JOURNAL OF FINANCIAL AND QUANTITATIVE ANALYSIS
© The Author(s), 2026. Published by Cambridge University Press on behalf of the Michael G. Foster School of Business, University of Washington. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.
doi:10.1017/S0022109026102907

Politically Polarized Depositors

Jinoug Jeung
The Chinese University of Hong Kong CUHK Business School
jinoug.jeung@cuhk.edu.hk (corresponding author)

Abstract

Exploiting an exogenous increase in public awareness of banks' lending to the gun industry, this article documents significant deposit outflows from gun lenders. These outflows are stronger in Democratic-leaning markets and for Republican-leaning lenders. In contrast, anti-gun lenders experience limited and insignificant outflows, consistent with policy alignment with depositor values. Outflows tighten funding constraints, prompting gun lenders to reduce deposit spreads and branches in Democratic-leaning markets. While large gun lenders remain resilient, small gun lenders significantly reduce their CRA loan volumes. The findings highlight political value misalignment as a driver of depositor behavior and its real effects on bank operations.

I. Introduction

In recent years, political polarization in the United States has intensified, increasingly shaping the role of political values in the financial decisions of households, investment professionals, and corporations (e.g., Hong and Kostovetsky (2012), Gromet, Kunreuther, and Larrick (2013), Di Giuli and Kostovetsky (2014), McConnell, Margalit, Malhotra, and Levendusky (2018), Painter (2020), Conway and Boxell (2024), and Rajgopal, Srivastava, and Zhao (2025)).[1] However, little is known about its impact on bank depositors, including their choice of banks and the resulting implications for bank operations. Political value misalignment between banks and depositors can lead to deposit outflows, thereby

I would like to express my gratitude to my dissertation committee members and the Emory faculty for their invaluable support and guidance: Tarun Chordia, Ilia Dichev, T. Clifton Green, Christoph Herpfer, Wei Jiang, William Mann, and Gonzalo Maturana. I would also like to thank discussants—William Cassidy, Dong Beom Choi, Tony Cookson, Taek-yul Kim, Chen Lin, Runjing Lu, Pedro Matos, Ca Nguyen, James O'Donovan, Wanyi Wang, and Liyan Yang—as well as the seminar and conference participants at the American Finance Association, Asian Finance Association & Doctoral Symposium, Chinese University of Hong Kong, Eastern Finance Association, Emory University, European Finance Association Doctoral Tutorial, Financial Management Association, Hong Kong Joint Finance Research Workshop, Joint Conference with the Allied Korea Finance Associations, Korea America Finance Association, Midwest Finance Association, and Southwestern Finance Association for helpful suggestions and comments.

[1]This literature differs from work on political beliefs, which focuses on partisan differences in subjective expectations about economic outcomes (e.g., Cookson, Engelberg, and Mullins (2020), Kempf and Tsoutsoura (2021), Engelberg, Guzman, Lu, and Mullins (2022), Meeuwis, Parker, Schoar, and Simester (2022), Kempf, Luo, Schäfer, and Tsoutsoura (2023), Rice (2024)).

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

constraining bank funding and reducing lending. To address this gap, this article examines depositor responses to political value misalignment with banks, documenting broader consequences for bank funding and lending.

This article examines political values regarding gun policy, one of the most divisive issues in the United States.[2] I identify banks with ties to the gun industry based on their financing of major firearms manufacturers in the United States. I measure depositor political values using granular measures of local campaign contributions and voting outcomes. Depositors generally lack detailed information on bank asset portfolios (Freixas and Rochet (2008)), making it difficult for them to identify banks' gun-related positions absent salient information. I, therefore, exploit the Feb. 14, 2018, Parkland school shooting and the subsequent wave of anti-gun financial activism as an exogenous increase in public awareness of banks' ties to the gun industry. This activism, which pressured financial institutions to end relationships with gun manufacturers, gained unprecedented traction after Parkland, amplified by student-led movements and social media. In contrast, earlier episodes of gun-related activism focused primarily on legislative changes or public awareness campaigns against gun violence rather than targeted pressure on financial intermediaries.

Following the Parkland shooting, activists pressured financial institutions to reduce gun violence by severing ties with the gun industry. On Feb. 26, 2018, ThinkProgress published a list of banks financing major firearms manufacturers.[3] In early 2019, Guns Down America released a widely referenced report card, "Is Your Bank Loaded?," grading the largest U.S. banks on their relationships with the gun industry.[4] Several banks responded by adopting restrictions on business with the gun industry; for example, Bank of America Corporation and Citigroup implemented anti-gun policies, while others, such as Wells Fargo & Company, maintained their existing practices.[5] These developments also highlighted partisan differences: during an April 2019 congressional hearing, Democratic members praised banks that adopted anti-gun policies, whereas Republican Representative Sean Duffy criticized Bank of America Corporation CEO Brian Moynihan, arguing that many customers would oppose restrictions on lending to gun manufacturers.[6]

Exploiting the Parkland shooting and subsequent activism as a source of exogenous variation in public awareness of banks' ties to the gun industry, this article employs a difference-in-differences design to examine depositor responses to gun lenders—banks that financed major firearms manufacturers around the time of the Parkland shooting, did not adopt anti-gun policies afterward, and received

[2]The Pew Research Center identifies gun policy as having the largest partisan gaps, followed by views on race and the environment. See "Pew Research Center: In a Politically Polarized Era, Sharp Divides in Both Partisan Coalitions," https://www.pewresearch.org/politics/2019/12/17/in-a-politically-polarized-era-sharp-divides-in-both-partisan-coalitions/.

[3]See "ThinkProgress: These are the banks financing the assault weapons industry," https://archive.thinkprogress.org/banks-financing-guns-c985a46dd4d1/.

[4]See "Guns Down America: Is Your Bank Loaded?" https://isyourbankloaded.org/.

[5]Some banks faced costs from these positions. For instance, certain states restricted Bank of America Corporation and Citigroup from municipal bond underwriting, and the American Federation of Teachers excluded Wells Fargo & Company from its approved mortgage lender list.

[6]See "UPI: Big banks defend policies on gun manufacturers to Congress," https://www.upi.com/Top_News/US/2019/04/10/Big-banks-defend-policies-on-gun-manufacturers-to-Congress/4691554916335/.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

media attention for these ties. Using a bank–county–year panel of annual deposit growth from 2015 to 2019 with granular county–year fixed effects, the analysis compares banks operating in the same local markets but differing in their gun-related positions. Following the shooting, gun lenders experience 1.8 percentage points lower annual deposit growth, representing a 25% decline relative to their preperiod mean of 7.2%. These outflows translate into approximately $2.13 billion in annual deposit losses per gun lender, more than 20 times their average exposure to the gun industry of $103 million in lending. The results document economically significant deposit outflows from gun lenders.

Consistent with sharp partisan divides on gun policy, the negative depositor response to gun lenders is more pronounced in local markets with greater exposure to Democratic-leaning depositors.[7] A 1-standard-deviation increase in this exposure is associated with an additional 1.1 percentage point reduction in annual deposit growth at gun lenders following the shooting. The results are robust to controlling for demographic characteristics—such as age, education, and income—that correlate with political values and may independently affect depositor behavior. Further, the outflows are larger for gun lenders with greater donations to Republican politicians. Taken together, the results indicate that political value misalignment between banks and depositors influences depositor behavior.

To further strengthen identification and address potential unobserved heterogeneity, the analysis explores cross-sectional variation along dimensions related to switching frictions, gun control salience, and attitudes toward gun control. Deposit outflows from gun lenders are significantly larger in markets with lower switching frictions, amounting to an additional 1.6 to 2.2 percentage point reduction in annual deposit growth, consistent with frictions attenuating the response to political value misalignment. The effects are also more pronounced in markets where gun control issues exhibit greater salience and stronger supporting attitudes, as proxied by prior exposure to public mass shootings and stronger social connectedness to the Parkland shooting. For example, gun lenders in markets that experienced at least one public mass shooting between 1998 and 2017 see an additional 3.1 percentage point decline in annual deposit growth, while a 1-standard-deviation increase in social connectedness to Parkland is associated with an additional 1.1 percentage point reduction. When these proxies are included jointly with the measure of depositor political values, all variables remain statistically and economically significant. The results indicate that salience and attitudinal factors amplify the role of political values in driving depositor responses to gun lenders.

In a symmetric analysis, the article examines depositor responses to anti-gun lenders—banks that adopted restrictions on business with the gun industry following the Parkland shooting. Anti-gun lenders experience 1.1 percentage points lower annual deposit growth following the shooting, though the estimate is statistically insignificant. The effect is somewhat more negative in markets with greater

[7]The Pew Research Center documents wide partisan divides on gun policy, with Democrats far more likely than Republicans to prioritize gun control over gun rights. See "Pew Research Center: Gun Policy Remains Divisive, But Several Proposals Still Draw Bipartisan Support," https://www.pewresearch.org/politics/2018/10/18/gun-policy-remains-divisive-but-several-proposals-still-draw-bipartisan-support/.

exposure to Republican-leaning depositors, where a 1-standard-deviation increase in this exposure is associated with an additional 0.3 percentage point reduction; however, this heterogeneity is also insignificant. Anti-gun lenders have depositor bases with an average Democratic exposure of 0.654—comparable to 0.65 for gun lenders. Because anti-gun policies align with the predominant political values of their depositors, deposit outflows from anti-gun lenders remain limited, in contrast to the substantial outflows from gun lenders, whose ties to the gun industry conflict with depositor values.

The analysis next examines the broader implications of deposit outflows from gun lenders for bank funding and lending. Gun lenders respond by reducing deposit spreads, particularly for longer-maturity and larger-amount products in Democratic-leaning markets—consistent with efforts to improve price competitiveness and retain depositors. Gun lenders also reduce branches, with reductions more pronounced in Democratic-leaning markets. These adjustments, combined with significant deposit outflows, tighten funding constraints for gun lenders. While large gun lenders appear resilient in transmitting these constraints to lending despite a 1.6 percentage point decline in annual deposit growth, small lenders reduce CRA loan volumes by 13.5% following a 3.0 percentage point decline in annual deposit growth. The results highlight heterogeneity in the pass-through of depositor-driven funding constraints to real activities, with stronger effects among smaller lenders that rely more heavily on retail deposits.

This article contributes to several strands of the literature. First, it adds to studies of depositor behavior, which primarily emphasize bank fundamentals and depositors' financial incentives (Saunders and Wilson (1996), Martinez Peria and Schmukler (2001), Maechler and McDill (2006), Egan, Hortaçsu, and Matvos (2017), and Martin, Puri, and Ufier (2018)). Few examine nonfinancial factors, such as corporate social responsibility or depositor political values. This article extends this work by documenting how political value misalignment between banks and depositors affects deposit flows, with implications for bank funding and lending. Second, the article contributes to research on political polarization in financial decision-making. Prior studies show that political values influence the choices of households, investment professionals, and corporations (Hong and Kostovetsky (2012), Gromet et al. (2013), Di Giuli and Kostovetsky (2014), McConnell et al. (2018), Painter (2020), Conway and Boxell (2024), and Rajgopal et al. (2025)). This article extends these findings to retail depositors, providing evidence of deposit outflows driven by conflicts between depositor political values and bank practices. Third, the article relates to the literature on stakeholder responses to corporate social responsibility in banking. Recent work documents depositor discipline for socially controversial activities (Homanen (2022), Chen, Hung, and Wang (2023)), but without emphasizing political value heterogeneity across depositors. This article complements these studies by highlighting how political polarization shapes depositor responses to contentious issues, underscoring the role of political value misalignment in depositor discipline.

The remainder of the article proceeds as follows: Section II describes data and variables. Section III presents summary statistics. Section IV discusses empirical methodologies and results. Section V examines implications. Section VI concludes.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

II. Data and Variables

A. Bank–County–Year Deposit Growth Panel

Annual deposit data are obtained from the Federal Deposit Insurance Corporation (FDIC) Summary of Deposits (SOD), which provides branch-level deposit holdings as of June 30 each year for all FDIC-insured institutions, including insured U.S. branches of foreign banks.

To examine depositor responses to political value misalignment with banks, the analysis constructs a bank–county–year deposit growth panel. Branches with deposits exceeding $1 billion as of June 30, 2017, are excluded to focus on retail deposits, as large branches are primarily funded by institutional funds (Homanen (2022)). Branches involved in acquisitions, entries, or exits during the sample period are also excluded to avoid confounding changes in market structure.[8] Deposits from eligible branches are aggregated to the bank–county–year level, and the variable, DEPOSIT_GROWTH, is computed as the annual percentage change, yielding a panel spanning 2015–2019.

The panel includes bank and county controls. Bank controls comprise 1-year lagged values of log bank assets and log deposits, the log number of bank branches in the county, and indicators for bank type and the Wells Fargo scandal.[9] These are derived from SOD data. County controls include 1-year lagged values of log population, log per capita income, population growth, and the unemployment rate, sourced from the U.S. Bureau of Economic Analysis and the Economic Research Service of the U.S. Department of Agriculture. Additional controls, where applicable, are incorporated into the empirical specifications. Variable definitions are provided in the Appendix.

B. Bank–County–Product–Quarter Deposit Spread Panel

Retail deposit interest rate data are obtained from the S&P Global RateWatch database, which provides weekly rates at the branch level for multiple deposit products, covering approximately 80% of FDIC-insured branches as of 2017.

To examine bank responses to deposit outflows, the analysis constructs a bank–county–product–quarter deposit spread panel. The RateWatch data are merged with FDIC SOD using branch identifiers, focusing on the most popular deposit products across all U.S. branches: certificates of deposit (CDs) with $10,000 and $25,000 accounts and maturities of 6, 12, 18, 24, 36, 48, and 60 months, as well as money market deposit accounts (MMDAs) with $10,000 and $25,000 accounts. Quarterly average rates are calculated for each bank–branch–product combination. Following evidence of rate uniformity within counties (e.g., Radecki (1998), Heitfield (1999), Biehl (2002), Heitfield and Prager (2004), Park and Pennacchi (2008), Avramidis and Pennacchi (2025), Begenau and

[8]Exits include branch closures, relocations to different counties, and changes in branch type (e.g., from retail to drive-through).

[9]The analysis controls for the Wells Fargo cross-selling scandal, publicly known in late 2016. Robustness tests excluding Wells Fargo, as reported in Table 3 and Table IA.3 in the Supplementary Material, yield statistically and economically significant results.

Stafford (2025), and Granja and Paixao (2026)), rates from reporting branches are assigned to nonreporting branches of the same bank in the same county. Bank–county–product deposit-weighted average rates are then derived. Deposit spreads are computed as the difference between these rates and corresponding quarterly averaged U.S. Treasury yields matched to the product maturities, sourced from Federal Reserve Economic Data (FRED). The variable, ΔDEPOSIT_SPREAD, is the quarterly change in the spread, yielding a panel spanning 2017–2018.[10]

C. Bank–County–Year CRA Loan Panel

Annual CRA loan origination data are obtained from the Federal Financial Institutions Examination Council (FFIEC) Community Reinvestment Act (CRA) disclosures, which report small business loans with commitment amounts below $1 million originated by institutions with assets exceeding $1 billion, aggregated at the county level.

To examine how deposit outflows affect bank lending, the analysis constructs a bank–county–year CRA loan panel. The CRA data are merged with Call Reports using the regulatory identifier. To mitigate outliers, the panel retains only bank–county pairs where the bank originates more than one loan. The variable, CRA_LOANS, is computed as the total CRA loan amount originated by the bank in the county, yielding a panel spanning 2015–2019.

D. Gun Lenders, Anti-Gun Lenders, and Control Lenders

Gun lenders are defined using three criteria: i) banks that financed major firearms manufacturers around the time of the 2018 Parkland shooting,[11] ii) banks that did not adopt anti-gun policies afterward, and iii) banks that received media attention for these ties. The third criterion addresses information asymmetry, as depositors generally lack access to detailed bank asset portfolios (Freixas and Rochet (2008)).[12]

Using DealScan data on historical loan contracts, the analysis identifies 31 banks that extended $3.2 billion in loans and facilities to six major firearms manufacturers around the time of the shooting. Four adopted anti-gun policies afterward: Bank of America Corporation, Berkshire Hills Bancorp, and Fifth Third

[10]The deposit spread panel is restricted to 2017–2018 to balance the pre- and postperiods with respect to interest rate environments. For example, the 12-month Treasury yield peaked in late 2018 and declined in 2019. These asymmetric movements could differentially affect banks of different sizes—large banks tend to exhibit stickier deposit rates (d'Avernas, Eisfeldt, Huang, Stanton, and Wallace (2023))—and potentially confound the interpretation of observed spread reductions as responses to political value misalignment rather than responses to monetary policy shifts.

[11]According to a 2016 Mother Jones report, the top manufacturers—Sturm Ruger, Remington Outdoor (formerly Freedom Group), Smith & Wesson, Glock, Sig Sauer, O.F. Mossberg & Sons, Savage Arms (owned by Vista Outdoor), Springfield Armory, Beretta, and Taurus International—produced over two-thirds of U.S. firearms. See "Mother Jones: Fully Loaded-Inside the Shadowy World of America's 10 Biggest Gunmakers," https://www.motherjones.com/politics/2016/06/fully-loaded-ten-biggest-gun-manufacturers-america/.

[12]Table IA.7 in the Supplementary Material shows that the main results are robust to including gun lenders without media attention, with effects concentrated among those with attention, consistent with information asymmetry.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 1

Lists of Gun Lenders and Anti-Gun Lenders

Table 1 lists gun lenders and anti-gun lenders, as defined in Section II.D. Panel A lists gun lenders that received media attention following the 2018 Parkland shooting and Panel B lists gun lenders without media attention. Panel C lists anti-gun lenders that adopted anti-gun policies following the shooting.

Panel A. Gun Lenders with Media Attention

Wells Fargo & Company	JPMorgan Chase & Co	U.S. Bancorp
PNC Financial Services	BB&T Corporation	Regions Financial Corporation
Toronto-Dominion Bank	Citizens Financial Group	Bank of Montreal
Zions Bancorporation	People's United Financial	Mitsubishi UFJ Financial Group
Northern Trust Corporation	Stifel Financial Corp	Morgan Stanley

Panel B. Gun Lenders without Media Attention

AmBank Holdings	Associated Banc-Corp	BNP Paribas
Bear State Financial Holdings	First Busey Corporation	Deutsche Bank AG
Southern Bancorp	Smith & Hood Holding Company	Midland States Bancorp
Raymond James Financial	Royal Bank of Canada	Woodforest Financial Group

Panel C. Anti-Gun Lenders

Workers United	Bank of America Corporation	Berkshire Hills Bancorp
Citigroup	Capital One Financial Corporation	Fifth Third Bancorp
Lauritzen Corporation		

Bancorp ceased business with the gun industry, while Capital One Financial Corporation restricted firearms-related transactions. Of the remaining 27, 15 received media attention from outlets such as ThinkProgress and Guns Down America. These 15 gun lenders, which are the focus of the main analysis, are listed in Panel A of Table 1. The 12 without media attention are listed in Panel B. Panel C lists seven banks that adopted anti-gun policies, including the aforementioned four and three additional banks that adopted anti-gun policies without identified firearms manufacturer financing.

Control lenders are banks active in DealScan around the time of the shooting, but without firearms manufacturer financing and anti-gun policies, yielding 351 banks. This selection minimizes confounding differences in observable lending characteristics between gun lenders and control lenders.

E. Political Values of Depositors

Depositor political values are measured using 2015–2016 individual campaign donation data from the Federal Election Commission, focusing on donations to Political Action Committees (PACs) affiliated with the two major U.S. political parties that received at least $20 million in total donations (Meeuwis et al. (2022)). For each zip code, the number of donors to each party is counted, excluding zip codes with fewer than 10 donors to reduce noise from areas with limited representation. The ratio of Democratic donors to total donors is then calculated for each zip code. The variable, DEMOCRAT_SHARE, is constructed as the deposit-weighted average of these zip-code ratios across bank branches in the county, using branch deposit holdings as of June 30, 2017, as weights.

For robustness, an alternative measure is constructed using county-level vote shares from the 2016 U.S. presidential election. The variable, $\text{DEMOCRAT_SHARE}_{\text{ELECTION}}$, is defined as votes for the Democratic candidate divided by total votes for the two major-party candidates. As shown in Table IA.8 in the Supplementary

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

Material, the main results remain robust to this measure, though statistical and economic significance is attenuated. This reflects the coarser granularity of $\text{DEMOCRAT_SHARE}_{\text{ELECTION}}$, which masks substantial within-county variation linked to bank branch locations. For example, in Cook County, Illinois—one of the most populous U.S. counties—$\text{DEMOCRAT_SHARE}_{\text{ELECTION}}$ is 78.1%, whereas the baseline DEMOCRAT_SHARE ranges from 35.3% to 94.4% across banks. Similarly, in Harris County, Texas, $\text{DEMOCRAT_SHARE}_{\text{ELECTION}}$ is 56.5%, but the baseline DEMOCRAT_SHARE varies from 38.3% to 75.9%. These examples highlight the advantages of the baseline DEMOCRAT_SHARE in capturing localized political heterogeneity relevant to depositor behavior.

F. Political Leanings of Gun Lenders

Political leanings of gun lenders are measured using 2015–2016 PAC donation data from the Federal Election Commission. The variable, REPUBLICAN_SHARE, is computed as PAC donations to Republican politicians divided by total donations to politicians from the two major parties. As shown in Table IA.2 in the Supplementary Material, gun lenders contributed an average of $206,210 to Republican politicians and $89,296 to Democratic politicians, yielding an average REPUBLICAN_SHARE of 0.658. These figures reveal a pronounced Republican lean among gun lenders.

G. Cross-Sectional Variables

To further strengthen the identification and address potential unobserved heterogeneity, the analysis constructs several cross-sectional variables capturing variation in depositor demographics, switching frictions, gun control salience, and attitudes toward gun control.

1. Depositor Demographics

Demographic characteristics may correlate with political values while independently influencing depositor behavior. Pew Research Center surveys document substantial partisan divides on gun policy, with age and education also associated with differences in views, though political affiliation remains the dominant factor.[13] To isolate the role of political values, three county-level variables are constructed using 2017 data. The variable, AGE_UNDER_65, is the proportion of the population under age 65, obtained from the U.S. Census Bureau. The variable, COLLEGE, is the proportion of individuals with a bachelor's degree or higher, obtained from the U.S. Census Bureau. The variable, INCOME, is per capita income, derived from the U.S. Bureau of Economic Analysis.

2. Switching Frictions

Switching frictions may attenuate depositor responses to political value misalignment. Two complementary measures are constructed using SOD branch locations and deposit holdings as of June 30, 2017. The shortest distance from each gun lender branch to the nearest control lender branch in the same county is calculated. The variable, $\text{SWITCHING_FRICTION}_{\text{BANK-COUNTY}}$, is the deposit-weighted

[13] See "Pew Research Center: Key facts about Americans and guns," https://www.pewresearch.org/short-reads/2024/07/24/key-facts-about-americans-and-guns/.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

average of these distances across gun lender branches in the county. The variable, $\text{SWITCHING_FRICTION}_{\text{COUNTY}}$, is the deposit-weighted average of $\text{SWITCHING_FRICTION}_{\text{BANK-COUNTY}}$ across gun lenders in the county. Market concentration, which is closely related to switching frictions and influences depositor behavior through deposit rate sensitivity (Klemperer (1995), Drechsler, Savov, and Schnabl (2017)), is captured by the county-level Herfindahl–Hirschman Index. The variable, HHI, is the sum of squared deposit market shares of all branches operating in the county as of June 30, 2017.

3. Gun Control Salience and Attitudes Toward Gun Control

Attitudes toward gun control may be influenced by factors beyond political values and demographics. For example, Luca, Malhotra, and Poliquin (2020) document increased support for gun control following exposure to mass shootings. Moreover, the Parkland shooting sparked widespread social media activism, with the "Never Again MSD" movement rapidly gaining traction and the hashtag, #NeverAgain, going viral. To capture variation in salience and attitudes, two proxies are constructed. The variable, MASS_SHOOTING, is an indicator equal to 1 for counties that experienced at least one public mass shooting between 1998 and 2017, identified using data from USA Today, the Washington Post, Mother Jones, and the Stanford Mass Shootings in America database; 71 counties meet this criterion, as illustrated in Figure 1. The variable, SCI, measures social connectedness to Broward County, Florida, the site of the Parkland shooting, using the Facebook Social Connectedness Index, as illustrated in Figure 2; it is standardized

FIGURE 1

U.S. Counties with Public Mass Shootings, 1998–2017

Figure 1 plots U.S. counties that experienced at least one public mass shooting between 1998 and 2017. Shaded counties are identified using data compiled from USA Today, the Washington Post, Mother Jones, and the Stanford Mass Shootings in America database.

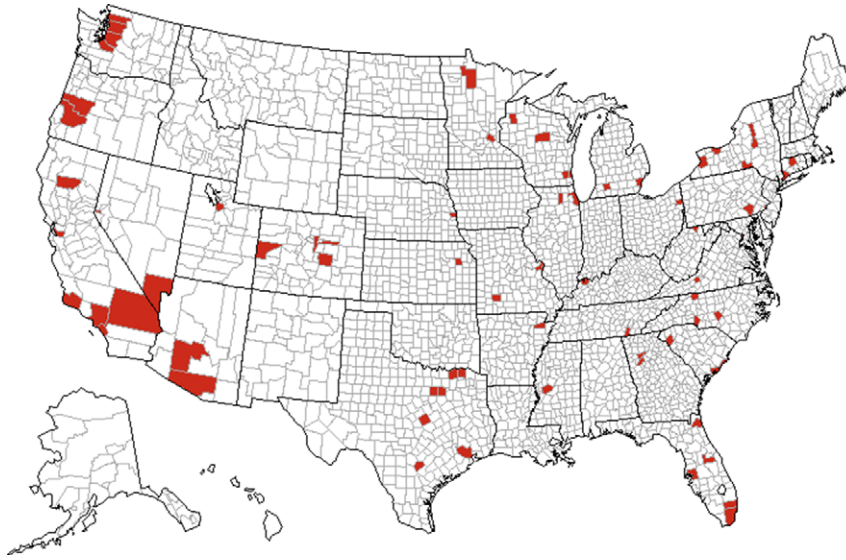
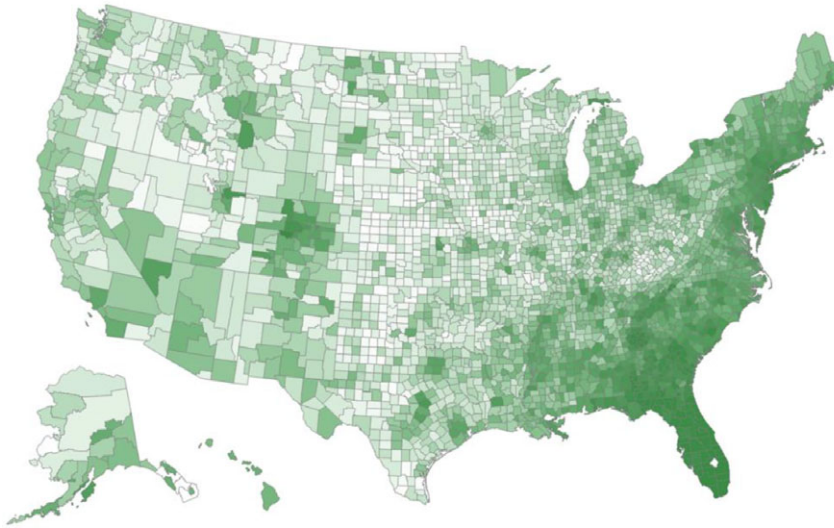


FIGURE 2

Social Connectedness to Broward County, Florida

Figure 2 plots U.S. counties shaded by their social connectedness to Broward County, Florida, the site of the Parkland shooting. Social connectedness is measured using the Facebook Social Connectedness Index. Darker shades indicate higher connectedness.



to mean 0 and standard deviation 1. To control for geographic proximity, the variable, PHYSICAL_DISTANCE, measures the distance between county centroids and Broward County.

III. Summary Statistics

Table 2 reports summary statistics for the main variables. More detailed statistics, including mean, standard deviation, median, minimum, and maximum, are provided in Table IA.1 in the Supplementary Material.

Panel A presents summary statistics for the bank–county–year deposit growth panel described in Section II.A. Gun lenders are larger than control lenders, with average assets of $853 billion and 7.3 branches per county compared to $29 billion and 4.6 branches for control lenders. Equal-weighted Democratic exposure is comparable at approximately 0.49 for both lenders. On a deposit-weighted basis, however, gun lenders exhibit higher exposure at 0.65 than control lenders at 0.54, as shown in Table IA.10 in the Supplementary Material. These differences raise potential endogeneity concerns, as unobserved factors could jointly influence bank characteristics and depositor composition. The analysis addresses these concerns by matching each gun lender to up to five nearest-neighbor control lenders drawn from the pool of DealScan-active lenders around the Parkland shooting, using 2017 bank assets, number of branches, profitability, and deposit-weighted Democratic exposure. Table IA.10 in the Supplementary Material confirms balance on observables in the

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 2

Summary Statistics

Table 2 reports summary statistics for the main variables. Panels A, B, C, and D present statistics for the bank–county–year deposit growth panel, the bank–county–product–quarter deposit spread panel for $10,000 account size, the bank–county–product–quarter deposit spread panel for $25,000 account size, and the bank–county–year CRA loan panel, respectively, as described in Section II. Variable definitions and more detailed summary statistics are provided in the Appendix and Table IA.1 in the Supplementary Material.

	All		Gun Lenders		Control Lenders	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Panel A. Bank–County–Year Deposit Growth Panel						
Bank–County Level						
DEPOSIT_GROWTH	0.071	0.166	0.066	0.149	0.075	0.180
NUMBER_OF_BANK_BRANCHES	5.853	11.38	7.300	15.02	4.557	6.322
DEMOCRAT_SHARE	0.490	0.236	0.488	0.222	0.492	0.247
LOW_SWITCHING_FRICTION	0.236	0.425	0.500	0.500	0.000	0.000
Bank Level						
WELLS_FARGO_SCANDAL	0.023	0.149	0.048	0.214	0.000	0.000
ASSETS	0.418	0.675	0.853	0.778	0.029	0.039
DOMESTIC_DEPOSITS	0.283	0.439	0.573	0.496	0.023	0.030
County Level						
$\text{DEMOCRAT_SHARE}_{\text{ELECTION}}$	0.441	0.174	0.429	0.169	0.452	0.177
AGE_UNDER_65	0.833	0.045	0.829	0.048	0.836	0.041
COLLEGE	0.294	0.117	0.284	0.113	0.302	0.119
INCOME	48.37	16.41	47.13	15.39	49.48	17.19
LOW_SWITCHING_FRICTION	0.478	0.500	0.425	0.494	0.525	0.499
HHI	0.323	0.143	0.332	0.140	0.315	0.145
MASS_SHOOTING	0.098	0.298	0.076	0.265	0.118	0.323
SCI	0.000	1.000	−0.002	0.951	0.002	1.042
PHYSICAL_DISTANCE/1000	1.197	0.652	1.178	0.673	1.215	0.633
POPULATION	454.4	950.8	334.6	697.0	561.7	1120
PER_CAPITA_INCOME	47.08	15.72	45.88	14.82	48.16	16.40
POPULATION_GROWTH	0.659	1.072	0.711	1.095	0.613	1.047
UNEMPLOYMENT_RATE	4.964	1.655	5.000	1.755	4.932	1.559
Observations	33,091		15,637		17,454	
Panel B. Bank–County–Product–Quarter Deposit Spread Panel ($10,000 Account Size)						
Bank–County Level						
ΔDEPOSIT_SPREAD (MM)	0.235	0.076	0.240	0.065	0.230	0.086
ΔDEPOSIT_SPREAD (6M)	0.227	0.108	0.232	0.092	0.220	0.123
ΔDEPOSIT_SPREAD (12M)	0.206	0.152	0.209	0.151	0.203	0.154
ΔDEPOSIT_SPREAD (24M)	0.187	0.196	0.192	0.186	0.182	0.206
ΔDEPOSIT_SPREAD (36M)	0.167	0.213	0.167	0.215	0.166	0.211
ΔDEPOSIT_SPREAD (48M)	0.147	0.208	0.146	0.207	0.148	0.209
ΔDEPOSIT_SPREAD (60M)	0.123	0.224	0.122	0.222	0.125	0.225
NUMBER_OF_BANK_BRANCHES	5.778	10.948	6.663	13.662	4.787	6.582
DEMOCRAT_SHARE	0.454	0.249	0.444	0.242	0.464	0.256
County Level						
HHI	0.386	0.224	0.405	0.227	0.365	0.219
POPULATION	357.8	811.6	259.6	586.5	467.6	993.8
PER_CAPITA_INCOME	45.57	14.25	44.48	13.58	46.80	14.88
POPULATION_GROWTH	0.561	1.143	0.624	1.200	0.491	1.072
UNEMPLOYMENT_RATE	4.768	1.509	4.800	1.605	4.732	1.392
Observations	40,948		21,616		19,332	
Panel C. Bank–County–Product–Quarter Deposit Spread Panel ($25,000 Account Size)						
Bank–County Level						
ΔDEPOSIT_SPREAD (MM)	0.231	0.081	0.238	0.065	0.226	0.093
ΔDEPOSIT_SPREAD (6M)	0.225	0.111	0.235	0.088	0.216	0.129
ΔDEPOSIT_SPREAD (12M)	0.211	0.138	0.227	0.103	0.196	0.164
ΔDEPOSIT_SPREAD (24M)	0.191	0.185	0.209	0.142	0.173	0.217
ΔDEPOSIT_SPREAD (36M)	0.173	0.197	0.188	0.171	0.160	0.219
ΔDEPOSIT_SPREAD (48M)	0.156	0.201	0.169	0.182	0.142	0.216
ΔDEPOSIT_SPREAD (60M)	0.132	0.222	0.145	0.210	0.119	0.232
NUMBER_OF_BANK_BRANCHES	5.356	10.423	6.245	13.559	4.508	5.957
DEMOCRAT_SHARE	0.435	0.252	0.429	0.245	0.441	0.259
County Level						
HHI	0.398	0.233	0.419	0.234	0.378	0.231
POPULATION	344.8	789.4	237.3	552.2	447.2	951.4

(continued on next page)

TABLE 2 (continued)
Summary Statistics

	All		Gun Lenders		Control Lenders	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Panel C. Bank–County–Product–Quarter Deposit Spread Panel ($25,000 Account Size) (Continued)						
PER_CAPITA_INCOME	44.76	13.59	43.49	12.49	45.97	14.46
POPULATION_GROWTH	0.534	1.138	0.614	1.194	0.458	1.076
UNEMPLOYMENT_RATE	4.766	1.462	4.761	1.490	4.770	1.434
Observations	30,341		14,807		15,534	
Panel D. Bank–County–Year CRA Loan Panel						
Bank–County Level						
AMOUNT_OF_CRA_LOANS	3.419	8.279	3.516	8.663	3.350	7.991
NUMBER_OF_CRA_LOANS	48.15	115.0	68.61	145.2	33.48	84.04
Observations	153,856		64,280		89,576	

matched sample. The main results remain robust, as shown in Tables IA.11 and IA.12 in the Supplementary Material.

Panels B and C report summary statistics for the bank–county–product–quarter deposit spread panel described in Section II.B, separately for $10,000 and $25,000 account sizes. Quarterly changes in deposit spreads decline with maturity, averaging approximately 23 basis points for MMDAs and 13 basis points for 60-month CDs. Gun lenders operate in slightly more concentrated markets, with an average HHI of 0.41 compared to 0.37 for control lenders. This measure of market concentration, which may correlate with depositor political values and influence depositor behavior through deposit rate sensitivity, is controlled for in the analysis.

Panel D summarizes the bank–county–year CRA loan panel described in Section II.C. Gun lenders originate more CRA loans per county on average, at 69 versus 33 for control lenders, but total loan amounts are similar at $3.5 million versus $3.4 million per county, suggesting that gun lenders extend smaller individual loans.

IV. Empirical Methodologies and Results

A. Depositor Movements Against Gun Lenders

The analysis exploits the 2018 Parkland shooting and subsequent activism as an exogenous increase in public awareness of banks' ties to the gun industry. The Parkland shooting is well suited for identification because it was the first high-profile shooting to trigger targeted activism against gun lenders, distinguishing it from prior episodes of gun violence that generated comparable media attention but no similar pressure on financial intermediaries. For example, the 2012 Sandy Hook school shooting—which received widespread media attention—produced no comparable effects on annual deposit growth of gun lenders, as reported in Table IA.5 in the Supplementary Material. These results are consistent with its aftermath being characterized by legislative campaigns and public awareness efforts against gun violence rather than targeted pressure on banks' relationships with the gun industry.

The baseline difference-in-differences specification, estimated on the bank–county–year deposit growth panel described in Section II.A, is

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 3

Effect of Depositor Movements Against Gun Lenders on Deposit Growth

Table 3 presents difference-in-differences estimates from equation (1), where the dependent variable is DEPOSIT_GROWTH. GUN_LENDER equals 1 for gun lenders, as defined in Section II.D. POST equals 1 for 2018 or later. Bank and county controls are described in Section IV.A. Variable definitions are provided in the Appendix. Standard errors (in parentheses) are heteroscedasticity-robust and clustered by bank–state. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Bank–County Deposit Growth (%)		
	Full Sample		Excl. Wells Fargo
	1	2	3
GUN_LENDER × POST	−0.016***	−0.018***	−0.017***
	(0.005)	(0.006)	(0.006)
Bank controls	Yes	Yes	Yes
County controls	Yes	No	No
Bank–county FEs	Yes	Yes	Yes
State-year FEs	Yes	No	No
County–year FEs	No	Yes	Yes
No. of obs.	33,091	33,091	28,553
R^2	0.278	0.418	0.421

$$(1)\quad \text{DEPOSIT_GROWTH}_{i,c,t} = \beta_1 \text{GUN_LENDER}_i \times \text{POST}_t + \beta_2 \mathbf{X}_{i,c,t} + \eta_{i,c} + \delta_{c,t} + \varepsilon_{i,c,t}$$

where $\text{DEPOSIT_GROWTH}_{i,c,t}$ is the annual percentage change in deposits of bank i in county c in year t. GUN_LENDER_i equals 1 for gun lenders, as defined in Section II.D. POST_t equals 1 for 2018 and later. The vector $\mathbf{X}_{i,c,t}$ includes bank and county control variables. Bank controls comprise 1-year lagged values of log bank assets and log deposits, the log number of bank branches in the county, and indicators for bank type and the Wells Fargo scandal. County controls include 1-year lagged values of log population, log per capita income, population growth, and unemployment rate. County controls are omitted when county–year fixed effects are included. Bank–county fixed effects $\eta_{i,c}$ absorb time-invariant bank–county characteristics. County–year fixed effects $\delta_{c,t}$ control for time-varying local economic conditions that influence local deposit demand, thereby mitigating concerns that unobserved changes in local deposit demand drive the results. Standard errors are heteroscedasticity-robust and clustered by bank–state.

Table 3 reports baseline estimates. Column 1 includes bank–county and state-year fixed effects. Gun lenders experience 1.6 percentage points lower annual deposit growth following the shooting. Column 2 adds county–year fixed effects, yielding a 1.8 percentage point decline.[14] Relative to the preperiod mean of 7.2%

[14]With county–year fixed effects, the estimate reflects relative deposit growth of gun lenders within each local market. If depositors fully reallocate funds within the county from gun to control lenders (a zero-sum shift), the coefficient overstates the magnitude of net deposit losses for gun lenders by a factor of 2, as the relative decline is double the actual net outflow; a conservative lower-bound estimate of the net effect would thus be half the reported magnitude, or 0.9 percentage points. Table IA.4 in the Supplementary Material suggests that within-county reallocation is the more likely mechanism than outflows to alternative investments such as money market funds or out-of-county banks. It compares county-level deposit growth across counties with varying gun lender presence, finding no significant relationship between gun lender share and county deposit growth—even among Democratic-leaning

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

for gun lenders, this represents a 25% reduction. Column 3 excludes Wells Fargo, confirming that the results are not driven by its cross-selling scandal.

The economic magnitude is substantial. The average gun lender holds approximately $431 million in deposits per county. A 1.8 percentage point slowdown implies annual losses of roughly $7.76 million per county. Across an average of 274 counties per gun lender, aggregate annual losses reach $2.13 billion per gun lender—more than 20 times their average exposure to the gun industry of $103 million in lending. Under the conservative lower-bound estimate of 0.9 percentage points, aggregate annual losses amount to approximately $1.07 billion per gun lender—still more than 10 times their average gun industry exposure.

Table IA.3 in the Supplementary Material reports dynamic estimates and confirms parallel pretrends. Deposit growth differences between gun lenders and control lenders are statistically indistinguishable from 2014 to 2017. Following the shooting, growth declines by 1.8 percentage points in 2018 and 1.9 percentage points in 2019 before fading in 2020, consistent with pandemic-related disruptions to deposit markets (Levine, Lin, Tai, and Xie (2021)).

B. Politically Polarized Movements

1. Political Values of Depositors

Consistent with sharp partisan divides on gun policy, deposit outflows from gun lenders are expected to be more pronounced in Democratic-leaning markets.[15] To test this prediction, the analysis augments the baseline difference-in-differences specification with interactions involving DEMOCRAT_SHARE defined in Section II.E:

$$\begin{aligned}(2)\quad \text{DEPOSIT_GROWTH}_{i,c,t} = {} & \beta_1 \text{GUN_LENDER}_i \times \text{DEMOCRAT_SHARE}_{i,c} \\ & \times \text{POST}_t + \beta_2 \text{DEMOCRAT_SHARE}_{i,c} \times \text{POST}_t \\ & + \beta_3 \mathbf{X}_{i,c,t} + \eta_{i,c} + \delta_{i,t} + \varepsilon_{i,c,t}\end{aligned}$$

where $\text{DEPOSIT_GROWTH}_{i,c,t}$ is the annual percentage change in deposits of bank i in county c in year t. GUN_LENDER_i equals 1 for gun lenders, as defined in Section II.D. POST_t equals 1 for 2018 and later. $\text{DEMOCRAT_SHARE}_{i,c}$ is the exposure of bank i to Democratic-leaning depositors in county c, as defined in Section II.E. The vector $\mathbf{X}_{i,c,t}$ includes a bank control—the log number of bank branches in the county—and county controls, which consists of interactions of HHI with the treatment indicators and 1-year lagged values of log population, log per capita income, population growth, and the unemployment rate. Bank–county fixed effects $\eta_{i,c}$ absorb time-invariant bank–county characteristics. Bank–year fixed

counties, where deposit outflows from gun lenders are most pronounced. These findings are consistent with depositors primarily reallocating funds from gun to control lenders within the same county rather than withdrawing into alternative investments or out-of-county banks.

[15]The Pew Research Center documents wide partisan divides on gun policy, with Democrats far more likely than Republicans to prioritize gun control over gun rights. See "Pew Research Center: Gun Policy Remains Divisive, But Several Proposals Still Draw Bipartisan Support," https://www.pewresearch.org/politics/2018/10/18/gun-policy-remains-divisive-but-several-proposals-still-draw-bipartisan-support/.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 4

Heterogeneous Effects by Depositor Political Values and Demographics

Table 4 presents triple difference-in-differences estimates from equation (2), where the dependent variable is DEPOSIT_GROWTH. GUN_LENDER equals 1 for gun lenders, as defined in Section II.D. POST equals 1 for 2018 or later. DEMOCRAT_SHARE is the proportion of Democratic-leaning depositors at the bank–county level, as defined in Section II.E. AGE_UNDER_65 is the proportion of the county population under age 65, COLLEGE is the proportion of individuals with a bachelor's degree or higher, and LOG_INCOME is log per capita income, all variables at the county level as of 2017, as defined in Section II.G.1. Low-order terms include interactions of DEMOCRAT_SHARE, AGE_UNDER_65, COLLEGE, and LOG_INCOME, with POST. Bank and county controls are described in Section IV.B.1. Variable definitions are provided in the Appendix. Standard errors (in parentheses) are heteroscedasticity-robust and clustered by bank–state. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Bank–County Deposit Growth (%)				
	1	2	3	4	5
GUN_LENDER × DEMOCRAT_SHARE × POST	−0.044**				−0.044**
	(0.020)				(0.021)
GUN_LENDER × AGE_UNDER_65 × POST		0.114			0.127
		(0.110)			(0.118)
GUN_LENDER × COLLEGE × POST			−0.066*		0.066
			(0.040)		(0.063)
GUN_LENDER × LOG_INCOME × POST				−0.048**	−0.058**
				(0.019)	(0.028)
Low-order terms	Yes	Yes	Yes	Yes	Yes
Bank controls	Yes	Yes	Yes	Yes	Yes
County controls	Yes	Yes	Yes	Yes	Yes
Bank–county FEs	Yes	Yes	Yes	Yes	Yes
Bank–year FEs	Yes	Yes	Yes	Yes	Yes
No. of obs.	32,625	32,625	32,625	32,625	32,625
R^2	0.332	0.332	0.332	0.332	0.332

effects $\delta_{i,t}$ control for time-varying bank characteristics. Standard errors are heteroscedasticity-robust and clustered by bank–state.

Table 4 reports estimates of heterogeneity in deposit outflows from gun lenders by depositor political values and demographics. Column 1 shows that outflows are significantly larger in markets with higher DEMOCRAT_SHARE. A 1-standard-deviation increase in DEMOCRAT_SHARE (0.24) is associated with an additional 1.1 percentage point reduction in annual deposit growth following the shooting.

Columns 2–4 examine heterogeneity along individual demographic dimensions discussed in Section II.G.1. No significant heterogeneity is observed for age in column 2. Columns 3 and 4, by contrast, exhibit significant negative heterogeneity for education and income. These results raise the possibility that education and income correlate with depositor political values and could confound the interpretation of political values as the primary driver.

Column 5 addresses this concern by including all measures simultaneously. The coefficient on DEMOCRAT_SHARE remains statistically and economically robust, with a magnitude nearly identical to column 1. By contrast, the coefficients on AGE_UNDER_65 and COLLEGE are insignificant, suggesting that different views on gun policy by age and education, as evidenced in surveys, do not translate into independent variation in depositor responses to gun lenders. Notably, the coefficient on LOG_INCOME retains significance with a slightly larger magnitude than in column 4, presenting an additional channel contributing to depositor responses to gun lenders. Taken together, these results suggest that political values are the primary driver of heterogeneous depositor responses, amplified by income levels.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

2. Political Leanings of Gun Lenders

To examine whether deposit outflows from gun lenders are stronger for Republican-leaning gun lenders, the analysis classifies the gun lenders into high and low groups based on the median REPUBLICAN_SHARE (0.637), as defined in Section II.F. The following difference-in-differences specification is estimated:

$$\begin{aligned}(3)\qquad \text{DEPOSIT_GROWTH}_{i,c,t} = {} & \beta_1 \text{HIGH_REP_PAC}_i \times \text{POST}_t \\ & + \beta_2 \text{LOW_REP_PAC}_i \times \text{POST}_t \\ & + \beta_3 \mathbf{X}_{i,c,t} + \eta_{i,c} + \delta_{c,t} + \varepsilon_{i,c,t}\end{aligned}$$

where $\text{DEPOSIT_GROWTH}_{i,c,t}$ is the annual percentage change in deposits of bank i in county c in year t. HIGH_REP_PAC_i equals 1 for gun lenders with REPUBLICAN_SHARE above the median, and LOW_REP_PAC_i equals 1 for those at or below the median. POST_t equals 1 for 2018 and later. The vector $\mathbf{X}_{i,c,t}$ includes bank control variables—1-year lagged values of log bank assets and log deposits, the log number of bank branches in the county, and indicators for bank type and the Wells Fargo scandal. Bank–county fixed effects $\eta_{i,c}$ absorb time-invariant bank–county characteristics. County–year fixed effects $\delta_{c,t}$ control for time-varying local economic conditions that influence local deposit demand, thereby mitigating concerns that unobserved changes in local deposit demand drive the results. Standard errors are heteroscedasticity-robust and clustered by bank–state.

Table 5 reports estimates of heterogeneity in deposit outflows from gun lenders by the political leanings of gun lenders. Panel A presents results for the full sample. Column 1 includes all gun lenders and shows that the decline in annual deposit growth following the shooting is concentrated among HIGH_REP_PAC gun lenders at 2.7 percentage points, while the estimate for LOW_REP_PAC gun lenders is insignificant. Columns 2 and 3 interact the treatment with DEMOCRAT_SHARE while restricting the set of gun lenders to HIGH_REP_PAC gun lenders in column 2 and LOW_REP_PAC gun lenders in column 3. In column 2, a 1-standard-deviation increase in DEMOCRAT_SHARE (0.24) is associated with an additional 1.5 percentage point reduction in annual deposit growth for HIGH_REP_PAC gun lenders. Column 3 shows no significant heterogeneity across depositor political values for LOW_REP_PAC gun lenders.

A potential concern is that REPUBLICAN_SHARE may be endogenous to geographic ties, as firms tend to direct PAC contributions to representatives with connections to their operations (Wright (1989)). REPUBLICAN_SHARE could thus capture regional characteristics that influence depositor behavior rather than the political leanings of gun lenders. For instance, gun lenders operating in red states may exhibit higher REPUBLICAN_SHARE because local House members are Republican, and these regional factors could drive depositor responses to gun lenders. This concern is mitigated in two ways. First, gun lenders have a high mean REPUBLICAN_SHARE of 0.66, as reported in Table IA.2 in the Supplementary Material, yet their deposit-weighted Democratic exposure is 0.65, as reported in Table IA.10 in the Supplementary Material. This contrast indicates that PAC allocations of gun lenders are not tightly linked to geographic ties—that is, political compositions of their depositor bases. Second, Panel B addresses the concern by

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 5

Heterogeneous Effects by Political Leanings of Gun Lenders.

Table 5 presents difference-in-differences estimates from equation (1) in column 1 and triple difference-in-differences estimates from equation (2) in columns 2 and 3. Panel A reports results for all gun lenders; Panel B for gun lenders excluding those located in red states, as defined in Section IV.B.2. The dependent variable is DEPOSIT_GROWTH. GUN_LENDER equals 1 for gun lenders, as defined in Section II.D. POST equals 1 for 2018 or later. HIGH_REP_PAC (LOW_REP_PAC) equals 1 for gun lenders with REPUBLICAN_SHARE above (at or below) the sample median of 0.637. DEMOCRAT_SHARE is the proportion of Democratic-leaning depositors at the bank–county level, as defined in Section II.E. Columns 2 and 3 restrict the set of gun lenders to HIGH_REP_PAC gun lenders and LOW_REP_PAC gun lenders, as specified in each column header. Bank and county controls are described in Section IV.B.2 for column 1 and Section IV.B.1 for columns 2 and 3. Variable definitions are provided in the Appendix. Standard errors (in parentheses) are heteroscedasticity-robust and clustered by bank–state. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Bank–County Deposit Growth (%)		
	All	High_REP_PAC Gun Lenders	LOW_REP_PAC Gun Lenders
	1	2	3
Panel A. Full Sample			
HIGH_REP_PAC × POST	−0.027***		
	(0.006)		
LOW_REP_PAC × POST	0.002		
	(0.008)		
GUN_LENDER × DEMOCRAT_SHARE × POST		−0.064***	0.000
		(0.022)	(0.026)
DEMOCRAT_SHARE × POST		−0.002	−0.010
		(0.014)	(0.015)
No. of obs.	33,091	28,299	21,329
R^2	0.418	0.336	0.364
Panel B. Excl. Red State Gun Lenders			
HIGH_REP_PAC × POST	−0.020***		
	(0.007)		
LOW_REP_PAC × POST	0.001		
	(0.008)		
GUN_LENDER × DEMOCRAT_SHARE × POST		−0.071***	0.000
		(0.025)	(0.026)
DEMOCRAT_SHARE × POST		−0.005	−0.010
		(0.014)	(0.015)
Bank controls	Yes	Yes	Yes
County controls	No	Yes	Yes
Bank–county FEs	Yes	Yes	Yes
Bank–year FEs	No	Yes	Yes
County–year FEs	Yes	No	No
No. of obs.	26,706	22,977	21,329
R^2	0.434	0.360	0.364

excluding gun lenders headquartered in red states where Republicans won a majority of 2016 House seats: BB&T Corporation, PNC Financial Services, Regions Financial Corporation, Stifel Financial Corp, and Zions Bancorporation, all classified as HIGH_REP_PAC gun lenders in Panel A. The results remain robust, with HIGH_REP_PAC gun lenders experiencing a 2 percentage point decline in annual deposit growth in column 1 and significant heterogeneity based on depositor political values in column 2. These results suggest that political value misalignment between depositors and gun lenders drives depositor movements.

C. Cross-Sectional Tests

To further strengthen identification and address potential unobserved heterogeneity, the analysis estimates the triple difference-in-differences specification

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

from equation (2) along dimensions related to switching frictions, gun control salience, and attitudes toward gun control, using the cross-sectional variables defined in Section II.G.

1. Switching Frictions

Consistent with evidence that switching frictions represent a significant barrier to shifting deposits across banks (Kiser (2002)), deposit outflows from gun lenders are expected to be larger in markets with lower switching frictions.

To test this prediction, the analysis estimates equation (2) using two complementary indicators in place of DEMOCRAT_SHARE. LOW_SWITCHING_FRICTION$_{\text{BANK-COUNTY}}$ equals 1 if SWITCHING_FRICTION$_{\text{BANK-COUNTY}}$ is at or below its median of 0.84 miles. LOW_SWITCHING_FRICTION$_{\text{COUNTY}}$ equals 1 if SWITCHING_FRICTION$_{\text{COUNTY}}$ is at or below its median of 0.80 miles. Given market concentration is closely related to switching frictions and influences depositor behavior through deposit rate sensitivity (Klemperer (1995), Drechsler et al. (2017)), all specifications control for market concentration by including interactions of HHI with the treatment indicators, as defined in Section II.G.2 and incorporated in the baseline controls from equation (2).

Table 6 reports estimates of heterogeneity in deposit outflows from gun lenders by switching frictions. Columns 1 and 2 show that deposit outflows from

TABLE 6

Heterogeneous Effects by Switching Frictions

Table 6 presents triple difference-in-differences estimates from equation (2), where the dependent variable is DEPOSIT_GROWTH. GUN_LENDER equals 1 for gun lenders, as defined in Section II.D. POST equals 1 for 2018 or later. LOW_SWITCHING_FRICTION$_{\text{BANK–COUNTY}}$ (LOW_SWITCHING_FRICTION$_{\text{COUNTY}}$) equals 1 if SWITCHING_FRICTION$_{\text{BANK–COUNTY}}$ (SWITCHING_FRICTION$_{\text{COUNTY}}$) is at or below the sample median of 0.84 (0.80) miles, as defined in Section II.G.2. DEMOCRAT_SHARE is the proportion of Democratic-leaning depositors at the bank–county level, as defined in Section II.E. HHI is the Herfindahl–Hirschman Index as of 2017, as defined in Section II.G.2. Columns 3 and 4 use subsamples divided based on the median of SWITCHING_FRICTION$_{\text{COUNTY}}$, as specified in each column header. Low-order terms include interactions of LOW_SWITCHING_FRICTION$_{\text{BANK–COUNTY}}$, LOW_SWITCHING_FRICTION$_{\text{COUNTY}}$, DEMOCRAT_SHARE, and HHI, with POST. Bank and county controls are described in Section IV.B.1. Variable definitions are provided in the Appendix. Standard errors (in parentheses) are heteroscedasticity-robust and clustered by bank–state. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Bank–County Deposit Growth (%)			
			Switching Friction	
	Full Sample		Low	High
	1	2	3	4
GUN_LENDER × LOW_SWITCHING_FRICTION$_{\text{BANK–COUNTY}}$ × POST	−0.016***			
	(0.005)			
GUN_LENDER × LOW_SWITCHING_FRICTION$_{\text{COUNTY}}$ × POST		−0.022***		
		(0.008)		
GUN_LENDER × DEMOCRAT_SHARE × Post			−0.062**	−0.025
			(0.030)	(0.025)
GUN_LENDER × HHI × POST	−0.003	−0.006	−0.017	−0.020
	(0.028)	(0.028)	(0.046)	(0.036)
Low-order terms	Yes	Yes	Yes	Yes
Bank controls	Yes	Yes	Yes	Yes
County controls	Yes	Yes	Yes	Yes
Bank–county FEs	Yes	Yes	Yes	Yes
Bank–year FEs	Yes	Yes	Yes	Yes
No. of obs.	32,625	32,625	15,241	16,777
R^2	0.332	0.332	0.351	0.350

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

gun lenders are significantly larger when switching frictions are low. Gun lenders experience an additional 1.6 to 2.2 percentage point reduction in annual deposit growth in markets with low switching friction. Columns 3 and 4 split the sample by the median of $\text{SWITCHING_FRICTION}_{\text{COUNTY}}$. In column 3, when switching frictions are low, a 1-standard-deviation increase in DEMOCRAT_SHARE (0.24) is associated with an additional 1.5 percentage point reduction in annual deposit growth at gun lenders. Column 4 shows no significant heterogeneity based on depositor political values when switching frictions are high. These results indicate that switching frictions attenuate depositor responses to political value misalignment with gun lenders.

2. Gun Control Salience and Attitudes toward Gun Control

Attitudes toward gun control may be influenced by factors beyond political values and demographics. For example, Luca et al. (2020) document increased support for gun control following exposure to mass shootings. Moreover, the Parkland shooting sparked widespread social media activism, with the "Never Again MSD" movement rapidly gaining traction and the hashtag, #NeverAgain, going viral. Deposit outflows from gun lenders are, therefore, expected to be larger in markets where gun control issues exhibit greater salience and stronger supporting attitudes.

To test this prediction, the analysis estimates equation (2) using MASS_SHOOTING and SCI in place of DEMOCRAT_SHARE, as defined in Section II.G.3. All specifications involving SCI include PHYSICAL_DISTANCE to control for geographic proximity.

Table 7 reports estimates of heterogeneity in deposit outflows from gun lenders by gun control salience and attitudes toward gun control. Column 1 reproduces the baseline with DEMOCRAT_SHARE for comparison. Column 2 shows that the negative depositor responses to gun lenders are significantly stronger in markets that experienced at least one public mass shooting between 1998 and 2017, with gun lenders exhibiting an additional 3.1 percentage point reduction in annual deposit growth following the shooting. Column 3 shows significant negative heterogeneity for social connectedness. A 1-standard-deviation increase in SCI is associated with an additional 1.1 percentage point reduction in annual deposit growth for gun lenders. Column 4 includes all measures simultaneously; the coefficients on MASS_SHOOTING and SCI remain statistically and economically significant, as does the coefficient on DEMOCRAT_SHARE. These results indicate that salience and attitudinal factors amplify the role of political values in driving depositor responses to gun lenders.

D. Depositor Movements Against Anti-Gun Lenders

Several banks adopted restrictions on business with the gun industry following the Parkland shooting, as listed in Panel C of Table 1. For example, Bank of America Corporation ceased lending to manufacturers of military-style firearms for civilian use, and Citigroup imposed restrictions on credit to certain firearm

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 7

Heterogeneous Effects by Gun Control Salience and Attitudes

Table 7 presents triple difference-in-differences estimates from equation (2), where the dependent variable is DEPOSIT_GROWTH. GUN_LENDER equals 1 for gun lenders, as defined in Section II.D. POST equals 1 for 2018 or later. DEMOCRAT_SHARE is the proportion of Democratic-leaning depositors at the bank–county level, as defined in Section II.E. MASS_SHOOTING equals 1 for counties that experienced at least one public mass shooting between 1998 and 2017, SCI is standardized social connectedness between Broward County and other counties, and LOG_PHYSICAL_DISTANCE is log distance between Broward County and other counties, as defined in Section II.G.3. Low-order terms include interactions of DEMOCRAT_SHARE, MASS_SHOOTING, SCI, and LOG_PHYSICAL_DISTANCE, with POST. Bank and county controls are described in Section IV.B.1. Variable definitions are provided in the Appendix. Standard errors (in parentheses) are heteroscedasticity-robust and clustered by bank–state. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Bank–County Deposit Growth (%)			
	1	2	3	4
GUN_LENDER × DEMOCRAT_SHARE × POST	−0.044**			−0.038*
	(0.020)			(0.020)
GUN_LENDER × MASS_SHOOTING × POST		−0.031**		−0.024*
		(0.014)		(0.014)
GUN_LENDER × SCI × POST			−0.011***	−0.009***
			(0.003)	(0.003)
GUN_LENDER × LOG_PHYSICAL_DISTANCE × POST			−0.000	0.003
			(0.011)	(0.011)
Low-order terms	Yes	Yes	Yes	Yes
Bank controls	Yes	Yes	Yes	Yes
County controls	Yes	Yes	Yes	Yes
Bank–county FEs	Yes	Yes	Yes	Yes
Bank–year FEs	Yes	Yes	Yes	Yes
No. of obs.	32,625	32,625	32,625	32,625
R^2	0.332	0.332	0.332	0.333

retailers.[16] To examine depositor responses to these anti-gun lenders in parallel with those to gun lenders, the analysis estimates the baseline difference-in-differences specification from equation (1) and the triple interactions from equation (2), replacing GUN_LENDER with ANTIGUN_LENDER.

Table IA.9 in the Supplementary Material reports the estimates. Column 1 shows that anti-gun lenders experience 1.1 percentage points lower annual deposit growth following the shooting, though the estimate is statistically insignificant. Column 2 indicates modest heterogeneity by depositor political values; a 1-standard-deviation decrease in DEMOCRAT_SHARE (0.24) is associated with an additional 0.3 percentage point reduction in annual deposit growth at anti-gun lenders, but the effect is also insignificant.

Anti-gun lenders have depositor bases with a deposit-weighted Democratic exposure of 0.654, comparable to 0.65 for gun lenders. Because anti-gun policies align with the predominant political values of their depositors, deposit outflows from anti-gun lenders remain limited. In contrast, the ties of gun lenders to the gun industry conflict with depositor values, leading to substantial deposit outflows from gun lenders. These results provide further support for political value misalignment as a driver of depositor behavior.

[16]See "NBC: Bank of America stops financing for makers of 'military style' rifles," https://www.nbcnews.com/news/us-news/bank-america-stops-financing-makers-military-style-rifles-n865106 and "Citigroup: Announcing Our U.S. Commercial Firearms Policy," https://www.citigroup.com/global/news/perspective/2018/announcing-our-us-commercial-firearms-policy.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

V. Implications

A. Deposit Spreads

Deposit outflows from gun lenders impair their competitiveness in local deposit markets, prompting them to reduce deposit spreads, particularly in Democratic-leaning markets, consistent with efforts to retain depositors by improving price competitiveness.

To test this prediction, the analysis estimates the following triple difference-in-differences specification on the bank–county–product–quarter deposit spread panel described in Section II.B:

$$\begin{aligned}(4)\quad \Delta\text{DEPOSIT_SPREAD}_{i,c,t} = {} & \beta_1 \text{GUN_LENDER}_i \times \text{DEMOCRAT_SHARE}_{i,c} \\ & \times \text{POST}_t + \beta_2 \text{GUN_LENDER}_i \times \text{HHI}_c \times \text{POST}_t \\ & + \beta_3 \text{DEMOCRAT_SHARE}_{i,c} \times \text{POST}_t \\ & + \beta_4 \text{HHI}_c \times \text{POST}_t \\ & + \beta_5 \mathbf{X}_{i,c,t} + \eta_{i,c} + \delta_{i,t} + \varepsilon_{i,c,t}\end{aligned}$$

where $\Delta DEPOSIT_SPREAD_{i,c,t}$ is the quarterly change in the deposit spread of bank i in county c in year–quarter t. GUN_LENDER_i equals 1 for gun lenders, as defined in Section II.D. POST_t equals 1 if 2018. $\text{DEMOCRAT_SHARE}_{i,c}$ is the exposure of bank i to Democratic-leaning depositors in county c, as defined in Section II.E. HHI_c is the sum of squared deposit market shares of all bank branches operating in county c as of June 30, 2017, as defined in Section II.G.2. The vector $\mathbf{X}_{i,c,t}$ includes a bank control—the log number of bank branches in the county—and county controls—1-year lagged values of log population, log per capita income, population growth, and unemployment rate. Bank–county fixed effects $\eta_{i,c}$ absorb time-invariant bank–county characteristics. Bank–year–quarter fixed effects $\delta_{i,t}$ control for time-varying bank characteristics. Standard errors are heteroscedasticity-robust and clustered by bank–state.

Table 8 reports estimates of heterogeneity in deposit spreads by depositor political values, separately for $10,000 and $25,000 account sizes and by maturity. For $10,000 MMDAs and CDs in Panel A, the negative effects on deposit spreads of gun lenders are stronger in markets with higher DEMOCRAT_SHARE across maturities but statistically insignificant for shorter terms up to 36 months. The effects become statistically significant for longer-term products of 48 and 60 months. For example, for 48-month $10,000 CDs in column 6, a 1-standard-deviation increase in DEMOCRAT_SHARE (0.25) is associated with an additional 0.3 basis point reduction in quarterly deposit spread, which represents 2% relative to the mean quarterly change of 14.7 basis points.

For $25,000 MMDAs and CDs in Panel B, the negative effects are larger and statistically significant across all maturities of CDs. For 48-month $25,000 CDs in column 6, a 1-standard-deviation increase in DEMOCRAT_SHARE (0.25) is associated with an additional 0.4 basis point decline in quarterly deposit spread. These results hold after controlling for market concentration and suggest that gun lenders adjust deposit spreads on longer-term and larger-account products in Democratic-leaning markets to improve price competitiveness and retain depositors.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 8

Implications for Deposit Spreads

Table 8 presents triple difference-in-differences estimates from equation (4). Panel A reports results for $10,000 MMDAs and CDs; Panel B for $25,000 MMDAs and CDs. Each column header specifies the deposit maturity. The dependent variable is ΔDEPOSIT_SPREAD. GUN_LENDER equals 1 for gun lenders, as defined in Section II.D. POST equals 1 for 2018. DEMOCRAT_SHARE is the proportion of Democratic-leaning depositors at the bank–county level, as defined in Section II.E. HHI is the Herfindahl–Hirschman Index as of 2017, as defined in Section II.G.2. Low-order terms include interactions of DEMOCRAT_SHARE and HHI with POST. Bank and county controls are described in Section V.A. Variable definitions are provided in the Appendix. Standard errors (in parentheses) are heteroscedasticity-robust and clustered by bank–state. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Δ Bank–County Deposit Spread (%)						
	MM	6 Months	12 Months	24 Months	36 Months	48 Months	60 Months
	1	2	3	4	5	6	7
Panel A. $10,000 Account Size							
GUN_LENDER × DEMOCRAT_SHARE × POST	−0.000	−0.003	−0.002	−0.004	−0.009	−0.011**	−0.008*
	(0.001)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)
GUN_LENDER × HHI × POST	−0.002	−0.010*	−0.002	−0.006	−0.007	−0.007	−0.007
	(0.001)	(0.005)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
No. of obs.	40,948	40,948	40,948	40,948	40,948	40,948	40,948
R^2	0.946	0.958	0.970	0.976	0.976	0.974	0.949
Panel B. $25,000 Account Size							
GUN_LENDER × DEMOCRAT_SHARE × POST	−0.002	−0.006***	−0.006***	−0.006*	−0.013**	−0.015**	−0.013***
	(0.002)	(0.002)	(0.002)	(0.004)	(0.006)	(0.007)	(0.005)
GUN_LENDER × HHI × POST	−0.004	−0.005*	−0.003	−0.006**	−0.009**	−0.010	−0.012*
	(0.003)	(0.003)	(0.002)	(0.003)	(0.004)	(0.006)	(0.007)
Low-order terms	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank–county FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank–year–quarter FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	30,341	30,341	30,341	30,341	30,341	30,341	30,341
R^2	0.918	0.985	0.972	0.974	0.980	0.984	0.958

B. Bank Branching

Deposit outflows from gun lenders may also prompt them to reduce branches, particularly in Democratic-leaning markets, consistent with efforts to reduce operational costs in markets with deteriorating deposit bases.

To test this prediction, the analysis estimates the baseline difference-in-differences specification from equation (1) and the triple difference-in-differences specification from equation (2), replacing the dependent variable, DEPOSIT_GROWTH, with NUMBER_OF_BANK_BRANCHES.

Table 9 reports the estimates. Column 1 shows that gun lenders reduce branches by 0.424 per county following the shooting, representing a 5.7% decline relative to the preperiod mean of 7.47 branches per county for gun lenders. Column 2 shows that the branch reductions are significantly larger in Democratic-leaning markets, with a 1-standard-deviation increase in DEMOCRAT_SHARE (0.24) associated with an additional 0.191 branch reduction per county. These results suggest that gun lenders reduce branches following the shooting, with reductions more pronounced in Democratic-leaning markets, reflecting operational adjustments in response to deteriorating deposit bases.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 9

Implications for Bank Branching

Table 9 presents difference-in-differences estimates from equation (1) in column 1 and triple difference-in-differences estimates from equation (2) in column 2, replacing the dependent variable, DEPOSIT_GROWTH, with NUMBER_OF_BANK_BRANCHES. GUN_LENDER equals 1 for gun lenders, as defined in Section II.D. POST equals 1 for 2018 or later. DEMOCRAT_SHARE is the proportion of Democratic-leaning depositors at the bank–county level, as defined in Section II.E. Bank and county controls are described in Section IV.A for column 1 and Section IV.B.1 for column 2. The log number of bank branches is excluded from bank controls. Variable definitions are provided in the Appendix. Standard errors (in parentheses) are heteroscedasticity-robust and clustered by bank–state. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Bank–County Number of Bank Branches	
	1	2
GUN_LENDER × POST	−0.424***	
	(0.067)	
GUN_LENDER × DEMOCRAT_SHARE × POST		−0.794***
		(0.168)
DEMOCRAT_SHARE × POST		0.155*
		(0.089)
Bank controls	Yes	No
County controls	No	Yes
Bank–county FEs	Yes	Yes
Bank–year FEs	No	Yes
County–year FEs	Yes	No
No. of obs.	33,091	32,625
R^2	0.996	0.995

C. Bank Lending

Prior studies document heterogeneity in the transmission of funding constraints to lending across bank sizes (e.g., Iyer and Peydro (2011), Gilje, Loutskina, and Strahan (2016)). Large banks are typically resilient due to access to alternative funding sources, whereas small and regional banks—which rely heavily on retail deposits and have limited access to external markets—are vulnerable to these constraints and thus more likely to reduce lending.

Deposit outflows from gun lenders, combined with adjustments in deposit spreads and branches, tighten funding constraints. Although gun lenders are generally large banks, they exhibit substantial variation in asset size, ranging from $37 billion to $2.1 trillion as of 2017. To examine whether these constraints transmit to lending and whether this transmission varies by bank size, the analysis classifies gun lenders into LARGE—top 75% by 2017 assets, ranging from $214 billion to $2.1 trillion—and SMALL—bottom 25%, ranging from $37 billion to $125 billion—groups, the latter broadly overlapping with the Federal Reserve classification for regional banks of $10 billion to $100 billion.

The following difference-in-differences specification is estimated on the bank–county–year CRA loan panel described in Section II.C:

$$\text{LOG_CRA_LOANS}_{i,c,t} = \beta_1 \text{GUN_LENDER}_i \times \text{POST}_t + \eta_{i,c} + \delta_{c,t} + \varepsilon_{i,c,t} \quad (5)$$

where $\text{LOG_CRA_LOANS}_{i,c,t}$ is the log of total CRA loan amount originated by bank i in county c in year t. GUN_LENDER_i equals 1 for gun lenders, as defined in Section II.D. POST_t equals 1 for 2018 and later. Bank–county fixed effects $\eta_{i,c}$ absorb time-invariant bank–county characteristics. County–year fixed effects $\delta_{c,t}$

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

TABLE 10

Implications for Bank Lending

Table 10 presents difference-in-differences estimates from equation (5), where the dependent variable is LOG_AMOUNT_OF_CRA_LOANS. GUN_LENDER equals 1 for gun lenders, as defined in Section II.D. POST equals 1 for 2018 or later. Columns 2 and 3 restrict the set of gun lenders to LARGE gun lenders (top 75% by 2017 assets) and SMALL gun lenders (bottom 25%), as specified in each column header. Variable definitions are provided in the Appendix. Standard errors (in parentheses) are heteroscedasticity-robust and clustered by bank–state. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Bank–County Log CRA Loan Amount		
		Bank Size	
	All	LARGE Gun Lenders	SMALL Gun Lenders
	1	2	3
GUN_LENDER × POST	−0.019	0.018	−0.135***
	(0.028)	(0.032)	(0.036)
Bank–county FEs	Yes	Yes	Yes
County–year FEs	Yes	Yes	Yes
No. of obs.	153,856	138,863	102,666
R^2	0.916	0.919	0.912

control for time-varying local economic conditions that influence local loan demand, thereby mitigating concerns that unobserved changes in local loan demand drive the results. Standard errors are heteroscedasticity-robust and clustered by bank–state.

Table 10 reports the estimates, with heterogeneity by bank size. Column 1 includes all gun lenders and shows no significant average effect on CRA lending, indicating that deposit outflows from gun lenders do not transmit to lending on average. Columns 2 and 3 restrict the set of gun lenders to LARGE gun lenders and SMALL gun lenders, respectively. LARGE gun lenders show no significant reduction in CRA loan volumes despite a 1.6 percentage point decline in annual deposit growth, as reported in Table IA.6 in the Supplementary Material. In contrast, SMALL gun lenders reduce CRA loan volumes by 13.5% following a 3.0 percentage point decline in annual deposit growth. These results are consistent with prior evidence that smaller banks are more likely to transmit funding constraints to lending due to greater reliance on retail deposits and limited access to alternative funding.

VI. Conclusion

A growing literature documents the influence of political values on financial decision-making. This article extends this work to the deposit market by examining depositor responses to political value misalignment with banks. Focusing on gun policy—one of the most divisive issues in the United States—and exploiting the 2018 Parkland shooting and subsequent activism as an exogenous increase in public awareness of banks' ties to the gun industry, the analysis finds significant deposit outflows from gun lenders. These outflows are more pronounced in Democratic-leaning markets and for Republican-leaning gun lenders, amplified by low switching frictions, heightened gun control salience, and strong supporting attitudes toward gun control issues. In contrast, anti-gun lenders experience limited

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

and insignificant outflows, consistent with alignment between their policies and the political values of their depositors.

Deposit outflows from gun lenders have implications for bank funding and lending. Gun lenders reduce deposit spreads in Democratic-leaning markets, particularly for longer-maturity and larger-account products, to improve price competitiveness and retain depositors. Gun lenders also reduce branches, with reductions more pronounced in Democratic-leaning markets. Deposit outflows, combined with adjustments in deposit spreads and branches, tighten funding constraints. While large gun lenders appear resilient, small gun lenders significantly reduce CRA loan volumes, consistent with prior evidence on heterogeneity in the transmission of funding constraints to lending across bank sizes.

These findings highlight the role of political value misalignment in shaping depositor behavior and its real effects on banks. They suggest that political values can impose economically significant costs on banks, particularly smaller banks with limited funding diversification.

Appendix. Variable Definitions

Bank–County Level

DEPOSIT_GROWTH: Annual percentage change in deposits, as defined in Section II.A

ΔDEPOSIT_SPREAD: Quarterly change in deposit spread, as defined in Section II.B

NUMBER_OF_BANK_BRANCHES: Number of bank branches in a county

DEMOCRAT_SHARE: Deposit-weighted average of zip-code-level ratios of Democratic Party donors to total donors during the 2015–2016 election cycle across branches of a bank in a county, using branch deposit holdings as of June 30, 2017 as weights, as defined in Section II.E

SWITCHING_FRICTION: Deposit-weighted average of the shortest distances from branches of a gun lender to the nearest branches of control lenders in the same county, using branch deposit holdings as of 2017 as weights, as defined in Section II.G.2

LOW_SWITCHING_FRICTION: Indicator variable, equal to 1 if $\text{SWITCHING_FRICTION}_{\text{BANK–COUNTY}}$ is at or below the sample median of 0.84 miles

AMOUNT_OF_CRA_LOANS: Total CRA loan amount (millions, USD) originated by a bank in a county, as defined in Section II.C

NUMBER_OF_CRA_LOANS: Total number of CRA loans originated by a bank in a county, as defined in Section II.C

Bank Level

GUN_LENDER: Indicator variable, equal to 1 for gun lenders, as defined in Section II.D

ANTIGUN_LENDER: Indicator variable, equal to 1 for anti-gun lenders, as listed in Panel C of Table 1

ASSETS: Bank assets (trillions, USD)

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

DOMESTIC_DEPOSITS: Bank domestic deposits (trillions, USD)

BANK_TYPE: Bank type as defined by the FDIC (e.g., national bank, state commercial banks, federal chartered stock savings bank)

WELLS_FARGO_SCANDAL: Indicator variable, equal to 1 for Wells Fargo & Company in 2017

REPUBLICAN_SHARE: PAC donations to Republican politicians divided by total PAC donations to politicians from the two major parties during the 2015–2016 election cycle, as defined in Section II.F

HIGH_REP_PAC: Indicator variable, equal to 1 for gun lenders with REPUBLICAN_SHARE above the sample median of 0.637

LOW_REP_PAC: Indicator variable, equal to 1 for gun lenders with REPUBLICAN_SHARE at or below the sample median of 0.637

County Level

$\text{DEMOCRAT_SHARE}_{\text{ELECTION}}$: Votes for the Democratic candidate divided by total votes for the two major-party candidates in the 2016 U.S. presidential election, as defined in Section II.E

AGE_UNDER_65: Proportion of county population under age 65 as of 2017, as defined in Section II.G.1

COLLEGE: Proportion of individuals with a bachelor's degree or higher in a county as of 2017, as defined in Section II.G.1

INCOME: Total county income (thousands, USD) divided by the county population as of 2017, as defined in Section II.G.1

SWITCHING_FRICTION: Deposit-weighted average of $\text{SWITCHING_FRICTION}_{\text{BANK–COUNTY}}$ across gun lenders in a county, using bank–county deposit holdings as of 2017 as weights, as defined in Section II.G.2

LOW_SWITCHING_FRICTION: Indicator variable, equal to 1 if $\text{SWITCHING_FRICTION}_{\text{COUNTY}}$ is at or below the sample median of 0.8 miles

HHI: Sum of squared deposit market shares of all branches operating in a county as of 2017, as defined in Section II.G.2

MASS_SHOOTING: Indicator variable, equal to 1 for counties that experienced at least one public mass shooting between 1998 and 2017, as defined in Section II.G.3

SCI: Standardized social connectedness between a county and Broward County, Florida, the site of the Parkland shooting, with mean zero and standard deviation 1, as defined in Section II.G.3

PHYSICAL_DISTANCE: Physical distance (miles) between a county and Broward County based on their centroids, as defined in Section II.G.3

POPULATION: County population (thousands)

PER_CAPITA_INCOME: Total county income (thousands, USD) divided by the county population

POPULATION_GROWTH: Annual percentage change in county population

UNEMPLOYMENT_RATE: Unemployment rate (percent) in the county

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

Supplementary Material

To view supplementary material for this article, please visit http://doi.org/10.1017/S0022109026102907.

References

Avramidis, P., and G. G. Pennacchi. "The Effects of an Aging Population on the Structure of Bank Assets and Liabilities." *Journal of Money, Credit and Banking*, 57 (2025), 2211–2251.

Begenau, J., and E. Stafford. "Uniform Rate Setting, Branch Expansion, and the Deposit Channel." Working Paper, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4136858 (2025).

Biehl, A. R. "The Extent of the Market for Retail Banking Deposits." *Antitrust Bulletin*, 47 (2002), 91–106.

Chen, Y.-C.; M. Hung; and L. L. Wang. "Do Depositors Respond to Banks' Social Performance?" *Accounting Review*, 98 (2023), 89–114.

Conway, J., and L. Boxell. "Consuming Values." Working Paper, available at SSRN 4855718 (2024).

Cookson, J. A.; J. E. Engelberg; and W. Mullins. "Does Partisanship Shape Investor Beliefs? Evidence from the Covid-19 Pandemic." *Review of Asset Pricing Studies*, 10 (2020), 863–893.

d'Avernas, A.; A. L Eisfeldt; C. Huang; R. Stanton; and N. Wallace. "The Deposit Business at Large vs. Small Banks." NBER Working Paper No. 31865 (2023).

Di Giuli, A., and L. Kostovetsky. "Are Red or Blue Companies More Likely to Go Green? Politics and Corporate Social Responsibility." *Journal of Financial Economics*, 111 (2014), 158–180.

Drechsler, I.; A. Savov; and P. Schnabl. "The Deposits Channel of Monetary Policy." *Quarterly Journal of Economics*, 132 (2017), 1819–1876.

Egan, M.; A. Hortaçsu; and G. Matvos. "Deposit Competition and Financial Fragility: Evidence from the US Banking Sector." *American Economic Review*, 107 (2017), 169–216.

Engelberg, J.; J. Guzman; R. Lu; and W. Mullins. "Partisan Entrepreneurship." NBER Working Paper No. 30249 (2022).

Freixas, X., and J.-C. Rochet. *Microeconomics of Banking*. Cambridge, MA: MIT Press (2008).

Gilje, E. P.; E. Loutskina; and P. E. Strahan. "Exporting Liquidity: Branch Banking and Financial Integration." *Journal of Finance*, 71 (2016), 1159–1184.

Granja, J., and N. Paixao. "Bank Consolidation and Uniform Pricing." *Journal of Financial Economics*, 176 (2026), 104204.

Gromet, D. M.; H. Kunreuther; and R. P. Larrick. "Political Ideology Affects Energy-Efficiency Attitudes and Choices." *Proceedings of the National Academy of Sciences*, 110 (2013), 9314–9319.

Heitfield, E., and R. A. Prager. "The Geographic Scope of Retail Deposit Markets." *Journal of Financial Services Research*, 25 (2004), 37–55.

Heitfield, E. A. "What Do Interest Rate Data Say About the Geography of Retail Banking Markets?" *Antitrust Bulletin*, 44 (1999), 333–347.

Homanen, M. "Active Depositors." *Journal of Banking & Finance*, 136 (2022), 106417.

Hong, H., and L. Kostovetsky. "Red and Blue Investing: Values and Finance." *Journal of Financial Economics*, 103 (2012), 1–19.

Iyer, R., and J.-L. Peydro. "Interbank Contagion at Work: Evidence from a Natural Experiment." *Review of Financial Studies*, 24 (2011), 1337–1377.

Kempf, E.; M. Luo; L. Schäfer; and M. Tsoutsoura. "Political Ideology and International Capital Allocation." *Journal of Financial Economics*, 148 (2023), 150–173.

Kempf, E., and M. Tsoutsoura. "Partisan Professionals: Evidence from Credit Rating Analysts." *Journal of Finance*, 76 (2021), 2805–2856.

Kiser, E. K. "Predicting Household Switching Behavior and Switching Costs at Depository Institutions." *Review of Industrial Organization*, 20 (2002), 349–365.

Klemperer, P. "Competition when Consumers Have Switching Costs: An Overview with Applications to Industrial Organization, Macroeconomics, and International Trade." *Review of Economic Studies*, 62 (1995), 515–539.

Levine, R.; C. Lin; M. Tai; and W. Xie. "How Did Depositors Respond to Covid-19?" *Review of Financial Studies*, 34 (2021), 5438–5473.

Luca, M.; D. Malhotra; and C. Poliquin. "The Impact of Mass Shootings on Gun Policy." *Journal of Public Economics*, 181 (2020), 104083.

Maechler, A. M., and K. M. McDill. "Dynamic Depositor Discipline in US Banks." *Journal of Banking & Finance*, 30 (2006), 1871–1898.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press

Martin, C.; M. Puri; and A. Ufier. "Deposit Inflows and Outflows in Failing Banks: The Role of Deposit Insurance." NBER Working Paper No. 24589 (2018).
Martinez, P.; M. Soledad; and S. L. Schmukler. "Do Depositors Punish Banks for Bad Behavior? Market Discipline, Deposit Insurance, and Banking Crises." *Journal of Finance*, 56 (2001), 1029–1051.
McConnell, C.; Y. Margalit; N. Malhotra; and M. Levendusky. "The Economic Consequences of Partisanship in a Polarized Era." *American Journal of Political Science*, 62 (2018), 5–18.
Meeuwis, M.; J. A. Parker; A. Schoar; and D. Simester. "Belief Disagreement and Portfolio Choice." *Journal of Finance*, 77 (2022), 3191–3247.
Painter, M. "Partisanship and the Limits of Stakeholder Capitalism." Working Paper, available at SSRN 3557961 (2020).
Park, K., and G. Pennacchi. "Harming Depositors and Helping Borrowers: The Disparate Impact of Bank Consolidation." *Review of Financial Studies*, 22 (2008), 1–40.
Radecki, L. J. "The Expanding Geographic Reach of Retail Banking Markets." *Economic Policy Review*, 4 (1998), 15–34.
Rajgopal, S.; A. Srivastava; and R. Zhao. "Economic Substance Behind Texas Political Anti-Esg Sanctions." *Management Science* (2025).
Rice, A. B. "Executive Partisanship and Corporate Investment." *Journal of Financial and Quantitative Analysis*, 59 (2024), 2226–2255.
Saunders, A., and B. Wilson. "Contagious Bank Runs: Evidence from the 1929–1933 Period." *Journal of Financial Intermediation*, 5 (1996), 409–423.
Wright, J. R. "Pac Contributions, Lobbying, and Representation." *Journal of Politics*, 51 (1989), 713–729.

https://doi.org/10.1017/S0022109026102907 Published online by Cambridge University Press