S., K. Wang and Z. Wang (2018). 'Stakeholder orientation and accounting conservatism: Evidence from a natural experiment', *University of Alberta School of Business Research Paper*.
- Rozeff, M. S. (1982). 'Growth, beta and agency costs as determinants of dividend payout ratios', *Journal of Financial Research*, **5**, pp. 249-259.
- Rueda-Manzanares, A., J. A. Aragón-Correa and S. Sharma (2008). 'The influence of stakeholders on the environmental strategy of service firms: The moderating effects of complexity, uncertainty and munificence', *British Journal of Management*, **19**, pp. 185-203.
- Russo, A. and F. Perrini (2010). 'Investigating stakeholder theory and social capital: CSR in large firms and SMEs', *Journal of Business Ethics*, **91**, pp. 207-221.
- Shapiro, A.C. (1990). Modern Corporate Finance, New York, Macmillan Publishing.
- Skinner, D. J. (2008). 'The evolving relation between earnings, dividends, and stock repurchases', *Journal of Financial Economics*, **87**, pp. 582-609.
- Srivastav, A. and J. Hagendorff (2016). 'Corporate governance and bank risk-taking', *Corporate Governance: An International Review*, **24**, pp. 334-345.
- Srivastav, A., S. Armitage and J. Hagendorff (2014). 'CEO inside debt holdings and risk-shifting: Evidence from bank payout policies', *Journal of Banking & Finance*, **47**, pp. 41-53.
- Stiroh, K. J. (2015). 'Diversification in banking'. In A. Berger, P. Molyneux and J. O. S. Wilson (eds), The *Oxford Handbook of Banking*, 2nd edn, pp. 219–243. Oxford: Oxford University Press.
- Stiroh, K. J. and A. Rumble (2006). 'The dark side of diversification: The case of US financial holding companies', *Journal of Banking & Finance*, **30**, pp. 2131-2161.
- Stout, L. A. (2012). *The Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations, and the Public*. Berrett-Koehler Publishers.
- Tang, Z. and J. Tang (2018). 'Stakeholder corporate social responsibility orientation congruence, entrepreneurial orientation and environmental performance of Chinese small and medium-sized enterprises', *British Journal of Management*, **29**, pp. 634-651.
- Tran, D. V. (2020). 'Economic policy uncertainty and bank dividend policy', *International Review of Economics*, **67**, pp. 339-361.
- Tripathy, N., D. Wu and Y. Zheng (2021). 'Dividends and financial health: Evidence from US bank holding companies', *Journal of Corporate Finance*, **66**, art. 101808.
- Von Eije, H. and W. L. Megginson (2008). 'Dividends and share repurchases in the European Union', *Journal of Financial Economics*, **89**, pp. 347-374.
- Walter, J.R. (1996). Firewalls, Federal Reserve Bank of Richmond Economic Quarterly, 82, pp. 15-39.
- Watts, R. L. and J. L. Zimmerman (1990). 'Positive accounting theory: A ten-year perspective'. *Accounting Review*, **65**, pp. 131-156.
- West, B., C. Hillenbrand, K. Money, A. Ghobadian and R. D. Ireland (2016). 'Exploring the impact of social axioms on firm reputation: A stakeholder perspective', *British Journal of Management*, **27**, pp. 249-270.
- World Economic Forum, 2020. 'Measuring Stakeholder Capitalism'. Available at: https://www.weforum.org/reports/measuring-stakeholder-capitalism-towards-common-metrics-and-consistent-reporting-of-sustainable-value-creation (Accessed: 1 March 2021).

Yeager, T. J., F. C. Yeager and E. Harshman (2007). 'The financial services modernization act: evolution or revolution?', *Journal of Economics and Business*, **59**, pp. 313-339.

Table 1: The Enactment of Constituency Statutes and BHC Observations

State Names	Enactment Year	Total Bank-Years of Treated BHCs	Number of Treated BHCs
Ohio	1984	337	19
Illinois	1985	43	3
Maine	1985	84	4
Indiana	1986	248	14
Missouri	1986	112	7
Arizona	1987		
Minnesota	1987		
New Mexico	1987		
New York	1987	298	15
Wisconsin	1987	111	7
Connecticut	1988	38	4
Idaho	1988	14	1
Kentucky	1988	143	8
Louisiana	1988	67	8
Tennessee	1988	91	8
Virginia	1988	333	27
Florida	1989	92	7
Georgia	1989	147	8
Hawaii	1989	27	1
Iowa	1989	81	3
Massachusetts	1989	161	9
New Jersey	1989	215	18
Oregon	1989	86	5
Mississippi	1990	236	10
Pennsylvania	1990	618	37
Rhode Island	1990	54	2
South Dakota	1990		
Wyoming	1990		
Nevada	1991	27	1
North Carolina	1993	209	16
North Dakota	1993		
Vermont	1998	12	1
Maryland	1999	282	44
Texas	2006	221	13
Nebraska	2007		

<u>Notes:</u> This table lists the staggered adoption of constituency statutes in 35 treated states between 1984 and 2007. The effective enactment dates are taken from Karpoff and Wittry (2018). In total, 298 BHCs are subject to treatment in 28 states.

Table 2: Stakeholder Orientation and Bank Payout Policy

	(1)	(2)	(3)	(4)	(5)	(6)
	Dividends	Dividends	Repurchases	Repurchases	Total Payout	Total Payout
CC	-0.114	-0.099	-0.546***	-0.544***	-0.658**	-0.646***
CS	(0.228)	(0.216)	(0.118)	(0.142)	(0.246)	(0.228)
NPL		-17.837***		1.845		-16.348***
		(3.984)		(2.612)		(4.952)
Provisions		-42.941***		-10.924***		-53.626***
TIOVISIONS		(5.950)		(3.850)		(7.298)
Capital		-1.348		8.394**		6.962
Сарпаі		(3.774)		(3.433)		(4.203)
Size		0.355**		0.182		0.533**
Size		(0.136)		(0.121)		(0.211)
Liquidity		0.552		-0.942		-0.368
Liquidity		(0.706)		(0.941)		(0.756)
Earnings		1.228***		0.287		1.509***
Lamings		(0.369)		(0.321)		(0.491)
Charter		-0.620		0.305		-0.330
Charter		(0.643)		(0.639)		(0.990)
Bank Controls	No	Yes	No	Yes	No	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Region x Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	6,664	6,197	6,629	6,164	6,629	6,164
Adjusted R ²	0.670	0.702	0.291	0.308	0.556	0.580

Notes: This table presents the estimation results of the baseline difference-in-differences model specified in Equation (1) that employs the staggered adoption of statutes. The sample period covers the interval between 1986 and 2012. In columns (1) and (2), the dependent variable is the ratio of cash dividends to total equity, whereas columns (3) and (4) indicate the regressions involving the ratio of net repurchases to total equity. Columns (5) and (6) predict the ratio of total payout to total equity. All regressions control for BHC and region-by-year fixed effects. The main independent variable is *CS* taking the value of one if the incorporation state of a specific BHC has enacted constituency statutes, otherwise assuming the value of zero. The dependent variables normalized by total equity are all multiplied with 100 for ease of interpretation. The full set of independent variables is included in columns (2), (4), and (6), which consists of *NPL*, *Provisions*, *Capital*, *Size*, *Liquidity*, *Earnings*, and *Charter*. The control variables other than policy indicator are lagged for one period. To alleviate the impact of outliers, we winsorize all continuous variables at 2nd and 98th percentiles. Detailed variable definitions are available in Table A1. Standard errors clustered at the state of incorporation level are reported in parentheses. ***, **, and * denote statistical significance at 1%, 5%, and 10% levels, respectively.

Table 3: Cross-Sectional Analysis

	(1)	(2)
Panel A	Repurchases	Repurchases
	(High Activity Diversification)	(Low Activity Diversification)
CS	-0.947	-0.533***
	(1.091)	(0.143)
Bank Controls	Yes	Yes
Bank FE	Yes	Yes
Region x Year FE	Yes	Yes
Obs.	481	5,614
Adjusted R ²	0.418	0.303
	(3)	(4)
Panel B	Repurchases	Repurchases
	(High Asset Diversification) -0.214	(Low Asset Diversification) -0.710**
CS	-0.214 (0.164)	(0.341)
	(0.104)	(0.541)
Bank Controls	Yes	Yes
Bank FE	Yes	Yes
Region x Year FE	Yes	Yes
Obs.	2,632	3,486
Adjusted R ²	0.339	0.304
	(5)	(6)
Panel C	Repurchases	Repurchases
	(High Earnings Management)	(Low Earnings Management)
CS	-0.456*	-0.518
	(0.254)	(0.342)
Bank Controls	Yes	Yes
Bank FE	Yes	Yes
Region x Year FE	Yes	Yes
Obs.	2,576	3,117
Adjusted R ²	0.266	0.347
	(7)	(8)
Panel D	Repurchases	Repurchases
CC	(High Agency Conflicts)	(Low Agency Conflicts)
CS	-0.935*** (0.302)	-0.109 (0.381)
	(0.302)	(0.301)
Bank Controls	Yes	Yes
Bank FE	Yes	Yes
Region x Year FE	Yes Yes	
Obs.	1,447	1,169
Adjusted R ²	0.401	0.262

Notes: This table presents the estimation results of the cross-sectional analysis utilizing the specification in column (4) of Table 2 for sub-sample BHCs. In columns (1) and (2), we identify the banks with high and low degree of activity-based diversification depending on whether banks engage in underwriting and securities dealing. In columns (3) and (4), we separate the banks into two categories based on Asset HHI monitoring the degree of asset diversification. In columns (5) and (6), we classify the sample into two groups with high and low opacity with respect to bank opacity measured by Discretionary EMI. In columns (7) and (8), we classify the sample into two groups with high and low levels of agency conflicts by utilizing FCF and Loan Growth. In Panel A, the classification of banks into groups is conducted if they report net assets of broker-dealer subsidiaries engaged in underwriting and securities dealing (BHCKC252 item in FRY-9C forms) after 1999 and if they operate Section 20 subsidiaries before 1999. In all other cases, the classification of banks into groups is conducted based on pretreatment median threshold values of channel (classification) variables. All regressions control for BHC and region-by-year fixed effects. The main independent variable is CS taking the value of one if the incorporation state of a specific BHC has enacted constituency statutes, otherwise assuming the value of zero. The dependent variables normalized by total equity are all multiplied by 100 for ease of interpretation. The full set of independent variables is included in all specifications, which consists of NPL, Provisions, Capital, Size, Liquidity, Earnings, and Charter. The control variables other than policy indicator are lagged by one period. To alleviate the impact of outliers, we winsorize all continuous variables at 2nd and 98th percentiles. Variable definitions are available in Table A1. Standard errors clustered at the state of incorporation level are reported in parentheses. ***, **, and * denote statistical significance at 1%, 5%, and 10% levels, respectively.

Supplementary Material to

Stakeholder Orientation and Bank Payout Policy: Evidence from US Constituency Statutes

April 2022

Appendix 1: Variable definitions

Table A1: Variable definitions

Variables	Definition	FR Y-9C Mnemonics and Data Sources
Dependent Variables	Deminion	1'K 1-7C IMmemorites and Data Sources
	Cash dividends declared on common stock to total	D. C.
Dividends	equity (×100)	BHCK4460/BHCK3210
Repurchases	Net repurchases to total equity (×100)	(BHCK4783-BHCK4782)/BHCK3210
Total Payout	Total payout to total equity (×100)	(BHCK4460+BHCK4783-BHCK4782)/BHCK3210
Policy Variable		
CS	An indicator variable taking the value of one if a bank's state of incorporation has already adopted constituency statutes in a given year, and zero otherwise	Karpoff and Wittry (2018)
Control Variables		
NPL	The sum of loans due 90 days or more and still accruing and nonaccrual loans divided by total loans	(BHCK5526[1407]+BHCK5525[1403]- BHCK3506-BHCK3507)/BHCK2122
Provisions	The ratio of provisions for loan and lease losses to total loans	BHCK4230/BHCK2122
Capital	The ratio of total equity to total assets	BHCK3210/BHCK2170
Size	The natural logarithm of total loans	ln(BHCK2122)
Liquidity	The sum of cash, non-interest bearing balances and interest bearing balances divided by total assets	(BHCK0010+BHCK0081+BHCK0395 +BHCK0397)/BHCK2170
Earnings	The ratio of retained earnings to total equity	BHCK3247/BHCK3210
Charter	The sum of total demand deposits and total time deposits divided by total assets	(BHCB2210+BHCB2604+BHCB6648)/ BHCK2170
Channel Variables		
Activity Diversification	An indicator variable taking the value of one if a bank reports net assets of broker-dealer subsidiaries engaged in underwriting and securities dealing (after 1999) and if a bank operates Section 20 subsidiary	BHCKC252, Cornett et al. (2002)
Asset HHI	(before 1999) and zero otherwise The sum of squared shares of individual asset items in total assets	Authors' calculations
Discretionary EMI	The absolute value of the residuals retrieved from auxiliary model	Beatty and Liao (2014); Jiang et al. (2016)
FCF	(Interest Income+Noninterest Income-Interest Expense-Noninterest Expense-Provision for Loan and Lease Losses)/Total Assets	(BHCK4107+BHCK4079-BHCK4073-BHCK4093 BHCK4230)/BHCK2170
Loan Growth	The annual growth rate of total loans	BHCK2122
Alternative Dependent V	*	
Repurchases 2	The ratio of net repurchases to total assets (×100)	(BHCK4783-BHCK4782)/BHCK2170
Repurchases 3	The ratio of net repurchases to interest income	(BHCK4783-BHCK4782)/BHCK4170
Repurchases 4	The ratio of net repurchases to net income	(BHCK4783-BHCK4782)/BHCK4340
Gross Repurchases	The ratio of gross repurchases to total equity ($\times 100$)	(BHCK4783)/BHCK3210
Adjusted Net Repurchases	The ratio of adjusted net repurchases to total equity $(\times 100)$ (if conversions/retirement account is	(BHCK4783- BHCK4782+BHCK3580+BHCK3578)/BHCK3210
State-Level Control Varia	positive) ables	· · · · · · · · · · · · · · · · · · ·
Unemployment	Annual unemployment rate	US Bureau of Economic Analysis
Income	Per-capita income	US Bureau of Economic Analysis US Bureau of Economic Analysis
Population	The natural logarithm of population	US Bureau of Economic Analysis US Bureau of Economic Analysis
Policy Uncertainty	Economic policy uncertainty index	Baker et al. (2022)
Union Membership	Union membership density ratio	
Omon wembership	Omon membership density ratio	Hirsch et al. (2001)

Political Balance	An indicator variable taking the value of one if a state is governed by a Republican governor and otherwise zero	Online sources
Tax	Marginal corporate income tax rate	Tax Foundation
Other Control Variables		
Intrastate	An indicator variable taking the value of one for the years of intrastate banking deregulation and zero otherwise	Jayaratne and Strahan (1996)
Interstate	An indicator variable taking the value of one for the years of interstate banking deregulation and zero otherwise	Amore et al. (2013)
RS-Index	A continuous index monitoring the interstate branching deregulation	Favara and Imbs (2015)
ВС	An indicator variable taking the value of one for the adoption years of business combination laws and zero otherwise	Karpoff and Wittry (2018)
CSA	An indicator variable taking the value of one for the adoption years of control share acquisition laws and zero otherwise	Karpoff and Wittry (2018)
PP	An indicator variable taking the value of one for the adoption years of poison pill laws and zero otherwise	Karpoff and Wittry (2018)
UD Laws	An indicator variable taking the value of one for the adoption years of universal demand laws and zero otherwise	Nguyen et al. (2018)
Tobin's Q	The sum of market value of equity and book value of liabilities divided by book value of assets	CRSP
Adjusted Stock Return	Annual bank-level stock returns adjusted for S&P 500 index returns	CRSP

Appendix 2: Descriptive statistics

Table A2: Descriptive statistics

	Obs.	Mean	SD	P25	Median	P75
Dividends	6,739	3.3561	2.5019	1.2218	3.3363	5.0026
Repurchases	6,704	0.8736	2.1825	0	0	0.3059
Total Payout	6,704	4.2236	3.6866	1.4225	3.6911	5.8854
NPL	6,739	0.0122	0.0156	0.0021	0.0064	0.0157
Provisions	6,739	0.0061	0.0074	0.0019	0.0035	0.0067
Capital	6,740	0.0910	0.0234	0.0747	0.0882	0.1032
Size	6,739	13.7069	1.5407	12.6443	13.3849	14.4657
Liquidity	6,740	0.0736	0.0553	0.0402	0.0563	0.0844
Earnings	6,740	0.4852	0.3174	0.2651	0.5117	0.7316
Charter	6,740	0.4155	0.1311	0.3341	0.4295	0.5082
Asset HHI	6,740	3195.4	928.9	2504.3	3049.8	3735.2
Discretionary EMI	5,780	0.0039	0.0043	0.0012	0.0026	0.0050
FCF	6,740	0.0119	0.0094	0.0085	0.0133	0.0174
Loan Growth	6,218	0.0860	0.1123	0.0216	0.0808	0.1451
Repurchases 2	6,704	0.0808	0.2071	0	0	0.0271
Repurchases 3	6,704	0.0141	0.0367	0	0	0.0043
Repurchases 4	6,704	0.0784	0.2072	0	0	0.0276
Gross Repurchases	6,712	1.0885	2.4073	0	0	0.6813
Adjusted Net Repurchases	6,181	1.1676	2.5671	0	0	0.9838

<u>Notes:</u> This table reports summary statistics for dependent, control, and auxiliary variables used in analysis. The sample includes observations of 483 publicly traded BHCs over the period 1986-2012. Bank financials are retrieved from FRY-9C filings. To alleviate the impact of outliers, we winsorize all continuous variables at 2nd and 98th percentiles. Detailed variable definitions are available in Table A1.

Appendix 3: Robustness checks

We implement a number of different robustness tests accounting for: different model specifications; different clustering levels for standard errors; different sub-samples; particular issues prevailing for constituency statutes; distinct bank characteristics potentially influencing payout policy; other policy changes in the US banking industry; and alternative payout measures. In general, we show that the baseline finding describing the decrease in share repurchases following the passage of constituency statutes is robust to these factors. Table A3 presents the findings of these tests. For brevity, this table reports only the estimated coefficient and relevant standard errors for the policy variable *CS* and presents them in rows instead of columns.

In row (1), we show that the significance of the impact continues to hold when we include only year fixed effects in Equation (1). Row (2) suggests that our main conclusions do not change when year dummies are added to the empirical specification in the form of interactions with nine statistical division groupings established by the US Census Bureau. Following Cremers et al. (2019), Ni et al. (2020) and Gao et al. (2020), we re-estimate Equation (1) with state (of headquarters)-by-year fixed effects in row (3). In row (4), we control explicitly for local economic conditions and political activity at the state level. Specifically, we reestimate Equation (1), while controlling for state-level unemployment, per capita income growth, population, economic policy uncertainty, union membership and the political party to which the Governor belongs. In rows (5) to (7), we perform the estimations by relying on the clustering of standard errors at different levels rather than the baseline choice of clustering determined by state of incorporation. Specifically, in row (5) we cluster standard errors at the BHC level, whereas in row (6) we cluster at the state of location level determined by the position of BHCs' headquarters. Finally, row (7) presents the results when clustering at both year and state of incorporation. In all cases, our main finding remains unaltered.

The majority of the constituency statutes were enacted during the earlier part of our sample, particularly the late 1980s and earlier 1990s (Geczy et al., 2015; Karpoff and Wittry, 2018). This timeline of statute adoption may create noise in estimating the impact of state-level

¹ These divisions are New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain and Pacific. The guidelines for divisional categorization can be accessed at

 $[\]frac{https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-regions-and-divisions-of-the-united-states.html}{}$

² We thank an anonymous reviewer for this suggestion.

legal shocks when an extended post-period sample is considered (Serfling, 2016; Ni et al., 2020; Hsu et al., 2020). In addition to this, our sample also includes the global financial crisis (GFC). Although we witness stable dividend policies during the initial phases of crisis, prior studies document changes in payout propensities of non-financial companies, and to some extent banking firms, caused by the GFC (Hauser, 2013; Abreu and Gulamhussen, 2013; Bildik et al., 2015). To ensure that our findings are not driven by an extended sample period nor by the inclusion of the crisis in our sample, we re-test the main hypothesis for *Repurchases* by restricting the sample into different sub-periods. Estimations performed with the sample period covering the period 1986-2000 (row (8)) as well as the sample period excluding the post-GFC (row (9)) both display negative and significant coefficients. Moreover, in row (10), we estimate the baseline regression using data winsorized at the 1% level on both tails (instead of 2%), whereas in row (11), instead of one-year lagged covariates, we introduce two-years lagged covariates to account for possible simultaneity effective in longer horizons.

Next, we focus on whether the unique characteristics of states where banks are incorporated influence our empirical findings. Firms incorporated in Delaware are expected to have distinct corporate governance structures relative to counterparts chartered in other US states (Heron and Lewellen, 1998; Danielson and Karpoff, 1998). However, this could potentially create an obstacle for identification given that to date Delaware has not adopted a constituency statute, and consequently all Delaware-incorporated banks are allocated to the control group used in our research design. Delaware BHCs might be different in both payout policy and other bank characteristics from BHCs incorporated elsewhere in the US. If BHCs with incorporation status listed in Delaware have a decreasing trend in share repurchases over time, then our baseline result could merely reflect a Delaware effect. To alleviate this concern, in row (12), we re-estimate our model by excluding Delaware-incorporated BHCs. The concentration of the control group on Delaware banks does not introduce a systematic variation in our empirical results.

As mentioned by Karpoff and Wittry (2018), firms in some states have undertaken lobbying activities for the passage of non-shareholder constituency statutes.³ We follow the approach of Ni (2020) and Ni et al. (2020) by excluding BHCs incorporated in those states to handle possible self-selection behavior into the treatment group, as demonstrated in row (13). The other concern related to the constituency statutes of individual states is the scope of

³ These states are Arizona, Indiana, Massachusetts, Minnesota, and Pennsylvania with corresponding FIPS codes of 4, 18, 25, 27, and 42, respectively.

applicability. As explained by Keay (2011) and Geczy et al. (2015), the statutes in some states only broaden the managerial discretion to other stakeholders in the context of takeovers in which the control of a company is transferred.⁴ This restricted content of constituency statutes might lead to a subdued impact on payout policy when the BHC observations in such states are examined. On the other hand, given that hostile takeovers are relatively infrequent in the banking industry, the effect of statutory provisions might be further restricted. To address this concern, we re-design the sample by dropping the BHCs incorporated in states with a limited scope of statutes. In row (14), we show that bank payouts decline significantly after the adoption of statutes with a broader remit. Furthermore, the constituency statutes in some states are designed to include specific clauses for coverage. As described by Danielson and Karpoff (1998) and Bebchuk et al. (2021), three states provide opt-in choices for firms, whereas one state allows firms to opt-out from some or all provisions of the laws.⁵ The exclusion of BHCs incorporated in these states does not alter the main findings considerably, as seen in row (15). It should be noted that BHC financial statement data retrieved from regulatory sources are only available after 1986. However, few states had already implemented statutes before this date marking the beginning of our sample. Consequently, these states are naturally allocated to the treatment group without any control observations. In row (16), we exclude any states adopting the laws in the pre-sample period and repeat the estimations.

With the passage of the Small Business Job Protection Act of 1996, banks were granted the flexibility of deciding their organizational forms for taxation purposes (Goldstein, 1997). As such, banks could adopt a sub-chapter S charter to prevent double taxation.⁶ Mehran and Suher (2009) report an increase in dividends paid by US banks after conversion to the S-corporation form. We perform an additional robustness test to insulate our results from the possible effects of this legislative change on payout policy. We retrieve the data series from regulatory sources describing whether a BHC adopts an S-corporation form in a specific year.⁷ Then, we merge this information with financial statements to partition the sample into a subgroup without any S-corporation banks. In row (17), we repeat the baseline estimations and

⁴ These states are Iowa, Kentucky, Louisiana, Maryland, Missouri, Oregon, Rhode Island, South Dakota, and Tennessee with corresponding FIPS codes of 19, 21, 22, 24, 29, 41, 44, 46, and 47, respectively.

⁵ Opt-in states are Georgia, Maryland and Tennessee with corresponding FIPS codes of 13, 24, and 47. The only state providing an opt-out mechanism is Arizona (FIPS code of 4).

⁶ In S-corporations, profits are subject to taxation only at the shareholder level, not at both the corporate and owner level.

⁷ We use the series named BHCKA530 from the FR Y-9C form to obtain this information.

results validate the existence of a negative statute effect on payout via repurchases when S-corporation banks are omitted from the sample.

The main source of financial information used in this study is FR Y-9C forms filed by US BHCs. This regulatory filing process is determined based on the size of BHCs approximated by the total assets. In this regard, the level of asset size utilized as a threshold value for reporting requirement was increased from \$150 million to \$500 million in March 2006. In order to ensure that this shift in sample coverage does not introduce any bias to the main results, we exclude all banks with asset sizes less than \$500 million in row (18). In our setting, we use the coding of statutes presented by Karpoff and Wittry (2018). However, as noted by Leung et al. (2019) and Ni et al. (2020), there are few discrepancies among legal literature regarding enactment years. To address this concern, we create an alternative version of the policy variable by relying on the enactment dates given by Barzuza (2009). In row (19), we see that this discrepancy is inconsequential for the baseline relationship.

The wave of state-level deregulation between the 1970s and 1990s initiated the abolishment of impediments for interstate banking transactions (Rice and Strahan, 2010; Favara and Imbs, 2015). Similar to interstate banking, after the mid-1970s, several states had enacted new laws to facilitate de-novo branching within state boundaries (Kroszner and Strahan, 2014). Since the deregulation process in geographical restrictions is likely to alter business conditions, competitive pressures, credit supply, deposit base, and other behavior of banks, similar to the approach of Leung et al. (2019), we evaluate the robustness of our results against these policy changes. The first step of our analysis is done by manually collecting the enactment dates for legislative changes in the states deregulating intrastate and interstate banking restrictions from the studies of Jayaratne and Strahan (1996) and Amore et al. (2013). Then, in the following step, we create binary variables taking the value of one when a particular state passed relevant legislation, and zero otherwise. In rows (20) and (21), we show that the negative and significant coefficient does not vary when additional control variables monitoring the intrastate and interstate banking deregulation are added to the model.

Moreover, the adoption of the 1994 Interstate Banking and Branching Efficiency Act (IBBEA) was a federal-level attempt to repeal any remaining obstacles against the geographical expansion of banks and BHCs. However, the IBBEA had provisions granting individual states the freedom to put into place new rules governing the entry to the domestic banking market via

⁸ We perform this coding procedure only for the laws enacted after the beginning of our sample in 1986.

interstate branching (Johnson and Rice, 2008). Most states hampered the course of banking competition following the IBBEA by adopting certain rules in a staggered way (Favara and Imbs, 2015). To address staggering variation in competitive forces due to the establishment of provisions, we use the index created by Rice and Strahan (2010), which ranks the individual states based on the existence of the number of provisions. After collecting data, we repeat the baseline estimation enhanced by the RS index as an additional control variable in row (22).

In row (23), we replace bank fixed effects with the state of incorporation fixed effects in the model. The results indicate a negative statute effect at a 5% significance level. As mentioned by Ni (2020) and Ni et al. (2020), the years in which statutes are adopted can be reckoned as transition years so they might not reflect the shift in managerial discretion towards stakeholders extensively. It should also be noted that some of the statutes were enacted towards the latest months of the years hindering the pass-through to corporate behavior within a shorter period until the end of year when financial outcomes are observed (Karpoff and Wittry, 2018). Thus, we follow the approach of Basu and Liang (2019) by dropping the years in which the statues were passed from the sample in row (24).

The passage of the constituency statutes coincided with the enactment of another group of state-level legislations. As a response to the wave of hostile takeovers, in the early 1980s, US states began to implement several laws aiming to strengthen managerial power in fighting against unwanted bidders (Bebchuk et al., 2021). The second-generation anti-takeover statutes provided a legal basis for the corporate governance strategies used to limit control mechanisms (Danielson and Karpoff, 1998). Francis et al. (2011) analyze the payout decisions of non-financial firms following the staggered execution of anti-takeover laws. They detect a negative causal impact on dividends manifesting the lower payout propensity. As stated by Karpoff and Wittry (2018), the exclusion of anti-takeover statutes might cause an omitted variables problem and lead to confounding events in empirical models. Therefore, we create dummy variables *BC*, *CSA*, and *PP* assuming the value of one only at the exact date of passage for corresponding anti-takeover statutes in US states (business combination laws, control share acquisition laws and poison pill laws), and zero otherwise. We manually collect the date of passage for these

⁹ Since the index is available for the 1994-2005 period, we make assumptions to extrapolate the index scores over missing dates. In line with what Rice and Strahan (2010) apply for their placebo analysis in the pre-legislation period, we assign a score of 4 (the most restrictive value) to the RS index in all states before 1994 when the IBBEA was not implemented. We further posit that the index values remained at the level of 2005 until the end of our sample period.

¹⁰ Several studies like Flammer and Kacperczyk (2016), Leung et al. (2019), Ni (2020), and Ni et al. (2020) also perform robustness checks by taking anti-takeover statutes into consideration.

laws from the coding provided by Karpoff and Wittry (2018) to sustain uniformity with respect to legal information. Row (25) introduces these dummy variables to the model. We find that the negative impact of constituency statutes on share repurchases is robust to the inclusion of indicators reflecting other coincident anti-takeover laws.

In row (26), we explicitly control for the universal demand laws that were introduced over the same period as the constituency statutes. ¹¹ Specifically, we augment Equation (1) with a binary variable that takes the value of one when a state adopts a universal demand law and zero otherwise. In doing so, we account for the possibility that our results could be driven by the shift in shareholder litigation facilitated by the adoption of universal demand laws and its impact on corporate cash holdings and payout ratios for non-financial firms (Nguyen et al., 2018; Do 2021).

Since share repurchases could be driven by bank valuation (Vermaelen, 1981; Stephens and Weisbach, 1998; Dittmar, 2000) we augment Equation (1) with Tobin's Q and Adjusted Stock Return, two variables representing stock market valuation over time. Following Caprio et al. (2007) and Huizinga and Laeven (2012), Tobin's Q is defined by summing the market value of equity with the book value of liabilities normalized by the book value of assets, while Adjusted Stock Return is the prior-year market-adjusted bank stock returns (Dittmar, 2000). Row (27) demonstrates that the baseline empirical findings are not driven by bank valuation.

We perform additional estimations to show that the observed association between stakeholder orientation and bank payouts in the form of repurchases is invariant to way one normalizes repurchases. The results presented in rows (28)-(30) are obtained by using *Repurchases* 2, *Repurchases* 3, and *Repurchases* 4 as dependent variables for which total assets, interest income, and net income are, respectively, used to normalize net share repurchases (as described in Table A1 and summarised in Table A2). Regardless of the measurement choice, we observe a negative and statistically significant impact of constituency statutes. We also demonstrate whether the baseline relationship is altered when different definitions of repurchases are considered as proposed by the literature (Hirtle, 2004; Hirtle 2014). Rows (31)-(32) demonstrate these findings. When *Gross Repurchases* is treated as the dependent variable, we still document a negative effect of statutes with statistical significance retained at 1% level. Furthermore, the regression exploiting a narrower definition of payout

¹¹ We thank an anonymous reviewer for this suggestion.

policy in the form of *Adjusted Net Repurchases* also verifies the declining trend caused by the shift in stakeholder orientation.

As the last component of our robustness checks, we control for the effects of corporate income tax policies on payouts. We retrieve state-level corporate income tax rates from the Tax Foundation. As seen in row (33), the baseline results are not confounded by changes in state-level tax rates.

Table A3: Robustness checks

	(1) Repurc	
	Coefficient	S.E.
(1) Only year FE	-0.509***	(0.142)
(2) Division x year FE	-0.406**	(0.184)
(3) State x year FE	-0.566***	(0.159)
(4) Controlling for local economic and political conditions	-0.495***	(0.120)
(5) Standard errors clustered at bank level	-0.544***	(0.139)
(6) Standard errors clustered at state location level	-0.544***	(0.124)
(7) Two-way clustering	-0.544***	(0.135)
(8) Sample period 1986-2000	-0.277*	(0.156)
(9) Sample period 1986-2007	-0.529***	(0.163)
(10) Winsorized at 1% level	-0.618***	(0.156)
(11) 2-year lagged covariates	-0.560***	(0.143)
(12) Excluding Delaware banks	-0.521***	(0.154)
(13) Excluding lobbying states	-0.566***	(0.153)
(14) Excluding states restricting CS laws to takeover cases	-0.582***	(0.157)
(15) Excluding states providing opt-in and opt-out clauses	-0.664***	(0.149)
(16) Excluding states adopting CS laws before 1987	-0.549***	(0.136)
(17) Excluding S-corp banks	-0.485***	(0.137)
(18) Excluding banks with fewer than \$500 million assets	-0.588**	(0.219)
(19) Enactment dates listed in Barzuza (2009)	-0.583***	(0.133)
(20) Controlling for intrastate banking deregulation	-0.549***	(0.140)
(21) Controlling for interstate banking deregulation	-0.526***	(0.143)
(22) Controlling for interstate branching deregulation	-0.516***	(0.156)
(23) State of incorporation FE	-0.460**	(0.177)
(24) Excluding CS transition years	-0.647***	(0.183)
(25) Controlling for enactment of BC, CSA and PP laws	-0.542***	(0.140)
(26) Controlling for enactment of UD laws	-0.545***	(0.142)
(27) Controlling for bank valuation	-0.709***	(0.246)
(28) Repurchases 2	-0.048***	(0.014)
(29) Repurchases 3	-0.009***	(0.003)
(30) Repurchases 4	-0.031**	(0.013)
(31) Gross repurchases	-0.535***	(0.125)
(32) Adjusted net repurchases	-0.709***	(0.150)
(33) Controlling for state-level taxation policies	-0.541***	(0.138)

Notes: This table shows the robustness check of the effect of stakeholder orientation on the share repurchases component of bank payout policy. The dependent variable Repurchases is defined as the ratio of net repurchases to total equity. The main independent variable CS taking the value of one if the incorporation state of a specific BHC has enacted constituency statutes, otherwise assuming the value of zero. The full set of control variables includes NPL, Provisions, Capital, Size, Liquidity, Earnings, and Charter. Detailed variable definitions are available in Table A1. In all rows, we use different variants of the baseline specification in column (4) of Table 2, and exactly that one if not explicitly stated otherwise. In rows (1) to (3), we replace the region-by-year fixed effects with the only year, division-by-year, and state (of location)-by-year fixed effects. The division classification is based on US Census Bureau which separates the individual US states into nine geographical districts under four regions. State locations are determined according to the headquarters information available in regulatory reporting. In row (4), we add control variables accounting for state-level economic and political factors including annual unemployment rate (Unemployment), per-capita income (Income), the natural logarithm of population (Population), economic policy uncertainty index of Baker et al. (2022) (Policy Uncertainty), union membership density ratio (Union Membership), and a dummy variable monitoring the political alignment of state governor (Political Balance). In rows (5) to (7), we alter the baseline clustering choice for standard errors by using BHC-level, state (of location)-level, and two-way (year and state of incorporation levels) clustering. In rows (8) and (9), we repeat the estimations over sub-samples 1986-2000 and 1986-2007 to analyze the persistence of treatment effects across different sample periods. In row (10), we use the data series winsorized at 1st and 99th percentiles instead of 2nd and 98th percentiles. In row (11), we incorporate two-years lagged values of the independent variables other than CS policy variable. In row (12), we omit the BHCs incorporated in Delaware from the sample. Row (13) demonstrates the estimation results by excluding five states in which some firms had engaged in lobbying activities for the passage of constituency statutes. In row (14), we drop the states restricting the applicability of statutes to only takeover situations instead of all managerial decisions. The results presented in row (15) are obtained from the sample ignoring four states which had provided opt-in and opt-out clauses to the firms incorporated in those states for the coverage of the law. In row (16), we discard the BHC-years belonging to the states adopting laws before 1987. In row (17), we exclude the BHCs with S-corp organization forms. The results in row (18) consider BHCs with asset sizes larger than the regulatory reporting threshold of \$500 million. In row (19), we create an alternative version of the policy variable CS based on enactment dates provided by Barzuza (2009). In rows (20) to (22), we extend the baseline specification by adding indicator variables controlling for coincidental banking deregulation attempts and sectoral competition. To this end, we create state-level dummy variables Intrastate and Interstate taking the value of one at exact dates of regulatory changes regarding intrastate and interstate banking observed during our sample period, otherwise assuming the value of zero. This variable construction is based on Jayaratne and Strahan (1996) and Amore et al. (2013). To control for interstate branching regulations, we use the state-level continuous variable Rice - Strahan (RS) Index obtained from Favara and Imbs (2015). In row (23), we eliminate BHC fixed effects and extend the baseline specification by adding state of incorporation fixed effects. In row (24), we remove the observations belonging to the exact years of enactment from the sample for treated banks to alleviate the transition effects. Row (25) shows the robustness of baseline results to the adoption of other anti-takeover statutes. We construct variables BC, CSA, and PP taking the value of one only at the effective enactment dates of business combination, control share acquisition, and poison pill laws, respectively, otherwise assuming the value of zero. The coding of the laws is retrieved from Karpoff and Wittry (2018), similar to the construction of policy variable CS. In row (26), we add the variable UD Laws taking the value of one only at the effective enactment date of universal demand laws. Row (27) integrates the control variables *Tobin's Q* and *Adjusted Stock Return* accounting for bank valuation measures. In rows (28) - (30) we replace Repurchases with Repurchases 2, Repurchases 3, and Repurchases 4 indicating the ratio of net repurchases to total assets, interest income, and net income, respectively. In rows (31) and (32), respectively, we utilize different definitions of share repurchases in gross and adjusted terms. Row (33) uses state-level marginal corporate income tax rates (Tax) in the set of control variables.

Appendix 4 – Robust estimators for staggered difference-in-differences designs

In staggered difference-in-differences (DiD) designs, the most preferred approach to estimate causal impact has traditionally been the two-way fixed effects (TWFE) which augments the regression specification with the unit and time-level fixed effects. However, recent advances in econometrics literature emphasize the potential bias in staggered DiD settings estimated by TWFE (Athey and Imbens, 2018; Sun and Abraham, 2021; Goodman-Bacon, 2021; Baker et al., 2021). As a robustness check, instead of TWFE, we use two different robust estimators. First, we use the flexible conditional DiD estimation approach. Dettmann et al. (2020) operationalize the non-parametric flexible DiD technique for the staggered framework by accommodating different treatment durations of individual units, which is advantageous for our setting given that we work with an unbalanced sample of BHCs. The technique is based on a two-stage analysis. In the first stage, the sample is restricted to banks with similar observation dates and treatment durations with respect to outcome and control variables so that potential matches among treated and control units can be determined and tracked over the same time intervals. Subsequently, the nearest neighbor matching with replacement is performed according to a combined statistical distance function comparing treated and control firms.¹² Specifically, treated banks are matched with counterparts from a pool of control banks incorporated in never treated states on the basis of their observables one year before each state adopts a constituency statute. In the second stage, ATT is estimated by monitoring the average outcome developments in the matched sample and comparing the differences between selected treatment and control units. A distinctive feature of this method is that the control group is composed of never-treated units to prevent possible bias in TWFE.

We use all the control variables available in the baseline case (*NPL*, *Provisions*, *Capital*, *Size*, *Liquidity*, *Earnings*, and *Charter*) as inputs to the matching process. For our sample, the nearest-neighbor matching procedure implemented one year before each treatment date identifies 82 BHCs in the treated group and assigns 40 non-treated BHCs as their counterparts. We implement several quality checks to the matched sample. As demonstrated in Panel A of Table A4, treated and control counterparties in the matched sample have similar average tendencies regarding bank-level characteristics. Particularly, the mean differences are statistically indistinguishable from zero as suggested by t-test results. Moreover, Panel B of Table A4 also demonstrates the results of Kolmogorov-Smirnov tests indicating that matched

-

¹² As described by Dettmann et al. (2020), this function includes a similarity measure calculating the average absolute differences of continuous control variables normalized by the maximum observed deviation.

treatment and control groups have similar distributions of control variables with no statistically significant differences except for size, which is only marginal significant at the 10% level. Lastly, we present the estimation results of ATT for share repurchases in Panel C of Table A4. The mean difference in the development of payout ratios between treated and control BHCs (from the beginning of treatment until the end of it) is negative and statistically significant at a 5% level. This suggests that our main finding is not driven by any bias that could be associated with the TWFE.

To further alleviate the concerns about the inability of the TWFE estimator to yield unbiased causal parameters in staggered DiD designs, we follow Callaway and Sant'Anna (2021) and Sant'Anna and Zhao (2020) to apply doubly robust DiD estimator to our original unmatched sample data. This exercise also utilizes our baseline specification with the full set of control variables. The ATT is retrieved through stabilized inverse probability weighting and ordinary least squares by considering never-treated units as the only control group. The estimation results presented in Panel D of Table A4 provide further confirmation our main findings.

Table A4: Unbiased Estimates

Panel A: t-tes	sts											
	Mean Treated	Mean Control	+	n\ t								
	(N=82)	(N=40)	t	p> t								
NPL	0.0060	0.0059	0.11	0.913								
Provisions	0.0043	0.0043	0.02	0.988								
Capital	0.0840	0.0807	1.10	0.272								
Size	12.964	13.007	-0.21	0.837								
Liquidity	0.0732	0.0669	1.07	0.284								
Earnings	0.5367	0.5355	0.03	0.978								
Charter	0.4875	0.4878	-0.01	0.989								
Panel B: Kolmogorov-Smirnov Tests												
	Τ	est Statistic	Correcte	ed p-value								
NPL		0.1341	0.	384								
Provisions		0.1098	0.	.645								
Capital		0.1220	0.507									
Size		0.1951	0.064									
Liquidity		0.1585	0.202									
Earnings		0.1098	0.645									
Charter		0.1707	0.	.141								
Panel C: Flex	sible Conditional D	iD Estimator (Match	ned Sample)									
	1	ATT	SE	Z								
Repurchases	-0.	757**	0.334 -2.27									
Panel D: Dou	ıbly Robust DiD Es	timator (Unmatched	l Sample)									
		ATT	SE	Z								
Repurchases	-0.8	326***	0.247	-3.35								

Notes: Panels A and B present quality checks for the matching procedure in flexible conditional DiD estimations. The nearest neighbor matching process with replacement (based on a combined statistical distance function) performed one year prior to the law adoption at state-level yields 82 treated and 40 control BHCs in the matched sample. Panel A presents the findings of the t-tests conducted to assess the equality of averages between matched treatment and control groups with respect to matching independent variables. Panel B presents the results of Kolmogorov-Smirnov tests analyzing the similarity of distributions of independent variables between matched treatment and control groups. Panel C shows the average treatment effect on the treated (ATT) estimated by the flexible conditional DiD model with the matched sample. The dependent variable Repurchases is defined as the ratio of net repurchases to total equity. In the matched sample, ATT is retrieved by comparing the development of dependent variable in treated BHCs and their associated control peers until the end of treatment. In the following step, the simple averaging method is used to calculate overall ATT. Bias-corrected standard errors are reported as suggested by Abadie and Imbens (2011). Both matching and estimation are performed by utilizing the Stata command "flexpaneldid" developed by Dettmann et al. (2020). Panel D returns to original unmatched sample and presents estimates obtained with the doubly robust estimator based on stabilized inverse probability weighting and ordinary least squares developed by Callaway and Sant'Anna (2021). Never-treated units are taken as the comparison group. Standard errors are calculated using a multiplicative wild bootstrap procedure. The estimation is performed by utilizing the Stata command "csdid" developed by Rios-Avila et al. (2021). ***, **, and * denote statistical significance at 1%, 5%, and 10% levels, respectively.

Appendix 5 – Potential endogeneity issues

In this section, we undertake a diagnostics analysis to rule out endogeneity concerns and confirm the validity of parallel trends assumption. Although the staggered passage of constituency statutes provides an exogenous change to banks' stakeholder orientation, it might be the case that changes in bank payouts could have influenced the timing of the passage of these statutes. If this was the case case our analysis could suffer from endogeneity bias. To alleviate such concerns, we perform the following steps. First, we calculate state-level averages of share repurchases (and control variables). After defining the enactment of constituency statutes in a given state as "failure events", we drop the observations occurring in the postadoption period. The observations belonging to never-treated states are also discarded. Subsequently, we estimate a probit model to analyze the probability of constituency statute adoption (Cremers et al., 2019). The results of this analysis are reported in columns (1) and (2) of Table A5.1. In column (1), we only add repurchases averaged at the state-level to the specification, whereas column (2) includes other control variables as well. Results from both columns suggest that payout via share repurchases does not predict the probability of statute adoption. We also find that pre-determined state-level averages of bank characteristics do not determine the passage of constituency statutes.

As a further analysis and following the approach of Acharya et al. (2014), Leung et al. (2019), Ni (2020), Ni et al. (2020), and Gao et al. (2020), we perform the estimation of a duration model. Specifically, we estimate a Cox proportional hazard model investigating the role of ex-ante movements in bank payout on the timing of the constituency statute enactments. In this set of regressions displayed in columns (3) and (4) of Table A5.1, the repurchases ratio and other covariates, which are in the form of state-level averages, are lagged by one period and robust standard errors are used for inference. The results of these regressions suggest that share repurchases are not significantly associated with the timing of constituency statutes. In general, these results suggest that reverse causality is unlikely to be a problem in our identification strategy.

In the next step, we examine the dynamics of payout policy surrounding the passage of constituent statutes. To this end, we replace the policy variable CS in Equation (1) with a set of relative time dummies, and run the baseline regression again for share repurchases (in order to provide evidence for the dynamics of the treatment effect). The dummy variables CS(-2) and CS(-1) indicate two-year and one-year prior to the adoption of statutes, respectively. The

specification is also augmented with CS(0) representing the exact year a state adopts the constituency statute, and CS(1) and CS(2+) denoting one-year and two or more years following the enactment. The results of this analysis are presented in Table A5.2. The significance and magnitude of the coefficients on CS(-2) and CS(-1) support the notion that there is no relation between share repurchases and stakeholder orientation before the relevant statutes were passed. The coefficient on CS(0) is significant at the 5% level confirming the negative immediate impact of statute adoption on the payout ratio. Furthermore, the effect seems to be long-lived as the coefficient of CS(2+) is highly significant at the 1% level. These findings are also in line with the applicability of parallel trends assumption to our empirical design.

As a final step, we conduct placebo tests to check the validity of the parallel trends assumption in order to ensure that our estimation results are not driven by randomness. Our approach aligns with prior studies which undertake similar tests where treatment status is determined by state-level enactments of legislation (Cornaggia et al., 2015; Berger et al., 2019). We construct a pseudo policy variable, *Placebo CS*, by reshuffling the treatment assignment across states of incorporation of sample BHCs, while preserving the enactment years. Then, we derive another version of *Placebo CS* by retaining treated states, but randomizing the treatment years. Figure A5.1 plots the empirical distribution of the coefficient estimates based on the placebo events for 5000 samples. We also present the summary statistics of empirical distributions in Table A5.3, which show that the coefficient reported in column (4) of Table 2 is plausibly lower than the placebo coefficient estimates. These results suggest that the observed impact of constituency statutes on share repurchases is unlikely to be driven by chance.

Table A5.1: Reverse causality tests

	(1)	(2)	(3)	(4)
	CS	CS	CS	CS
State Average Depurchases	-0.136	-0.119	-0.123	-0.235
State-Average Repurchases	(0.161)	(0.182)	(0.362)	(0.294)
State Avenue NDI		-49.142		-6.645
State-Average NPL		(36.834)		(41.284)
State Average Provisions		-28.006		-47.166
State-Average Provisions		(49.328)		(84.624)
State Average Conital		22.317		29.317
State-Average Capital		(16.661)		(21.133)
State Average Size		-0.164		-0.309
State-Average Size		(0.258)		(0.379)
State-Average Liquidity		13.288		23.271**
State-Average Liquidity		(8.167)		(10.961)
State-Average Earnings		1.322		2.920***
State-Average Earnings		(1.070)		(0.976)
State-Average Charter		1.075		-0.192
State-Average Charter		(2.765)		(2.450)
Model	Probit	Probit	Duration	Duration
Obs.	89	89	89	89
Pseudo R ²	0.0077	0.0838		

Notes: This table presents estimation results relevant to the determinants of statute adoption. In all estimations, the dependent binary variable is *CS* representing the "failure event" as the enactment of constituency statutes in a particular state. We begin the analysis by calculating the averages of *Repurchases* and other control variables at the state of incorporation level. State observations are dropped from the sample following the "failure event". In columns (1) and (2), probit models are utilized to estimate the impact of state-level *Repurchases* on the probability of statute enactment with and without other controls. In columns (3) and (4), Cox proportional hazards models are utilized to estimate the impact of state-level *Repurchases* on the time remaining to the statute enactment with and without other controls. For duration models, the coefficients rather than hazard ratios are displayed. Robust standard errors are reported in parentheses. ***, ***, and * denote statistical significance at 1%, 5%, and 10% levels, respectively.

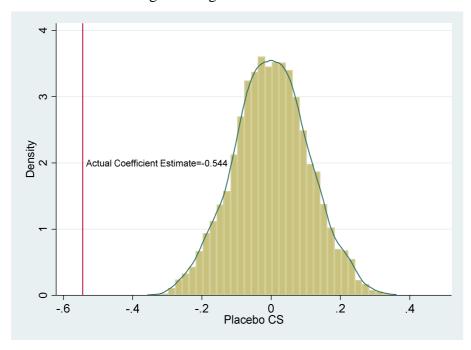
Table A5.2: Dynamics of the treatment effects

	(1)
	Repurchases
CS(2)	-0.093
CS(-2)	(0.152)
CS(1)	-0.092
CS(-1)	(0.207)
CS(O)	-0.300**
CS(0)	(0.111)
70/1)	-0.194
CS(1)	(0.161)
CG(2.)	-0.762***
CS(2+)	(0.149)
Bank Controls	Yes
Bank FE	Yes
Region x Year FE	Yes
Obs.	6,164
Adjusted R ²	0.308

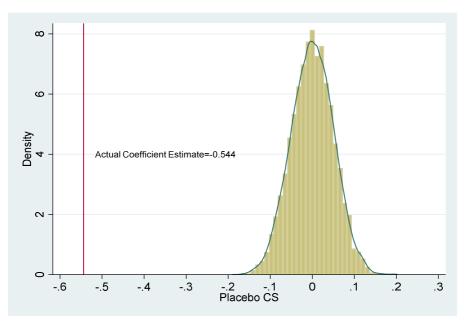
Notes: This table analyzes the dynamics of share repurchases surrounding the passage of constituency statutes. We replace the policy variable CS with a set of dummy variables indicating the relative time to the enactment of constituency statutes. For the treated banks, CS(-2) and CS(-1) are assigned the value of one if it is two and one year prior to the law adoption in the state of incorporation, respectively, otherwise assuming the value of zero. CS(0) is the binary variable taking the value of one only at the exact date of statute enactment, whereas CS(1) denote the time period one year after the statute enactment. CS(2+) takes the value of one if the law is implemented in a particular state two or more years ago. The regression accounts for BHC and region-by-year fixed effects. The full set of control variables includes NPL, Provisions, Capital, Size, Liquidity, Earnings, and Charter. The control variables other than policy indicators are lagged for one period. To alleviate the impact of outliers, we winsorize all continuous variables at 2^{nd} and 98^{th} percentiles. Detailed variable definitions are available in Table A1. Standard errors clustered at the state of incorporation level are reported in parentheses. ***, **, and * denote statistical significance at 1%, 5%, and 10% levels, respectively.

Figure A5.1: Placebo Tests

Panel A: Randomizing the assignment of CS laws across states



Panel B: Randomizing the assignment of CS laws across years



Notes: These figures plot the results of placebo estimations. In panel A, we randomize the assignment of treatment variable *CS* across states-of-incorporation by keeping the years same and estimate the specification presented in column (4) of Table 2. We repeat this re-shuffling procedure assigning pseudo-events to BHCs 5000 times to record the coefficient estimates for *CS* policy variable. In panel B, we randomize the assignment of treatment variable *CS* across years by keeping the states-of-incorporation same and estimate the specification presented in column (4) of Table 2. We repeat this re-shuffling procedure assigning pseudo-events to BHCs 5000 times to record the coefficient estimates for *CS* policy variable. The histograms display the distributions of placebo estimates together with density functions. The solid vertical red lines represent the actual coefficient estimate obtained from the empirical model including full set of control variables *NPL*, *Provisions*, *Capital*, *Size*, *Liquidity*, *Earnings*, and *Charter*. Detailed variable definitions are available in Table A1.

Table A5.3: Empirical Distribution of Placebo Coefficients

	P1	P5	P10	P25	P50	P75	P90	P95	P99	Mean	Std Dev
Placebo Test 1	-0.2483	-0.1824	-0.1408	-0.0718	0.0005	0.0733	0.1411	0.1833	0.2502	0.0006	0.1090
Placebo Test 2	-0.1161	-0.0831	-0.0653	-0.0342	0.0004	0.0349	0.0644	0.0825	0.1163	0.0001	0.0503

Notes: This table presents the summary statistics of the empirical distribution of *Placebo CS* in the context of two different placebo tests (randomizing the assignment of treatment across states and years, respectively). Thresholds for 1st, 5th, 10th, 25th, 50th, 75th, 90th, 95th and 99th percentiles are displayed together with mean and standard deviation.

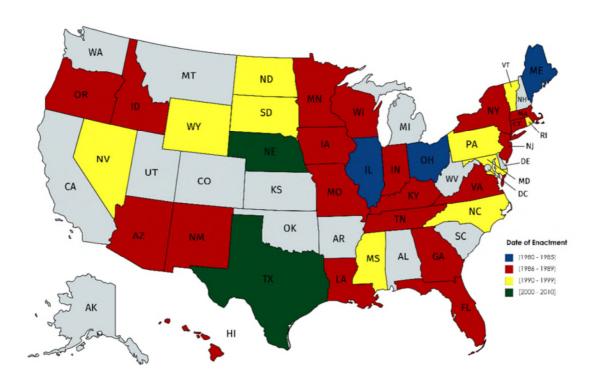
Appendix 6 – Auxiliary regression to estimate bank earnings management

Table A6: Auxiliary regression results

-	(1)					
	$Provisions_t$					
ΔNPL_{t+1}	-0.0491**					
ΔNFL_{t+1}	(0.0194)					
$\Delta \mathrm{NPL}_{\mathrm{f}}$	0.0884***					
AINF L _t	(0.0216)					
$Size_{t-1}$	0.0003***					
51ZC[-]	(0.0001)					
$\Delta Loans_t$	-0.0089***					
\(\text{Loans}_t\)	(0.0009)					
Allnamployment	0.0023***					
Δ Unemployment _t	(0.0003)					
GDP Growth _t	0.0635***					
ODF Glowing	(0.0149)					
Case-Shiller Index Return _t	-0.0321***					
Case-Sillier lildex Returnt	(0.0024)					
Allowances _{t-1}	0.3985***					
Anowances _{t-1}	(0.0332)					
CS_t	-0.0012					
CSt	(0.0019)					
Interaction Terms (CS x Controls)	Yes					
State FE	Yes					
Obs.	5,780					
Adjusted R ²	0.368					

Notes: This table reports the estimation results for the auxiliary regression used to obtain the discretionary component of banks' earnings management. The dependent variable $Provisions_t$ is the ratio of provisions for loan and lease losses to total loans. ΔNPL_{t+1} and ΔNPL_t denote forward and contemporaneous values of change in non-performing loans divided by lagged total loans. $Size_{t-1}$ is defined as the natural logarithm of lagged total assets. $\Delta Loans_t$ represents the change in total loans divided by lagged total loans. $\Delta Unemployment_t$ stands for the change in the unemployment rate, while GDP $Growth_t$ is the annual growth rate of real Gross Domestic Product of the US. $Case - Shiller\ Index\ Return_t$ is calculated as the annual rate of change in S&P/Case-Shiller US National Home Price Index. $Allowances_{t-1}$ represents the lagged values of the ratio of loan loss allowances to total loans. The bank-specific variables are retrieved from FRY9-C forms, while macroeconomic data is taken from the Federal Reserve Bank of St. Louis. To alleviate the impact of outliers, we winsorize all continuous bank-specific variables at 2^{nd} and 98^{th} percentiles. The policy variable CS and its interactions with other control variables are also added to the specification. The model is estimated with pooled OLS method with state of location fixed effects. Robust standard errors are reported in parentheses. ***, **, and * denote statistical significance at 1%, 5%, and 10% levels, respectively.

Appendix 7 – Historical and geographical distribution of constituency statutes across US States



Notes: This chart displays the geographical distribution and timeline of statute adoption across US states for the period 1984-2007. The blue-colored states are the initial adopters of the laws before 1986. The states depicted with red color are the ones with effective adoption dates around the late 1980s. The yellow-colored and green-colored states enacted statutes during 1990s and 2000s, respectively. The states highlighted in grey had not implemented constituency statutes. The chart is created via https://mapchart.net/usa.html

Appendix 8 – BHC Observations across States over Sample Period

Year AL AK AR CA CO CT DE FL GA HI ID IL IN IA KS KY LA ME MD M 1986 0 0 2 3 1 0 23 2 3 1 0 0 6 3 0 2 0 0 3 4 1988 0 0 2 3 1 0 26 2 4 1 0 0 7 3 0 2 0 1 3 4 4 1 0 0 7 3 0 2 0 2 4 4 4 1 0 0 0 2 4 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>																						
1986 0 0 2 3 1 0 23 2 3 1 0 0 6 3 0 2 0 0 3 4 1987 0 0 2 3 1 0 25 2 3 1 0 0 7 3 0 2 0 1 3 4 1988 0 0 2 3 1 0 26 2 4 1 0 0 2 0 2 4 1989 0 0 2 3 1 0 26 2 4 1 0 0 2 0 3 4 4 1990 0 0 2 4 1 0 29 2 5 1 0 7 3 0 2 0 3 5 1 0 1 7 3 0	26 28	25 26	24	23	22	21	20	19	18	17	16	15	13	12	10	9	8	6	5	2	1	FIPS
1987 0 0 2 3 1 0 25 2 3 1 0 0 7 3 0 2 0 1 3 4 4 1988 0 0 2 3 1 0 26 2 4 1 0 0 7 3 0 2 0 2 4 4 1989 0 0 2 3 1 0 26 2 4 1 0 0 7 3 0 2 0 3 4 4 1990 0 0 2 3 1 0 28 2 5 1 0 0 7 3 0 2 0 3 5 4 1991 0 0 2 4 1 0 30 2 5 1 0 1 7 3 0 2 0 3 6 4 1992 0 0 2 4 1	MI MS	MA MI	MD	ME	LA	KY	KS	IΑ	IN	IL	ID	HI	GA	FL	DE	CT	CO	CA	AR	AK	AL	Year
1988 0 0 2 3 1 0 26 2 4 1 0 0 7 3 0 2 0 2 4 4 1 0 0 7 3 0 2 0 3 4 4 1 1 0 0 7 3 0 2 0 3 4 4 1 0 0 7 3 0 2 0 3 4 4 1 0 0 7 3 0 2 0 3 4 4 1 0 0 2 4 1 0 29 2 5 1 0 1 7 3 0 2 0 3 6 4 1 999 0 0 2 4 1 0 30 2 5 1 0 1 7 3 0 4 0 3 7 4 1 1993 0 0 2 5 0 0 30 <	3 7	4 3	3	0	0	2	0	3	6	0	0	1	3	2	23	0	1	3	2	0	0	1986
1989 0 0 2 3 1 0 26 2 4 1 0 0 7 3 0 2 0 3 4 4 1990 0 0 2 3 1 0 28 2 5 1 0 0 7 3 0 2 0 3 5 4 1991 0 0 2 4 1 0 29 2 5 1 0 1 7 3 0 2 0 3 6 4 1992 0 0 2 4 1 0 30 2 5 1 0 1 7 3 0 3 0 3 7 4 1993 0 0 2 4 1 0 31 2 5 1 0 1 7 3 0 4 0 3 7 2 1994 0 0 2 5 0 0	4 7	4 4	3	1	0	2	0	3	7	0	0	1	3	2	25	0	1	3	2	0	0	1987
1990 0 0 2 3 1 0 28 2 5 1 0 0 7 3 0 2 0 3 5 4 1991 0 0 2 4 1 0 29 2 5 1 0 1 7 3 0 2 0 3 6 4 1992 0 0 2 4 1 0 30 2 5 1 0 1 7 3 0 3 0 3 7 4 1993 0 0 2 4 1 0 31 2 5 1 0 1 7 3 0 4 0 3 7 4 1994 0 0 2 5 0 0 33 3 5 1 0 1 7 3 0 4 0 3 7 2 1995 1 0 2 5 1 0	4 7	4 4	4	2	0	2	0	3	7	0	0	1	4	2	26	0	1	3	2	0	0	1988
1991 0 0 2 4 1 0 29 2 5 1 0 1 7 3 0 2 0 3 6 4 1992 0 0 2 4 1 0 30 2 5 1 0 1 7 3 0 3 0 3 7 4 1993 0 0 2 4 1 0 31 2 5 1 0 1 7 3 0 4 0 3 7 4 1994 0 0 2 5 0 0 30 3 5 1 0 1 7 3 0 4 0 3 7 2 1995 1 0 2 5 1 0 36 3 5 1 0 1 7 3 0 6 2 3 7 2 1996 1 0 2 8 1 2	4 8	4 4	4	3	0	2	0	3	7	0	0	1	4	2	26	0	1	3	2	0	0	1989
1992 0 0 2 4 1 0 30 2 5 1 0 1 7 3 0 3 0 3 7 4 1993 0 0 2 4 1 0 31 2 5 1 0 1 7 3 0 4 0 3 7 4 1994 0 0 2 5 0 0 30 3 5 1 0 1 7 3 0 4 0 3 7 2 1995 1 0 2 5 0 0 33 3 5 1 0 1 7 3 0 4 0 3 7 2 1996 1 0 2 5 1 0 36 3 5 1 0 2 8 3 0 6 2 3 11 0 1997 1 0 2 8 1 2	5 8	4 5	5	3	0	2	0	3	7	0	0	1	5	2	28	0	1	3	2	0	0	1990
1993 0 0 2 4 1 0 31 2 5 1 0 1 7 3 0 4 0 3 7 4 1994 0 0 2 5 0 0 30 3 5 1 0 1 7 3 0 4 0 3 7 2 1995 1 0 2 5 0 0 33 3 5 1 0 1 7 3 0 4 0 3 7 2 1996 1 0 2 5 1 0 36 3 5 1 0 2 8 3 0 6 2 3 7 0 1997 1 0 2 8 1 2 45 3 6 1 0 2 8 3 0 6 2 3 11 0 1998 1 0 2 8 1 3	5 8	4 5	6	3	0	2	0	3	7	1	0	1	5	2	29	0	1	4	2	0	0	1991
1994 0 0 2 5 0 0 30 3 5 1 0 1 7 3 0 4 0 3 7 2 1995 1 0 2 5 0 0 33 3 5 1 0 1 7 3 0 5 0 3 7 2 1996 1 0 2 5 1 0 36 3 5 1 0 2 8 3 0 6 2 3 7 0 1997 1 0 2 8 1 2 45 3 6 1 0 2 8 3 0 6 2 3 11 0 1998 1 0 2 8 1 2 45 3 6 1 0 2 8 3 0 6 2 3 12 0 2000 1 0 3 11 1 3	5 8	4 5	7	3	0	3	0	3	7	1	0	1	5	2	30	0	1	4	2	0	0	1992
1995 1 0 2 5 0 0 33 3 5 1 0 1 7 3 0 5 0 3 7 2 1996 1 0 2 5 1 0 36 3 5 1 0 2 8 3 0 6 2 3 7 0 1997 1 0 2 8 1 2 45 3 6 1 0 2 8 3 0 6 2 3 11 0 1998 1 0 2 8 1 2 45 3 6 1 0 2 8 3 0 6 2 3 112 0 1999 1 0 2 8 1 3 48 3 6 1 1 2 8 3 0 6 3 3 112 0 2000 1 0 3 14 1 3 <td>5 8</td> <td>4 5</td> <td>7</td> <td>3</td> <td>0</td> <td>4</td> <td>0</td> <td>3</td> <td>7</td> <td>1</td> <td>0</td> <td>1</td> <td>5</td> <td>2</td> <td>31</td> <td>0</td> <td>1</td> <td>4</td> <td>2</td> <td>0</td> <td>0</td> <td>1993</td>	5 8	4 5	7	3	0	4	0	3	7	1	0	1	5	2	31	0	1	4	2	0	0	1993
1996 1 0 2 5 1 0 36 3 5 1 0 2 8 3 0 6 2 3 7 0 1997 1 0 2 5 1 1 41 3 5 1 0 2 8 3 0 6 2 3 11 0 1998 1 0 2 8 1 2 45 3 6 1 0 2 8 3 0 6 2 3 12 0 1999 1 0 2 8 1 3 48 3 6 1 1 2 8 3 0 6 3 3 12 0 2000 1 0 3 11 1 3 48 4 6 1 1 2 8 3 0 6 3 3 11 1 2001 0 0 3 14 1 3 <td>6 8</td> <td>5 6</td> <td>7</td> <td>3</td> <td>0</td> <td>4</td> <td>0</td> <td>3</td> <td>7</td> <td>1</td> <td>0</td> <td>1</td> <td>5</td> <td>3</td> <td>30</td> <td>0</td> <td>0</td> <td>5</td> <td>2</td> <td>0</td> <td>0</td> <td>1994</td>	6 8	5 6	7	3	0	4	0	3	7	1	0	1	5	3	30	0	0	5	2	0	0	1994
1997 1 0 2 5 1 1 41 3 5 1 0 2 8 3 0 6 2 3 11 0 1998 1 0 2 8 1 2 45 3 6 1 0 2 8 3 0 6 2 3 12 0 1999 1 0 2 8 1 3 48 3 6 1 1 2 8 3 0 6 3 3 12 0 2000 1 0 3 11 1 3 48 4 6 1 1 2 8 3 0 6 3 3 11 0 2001 0 0 3 14 1 3 53 4 6 1 1 2 11 3 0 6 3 3 12 0 2002 0 1 3 16 1 3	6 9	5 6	7	3	0	5	0	3	7	1	0	1	5	3	33	0	0	5	2	0	1	1995
1998 1 0 2 8 1 2 45 3 6 1 0 2 8 3 0 6 2 3 12 0 1999 1 0 2 8 1 3 48 3 6 1 1 2 8 3 0 6 3 3 12 0 2000 1 0 3 11 1 3 48 4 6 1 1 2 8 3 0 6 3 3 11 1 2001 0 0 3 14 1 3 53 4 6 1 1 2 11 3 0 6 3 3 11 1 2002 0 1 3 16 1 3 55 4 6 1 1 2 11 3 0 6 3 3 12 3 2003 0 1 3 16 1 <td< td=""><td>6 9</td><td>6 6</td><td>7</td><td>3</td><td>2</td><td>6</td><td>0</td><td>3</td><td>8</td><td>2</td><td>0</td><td>1</td><td>5</td><td>3</td><td>36</td><td>0</td><td>1</td><td>5</td><td>2</td><td>0</td><td>1</td><td>1996</td></td<>	6 9	6 6	7	3	2	6	0	3	8	2	0	1	5	3	36	0	1	5	2	0	1	1996
1999 1 0 2 8 1 3 48 3 6 1 1 2 8 3 0 6 3 3 12 0 2000 1 0 3 11 1 3 48 4 6 1 1 2 8 3 0 6 3 3 11 1 2001 0 0 3 14 1 3 53 4 6 1 1 2 11 3 0 6 3 3 12 0 2002 0 1 3 16 1 3 55 4 6 1 1 2 11 3 0 6 3 3 12 3 2003 0 1 3 16 1 4 58 5 7 1 1 2 11 3 0 8 3 3 12 3 2 2004 0 1 3 19 <	6 9	6 6	11	3	2	6	0	3	8	2	0	1	5	3	41	1	1	5	2	0	1	1997
2000 1 0 3 11 1 3 48 4 6 1 1 2 8 3 0 6 3 3 11 1 2001 0 0 0 3 14 1 3 53 4 6 1 1 2 11 3 0 6 3 3 12 2 2002 0 1 3 16 1 3 55 4 6 1 1 2 11 3 0 6 3 3 12 3 2003 0 1 3 16 1 4 58 5 7 1 1 2 11 3 0 8 3 3 12 3 2004 0 1 3 19 1 3 64 6 7 1 1 2 11 3 0 8 3 4 12 12 2005 0 1 3 19	6 9	6 6	12	3	2	6	0	3	8	2	0	1	6	3	45	2	1	8	2	0	1	1998
2001 0 0 3 14 1 3 53 4 6 1 1 2 11 3 0 6 3 3 12 2 2002 0 1 3 16 1 3 55 4 6 1 1 2 11 3 0 6 3 3 12 3 2003 0 1 3 16 1 4 58 5 7 1 1 2 11 3 0 8 3 3 12 3 2004 0 1 3 19 1 3 64 6 7 1 1 2 11 3 0 8 3 4 12 3 2005 0 1 3 15 1 1 59 5 6 1 1 2 11 3 0 8 3 4 12 3 2006 0 1 3 15 1	8 9	6 8	12	3	3	6	0	3	8	2	1	1	6	3	48	3	1	8	2	0	1	
2002 0 1 3 16 1 3 55 4 6 1 1 2 11 3 0 6 3 3 12 3 2003 0 1 3 16 1 4 58 5 7 1 1 2 11 3 0 8 3 3 12 3 2004 0 1 3 19 1 3 64 6 7 1 1 2 11 3 0 8 3 4 12 3 2005 0 1 3 15 1 1 59 5 6 1 1 2 11 3 0 7 3 4 11 6	9 9	7 9	11	3	3	6	0	3	8	2	1	1	6	4	48	3	1	11	3	0	1	2000
2003 0 1 3 16 1 4 58 5 7 1 1 2 11 3 0 8 3 3 12 8 2004 0 1 3 19 1 3 64 6 7 1 1 2 11 3 0 8 3 4 12 8 2005 0 1 3 19 1 3 64 6 7 1 1 2 11 3 0 8 3 4 12 8 2006 0 1 3 15 1 1 59 5 6 1 1 2 11 3 0 7 3 4 11 6	9 9	7 9	12	3	3	6	0	3	11	2	1	1	6	4	53	3	1	14	3	0	0	2001
2004 0 1 3 19 1 3 64 6 7 1 1 2 11 3 0 8 3 4 12 8 2005 0 1 3 19 1 3 64 6 7 1 1 2 11 3 0 8 3 4 12 8 2006 0 1 3 15 1 1 59 5 6 1 1 2 11 3 0 7 3 4 11 6	11 9	8 11	12	3	3	6	0	3	11	2	1	1	6	4	55	3	1	16	3	1	0	2002
2005 0 1 3 19 1 3 64 6 7 1 1 2 11 3 0 8 3 4 12 8 2006 0 1 3 15 1 1 59 5 6 1 1 2 11 3 0 7 3 4 11 6	11 10	8 11		3	3	8	0	3	11	2	1	1	7	5	58	4	1	16	3	1	0	
2006 0 1 3 15 1 1 59 5 6 1 1 2 11 3 0 7 3 4 11	11 10	8 11		4	3	8	0	3	11	2	1	1	7	6	64	3	1	19	3	1	0	2004
	11 10		12	4			0		11		1	1	7			3	1			1	0	
2007 0 1 3 16 1 2 60 5 6 1 1 2 11 3 0 7 4 4 11 (9 9	6 9	11	4	3	7	0		11		1	1	6			1	1	15		1	0	
	9 9	6 9	11	4	4	7	0	3	11	2	1	1	6	5	60	2	1	16	3	1	0	
	9 9			4	4		0				1	1	6		60		1			1		
	9 10										1	1	6				_			1		
	9 10					-					1	1								1		
	9 9						1				1	_								1		
2012 0 1 3 21 2 2 95 4 6 1 1 3 14 3 1 7 8 4 40	11 9	8 11	40	4	8	7	1	3	14	3	1	1	6	4	95	2	2	21	3	1	0	2012

FIPS	S 29	30	32	33	34	36	37	39	40	41	42	44	45	47	48	49	50	51	53	54	55
Yea	r MO	MT	NV	NH	NJ	NY	NC	OH	OK	OR	PA	RI	SC	TN	TX	UT	VT	VA	WA	WV	WI
198	5 3	1	1	0	3	9	2	9	2	1	10	2	1	1	5	1	0	2	0	4	1
198	7 3	1	1	0	3	9	2	10	2	1	12	2	1	1	5	1	0	2	0	4	2
198	3 3	1	1	0	4	9	4	10	2	1	12	2	2	1	5	1	0	2	0	4	2
1989	3	1	1	0	5	9	4	10	2	1	13	2	2	1	5	1	0	4	0	4	2
1990) 3	1	1	0	5	9	4	10	2	1	15	2	2	1	6	1	0	5	0	4	2
199	1 3	1	1	0	5	9	4	10	3	1	17	2	2	1	6	1	0	5	0	4	2
1992	2 3	2	1	0	4	9	4	11	3	1	17	2	2	1	7	1	0	6	0	4	3
1993	3 4	2	1	0	4	11	4	11	2	1	18	2	2	1	7	1	0	7	2	4	3
1994	4	2	1	0	5	11	4	11	2	1	19	2	2	1	7	1	1	8	3	3	3
199	5 4	2	1	0	5	11	4	11	2	2	20	2	2	2	7	1	1	8	3	3	3
199	5 4	1	1	0	5	12	5	11	3	2	23	2	2	2	8	1	1	8	3	3	3
199	7 4	2	1	0	6	12	6	11	3	2	23	2	2	2	8	1	1	12	4	4	4
199	3 4	2	1	1	8	13	6	12	3	4	25	2	2	2	10	1	1	12	5	5	4
199	9 4	2	1	1	8	12	7	14	3	5	26	2	2	2	10	2	1	13	5	5	4
2000) 4	2	1	1	10	12	7	14	3	5	28	2	3	3	10	2	1	14	5	5	4
200	1 4	2	1	1	10	12	8	14	3	5	29	2	3	4	10	2	1	16	5	5	5
200	2 4	2	1	1	10	12	11	15	3	5	30	2	5	5	9	2	1	18	5	5	6
2003	3 4	2	1	1	12	13	12	15	3	5	30	2	6	6	10	2	1	18	5	5	6
200	1 5	2	1	1	12	13	12	16	3	5	30	2	6	6	10	2	1	19	5	5	6
200	5 5	2	1	1	13	13	12	16	3	5	30	2	6	6	9	2	1	20	6	4	6
200	5 4	2	1	1	8	10	11	13	3	5	24	2	5	5	8	2	0	16	6	4	5
200	7 5	2	1	1	9	10	11	13	3	5	25	2	5	5	8	2	0	16	6	4	5
200	3 5	2	1	1	9	10	11	13	3	5	25	2	5	6	8	2	0	19	6	4	5
2009	5	2	1	1	12	11	13	13	3	5	27	2	7	6	10	2	0	21	6	4	6
2010) 5	2	1	1	12	12	12	13	3	5	27	2	6	6	11	2	0	19	6	4	6
201	l 6	2	1	1	13	12	15	14	3	5	29	2	5	7	11	2	0	21	8	4	6
2012	2 7	2	1	1	15	13	14	17	3	5	34	2	5	7	11	2	1	22	11	4	7

Notes: These tables report the frequency of BHC observations in each incorporation state over the sample period.

References

- Abreu, J. F. and M. A. Gulamhussen (2013). 'Dividend payouts: Evidence from US bank holding companies in the context of the financial crisis', *Journal of Corporate Finance*, **22**, pp. 54-65.
- Acharya, V. V., R. P. Baghai and K. V. Subramanian (2014). 'Wrongful discharge laws and innovation', *Review of Financial Studies*, **27**, pp. 301-346.
- Amore, M. D., C. Schneider and A. Žaldokas (2013). 'Credit supply and corporate innovation', *Journal of Financial Economics*, **109**, pp. 835-855.
- Athey, S. and G. Imbens (2018). 'Design-based analysis in difference-in-differences settings with staggered adoption'. *National Bureau of Economic Research Working Paper*, No. w24963.
- Baker, A., D. F. Larcker, D.F. and C. C. Wang (2021). 'How much should we trust staggered difference-in-differences estimates?'. Available at SSRN: https://ssrn.com/abstract=3794018
- Baker, S. R., S. J. Davis and J. A. Levy (2022). 'State-level economic policy uncertainty', *National Bureau of Economic Research Working Paper*, No. w29714.
- Barzuza, M. (2009). 'The state of state antitakeover law', Virginia Law Review, 95, pp. 1973-2052.
- Basu, S. and Y. Liang (2019). 'Director-liability-reduction laws and conditional conservatism', *Journal of Accounting Research*, **57**, pp. 889-917.
- Beatty, A. and S. Liao (2014). 'Financial accounting in the banking industry: A review of the empirical literature', *Journal of Accounting and Economics*, **58**, pp. 339-383.
- Bebchuk, L. A., K. Kastiel and R. Tallarita (2021). 'For whom corporate leaders bargain'. Available at SSRN: https://ssrn.com/abstract=3677155
- Berger, A. N., Ö. Öztekin and R. A. Roman (2019). 'Geographic deregulation and bank capital structure'. Available at SSRN: https://ssrn.com/abstract=3177995
- Bildik, R., A. Fatemi and I. Fooladi (2015). 'Global dividend payout patterns: The US and the rest of the world and the effect of financial crisis', *Global Finance Journal*, **28**, pp. 38-67.
- Callaway, B. and P. H. Sant'Anna (2021). 'Difference-in-differences with multiple time periods'. *Journal of Econometrics*, **225**, pp. 200-230.
- Caprio, G., L. Laeven, L. and R. Levine (2007). 'Governance and bank valuation', *Journal of Financial Intermediation*, **16**, pp. 584-617.
- Cornaggia, J., Y. Mao, X. Tian and B. Wolfe (2015). 'Does banking competition affect innovation?', *Journal of Financial Economics*, **115**, pp. 189-209.
- Cremers, M., S. B. Guernsey and S. M. Sepe (2019). 'Stakeholder orientation and firm value'. Available at SSRN: https://ssrn.com/abstract=3299889
- Cornett, M. M., E. Ors and H. Tehranian (2002). 'Bank performance around the introduction of a Section 20 subsidiary', *The Journal of Finance*, **57**, pp. 501-521.
- Danielson, M. G. and J. M. Karpoff (1998). 'On the uses of corporate governance provisions', *Journal of Corporate Finance*, **4**, pp. 347-371.
- Dettmann, E., A. Giebler and A. Weyh (2020). 'Flexpaneldid: A Stata toolbox for causal analysis with varying treatment time and duration', *IWH Discussion Papers*, No. 3/2020.
- Dittmar, A. K. (2000). 'Why do firms repurchase stock', Journal of Business, 73, pp. 331-355.
- Do, T. K. (2021). 'Shareholder litigation rights and corporate payout policy: Evidence from universal demand laws', Research *in International Business and Finance*, **58**, art. 101440.
- Favara, G. and J. Imbs (2015). 'Credit supply and the price of housing', *American Economic Review*, **105**, pp. 958-92.

- Flammer, C. and A. Kacperczyk (2016). 'The impact of stakeholder orientation on innovation: Evidence from a natural experiment', *Management Science*, **62**, pp. 1982-2001.
- Gao, H., K. Li and Y. Ma (2020). 'Stakeholder orientation and the cost of debt: Evidence from a natural experiment', Available at SSRN: https://ssrn.com/abstract=2878415
- Geczy, C., J. S. Jeffers, D. K. Musto and A. M. Tucker (2015). 'Institutional investing when shareholders are not supreme', *Harvard Business Law Review*, **5**, pp. 73-139.
- Goldstein, R. (1997). 'Banks as S corporations: The small business job protection act of 1996', *Banking Law Journal*, **114**, pp. 647-654.
- Goodman-Bacon, A. (2021). 'Difference-in-differences with variation in treatment timing'. *Journal of Econometrics*, **225**, pp. 254-277.
- Hauser, R. (2013). 'Did dividend policy change during the financial crisis?', *Managerial Finance*, **39**, pp. 584-606
- Heron, R. A. and W. G. Lewellen (1998). 'An empirical analysis of the reincorporation decision'. *Journal of Financial and Quantitative Analysis*, **33**, pp. 549-568.
- Hirsch, B. T., D. A. Macpherson and W. G. Vroman (2001). 'Estimates of union density by state', *Monthly Labor Review*, **124**, pp. 51-55.
- Hirtle, B. (2004). 'Stock repurchases and bank holding company performance', *Journal of Financial Intermediation*, **13**, pp. 28-57.
- Hirtle, B. (2014). 'Bank holding company dividends and repurchases during the financial crisis', *Federal Reserve Bank of New York Staff Report*, No. 666.
- Hsu, P. H., H. Lee, Q. Meng and H. Wu (2020). 'Do constituency statutes really benefit customers?'. Available at SSRN: https://ssrn.com/abstract=3622817
- Huizinga, H. and L. Laeven (2012). 'Bank valuation and accounting discretion during a financial crisis', *Journal of Financial Economics*, **106**, pp. 614-634.
- Jayaratne, J. and P. E. Strahan (1996). 'The finance-growth nexus: Evidence from bank branch deregulation', *The Quarterly Journal of Economics*, **111**, pp. 639-670.
- Jiang, L., R. Levine, R. and C. Lin (2016). 'Competition and bank opacity', *Review of Financial Studies*, **29**, pp. 1911-1942.
- Johnson, C. A. and T. Rice (2008). Assessing a decade of interstate bank branching, *Washington & Lee Law Review*, **65**, pp. 73-128.
- Karpoff, J. M. and M. D. Wittry (2018). 'Institutional and legal context in natural experiments: The case of state antitakeover laws', *Journal of Finance*, **73**, pp. 657-714.
- Keay, A. (2011). 'Moving towards stakeholderism-constituency statutes, enlightened shareholder value, and more: Much ado about little', *European Business Law Review*, **22**, pp. 1-49.
- Kroszner, R. S. and P. E. Strahan (2014). 'Regulation and deregulation of the US banking industry: causes, consequences, and implications for the future'. In Rose, L. N. (eds), *Economic Regulation and Its Reform:* What Have We Learned?, pp. 485-544. Chicago: University of Chicago Press.
- Leung, W. S., W. Song and J. Chen (2019). 'Does bank stakeholder orientation enhance financial stability?', *Journal of Corporate Finance*, **56**, pp. 38-63.
- Mehran, H. and M. Suher (2009). 'The impact of tax law changes on bank dividend policy, sell-offs, organizational form and industry structure', *Federal Reserve Bank of New York Staff Report*, No. 369.
- Nguyen, H. T., H. V. Phan and L. S. Sun (2018). 'Shareholder litigation rights and corporate cash holdings: Evidence from universal demand laws', *Journal of Corporate Finance*, **52**, pp. 192-213.
- Ni, X. (2020). 'Does stakeholder orientation matter for earnings management: Evidence from non-shareholder constituency statutes', *Journal of Corporate Finance*, **62**, art. 101606.

- Ni, X., W. Song and J. Yao (2020). 'Stakeholder orientation and corporate payout policy: Insights from state legal shocks', *Journal of Banking & Finance*, **121**, art. 105970.
- Rice, T. and P. E. Strahan (2010). 'Does credit competition affect small-firm finance?', *Journal of Finance*, **65**, pp. 861-889.
- Rios-Avila, F., P. Sant'Anna and B. Callaway (2021). CSDID: Stata module for the estimation of difference-in-difference models with multiple time periods.
- Sant'Anna, P. H. and J. Zhao (2020). 'Doubly robust difference-in-differences estimators', *Journal of Econometrics*, **219**, pp. 101-122.
- Serfling, M. (20169. 'Firing costs and capital structure decisions', Journal of Finance, 71, pp. 2239-2286.
- Stephens, C. P. and M. S. Weisbach (1998). 'Actual share reacquisitions in open-market repurchase programs', *The Journal of Finance*, **53**, pp. 313-333.
- Sun, L. and S. Abraham (2021). 'Estimating dynamic treatment effects in event studies with heterogeneous treatment effects', *Journal of Econometrics*, **225**, pp. 175-199.
- Vermaelen, T. (1981). 'Common stock repurchases and market signalling: An empirical study', *Journal of Financial Economics*, **9**, pp. 139-183.



The Centre for Responsible Banking & Finance CRBF Working Paper Series

School of Management, University of St Andrews The Gateway, North Haugh, St Andrews, Fife, KY16 9RJ. Scotland, United Kingdom

https://crbf.wp.st-andrews.ac.uk/



Recent CRBF Working papers published in this Series

Third Quarter | 2022

22-010 **José M. Liñares-Zegarra and John O.S. Wilson:** SMEs as Social Enterprises: Regional Disparities, Access to Finance, Strategic Intentions, and the COVID-19 Pandemic.

22-009 **Diana Bonfim, Cláudia Custódio, Clara Raposo:** Supporting Small Firms through Recessions and Recoveries.

22-008 Dimitris K. Chronopoulos, Edie Erman Che Johari, Anna L. Sobiech, John O.S. Wilson: Payouts and Future Bank Profitability: The Role of Capital Distribution Plans.

Second Quarter | 2022

22-007 Foly Ananou, Dimitris Chronopoulos, Amine Tarazi, John O.S. Wilson: Liquidity Regulation and Bank Risk.

22-006 **Ozlem Akin and S. Mehmet Ozsoy:** Political Liquidity Creation: Electoral Cycles and State-Owned Banks.

22-005 Dimitris K. Chronopoulos, John O.S. Wilson, Muhammed H. Yilmaz: Regulatory Oversight and Bank Risk.

22-004 **Adnan Balloch, Christian Engels, Dennis Philip:** When It Rains It Drains: Psychological Distress and Household Net Worth.

22-003 **Dimitris Andriosopoulos and Sheikh Tanzila Deepty:** ESG reputation and Risk-Shifting Incentives.



