

Does the Credit Union Tax Exemption Affect Competition in Local Lending Markets? Evidence from the TCJA

Jennifer Blouin
blouin@wharton.upenn.edu
University of Pennsylvania

Tanya Paul
tpaul@haas.berkeley.edu
University of California, Berkeley

September 2026

Please do not cite or circulate without the authors' permission.

We examine whether the credit union tax exemption affects competition in local mortgage markets, using the 2017 Tax Cuts and Jobs Act as a shock that narrowed the tax wedge between C-corporation banks and tax-exempt credit unions. We find that C-corp banks reduced mortgage rates by 13 basis points relative to S-corp banks by 2019. Credit union rates did not respond, consistent with the pre-TCJA tax advantage being fully capitalized into pricing. Credit union market share declined by 5.5 percentage points in treated counties, though credit union originations grew in absolute terms, indicating relative displacement rather than absolute decline. The effect is stronger among large credit unions and in urban markets, where mortgage competition is most commoditized and rate-sensitive. The results suggest that the credit union tax exemption sustains a narrow competitive advantage that is sensitive to changes in the corporate tax code.

Keywords: Credit union tax exemption; bank competition; TCJA; mortgage lending; tax incidence; market definition

JEL Codes: G21, G28, H22, H25, L11

1. Introduction

Credit unions have been exempted from federal income taxation since 1934, at an annual cost of approximately \$2.8 billion in forgone revenue (Tax Foundation 2024). Critics of the exemption argue that it distorts competition in local lending markets, particularly as credit unions have expanded their membership charters and product offerings to compete directly with community banks (Emmons and Schmid 2000; Feinberg 2001)¹. Despite the policy significance of the exemption and decades of debate, whether it actually confers a meaningful competitive advantage has been difficult to establish empirically: the exemption is a time-invariant feature of credit union status, and no period exists in which credit unions were taxed that would permit a straightforward comparison.

We exploit the 2017 Tax Cuts and Jobs Act (TCJA) to test whether the credit union tax exemption affects competition in local mortgage lending markets. The TCJA reduced the federal corporate income tax rate from 35% to 21%, narrowing the tax wedge between C-corporation banks and tax-exempt credit unions by 40%. We compare counties in the top tercile of pre-TCJA C-corp bank presence, e.g. those most exposed to the competitive shock, to counties in the bottom tercile. Counties with greater C-corp bank presence experienced a larger aggregate competitive shock when those banks passed through the tax savings as lower mortgage rates. The key identifying assumption is that, absent the TCJA, mortgage market outcomes would have

¹ The ABA's first vice president testified before the House of Representatives in 1997 that credit union tax subsidies distorted competition; in 2013, the ABA chairman listed ending the exemption as his top priority (Emmons and Schmid 2013). In 2024, the ABA and 52 state bankers associations sent a joint letter to Congress requesting a hearing on the credit union tax exemption, citing credit unions' expansion into bank acquisitions, subordinated debt issuance, and nationwide membership as evidence that the exemption no longer reflects the industry's original mission. The Tax Foundation (2024) independently concluded that the exemption allows credit unions to "compete unfairly with banks" and recommended its repeal. See also Senator Orrin Hatch's 2015 letter to the NCUA questioning whether large credit unions deserve continued tax-exempt status.

trended similarly across high and low C-corp counties, an assumption we evaluate by documenting parallel pre-trends in rates and market shares in the years before the reform. The design exploits cross-sectional variation in C-corp exposure as a source of quasi-experimental variation in the size of the competitive shock, isolating the effect of the tax wedge from the many county-level factors that affect overall mortgage demand.

Whether this tax pass-through mechanism operates in mortgage markets is not obvious. Conforming mortgage pricing is heavily anchored to secondary market rates set by Fannie Mae and Freddie Mac, which may limit the scope for individual bank pricing discretion in response to entity-level cost shocks. Even if C-corp banks do cut rates, it does not follow that credit union market position will change. Standard tax incidence theory predicts that a tax benefit is competed away into lower pre-tax prices in equilibrium: if credit unions had already passed their exemption through into lower mortgage rates, the tax wedge would already be reflected in the pre-existing rate gap, leaving credit unions with no pricing cushion to absorb a further competitive shock (Guenther and Sansing 2023). Under this view, the competitive response to a narrowing of the tax wedge would operate through quantity reallocation rather than through credit union pricing adjustments. Whether this prediction holds in mortgage markets, and whether it holds equally across institution sizes and geographies, is an empirical question.

C-corp banks reduced 30-year fixed mortgage rates by 13.4 basis points relative to S-corp banks by 2019, with no differential trend in the pre-treatment years. S-corp branches in counties with greater C-corp presence also cut rates significantly, consistent with strategic complementarity in local rate-setting: as C-corp competitors reduced rates, S-corps — already pass-through entities that received no direct benefit from the TCJA rate cut — followed, confirming that the rate response propagated through local market competition rather than

through a direct tax benefit to S-corps. This S-corp response thus serves as a falsification test of the price-spillover mechanism: the entity that was unaffected by the tax change nonetheless responded to its competitor's pricing, and only in markets where C-corp presence was high. Credit union rates, by contrast, did not respond. The pre-TCJA credit union–bank rate gap of approximately 3 basis points suggests that the tax advantage was already fully capitalized into credit union pricing — consistent with the implicit tax prediction that in competitive markets, tax-favored institutions compete away their advantage into lower pre-tax returns (Guenther and Sansing 2023). With no pricing margin from which to respond, credit unions could not match the bank rate reductions, and the competitive shock operated through borrower reallocation.

We find that credit union market share declined by 5.5 percentage points more in treated counties than in control counties following the TCJA. Credit union originations grew in absolute terms but bank lending expanded faster, eroding the credit union share of local depository mortgage lending. This is an important finding as it establishes this as relative displacement rather than credit union distress.

This relative displacement is especially pronounced among two groups. First, the market share decline is larger for credit unions with assets exceeding \$1 billion, consistent with large credit unions competing more directly on price in conventional mortgage markets. Smaller credit unions also lose share, but the effect is less than half as large. Second, the effect is nearly three times larger in urban markets (–8.4 percentage points) than in rural markets (–3.0 percentage points). The concentration among large, urban credit unions, institutions that operate at national scale in commoditized, rate-sensitive markets, is consistent with a competitive mechanism rather than a spurious correlation between C-corp bank presence and general mortgage market trends.

This paper makes three contributions. First, we contribute to the literature on the competitive effects of taxation (Donohoe, Jang, and Lisowsky 2021; Granja, Nagel, and Weinrich 2024). Donohoe et al. (2021) show that when only some firms receive tax cuts, the beneficiary firms' competitors suffer declines in economic performance, establishing that heterogeneous tax benefits have real competitive externalities. Granja et al. (2024) find that the TCJA corporate rate cut passed through to lower interest rates and higher origination volumes at C-corp banks in the auto lending market. We document a different pattern in mortgage markets. Banks passed through the tax savings as lower rates, but this pricing response generated relative rather than absolute displacement of credit unions: bank lending grew faster while credit union originations continued to expand. This pattern distinguishes our setting from both prior papers. Relative to Donohoe et al. (2021), the permanently tax-advantaged competitor is not financially impaired by the shock; relative to Granja et al. (2024), the competitor's response is constrained not by funding costs but by the prior capitalization of its own tax advantage. The mortgage market thus reveals a distinct equilibrium: in markets where a permanently tax-exempt competitor has already passed its advantage into pricing, a one-time narrowing of the tax wedge reshuffles competitive positions without eliminating lending by the advantaged institution. Our paper also responds to the call by Lester and Olbert (2025), who call for research on how tax policies affect real outcomes where peer firms differ in their exposure to specific tax rules.

Second, we contribute to the literature on tax incidence in bank lending and the implicit tax hypothesis (Kang, Li, and Lin 2021; Guenther and Sansing 2023). Kang et al. (2021) show that banks pass tax costs forward to borrowers in the syndicated loan market: a higher bank income tax rate leads to higher loan spreads, with the incidence borne in part by borrowing firms. We document the mirror image in the retail mortgage market: a tax rate reduction generates a

symmetric pass-through into lower rates. Our setting adds two features absent from Kang et al. (2021). First, we identify the effect using a major federal rate change rather than variation in state bank tax rates, providing cleaner identification of the national incidence margin. Second, we have a permanently tax-exempt competitor against whom we can measure how the competitive equilibrium adjusts. The pre-TCJA credit union–bank rate gap of approximately 3 basis points provides direct evidence of implicit tax capitalization: credit unions, competing in the same product market as taxable banks, had already passed their exemption-derived advantage into lower mortgage rates. This is a directly identified, quasi-experimental test of the implicit tax hypothesis in the retail financial market — a setting that the theoretical framework of Guenther and Sansing (2023) predicts but that prior empirical work has not cleanly established.

Third, we contribute to the literature on competitive overlap between banks and credit unions in local financial markets (Emmons and Schmid 2000; Feinberg 2001; Liebersohn 2024). Liebersohn (2024) uses discontinuities in U.S. bank antitrust rules to show that reduced bank concentration raises deposit rates, lowers mortgage rates, and increases mortgage originations by 11%, but has no effect on small business lending, where borrower-lender relationships insulate banks from competition. His finding that competition works differently across financial products depending on the importance of relationships informs the interpretation of our heterogeneity results. We find that the competitive response to the TCJA rate shock is similarly product- and institution-specific: it operates through price-sensitive conforming mortgage borrowers and concentrates among large credit unions that compete on rate, while leaving small relationship-oriented credit unions and their borrowers unaffected. Emmons and Schmid (2000) argue that credit unions' member-ownership structure creates fundamentally different institutional objectives that may limit competitive overlap with for-profit banks. Our results partially confirm

this view but show that it applies only at one end of the size distribution. Large credit unions that set rates centrally and operate at national scale behave as effective price competitors with banks; small credit unions serving defined membership groups in rural markets occupy a structurally distinct niche. This finding also connects to Jiang (2023), who shows that structural relationships between lender types shape how competitive shocks propagate in mortgage markets: our results extend this insight by showing that scale and pricing centralization, not organizational form alone, determine which credit unions function as banks' effective competitors.

The remainder of the paper is organized as follows. Section 2 describes the institutional background and develops the empirical predictions. Section 3 describes the data and sample construction. Section 4 presents the research design. Section 5 reports the empirical results. Section 6 concludes.

2. Institutional Background, Literature, and Hypothesis Development

2.1 The Credit Union Tax Exemption

Credit unions are member-owned, nonprofit financial cooperatives organized under either federal or state charters. Unlike commercial banks, which are owned by shareholders and operate to maximize profits, credit unions are owned by their depositors ("members") and governed by volunteer boards elected from the membership. This cooperative structure has been the basis for their exemption from federal income taxation since the Revenue Act of 1934. The original justification rested on three premises: credit unions were small (typically under \$1 million in assets), operated by unpaid volunteers, and served members with limited access to mainstream banking.

The industry has changed substantially. As of 2023, approximately 4,700 federally insured credit unions hold over \$2.2 trillion in total assets. While many remain small, the largest

institutions exceed \$150 billion in assets, operate branch networks spanning multiple states, and offer the full range of consumer and commercial financial products. The tax exemption generates approximately \$2.8 billion annually in forgone federal revenue. Credit unions have increasingly acquired community banks, raising questions about whether the exemption subsidizes the displacement of taxpaying institutions by tax-exempt ones (Avramidis, Huberdeau-Reid, Pennachi, 2026; Mazur and Paul 2026).

Banking trade groups have argued for decades that the exemption distorts competition, particularly as credit unions have grown to resemble commercial banks in size and scope. Credit union advocates counter that the exemption is justified by their cooperative structure and member-focused mission. The early empirical literature provides suggestive but inconclusive evidence on this question. Feinberg (2001) finds that credit union presence is associated with lower bank loan rates in local markets, and Tokle and Tokle (2000) find that credit union presence raises bank deposit rates. However, these cross-sectional associations are confounded by unobserved market characteristics. Goddard, McKillop, and Wilson (2008, 2014) document the increasing diversification and consolidation of credit unions but do not identify the competitive effects of their tax advantage. Liebersohn (2024) establishes that local market structure affects mortgage lending outcomes, with increased concentration reducing origination quantities. If mortgage lending is the product most responsive to competitive shocks in banking markets, it is also the strongest setting in which to test whether the tax exemption distorts competition. The empirical challenge throughout this literature has been the absence of plausibly exogenous variation in the competitive relationship between banks and credit unions. Whether banks and credit unions compete in the same relevant market also has direct implications for antitrust policy: the DOJ and Federal Reserve currently include credit union deposits in HHI

calculations at a discounted weight, reflecting uncertainty about whether credit unions are effective competitors.

2.2 The TCJA as a Shock to the Tax Wedge

The Tax Cuts and Jobs Act, signed in December 2017 and effective January 2018, reduced the federal corporate income tax rate from 35% to 21% while leaving credit unions' tax-exempt status unchanged. This narrowed the tax wedge between credit unions and C-corporation banks from 35 percentage points to 21 percentage points, a 40% reduction in the tax-based cost advantage. The TCJA also introduced Section 199A, which provides owners of pass-through entities, including S-corporation banks, a deduction of up to 20% of qualified business income, reducing the effective top tax rate on S-corp bank income from approximately 39.6% to 29.6%.

U.S. commercial banks may elect taxation as C-corporations or S-corporations under Subchapter S of the Internal Revenue Code. C-corporations face entity-level corporate income tax; S-corporations pass income through to shareholders at individual rates. Approximately one-third of commercial banks are organized as S-corporations, predominantly smaller, closely held community banks. Corporate form is highly persistent and is chosen well in advance of the TCJA, supporting its use as cross-sectional variation in the research design.

Two features of Section 199A mitigate concerns that the S-corp deduction confounds our analysis. First, the C-corp rate cut operates at the entity level, directly reducing the bank's tax expense and increasing retained earnings available for competitive lending. The 199A deduction operates at the shareholder level and does not directly affect the bank's entity-level cost structure. Second, we use S-corp banks as a benchmark for the C-corp pass-through (Table 3, Columns 1-2) and separately test for S-corp rate responses in treated versus control counties (Table 3, Columns 3-4). The S-corp cascade we document is consistent with competitive pressure from C-

corp rate cuts rather than a 199A-driven cost reduction, because the cascade varies with county-level C-corp presence, not with S-corp owners' individual tax positions.

Several other TCJA provisions affected housing and mortgage markets. The cap on state and local tax deductions at \$10,000 disproportionately affected homeowners in high-tax states, and the reduction in the mortgage interest deduction limit from \$1 million to \$750,000 affected high-cost markets. Both provisions affect housing demand at the county level regardless of lender corporate structure. County fixed effects absorb time-invariant differences in exposure to these provisions, and the urban/rural decomposition in Table 7 provides evidence that the results are not driven by county types differentially affected by the SALT cap.

2.3 Hypothesis Development

The preceding discussion generates testable predictions about how the TCJA should affect lending behavior on both sides of the bank-credit union market.

The central prediction concerns credit union market share. If the tax exemption confers a competitive advantage in mortgage pricing, the TCJA's narrowing of the tax wedge should erode that advantage in counties where C-corp banks are most prevalent. C-corp banks in these counties received the largest aggregate cost reduction and, if they pass through the tax savings as lower rates, should attract borrowers who might otherwise have obtained a mortgage from a credit union. This leads to the first hypothesis:

H1. Credit union market share of local mortgage lending declines in counties with greater pre-TCJA C-corporation bank presence following the TCJA.

H1 has a boundary condition. The competitive effect should be most pronounced where mortgage competition is commoditized and rate sensitive. Large credit unions, which operate at national scale, set rates centrally, and compete directly with banks for conventional mortgage

borrowers, are most exposed to bank rate competition. Small credit unions, which serve defined membership groups and compete on relationship banking, should be insulated. Similarly, urban mortgage markets are more competitive and rate-sensitive than rural markets, where thinner competition and relationship lending partially insulate credit unions. This leads to the second hypothesis:

H2. The decline in credit union market share is concentrated among large credit unions in urban markets.

The market share response predicted in H1 requires an initiating shock: C-corp banks must actually pass through their tax savings to borrowers as lower mortgage rates. If this cost advantage is passed through, C-corp banks should reduce rates in treated counties relative to control counties in the post-TCJA period. Moreover, if the rate reductions generate local competitive pressure, S-corp banks in the same markets should cut rates to match, despite not receiving a comparable entity-level tax cut.

H3. Following the TCJA, C-corporation banks reduce mortgage rates in counties with greater pre-TCJA C-corp presence, and S-corporation banks in those counties cascade the rate reductions.

A null result on H1 would be equally informative: it would suggest that banks and credit unions, despite geographic overlap, serve sufficiently distinct borrower segments that a 40% reduction in the tax wedge does not alter competitive dynamics. A null result on the credit union rate response, by contrast, would be consistent with the competitive mechanism if the pre-TCJA tax advantage was already fully capitalized into credit union pricing. In that case, credit unions would have no pricing cushion to absorb, and the competitive effect would operate through borrower reallocation rather than through credit union rate adjustments.

3. Data and Sample Construction

3.1 Data Sources

We draw on four primary data sources. First, we use loan-level data from the Home Mortgage Disclosure Act (HMDA) for 2014–2019. We restrict to originated conventional first-lien mortgages. HMDA provides the loan amount, borrower income, race, ethnicity, and the interest rate on each origination². HMDA covers virtually all depository institutions and large non-bank mortgage companies, enabling us to compute county-level market shares across lender types.

Second, we obtain bank characteristics from FFIEC Consolidated Reports of Condition and Income (Call Reports). We use field RIADA530 to identify each bank’s tax election status: RIADA530 = 0 indicates a C-corporation, and RIADA530 = 1 indicates an S-corporation. We classify banks by asset size using total assets (RCON2170 or RCFD2170): large C-corp banks have assets exceeding \$10 billion, and community C-corp banks have assets below \$10 billion.

Third, we obtain credit union characteristics from the NCUA Financial and Organizational Information for Credit Unions. Total assets (ACCT_013) classify credit unions as large (above \$1 billion) or small (below \$1 billion).

Fourth, we use RateWatch to obtain posted 30-year fixed mortgage rates at the branch-month level. RateWatch surveys depository institutions monthly on their posted rate quotes for standardized products. We restrict to the 30-year fixed rate product (PROD_CODE = 00022RATE) and winsorize rates at the 1st and 99th percentiles within year to limit the influence of outliers. The RateWatch sample covers both bank and credit union branches, enabling us to estimate rate responses separately by institution type.

² Interest rate information became available in HMDA beginning 2018.

3.2 Sample Construction

We construct the analysis sample in three steps. First, we merge HMDA originations with Call Reports and FOICU to classify each originating institution into one of five types: large C-corp bank (assets > \$10B), community C-corp bank (assets ≤ \$10B), S-corp bank, large credit union (assets > \$1B), and small credit union (assets ≤ \$1B). Originations by institutions not matched to either Call Reports or FOICU—primarily independent mortgage companies such as Rocket Mortgage and United Wholesale Mortgage—are classified as non-bank/other. Non-bank lenders account for approximately 30% of conventional first-lien originations in our sample and enter the treatment variable denominator but not the depository market share calculations.

Second, we compute the treatment variable *CCorp_Share* at the county level, defined as total C-corp bank originations (all asset sizes) divided by total HMDA originations (all lender types), averaged over 2014–2016. We classify the 3,220 counties with nonzero mortgage originations into terciles of *CCorp_Share*. The top tercile (819 counties) constitutes the treated group, and the bottom tercile provides the pool of potential control counties.

Third, we impose common support restrictions on the control group. Because C-corp bank share is mechanically inversely correlated with credit union share at the county level, treated and control counties could differ systematically in their baseline credit union presence and market size. We restrict control counties to those whose CU share falls between the 1st and 99th percentiles of the treated group's CU share distribution, and whose total depository originations do not exceed the treated group's 99th percentile. After these restrictions, 525 counties remain in the control group, yielding a final sample of 1,344 counties observed over five years (2014–2016 and 2018–2019, excluding 2017), for 6,720 county-year observations in the market share regressions.

3.3 Descriptive Statistics

Table 1 describes the competitive landscape in local mortgage markets. Panel A reports county-level means for market structure, concentration, and borrower demographics across all counties, urban and rural subsamples, and the treated and control groups used in our analysis. Panel B reports the product mix across the five institution types, showing where banks and credit unions overlap in mortgage lending. Panel C compares borrower and loan characteristics across institution types for conventional first-lien purchase mortgages, the segment where competitive overlap between banks and credit unions is most direct.

Table 2 reports summary statistics and covariate balance for the regression sample. Panel A presents descriptive statistics for the key variables. Mean CU share of depository originations is 0.377, though this masks substantial cross-county variation. The mean 30-year fixed mortgage rate across all branches is 4.25%, and the unconditional difference between credit union branches and bank branches is negligible. This is consistent with the tax advantage being fully capitalized into credit union pricing rather than passed through as a visible rate discount. The sample includes 1,344 counties, of which 40% are urban (MSA).

Panel B of Table 2 reports covariate balance between treated and control counties after common support restrictions. Mean CU share of depository originations is 10.2% in treated counties and 15.9% in control counties, a statistically significant difference of 5.8 percentage points. This residual imbalance reflects the mechanical inverse correlation between C-corp bank share and CU share: counties with high C-corp presence tend to have lower CU presence. County fixed effects absorb this level difference, and we show in Section 5.4 that the results are not driven by differences in baseline CU market position. Total depository originations are balanced

across groups, confirming that common support restrictions equalize market size. Treated counties are less likely to be urban (34% versus 48%).

4. Research Design

4.1 Treatment Variable and Sample Construction

We exploit the 2017 Tax Cuts and Jobs Act (TCJA) as a shock to the tax wedge between C-corporation banks and tax-exempt credit unions. The TCJA reduced the statutory C-corp tax rate from 35% to 21%, lowering the after-tax cost of mortgage lending for C-corp banks while leaving the credit union tax exemption unchanged.

We measure county-level exposure to this competitive shock using *CCorp-Share*, defined as total C-corp bank mortgage originations divided by total HMDA originations (including non-bank mortgage companies), averaged over 2014–2016. This measure represents the fraction of each county's mortgage market controlled by banks whose after-tax lending costs fell discretely under the TCJA and is therefore increasing in the county's exposure to the competitive shock.

We classify counties into terciles of *CCorp-Share* and define treated counties as those in the top tercile, the markets most exposed to the TCJA competitive shock, and control counties as those in the bottom tercile. Because *CCorp-Share* and CU share are mechanical complements within the depository sector, treated counties have lower baseline credit union presence by construction. To address this, we impose common support restrictions on the control group: control counties must have CU share within the 1st to 99th percentile range of the treated counties' CU share distribution and total depository originations at or below the treated group's 99th percentile. These restrictions ensure that treated and control counties are comparable in both credit union presence and market size, so that differences in post-TCJA outcomes reflect the competitive shock rather than pre-existing differences in market structure.

We exclude 2017 from all specifications and from the treatment variable construction. The TCJA was debated throughout 2017 and signed on December 22, 2017. Bank and credit union behavior in 2017 may reflect anticipation effects, making it ambiguous whether to classify the year as pre- or post-treatment. Our sample window is therefore 2014–2016 (pre-TCJA) and 2018–2019 (post-TCJA).

4.2 Bank Rate Pass-Through

We test whether C-corp banks passed through the TCJA tax cut as lower mortgage rates. and whether S-corp banks cascaded these reductions by estimating branch-level event studies using 30-year fixed mortgage rates from RateWatch:

$$Rate_{ht} = \alpha_{ht} + \delta_t + \sum_{k \neq 2014} \beta_k \times Shock_{t,c} + \varepsilon_{ht} \quad (1)$$

where b indexes branches, c indexes counties, and t indexes years or month-years. Branch fixed effects absorb time-invariant pricing differences across branches, and year fixed effects absorb common interest rate movements. The β coefficients trace year-by-year rate differentials relative to 2014, and standard errors are clustered by county. We use two related rate specifications. First, we pool C-corp and S-corp bank branches and interact year indicators with a C-corp indicator, using S-corp banks as the benchmark for C-corp pass-through. Second, we restrict to S-corp branches and interact year indicators with the county-level treatment indicator, which equals one if the county is in the top tercile of the pre-TCJA all-C-corp origination share distribution and zero if the county is in the bottom tercile. This second specification tests whether S-corp banks in treated counties reduced rates through competitive pressure. The first specification identifies the relative C-corp rate response; the second tests for the local competitive cascade. In untabulated results, we replace the binary treatment indicator with continuous *CCorp_Share* and find similar inferences.

4.3 Credit Union Rate Response

We test whether credit unions adjusted mortgage rates in response to increased bank competition by estimating Equation (1) on the credit union branch subsample. We also report a collapsed specification replacing the event study interactions with a single $Post \times Treated$ interaction. If the pre-TCJA tax advantage was already fully capitalized into credit union pricing, credit union rates should not respond differentially and the post-TCJA coefficients should be zero.

4.4 Credit Union Market Share

Our main test estimates whether the TCJA reduced credit union market share in counties most exposed to the competitive shock:

$$Y_{c,t} = \alpha^c + \delta_t + \beta(Post_t \times Treated_c) + \varepsilon_{c,t} \quad (2)$$

where c indexes counties and t indexes years. Y is either CU share of depository originations or log CU originations. County fixed effects absorb time-invariant differences across counties, and year fixed effects absorb common trends. Standard errors are clustered by county. We measure the outcome as credit union share of depository originations because the hypothesis concerns reallocation between differentially taxed depository institutions, namely banks and credit unions. By contrast, the treatment denominator includes all HMDA lenders so that county exposure reflects the aggregate size of the C-corp bank shock relative to the full mortgage market, including markets where nonbank lenders account for a large share of originations.

4.5 Identifying Assumptions

The identifying assumption is that, absent the TCJA, mortgage rates and credit union market shares would have evolved similarly in treated and control counties. We evaluate this assumption through pre-trend coefficients in the event study specifications.

Two potential confounds merit discussion. First, other TCJA provisions, such as the SALT deduction cap (\$10,000) and the mortgage interest deduction limit (\$750,000), affected housing demand differentially across counties. These provisions could confound our estimates if they correlate with pre-TCJA C-corp bank share. County fixed effects absorb level differences, and the urban/rural decomposition in Table 7 provides evidence on whether results are driven by particular county types. Second, Section 199A introduced a qualified business income deduction for pass-through entities, including S-corp banks. This deduction operates at the shareholder level, however, and does not directly reduce the S-corp bank's cost of lending.

5. Empirical Results

5.1 Bank Rate Response

We first examine whether banks passed through the TCJA tax savings as lower mortgage rates. Table 3 reports branch-level event study estimates of 30-year fixed rates from RateWatch. Columns 1-2 pool C-corp and S-corp bank branches and interact year dummies with a C-corp indicator, capturing the relative rate change for C-corp versus S-corp banks. Columns 3-4 restrict to S-corp bank branches and interact year dummies with the county-level tercile treatment, testing for a competitive cascade.

We find clean pre-trends for the C-corp pass-through: the 2015 and 2016 interaction coefficients are small and statistically indistinguishable from zero in both specifications. The 2018 coefficient is also insignificant, indicating that the pass-through was not immediate. By 2019, C-corp banks had reduced rates by 13.4 basis points relative to S-corp banks. On a \$250,000 conforming mortgage, this rate differential corresponds to approximately \$335 in annual interest savings. Replacing year fixed effects with month-year fixed effects yields a comparable estimate of 10.6 basis points.

We next test for a competitive cascade to S-corp banks. If C-corp rate reductions created local competitive pressure, S-corp banks in treated counties should have cut rates to match, even absent a comparable entity-level tax cut. We find evidence consistent with this prediction: the 2015 and 2016 interactions are insignificant, but by 2019, S-corp banks in treated counties had reduced rates by 22.2 basis points relative to S-corp banks in control counties. The S-corp sample is smaller ($N = 2,120$ versus 15,707 for C-corp banks), reflecting the smaller number of S-corp bank branches in RateWatch.

Table 3 establishes the competitive shock: the TCJA generated a meaningful rate reduction among C-corp banks that also propagated to S-corp banks through local competitive pressure. Because S-corp banks serve as the control group in Columns 1-2, this estimate captures the C-corp rate reduction *relative to* S-corp banks. Columns 3-4 show that S-corp banks in treated counties also reduced rates by 22.2 basis points through competitive pressure, implying that the 13.4 basis point differential understates the absolute C-corp rate decline. Both bank types cut rates; C-corp banks simply cut more.

5.2 Credit Union Rate Response

We next examine whether credit unions adjusted their mortgage rates in response to the bank rate reductions documented in Table 3. If credit unions could match the bank rate cuts, we would expect negative post-TCJA coefficients. If instead the pre-TCJA tax advantage was already fully capitalized into credit union pricing, leaving no pricing cushion, we would expect null coefficients.

We find no evidence of a credit union rate response. The yearly point estimates in Column 1 are small and, if anything, positive, inconsistent with credit unions cutting rates to match bank competition. We interpret this null as evidence that the pre-TCJA credit union–bank

rate gap was narrow, i.e. on the order of 3 basis points and that the tax advantage was already fully capitalized into credit union pricing. With no pricing cushion, credit unions could not reduce rates further when banks became more price-competitive. The credit union rate null establishes that the competitive shock likely operated through borrower reallocation—borrowers shifting to banks that now offered lower rates—rather than through credit union pricing adjustments.

5.3 Credit Union Market Share Response

Next, we test the central prediction of the paper: that the narrowing of the tax wedge reduced credit union market share in counties most exposed to the competitive shock. Table 5 estimates Equation (2) on a balanced county-year panel of 6,720 observations spanning 2014–2016 and 2018–2019. We find that credit union market share declined by 5.5 percentage points more in treated counties relative to control counties. We also find that log CU originations increased in treated counties, indicating that CU lending grew in absolute terms even as market share fell. The divergence between share and volume is informative about the competitive mechanism. The simultaneous decline in market share and increase in origination volume implies that bank lending expanded substantially more in treated counties; banks grew faster than credit unions, eroding CU share even as CU lending itself grew. This pattern is consistent with the TCJA generating new mortgage demand through lower bank rates rather than simply redistributing existing CU borrowers to banks. The competitive effect is a relative displacement, not an absolute decline in credit union lending.

5.4 Cross-Sectional Variation

We examine which credit unions lost market share and in which markets by decomposing the Table 5 result along two dimensions: institution size and market type.

First, we separate CU market share into large credit unions (total assets exceeding \$1 billion) and small credit unions (below \$1 billion). We find that the market share decline is larger for large credit unions but is also present among small credit unions. The Post $\times$ Treated coefficient is -0.0931 for large credit unions and -0.0349 for small credit unions, indicating that the response is strongest among large institutions but not limited to them. This concentration may be explained by large credit unions operating at national scale, setting rates centrally, and competing directly with banks for conventional mortgage borrowers. Small credit unions also lose share, but the smaller coefficient suggests they were less exposed than large credit unions.

Second, we split the sample into urban (MSA) and rural (non-MSA) counties. We find that the effect is nearly three times larger in urban markets: the Post $\times$ Treated coefficient is -0.0841 in urban counties versus -0.0304 in rural counties. Urban mortgage markets are more commoditized and rate-sensitive, amplifying the competitive impact of bank rate reductions. In rural markets, thinner competition and relationship lending partially insulate credit unions.

The cross-sectional variation reinforces the competitive interpretation. If the market share decline reflected a spurious correlation between C-corp bank presence and general mortgage market trends, we would not expect the effect to concentrate among large, urban credit unions—the institutions and markets where rate-based competition is most intense. The pattern is instead consistent with a specific competitive mechanism: the TCJA narrowed the tax wedge, banks passed through the savings as lower rates, and credit unions that compete on price in commoditized markets lost relative ground.

6. Conclusion

We examine whether the credit union tax exemption affects competition in local mortgage lending markets by exploiting the Tax Cuts and Jobs Act as a shock to the tax wedge

between C-corp banks and tax-exempt credit unions. Using cross-county variation in pre-TCJA C-corp bank presence as treatment intensity, we find that C-corp banks reduced 30-year fixed mortgage rates by 13.4 basis points relative to S-corp banks by 2019, and that S-corp banks cascaded these rate reductions through local competitive pressure. Credit union rates did not respond, consistent with the pre-TCJA tax advantage being fully capitalized into pricing. Credit union market share declined by 5.5 percentage points in treated counties, though credit union originations grew in absolute terms, indicating that banks expanded lending faster than credit unions rather than displacing them outright. The competitive effect is concentrated among large credit unions in urban markets, where mortgage competition is most commoditized and rate-sensitive.

These findings suggest that the credit union tax exemption sustains a narrow but competitively meaningful pricing advantage that can be neutralized by changes to the corporate tax code. For policymakers evaluating the exemption, the results highlight that even a partial narrowing of the tax wedge generates competitive spillovers between taxable and tax-exempt depository institutions in local lending markets. The concentration of the effect among large credit unions, rather than the small community-oriented institutions the exemption was designed to support, may inform ongoing debates over the scope of the tax benefit.

This study is subject to several limitations. The analysis ends in 2019, so we cannot assess whether the competitive repositioning persists beyond the initial post-TCJA period. County-level aggregation may mask heterogeneity in competitive dynamics within counties. Finally, we examine only conventional first-lien mortgages; whether the competitive dynamics documented here extend to other lending products where credit unions have expanded their

presence, such as auto loans or small business credit, remains an open question for future research.

References

- Blouin, J., 2025. Private firms in accounting research. *Journal of Accounting and Economics*, forthcoming.
- Donohoe, M. P., Jang, H., & Lisowsky, P. (2022). Competitive externalities of tax cuts. *Journal of Accounting Research*, 60(1), 201-259.
- Donohoe, M. P., Lisowsky, P., & Mayberry, M. A. (2019). The effects of competition from S corporations on the organizational form choice of rival C corporations. *Contemporary Accounting Research*, 36(3), 1784-1823.
- Emmons, W. R., & Schmid, F. A. (2000). *Banks vs. credit unions: Dynamic competition in local markets* (No. 2000-006). Federal Reserve Bank of St. Louis.
- Feinberg, R. M. (2001). The competitive role of credit unions in small local financial services markets. *Review of Economics and Statistics*, 83(3), 560-563.
- Fox, Z., Pyle, B., 2023. Tax savings and bank lending: Evidence from the Tax Cuts and Jobs Act. Working paper.
- Goddard, J., McKillop, D., Wilson, J., 2008. The diversification and financial performance of US credit unions. *Journal of Banking and Finance* 32, 1836–1849.
- Goddard, J., McKillop, D., Wilson, J., 2014. U.S. credit unions: Survival, consolidation, and growth. *Economic Inquiry* 52, 304–319.
- Goodman, L., Lim, K., Sacerdote, B., Whitten, A., 2022. Pass-through of the corporate income tax cut: Evidence from the Tax Cuts and Jobs Act. Working paper.
- Granja, J., Nagel, F., & Weinrich, A. (2025). The pass-through of corporate tax cuts to consumer loans: Evidence from the TCJA.
- Guenther, D. A., & Sansing, R. C. (2023). Implicit tax, tax incidence, and pretax returns. *The Accounting Review*, 98(2), 201-214.
- Hanlon, M., Shroff, N., Yoon, A., 2026. The competitive effects of corporate taxation: Evidence from the Tax Reform Act of 1986. *Journal of Accounting and Economics*, forthcoming.
- Jiang, E. X. (2023). Financing competitors: Shadow banks' funding and mortgage market competition. *The Review of Financial Studies*, 36(10), 3861-3905.
- Kang, Y., Li, O. Z., & Lin, Y. (2021). Tax incidence in loan pricing. *Journal of Accounting and Economics*, 72(1), 101418.
- Kennedy, P. J., Dobridge, C. L., Landefeld, P., & Mortenson, J. (2026). Corporate tax cuts, firm growth, and workers' earnings. *American Economic Review*, 116(9), 3380-3422.
- Lester, R., & Olbert, M. (2025). Firms' real and reporting responses to taxation: A review. *Journal of Accounting and Economics*, 101837.
- Liebersohn, J. (2024). How does competition affect retail banking? Quasi-experimental evidence from bank mergers. *Journal of Financial Economics*, 154, 103797.

- Mazur, L, Paul, T., 2026. Credit union acquisitions of community banks. Working paper.
- Suárez Serrato, J. C., & Zidar, O. (2016). Who benefits from state corporate tax cuts? A local labor markets approach with heterogeneous firms. *American Economic Review*, 106(9), 2582-2624.
- Tax Foundation, 2024. Reforming the credit union tax exemption. Tax Foundation Report.
- Tokle, R.J., Tokle, J.G., 2000. The influence of credit union and savings institution competition on bank deposit rates in Idaho and Montana. *Review of Industrial Organization* 17, 427–439.

Appendix A. Variable Definitions

Independent Variables

<i>All C-corp share (AllCC/All)</i>	Total C-corp bank originations (all asset sizes) divided by total HMDA originations in the county, averaged over 2014-2016. Source: HMDA + FFIEC Call Reports
<i>Treated</i>	Indicator equal to one if the county is in the top tercile of the pre-TCJA AllCC/All distribution, and zero if in the bottom tercile. Source: Computed
<i>Post</i>	Indicator equal to one for years 2018-2019, and zero for 2014-2016. Year 2017 is excluded due to potential TCJA anticipation effects. Source: Computed

Outcome Variables

<i>CU share (depository)</i>	Credit union originations divided by total depository originations (community C-corp + S-corp + credit union) in the county-year. Source: HMDA
<i>Log CU originations</i>	Natural log of (1 + credit union originations) in the county-year. Source: HMDA
<i>30yr fixed mortgage rate</i>	Posted 30-year fixed mortgage rate quoted at the branch-month level, winsorized at the 1st and 99th percentiles. Source: RateWatch
<i>Large CU share</i>	Share of depository originations attributable to credit unions with total assets exceeding \$1 billion. Source: HMDA + NCUA FOICU
<i>Small CU share</i>	Share of depository originations attributable to credit unions with total assets below \$1 billion. Source: HMDA + NCUA FOICU

Institution Classification

<i>C-corp bank</i>	Bank filing taxes as a C-corporation, identified by RIADA530 = 0 in FFIEC Call Reports. Source: FFIEC Call Reports
--------------------	--

<i>S-corp bank</i>	Bank filing taxes as an S-corporation, identified by RIADA530 = 1 in FFIEC Call Reports. S-corp owners received a Section 199A QBI deduction under TCJA. Source: FFIEC Call Reports
<i>Large C-corp bank (>\$10B)</i>	C-corp bank with total assets (RCON2170 or RCFD2170) exceeding \$10 billion. Source: FFIEC Call Reports
<i>Community C-corp bank (<\$10B)</i>	C-corp bank with total assets below \$10 billion. Source: FFIEC Call Reports
<i>Credit union</i>	Tax-exempt depository institution identified by NCUA FOICU or HMDA agency code = 5 (NCUA). Source: NCUA FOICU / HMDA
<i>Large credit union (>\$1B)</i>	Credit union with total assets (ACCT_013 in NCUA FOICU) exceeding \$1 billion. Source: NCUA FOICU
<i>Small credit union (<\$1B)</i>	Credit union with total assets below \$1 billion. Source: NCUA FOICU
<i>Non-bank/other</i>	HMDA reporters not matched to FFIEC Call Reports or NCUA FOICU. Primarily independent mortgage companies (e.g., Rocket Mortgage, United Wholesale Mortgage). Source: HMDA

County Characteristics

<i>Non-bank share</i>	Non-bank/other originations divided by total HMDA originations in the county, averaged over 2014-2016. Source: HMDA
<i>Urban (MSA)</i>	Indicator equal to one if the county is located within a Metropolitan Statistical Area per the 2020 Census Core Based Statistical Area delineation. Source: Census CBSA
<i>Total depository originations</i>	Sum of community C-corp + S-corp + credit union conventional first-lien originations in the county-year. Source: HMDA
<i>HHI (all lenders)</i>	Herfindahl-Hirschman Index computed from individual lender origination shares within each county. Source: HMDA

Table 1. Descriptive Statistics for Competitive Landscape in Local Mortgage Markets

This table presents descriptive statistics for the estimation sample. Panel A reports county-level market structure statistics for 2015. High C-corp and Low C-corp correspond to the top and bottom terciles of the pre-TCJA all-C-corp origination share distribution. Urban counties are those located within a Metropolitan Statistical Area per the 2020 Census CBSA delineation. Panel B reports the percentage of each institution type's total originations in each product segment. Panel C reports each institution type's share of originations within each product segment. Panel D presents demographic descriptives by type of financial institution. Large C-corp banks are defined as C-corporation banks with total assets exceeding \$10 billion. Community C-corp banks have total assets below \$10 billion. Large credit unions have total assets exceeding \$1 billion; small credit unions have total assets below \$1 billion. All variables are defined in Appendix A.

Panel A: Market Structure

	All Counties	Urban (MSA)	Rural (Non- MSA)	High C-corp	Low C-corp
N (counties)	3,263	1,251	2,012	1,073	1,073
<i>Lender Composition (origination share)</i>					
Small C-corp share (<\$1B)	16.1%	14.1%	17.4%	25.7%	7.8%
Mid C-corp share (\$1B-\$10B)	15.2%	14.4%	15.7%	22.6%	8.7%
Large C-corp share (>\$10B)	34.5%	39.3%	31.4%	33.8%	31.8%
Total C-corp share	66.3%	68.8%	64.7%	83.0%	49.6%
S-corp bank share	15.5%	10.2%	18.9%	7.6%	25.9%
Credit union share	14.6%	16.3%	13.5%	7.6%	19.6%
Non-bank/other share	3.5%	4.7%	2.8%	1.8%	4.9%
<i>Market Concentration</i>					
HHI (all lenders)	1,506	1,079	1,778	1,756	1,597
HHI (community lenders)	2,639	2,105	2,976	3,021	2,717
HHI (all depositories)	1,543	1,117	1,814	1,797	1,633
# distinct lenders	52.4	87.8	29.8	39.7	54.9
<i>Mortgage Market Size</i>					
Total originations (county, annual)	1,107	2,481	229	614	1,266
Avg loan size (\$K)	135	158	119	122	135
% purchase (vs refi)	46.6%	45.8%	47.1%	45.0%	47.0%

Panel B: Product Mix by Institution Type

Product Segment	Large C-corp (>\$10B)	Comm C-corp (<\$10B)	S-corp	Large CU (>\$1B)	Small CU (<\$1B)
Conv FL Purchase	33.5%	41.9%	38.9%	33.0%	25.9%
Conv FL Refinance	45.1%	29.6%	33.9%	43.6%	40.4%
FHA	5.9%	8.7%	8.8%	1.8%	0.9%
VA	4.5%	4.2%	4.2%	0.8%	0.6%
USDA/RHS	0.7%	1.9%	2.4%	0.2%	0.4%
Junior Lien	6.7%	9.0%	7.3%	15.8%	25.0%
N	1,644,037	916,037	255,961	301,783	249,676

Panel C: Institution Share by Product Segment

Product Segment	Large C- corp (>\$10B)	Comm C- corp (<\$10B)	S-corp	Large CU (>\$1B)	Small CU (<\$1B)	Total
Conv FL Purchase	46.0%	32.0%	8.3%	8.3%	5.4%	1,198,884
Conv FL Refinance	55.7%	20.4%	6.5%	9.9%	7.6%	1,332,027
FHA	46.7%	38.7%	10.9%	2.7%	1.1%	206,997
VA	58.0%	30.4%	8.4%	2.0%	1.2%	127,682
USDA/RHS	31.6%	47.1%	17.2%	1.6%	2.6%	36,262
Junior Lien	34.4%	25.6%	5.8%	14.8%	19.4%	321,967

Panel D. Borrower characteristics by Institution Type

	Large C-corp (>\$10B)	Comm C- corp (<\$10B)	S-corp	Large CU (>\$1B)	Small CU (<\$1B)
N (originations)	551,357	383,966	99,519	99,473	64,569
<i>Borrower Demographics</i>					
Median borrower income (\$K)	114	90	86	85	75
Mean borrower income (\$K)	174	131	121	106	94
% Minority	14.3%	7.8%	7.0%	9.3%	6.6%
% Hispanic	6.2%	4.1%	4.8%	6.7%	6.3%
% Female applicant	25.6%	25.3%	23.2%	30.9%	31.3%
% LMI borrower (<80% AMI)	16.6%	22.6%	22.6%	23.8%	29.0%
<i>Loan Characteristics</i>					
Median loan size (\$K)	250	176	149	178	141
Mean loan size (\$K)	356	226	186	222	169
Median LTI ratio	2.35	2.05	1.83	2.22	1.96
% High LTI (>3)	30.1%	22.7%	16.8%	25.0%	18.3%
% Small-dollar (<\$100K)	10.8%	22.4%	29.9%	18.6%	29.4%
% Higher-priced	0.3%	4.8%	8.4%	2.3%	5.5%

Table 2: Summary Statistics

This table presents summary statistics for the estimation sample. All variables are defined in Appendix A.

Variable	N	Mean	SD	P10	P25	P50	P75	P90
CU share (depository)	6,720	0.377	0.356	0.033	0.093	0.236	0.569	1.000
Log CU originations	6,720	3.787	2.272	1.609	2.303	3.401	4.836	6.358
30yr fixed mortgage rate (all)	27,542	4.250	0.576	3.625	3.875	4.125	4.500	4.875
30yr fixed rate (CU branches)	7,965	4.238	0.548	3.625	3.875	4.125	4.500	4.875
30yr fixed rate (bank branches)	16,480	4.242	0.581	3.625	3.875	4.125	4.500	4.875
All C-corp share (all HMDA)	1,344	0.503	0.181	0.269	0.334	0.545	0.638	0.734
Non-bank share	1,344	0.297	0.153	0.127	0.178	0.265	0.378	0.552
Urban (MSA = 1)	1,344	0.398	0.490	0.000	0.000	0.000	1.000	1.000

Table 3: Bank Rate Response to TCJA

This table reports event-study estimates of bank mortgage rate responses to the TCJA. The dependent variable is the 30-year fixed mortgage rate quoted at the branch-month level from RateWatch. Columns (1)-(2) pool C-corp and S-corp bank branches; the key coefficients are year dummies interacted with a C-corp indicator, which equals one if the bank files taxes as a C-corporation (RIADA530 = 0 in FFIEC Call Reports) and zero if the bank is an S-corporation. Columns (3)-(4) restrict to S-corp bank branches only; the key coefficients are year dummies interacted with Treated, which equals one if the county is in the top tercile of the pre-TCJA all-C-corp origination share distribution and zero if in the bottom tercile (with common support restrictions as defined in Table 2). All columns include branch fixed effects. Columns (1) and (3) include year fixed effects; Columns (2) and (4) include month-by-year fixed effects. The sample is restricted to counties in the tercile-based treatment and control groups. The base year is 2014; 2017 is excluded due to potential TCJA anticipation effects. Standard errors are clustered by county. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	C-Corp vs S-Corp		S-Corp Cascade	
	(1)	(2)	(3)	(4)
<i>2015 X C-corp</i>	-0.0183 (0.0236)	-0.0105 (0.0238)		
<i>2016 X C-corp</i>	-0.0210 (0.0332)	-0.00555 (0.0339)		
<i>2018 X C-corp</i>	-0.0179 (0.0393)	0.00572 (0.0387)		
<i>2019 X C-corp</i>	-0.134*** (0.0513)	-0.106** (0.0499)		
<i>2015 X Treated</i>			0.00677 (0.0335)	0.0247 (0.0351)
<i>2016 X Treated</i>			-0.00984 (0.0517)	0.00492 (0.0536)
<i>2018 X Treated</i>			-0.0590 (0.0703)	-0.0467 (0.0724)
<i>2019 X Treated</i>			-0.222** (0.0943)	-0.224** (0.0985)
<i>Constant</i>	4.260*** (0.0187)	4.248*** (0.0187)	4.273*** (0.0222)	4.267*** (0.0236)
N	15,707	15,707	2,120	2,120
Adj. R2	0.685	0.826	0.636	0.782
Fixed Effects	Year	Month, Year	Year	Month, Year

Table 4: Credit Union Rate Response

This table tests whether credit union mortgage rates responded to local C-corp bank competitive pressure following the TCJA. The dependent variable is the 30-year fixed mortgage rate quoted at the credit union branch-month level from RateWatch. The sample includes only credit union branches in counties belonging to the tercile-based treatment and control groups as defined in Table 5. Column (1) reports event-study estimates; the key coefficients are year dummies interacted with the county-level pre-TCJA all-C-corp origination share (continuous), defined as in Table 3. Columns (2)-(3) report difference-in-differences estimates; the key coefficient is the interaction of *Post* with *Treated*. *Post* equals one for years 2018-2019 and zero for 2014-2016. *Treated* equals one if the county is in the top tercile of the pre-TCJA all-C-corp origination share distribution and zero if the county is in the bottom tercile (with common support restrictions as defined in Appendix A). Column (1) includes branch and year fixed effects. Column (2) includes branch and year fixed effects. Column (3) includes branch and month-by-year fixed effects. The base year is 2014; 2017 is excluded. Standard errors are clustered by county. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
<i>2015 X Treated</i>	-0.00339 (0.0404)		
<i>2016 X Treated</i>	-0.0104 (0.0512)		
<i>2018 X Treated</i>	0.0267 (0.0554)		
<i>2019 X Treated</i>	0.0910 (0.0649)		
<i>Post X Treated</i>		0.0623 (0.0412)	0.0585 (0.0422)
<i>Constant</i>	4.218*** (0.0263)	4.216*** (0.0126)	4.217*** (0.0129)
N	7,959	7,959	7,959
Adj. R2	0.659	0.659	0.811
Fixed Effects	Branch, Year	Branch, Year	Branch, Mo-Yr

Table 5: Credit Union Market Share Response

This table reports the main difference-in-differences estimate of the effect of the TCJA on credit union competitive position. The dependent variable in Column (1) is the credit union share of depository mortgage originations (community C-corp + S-corp + credit union) at the county-year level. The dependent variable in Column (2) is log credit union originations. The key coefficient is the interaction of Post with Treated. *Post* equals one for years 2018-2019 and zero for 2014-2016. *Treated* equals one if the county is in the top tercile of the pre-TCJA all-C-corp origination share distribution and zero if the county is in the bottom tercile (with common support restrictions as defined in Appendix A). Both columns include county and year fixed effects. Standard errors are clustered by county. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
	CU Share	Log CU Orig
<i>Post X Treated</i>	-0.0554*** (0.00685)	0.114*** (0.0407)
<i>Constant</i>	0.390*** (0.00167)	3.759*** (0.00992)
N	6,720	6,720
Adj. R2	0.915	0.879
Fixed Effects	County, Year	County, Year
Common Support	Yes	Yes

Table 6: Credit Union Market Share Response by Credit Union Size

This table decomposes the credit union market share response by credit union size. The dependent variable in Column (1) is the share of depository mortgage originations attributable to large credit unions, defined as credit unions with total assets exceeding \$1 billion. The dependent variable in Column (2) is the corresponding share for small credit unions, defined as credit unions with total assets below \$1 billion. The key coefficient is the interaction of Post with Treated. Post equals one for years 2018-2019 and zero for 2014-2016. Treated equals one if the county is in the top tercile of the pre-TCJA all-C-corp origination share distribution and zero if the county is in the bottom tercile (with common support restrictions as defined in Appendix A). Both columns include county and year fixed effects. Standard errors are clustered by county.

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
	Large CU (>\$1B)	Small CU (<\$1B)
Post X Treated	-0.0931*** (0.0105)	-0.0349*** (0.00753)
Constant	0.138*** (0.00257)	0.142*** (0.00184)
N	6,720	6,720
Adj. R2	0.657	0.648
F-stat: Large CU = Small CU	21	
Fixed Effects	County, Year	County, Year

Table 7: Credit Union Market Share Response by Market Type

This table examines whether the credit union market share decline is concentrated in urban or rural mortgage markets. The dependent variable is the credit union share of depository mortgage originations at the county-year level. Column (1) restricts to urban counties, defined as counties located within a Metropolitan Statistical Area per the 2020 Census CBSA delineation. Column (2) restricts to rural counties, defined as counties not located within an MSA. The key coefficient is the interaction of Post with Treated. Post equals one for years 2018-2019 and zero for 2014-2016. Treated equals one if the county is in the top tercile of the pre-TCJA all-C-corp origination share distribution and zero if the county is in the bottom tercile (with common support restrictions as defined in Appendix A). Both columns include county and year fixed effects. Standard errors are clustered by county. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
	Urban (MSA)	Rural (Non-MSA)
Post X Treated	-0.0841*** (0.00875)	-0.0304*** (0.0101)
Constant	0.433*** (0.00185)	0.359*** (0.00267)
N	2,675	4,045
Adj. R2	0.923	0.914
F-Stat		16
Fixed Effects	County, Year	County, Year