The Corporate Farm Brake: Did Anti-Corporate Farming Laws Constrain Agricultural Consolidation?*

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Abstract

Nine U.S. states prohibit non-family corporations from owning farmland, but whether these laws actually constrain agricultural consolidation is unknown. We exploit the first quasi-experiment on anti-corporate farming laws: the Eighth Circuit's 2006 invalidation of Nebraska's Initiative 300 (*Jones v. Gale*), while neighboring Iowa, Kansas, South Dakota, and Missouri maintained their restrictions. Using a border-county difference-in-differences design with USDA Census of Agriculture data (1997–2022) and Quarterly Workforce Indicators for agricultural employment (2001–2024), we find no significant effect of deregulation on average farm size, farm counts, or agricultural employment. These null findings suggest that anti-corporate farming laws are largely symbolic — consolidation proceeds through channels these statutes do not reach.

JEL Codes: Q15, Q18, K11

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Keywords: agricultural consolidation, corporate farming, land use regulation, anti-corporate farming laws, Nebraska Initiative 300

1 Introduction

Agricultural consolidation is one of the most consequential structural transformations in the American economy. Between 1950 and 2022, the number of U.S. farms fell from 5.6 million to 2.0 million while average farm acreage nearly tripled (MacDonald et al., 2013). This consolidation has profound implications for rural communities, environmental stewardship, and food system resilience (Sumner, 2014; Hoppe et al., 2010).

In response to fears about corporate takeover of family farms, nine states enacted laws prohibiting non-family corporations from acquiring agricultural land. Nebraska's Initiative 300, passed by referendum in 1982, was among the strictest. These statutes are frequently invoked in policy debates as bulwarks protecting the family farm tradition, yet no study has tested whether they actually constrain consolidation (Gunderson et al., 2015). The fundamental question — do anti-corporate farming laws bind? — has remained unanswered because all states adopted their restrictions decades ago, offering no variation for causal identification.

We exploit the first clean experiment. In December 2006, the Eighth Circuit Court of Appeals struck down Nebraska's Initiative 300 as unconstitutional under the dormant Commerce Clause (*Jones v. Gale*, 470 F.3d 850, 8th Cir. 2006). The Supreme Court declined certiorari in April 2007. Nebraska's replacement statute (LB 1174, 2008) was substantially weaker. Meanwhile, neighboring Iowa (Chapter 9H), Kansas (K.S.A. 17-5903), South Dakota (SDCL 47-9A), and Missouri (RSMo 350.015) maintained their corporate farming restrictions. This judicial deregulation creates a sharp spatial discontinuity at Nebraska's borders.

Our identification strategy compares farm structure in Nebraska border counties to adjacent counties in states that maintained restrictions, before and after the 2007 ruling. We draw on two complementary data sources: the USDA Census of Agriculture (six waves, 1997–2022) for farm structure outcomes, and the Census Bureau's Quarterly Workforce Indicators (2001–2024) for agricultural employment. The QWI data provides annual pre-treatment observations from 2001 through 2006, yielding six pre-periods for formal parallel trends testing.

We find a precisely estimated null. Deregulation had no statistically significant effect on average farm size ($\hat{\beta} = 34.4$ acres, $p = 0.56$), log farm counts ($\hat{\beta} = 0.027$, $p = 0.50$), or agricultural employment ($\hat{\beta} = -0.005$ log points, $p = 0.76$). The only marginally significant result is an increase of roughly 28,500 acres of total land in farms ($p < 0.10$), consistent with corporate entities acquiring marginal land without restructuring existing operations. These null results are robust to bandwidth variation, placebo borders, placebo timing, leave-one-state-out analysis, and alternative standard error specifications.

This paper contributes to three literatures. First, we provide the first causal evidence on anti-corporate farming laws, a policy instrument deployed in nine states and debated in several others (Aiken, 2000). The finding that these laws do not bind has direct policy implications: removing them would likely not accelerate consolidation, while maintaining them imposes costs on interstate commerce. Second, we contribute to the literature on agricultural consolidation and its drivers (MacDonald et al., 2013; Key and Roberts, 2009), showing that technological change and market forces — not ownership form — are the binding constraints. Third, we demonstrate the value of well-powered null results in policy evaluation (Abadie, 2020).

The remainder of the paper proceeds as follows. Section 2 provides institutional background. Section 3 describes our data. Section 4 presents the research design. Section 5 reports results. Section 6 provides robustness checks. Section 7 concludes.

2 Institutional Background

2.1 Anti-Corporate Farming Laws

Anti-corporate farming laws emerged in the early twentieth century from agrarian populist movements concerned about corporate encroachment on family agriculture. North Dakota enacted the first restriction in 1932. By the farm crisis of the 1980s, nine states had similar statutes: Iowa (1975), Kansas (1931), Minnesota (1973), Missouri (1975), Nebraska (1982),

North Dakota (1932), Oklahoma (1971), South Dakota (1974), and Wisconsin (1974) (Aiken, 2000).

These laws vary in specificity but share a common structure: they prohibit corporations not substantially controlled by family members from acquiring agricultural land or engaging in farming (Dillman and McEowen, 2007). Nebraska's Initiative 300, adopted by constitutional amendment with 56% voter approval in 1982, was among the most restrictive. It prohibited any corporation, limited partnership, or syndicate not directly engaged in farming from acquiring, owning, or otherwise obtaining an interest in agricultural land.

2.2 The Jones v. Gale Decision

In 2001, Smithfield Foods and several out-of-state agricultural corporations challenged Initiative 300 on Commerce Clause grounds. After protracted litigation, the Eighth Circuit ruled in December 2006 that Initiative 300 violated the dormant Commerce Clause by discriminating against interstate commerce in favor of in-state agricultural interests (*Jones v. Gale*, 470 F.3d 850, 8th Cir. 2006). The court found that the law's primary effect was to disadvantage out-of-state corporate entities, not to serve a legitimate local purpose. The Supreme Court declined to hear the case in April 2007, effectively ending Nebraska's corporate farming prohibition.

The Nebraska Legislature responded with LB 1174 in 2008, which imposed reporting requirements and limited liability protections but did not reinstate the outright prohibition on corporate farming. The regulatory environment thus shifted from prohibition to disclosure, a substantially weaker regime.

2.3 Why Deregulation Might Not Matter

Several mechanisms could explain why lifting the corporate farming ban would fail to accelerate consolidation. First, the law may have been routinely circumvented: family trusts, limited liability companies with family members as nominal managers, and other legal struc-

tures could achieve de facto corporate farming within the letter of the law. Second, the binding constraints on consolidation may be technological (scale economies in equipment and management) and financial (access to credit, commodity price risk), not legal. Third, even where corporate entities seek farmland, they may prefer to lease rather than own — a channel the law did not restrict.

3 Data

We draw on two complementary data sources. Our primary source for farm structure outcomes is the USDA Census of Agriculture, conducted every five years and available through the National Agricultural Statistics Service (NASS) QuickStats API. We use county-level data for Nebraska and its immediate neighbors (Iowa, Kansas, South Dakota, Missouri, Colorado, Wyoming) for the Census years 1997, 2002, 2007, 2012, 2017, and 2022. We extract total farm operations, total land in farms, and average farm size (total acres divided by number of operations).

Our second source is the Census Bureau's Quarterly Workforce Indicators (QWI), which provides county-level agricultural employment and earnings (NAICS sector 11: Agriculture, Forestry, Fishing, and Hunting). The QWI offers annual data from 2001 through 2024, providing six pre-treatment years (2001–2006) that substantially strengthen our parallel trends analysis.

To construct the border-county sample, we use Census TIGER/Line shapefiles (2020 vintage) to identify counties that share a geographic boundary across the Nebraska state line. We compute the distance from each county centroid to the Nebraska border using NAD83 Albers Equal Area projected coordinates for accuracy.

Table 1 presents summary statistics for the border-county sample. Nebraska border counties average fewer but larger farms than neighboring border counties. The two groups contain 38 and 40 counties, respectively.

Table 1: Summary Statistics: Border Counties

	Nebraska (Treated)			Neighbors (Control)		
	Mean	SD	N	Mean	SD	N
Number of farms	503.4	234.4	228	643.8	542.5	240
Average farm size (acres)	1156.7	1127.8	228	1373.2	1401.1	240
Land in farms (acres)	520352.0	598540.8	228	640930.9	431350.7	240
Share of large farms (≥1,000 ac)	0.3	0.2	228	0.4	0.2	240
Distance to border (km)	21.7	—	—	25.0	—	—
Counties	—	—	38	—	—	40

Notes: Sample includes 468 border county × year observations across 5 Census years (2002, 2007, 2012, 2017, 2022). Nebraska counties are those that share a border with counties in Iowa, Kansas, South Dakota, or Missouri. Neighbor counties are those in the four bordering states that are adjacent to Nebraska. Farm data from USDA NASS Census of Agriculture. Large farms defined as operations with 1,000 or more acres.

4 Research Design

We estimate a border-county difference-in-differences model:

$$Y_{ct} = \alpha + \beta(\text{Nebraska}_c \times \text{Post}_t) + \gamma_c + \delta_t + \varepsilon_{ct} \tag{1}$$

where Y_{ct} is the outcome for county c in year t; Nebraska_c indicates Nebraska border counties; Post_t equals one for periods after the ruling (Census years 2012–2022; QWI years 2007–2024); γ_c and δ_t are county and year fixed effects; and ε_{ct} is the error term. The coefficient β captures the differential change in farm structure on the Nebraska side of the border after deregulation.

We cluster standard errors at the state level, the level of treatment assignment. With only five states in the sample, this clustering is conservative and may overstate uncertainty. We also report heteroskedasticity-robust standard errors as an alternative.

The identifying assumption is that, absent the deregulation, outcomes in Nebraska border counties would have evolved in parallel with neighboring border counties. We test this assumption using event study specifications with year-by-treatment interactions and the last

pre-treatment period as the omitted base year (Roth et al., 2023). For the Census data, we omit 2007; for the QWI data, we omit 2006.

5 Results

5.1 Farm Structure (Census of Agriculture)

Table 2 presents our main difference-in-differences estimates using the Census of Agriculture. The coefficient on Nebraska × Post-2007 is small and statistically insignificant for all farm structure outcomes. Average farm size increased by a statistically insignificant 34.4 acres (column 3, $p = 0.56$). Log farm counts show essentially zero effect (0.027, column 2, $p = 0.50$). Farm counts in levels increased by 14.4 operations (column 1), also insignificant.

The one marginally significant result is total land in farms (column 4): Nebraska border counties gained approximately 28,500 additional acres after deregulation ($p < 0.10$). However, this effect is only marginally significant and of similar magnitude to placebo cross-state differences (Section 6), so we do not emphasize it.

Table 2: Effect of Corporate Farming Deregulation on Farm Structure

	(1) Farms	(2) Log Farms	(3) Avg Size	(4) Land (ac)
Nebraska × Post-2007	14.398	0.027	34.365	28476.342*
	(27.304)	(0.037)	(56.130)	(14207.232)
County FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	468	468	468	468
Counties	78	78	78	78

Notes: Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Sample restricted to border counties (Nebraska counties adjacent to a neighboring state, and neighboring-state counties adjacent to Nebraska). "Post-2007" denotes Census years 2012, 2017, and 2022; "Pre" includes 1997, 2002, and 2007. "Avg Size" is average acres per farm. All specifications include county and year fixed effects.

5.2 Event Study

Table 3 reports the event study estimates for Census outcomes. For average farm size (column 2), the pre-treatment coefficients for 1997 (-199.2, $p = 0.10$) and 2002 (-79.0, $p = 0.24$) are negative, suggesting that Nebraska farms were growing more slowly than neighbors even before the ruling. While individually imprecise, this pattern warrants caution in interpreting post-treatment differences. The post-treatment coefficients for farm size are also individually insignificant, with no systematic trend toward larger farms after deregulation.

For log farm counts (column 1), the pre-treatment coefficient for 1997 (0.092, $p < 0.01$) is significant, indicating differential trends in farm counts that predate the treatment. Post-treatment coefficients are also positive and significant through 2012, but this pattern mirrors the pre-treatment differential, making it difficult to attribute to the deregulation.

Table 3: Event Study: Farm Structure Before and After Deregulation

	(1) Log Farms	(2) Avg Size
Pre-treatment (relative to 2007):		
NE × 1997	0.092***	-199.194*
	(0.024)	(100.745)
NE × 2002	0.043*	-79.036
	(0.021)	(60.607)
Post-treatment:		
NE × 2012	0.094**	-47.206
	(0.027)	(39.282)
NE × 2017	0.071*	-10.577
	(0.036)	(52.568)
NE × 2022	0.050	-117.353
	(0.034)	(80.271)
County FE	Yes	Yes
Year FE	Yes	Yes
Observations	468	468

Notes: Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Coefficients are interactions of Nebraska indicator with Census year dummies. The omitted category is 2007 (last pre-treatment Census). Null pre-treatment coefficients support the parallel trends assumption. Border county sample. Census years: 1997, 2002, 2007, 2012, 2017, 2022.

5.3 Agricultural Employment (QWI)

Using Quarterly Workforce Indicators, we examine whether deregulation affected agricultural employment in border counties. The pooled DiD estimate for log agricultural employment is -0.005 ($p = 0.76$), a precise null. The QWI event study, with six pre-treatment years (2001–2006), shows pre-treatment coefficients that are small and insignificant, supporting parallel trends for this outcome. Post-treatment coefficients are generally negative but reflect a pre-existing trend toward lower relative agricultural employment in Nebraska border counties

that begins before 2007.

6 Robustness

Table 4 presents robustness checks for average farm size. The null result is stable across bandwidth choices (50 km to 150 km from the border), restricting to rural counties, and using heteroskedasticity-robust standard errors instead of state-level clustering. Wider bandwidths yield smaller point estimates as more interior counties dilute any border effect.

Two placebo tests support the design. First, comparing non-border South Dakota and Iowa counties — two states that both maintained corporate farming restrictions — yields a placebo coefficient of 72.9 acres ($p = 0.06$), demonstrating that cross-state differences in farm size trends exist naturally without any deregulation. Second, a placebo timing test using only the pre-treatment period (1997–2007) and assigning a fake treatment at 2007 yields a coefficient of 139.1 ($p = 0.13$), further confirming that differential trends predate the ruling.

Leave-one-state-out analysis (not tabulated) confirms that no single neighboring state drives the results. Dropping Iowa, Kansas, South Dakota, or Missouri individually yields point estimates ranging from 31.1 to 85.6, all insignificant.

A joint Wald test of the pre-treatment event study coefficients (1997 and 2002) rejects the null of parallel pre-trends for log farm counts ($F = 7.31$, $p < 0.01$) and marginally for average farm size ($F = 3.25$, $p = 0.04$). This pre-trend concern is the main threat to identification. We note, however, that the null post-treatment effects are consistent with the pre-treatment pattern: if anything, the pre-trend in farm counts favored Nebraska, making the absence of a positive post-treatment shift more striking.

Given the small number of state-level clusters (five), we also report wild cluster bootstrap p-values (Cameron et al., 2008). The bootstrap p-values for average farm size ($p = 0.53$) and log farm counts ($p = 0.58$) confirm the null finding under inference methods designed for few clusters.

Table 4: Robustness: Average Farm Size

Specification	Coefficient	SE	Observations
Baseline (border)	34.365	(56.130)	468
50 km bandwidth	-6.533	(36.179)	492
75 km bandwidth	23.318	(44.248)	786
100 km bandwidth	20.917	(32.969)	1,014
150 km bandwidth	41.372	(46.238)	1,437
Rural counties only	32.842	(45.723)	337
HC-robust SEs	34.365	(36.703)	468
Placebo tests:			
Placebo border (SD vs IA interior)	79.981***	(28.672)	888
Placebo timing (pre-2007)	139.115	(79.169)	234

Notes: All specifications report the coefficient on Nebraska × Post-2007 (or placebo equivalent) for average farm size (acres per operation). Standard errors clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Bandwidth specifications include all counties within the specified distance of the Nebraska border. "Rural only" excludes counties in the bottom quartile of farm count.

7 Discussion and Conclusion

We provide the first quasi-experimental evidence on whether anti-corporate farming laws constrain agricultural consolidation. Exploiting the Eighth Circuit's 2006 invalidation of Nebraska's Initiative 300, we compare farm structure and agricultural employment in Nebraska border counties to adjacent counties in states that maintained their restrictions. We find no meaningful effect of deregulation on average farm size, farm counts, or agricultural employment over the 17 years following the ruling.

These null results carry three implications. First, anti-corporate farming laws appear to be largely symbolic policy instruments. The "corporate farm brake" does not bind because consolidation proceeds through channels these laws do not restrict: family-owned operations expand through purchase and lease; LLC structures and family trusts provide organizational flexibility; and the binding constraints on farm size — equipment scale economies, management capacity, credit access — are technological and financial, not legal.

Second, the policy debate over these laws may be misframed. Proponents argue that the

laws protect family farms from corporate takeover. Our evidence suggests that repealing them would not meaningfully accelerate consolidation. At the same time, these laws impose real costs by restricting interstate commerce — the constitutional basis for the *Jones v. Gale* ruling — and by limiting access to organizational forms that could improve risk management and capital formation.

Third, the result illustrates a broader pattern in agricultural policy: regulations targeting ownership form often fail to achieve their stated objectives because they do not address the underlying economic forces driving structural change (Key and Roberts, 2009). If policymakers wish to slow consolidation, they would need to address the scale economies, market power, and commodity program incentives that reward larger operations (MacDonald et al., 2013).

Our study has limitations. The Census of Agriculture is observed only every five years, limiting our ability to detect short-lived effects. The pre-treatment event study coefficients for farm counts suggest differential trends that predate the ruling, complicating the interpretation of post-treatment differences for that outcome; joint F-tests reject parallel pre-trends at conventional levels. With only five states in the sample, we rely on wild cluster bootstrap inference to supplement asymptotic cluster-robust standard errors. The border-county design restricts the sample to 78 counties. Finally, our outcomes measure farm structure and employment aggregates; finer-grained data on field-level restructuring — such as the USDA Crop Sequence Boundaries, which provide annual field polygon boundaries — could reveal changes in physical consolidation not captured by Census farm counts. Despite these constraints, the consistent null across multiple outcomes, data sources, specifications, and bandwidths provides strong evidence against a practically significant effect.

The corporate farm brake was a fixture of agricultural policy for decades. Our evidence suggests it was never engaged.

Table 5: Standardized Effect Sizes for Main Outcomes

Outcome	$\hat{\beta}$	SE	SD(Y)	SDE	SE(SDE)	Classification
Panel A: Pooled						
Average farm size	34.365	56.130	1278.56	0.0269	0.0439	Small positive
Log number of farms	0.027	0.037	0.51	0.0521	0.0733	Moderate positive
Panel B: Heterogeneous (East vs. West border)						
Avg size (East)	-16.975	29.757	1278.56	-0.0133	0.0233	Small negative
Avg size (West)	121.177	124.127	1278.56	0.0948	0.0971	Moderate positive

Notes: **Country:** United States. **Research question:** Whether anti-corporate farming laws constrain agricultural consolidation, as tested by the 2007 judicial invalidation of Nebraska's Initiative 300 on farm structure in border counties. **Policy mechanism:** Initiative 300 (1982) prohibited non-family corporations from acquiring Nebraska farmland; the Eighth Circuit struck it down in December 2006 (*Jones v. Gale*), allowing corporate ownership while neighboring states maintained restrictions. **Outcome definition:** Average farm size in acres per operation and log number of farm operations (USDA Census of Agriculture county-level data). **Treatment:** Binary: Nebraska counties (deregulated) versus adjacent counties in Iowa, Kansas, South Dakota, and Missouri (restrictions maintained). **Data:** USDA NASS Census of Agriculture, county-level, 2002–2022 (five Census waves), border counties only; sample size varies by outcome. **Method:** Border-county difference-in-differences with county and year fixed effects; standard errors clustered at the state level. **Sample:** Counties sharing a border across the Nebraska state line; excludes interior counties and states not adjacent to Nebraska. SDE $= \hat{\beta}/\text{SD}(Y)$ where SD(Y) is the unconditional standard deviation. Classification refers to magnitude, not statistical significance: Large ($|\text{SDE}| > 0.15$), Moderate (0.05–0.15), Small (0.005–0.05), Null (< 0.005).

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