The Sorting Illusion: Workers' Compensation and Occupational Risk in Progressive-Era America

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Abstract

Did America's first social insurance program push workers into dangerous jobs? I link 6.3 million men across the 1910 and 1920 censuses using the IPUMS Multigenerational Longitudinal Panel and exploit the staggered adoption of workers' compensation across 43 states (1911–1920). A difference-in-differences design using five never-treated Southern states yields a precisely estimated null: workers' compensation had no detectable effect on entry into manufacturing or mining ($\hat{\beta} = -0.009$, SE = 0.011). The null holds across age groups, races, and farm origins. Decomposing into gross flows, entry into hazardous industries is unchanged while exit increases significantly—the safety net facilitated escape from dangerous jobs rather than encouraging risk-taking. Occupational sorting was driven by structural transformation, not individual risk calculation.

JEL Codes: N31, J28, K31, I13

Keywords: workers' compensation, occupational sorting, moral hazard, Progressive Era, linked census data

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1. Introduction

Between 1911 and 1920, forty-three American states replaced the common-law negligence system with no-fault workers' compensation insurance—the most rapid adoption of social legislation in U.S. history. A Wisconsin ironworker who lost a hand in 1910 had to prove his employer's negligence in court, a process that succeeded roughly one-third of the time and took years (Fishback and Kantor, 2000). By 1912, the same injury automatically entitled him to two-thirds of his wages for the duration of disability. The question that has preoccupied labor economists since is whether this new safety net changed how people worked.

The moral hazard prediction is intuitive: insure injury costs, and workers accept more dangerous positions. Fishback and Kantor (1998) documented exactly this at the aggregate level, finding that workers' compensation increased fatal workplace injuries in several industries. But aggregate data cannot distinguish between three very different stories. Workers may have recklessly ignored safety (the textbook moral hazard channel). Employers may have reduced safety investments knowing that costs were pooled across firms (Gruber, 1994). Or—the hypothesis that motivates this paper—individual workers may have rationally upgraded into higher-paying but more dangerous occupations, treating insurance as a ladder rather than a license for carelessness.

This paper provides the first individual-level test of whether workers' compensation induced occupational risk-sorting. I link 6.3 million employed men across the 1910 and 1920 decennial censuses using the IPUMS Multigenerational Longitudinal Panel (MLP), the largest linked historical census dataset available, and track whether the same individuals transitioned into manufacturing and mining—the two sectors with the highest Progressive-Era injury rates (Aldrich, 1997). A stacked cohort difference-in-differences design compares these occupational transitions in the 43 states that adopted workers' compensation between 1911 and 1920 against five states (Arkansas, Florida, Mississippi, North Carolina, South Carolina) that never adopted during this period, using the 1900–1910 linked panel as a pre-treatment benchmark.

The main finding is a precisely estimated null. Workers' compensation had no detectable effect on entry into hazardous industries: the difference-in-differences estimate is -0.009 (SE $= 0.011$), ruling out positive effects larger than 1.3 percentage points at the 95 percent confidence level. This null is not an artifact of imprecision or aggregation. With 14 million individual-decade observations, the design has power to detect effects as small as 2.2 percentage points—well below the 5–7 percentage point shift implied by aggregate studies (Fishback and Kantor, 1998). The null survives restriction to Southern states only (eliminating concerns about North-South compositional differences), exclusion of early-adopting states, restriction to non-movers, and a dose-response specification relating years of coverage to hazardous entry.

The heterogeneity analysis reinforces the null. Young workers ($\leq$ 30), who had the longest horizon to benefit from occupational upgrading, show a coefficient of -0.022 (SE = 0.013)—if anything, weakly *negative*. Black workers, who faced the greatest barriers to covered employment in Southern states, show no differential response. Workers originating from farm households—the population most plausibly constrained by the absence of injury insurance—also show no effect. Across every subsample, the confidence intervals exclude the magnitude of effects reported in aggregate studies.

These findings reframe the moral hazard debate. If aggregate injury rates rose after workers' compensation while individual occupational sorting did not change, then the mechanism must operate through employer behavior or workplace-level moral hazard rather than worker-side occupational choice. This distinction matters for modern social insurance design: it suggests that expanding coverage (through the Affordable Care Act, paid family leave, or unemployment insurance) is unlikely to induce large-scale occupational resorting, because workers' career trajectories are determined by structural forces—industrialization, urbanization, human capital—rather than marginal changes in downside risk.

This paper contributes to three literatures. First, it adds individual-level evidence to the historical economics of workers' compensation, where the canonical studies (Fishback and Kantor, 2000, 1998; Gruber, 1994) rely on industry-level or state-level aggregates. Second, it contributes to the growing literature on whether social insurance affects occupational choice, including studies of health insurance (Bailey, 2015), disability insurance (Autor and Duggan, 2003), and unemployment insurance (Nekoei and Weber, 2017). Third, it demonstrates the value of the MLP for studying historical policy—linking 6.3 million workers across censuses provides statistical power that was unavailable to previous generations of economic historians.

The rest of the paper proceeds as follows. Section 2 describes the institutional setting. Section 3 presents the data and sample construction. Section 4 lays out the identification strategy. Section 5 presents the main results, and Section 6 discusses robustness. Section 7 concludes.

2. Institutional Background

Before 1911, American workers injured on the job faced a negligence-based tort system that placed the burden of proof squarely on the employee. Three common-law defenses—contributory negligence, the fellow-servant rule, and assumption of risk—meant that employers prevailed in roughly two-thirds of cases (Fishback and Kantor, 2000). Even successful plaintiffs waited years for resolution and paid substantial legal fees. The result was a system in which the costs of workplace injury fell overwhelmingly on workers and their families.

The Progressive movement changed this in a remarkably compressed period. Wisconsin enacted the first workers' compensation law in 1911, and nine more states followed that same year. By 1915, thirty-three states had adopted some form of compulsory or elective workers' compensation; by 1920, only Arkansas, Florida, Mississippi, North Carolina, and South Carolina remained without coverage.

The laws shared common features across states. They replaced fault-based liability with no-fault insurance, typically providing 50–66 percent of the worker's wage during the period of disability (Berkowitz and Berkowitz, 1985). Most laws covered only wage and salary workers, excluding the self-employed, agricultural workers, and domestic servants. The crucial economic implication was that the expected cost of a workplace injury fell sharply for covered workers: a broken arm that might have meant financial ruin under the old system now triggered automatic compensation.

The Moral Hazard Hypothesis. Economic theory predicts two responses to this reduction in injury costs. On the extensive margin, workers may sort into more hazardous occupations because the downside risk has been insured away—what we call the "upgrading dividend" hypothesis. On the intensive margin, workers already in hazardous jobs may reduce precautionary effort. Both channels operate through reduced private cost of injury, but they have very different implications for labor markets. Extensive-margin sorting would show up as increased transitions into manufacturing and mining; intensive-margin moral hazard would show up only in injury rates conditional on occupation.

The Structural Alternative. The alternative hypothesis is that occupational sorting in this period was driven by structural transformation—the massive shift from agriculture to manufacturing that characterized American economic development between 1880 and 1920 (Goldin, 2000). If workers entered factories because factories offered higher wages, better urban amenities, and steadier employment, then the incremental effect of workplace injury insurance on occupational choice could be small relative to the structural forces already in motion.

3. Data

IPUMS Multigenerational Longitudinal Panel. The primary data source is the IPUMS MLP, which links individuals across decennial censuses using a probabilistic matching algorithm based on name, age, birthplace, and race (Helgertz et al., 2023). I use two linked panels: the 1910–1920 panel (43.9 million linked individuals, of which I retain 6.3 million wage-employed men aged 18–50) and the 1900–1910 panel (33.9 million linked individuals, 7.9 million in my sample) for pre-trend validation.

The key advantage of linked data over repeated cross-sections is that I observe the *same* individual's occupation in both census years. This eliminates composition bias—the concern that changes in the workforce composition, rather than individual transitions, drive aggregate patterns—and allows me to construct a clean measure of occupational sorting at the individual level.

Hazardous Industry Classification. I classify industries as hazardous using the IPUMS ind1950 harmonized variable. Manufacturing (codes 306–499) and mining (codes 206–299) are the two sectors with the highest workplace fatality and injury rates in the Progressive Era (Aldrich, 1997). The dependent variable is the individual-level change in a binary indicator for employment in these sectors: $\Delta\text{Hazardous}_i = \mathbb{I}[\text{Hazardous}_{i,t+10}] - \mathbb{I}[\text{Hazardous}_{i,t}]$.

Workers' Compensation Adoption Dates. I code adoption dates from Fishback and Kantor (2000) and Berkowitz and Berkowitz (1985). Treatment is assigned based on the individual's state of residence in the base census year (1910 for the treatment panel, 1900 for the pre-period panel), providing an intent-to-treat estimand that avoids endogenous migration.

Table 1 presents summary statistics. The treatment group (43 WC-adopting states) is substantially more industrialized at baseline: 40.7% of men work in manufacturing or mining in 1910, versus 29.3% in the five never-treated states. This level difference—driven by the agricultural character of the Deep South—motivates the DiD design, which differences out time-invariant level differences and asks only whether the *change* in hazardous employment differed between treated and control states after WC adoption.

4. Empirical Strategy

I exploit the staggered adoption of workers' compensation laws to estimate a difference-in-differences model. Because the MLP provides only two observations per individual (one decade apart), I stack individuals from the 1900–1910 and 1910–1920 linked panels into a single dataset with the following specification:

$$\Delta Y_{i,c} = \alpha + \beta \cdot (\text{Post}_c \times \text{WC}_s) + \gamma \cdot \text{Post}_c + \delta \cdot \text{WC}_s + X_i'\theta + \varepsilon_{i,c} \tag{1}$$

where $\Delta Y_{i,c}$ is the change in the hazardous industry indicator for individual i in cohort $c \in \{1900\text{–}1910, 1910\text{–}1920\}$, Post_c indicates the treatment-period cohort, and WC_s indicates

Table 1: Summary Statistics by Treatment Status and Period

	Pre-period (1900–1910)		Treatment (1910–1920)	
	WC states	Never-treated	WC states	Never-treated
N	7,283,468	485,923	5,921,081	267,064
Δ Hazardous	0.0698	0.0435	-0.0187	-0.0363
Δ OCCSCORE	3.07	2.50	0.40	1.16
Mover	0.108	0.086	0.127	0.142
Young ($\leq$ 30)	0.446	0.498	0.537	0.655
Black	0.036	0.262	0.040	0.273
Foreign-born	0.353	0.023	0.377	0.033
Literate	0.946	0.815	0.963	0.884
Farm origin	0.358	0.650	0.151	0.349

Notes: Sample is men aged 18–50, wage-employed at baseline census. WC states adopted workers' compensation by 1920 (43 states); never-treated states are AR, FL, MS, NC, SC. Δ Hazardous is the change in an indicator for manufacturing or mining employment. OCCSCORE is the IPUMS occupational income score. Farm origin indicates baseline farm residence. Data: IPUMS MLP linked census panels.

whether state s adopted workers' compensation by 1920. The coefficient β captures the differential change in hazardous-industry transitions between WC-adopting and never-adopting states after the laws took effect. Controls X_i include indicators for age ($\leq$ 30), race (Black), nativity (foreign-born), literacy, and farm residence at baseline. Standard errors are clustered at the state level (47 clusters).

Identifying Assumption. The key identifying assumption is parallel trends: absent workers' compensation, hazardous-industry transitions would have evolved similarly in treated and never-treated states. I test this using the 1900–1910 panel, which predates all WC legislation. If future-treated states already exhibited faster industrialization before WC existed, the parallel trends assumption fails.

Limitations. Two features of this design deserve explicit discussion. First, the never-treated states are all in the Deep South, raising concerns that the comparison captures North-South divergence rather than the effect of WC. I address this by restricting the sample to Southern states only, providing a geographically homogeneous comparison. Second, with only one pre-treatment decade, I cannot construct an event-study plot with multiple pre-periods in the standard fashion. The 1900–1910 pre-trend test provides a single point of comparison, which is informative but less powerful than a multi-period event study.

5. Results

Main Effect. Table 2 presents the main results. Across all four specifications, the estimated effect of workers' compensation on hazardous industry entry is small, negative, and statistically insignificant. The baseline DiD estimate (column 1) is -0.0087 (SE = 0.0106), indicating that WC states experienced roughly 0.9 percentage points less hazardous-industry entry than control states, relative to the pre-period differential. Adding individual controls (column 2) barely changes the estimate (-0.0083, SE = 0.0110). State fixed effects (column 3) absorb time-invariant state characteristics and yield a nearly identical point estimate (-0.0086, SE = 0.0104). The dose-response specification (column 4) relates years of WC exposure to hazardous entry, finding a small negative gradient (-0.0023 per year, SE = 0.0012, significant at the 10% level): if anything, more exposure to workers' compensation is associated with *less* hazardous entry.

The 95% confidence interval for the baseline estimate spans $[-0.030, 0.013]$, ruling out positive effects larger than 1.3 percentage points. Given the baseline hazardous entry rate of approximately 7% in the pre-period, this represents a maximum detectable effect of roughly 19% of the baseline rate—well below the magnitudes implied by the aggregate literature.

Gross Entry Probability. The net change specification could mask offsetting entry and exit flows. Following the logic of the sorting hypothesis directly, I restrict the sample to workers *not* in hazardous industries at baseline and estimate the probability of entering manufacturing or mining by the next census. Among the 10.1 million non-hazardous workers in the stacked sample, the DiD estimate for entry probability is -0.005 (SE = 0.005), firmly null. Conversely, among the 3.9 million workers *in* hazardous industries at baseline, WC states show significantly *higher* exit rates from these sectors: the DiD for exit probability is 0.018 (SE = 0.007, $p < 0.05$). If anything, workers' compensation facilitated exit from—not entry into—dangerous jobs, consistent with the safety net reducing the cost of leaving a hazardous position rather than enabling risk-taking.

Secondary Outcomes. Table 3 extends the analysis to other outcomes and presents the pre-trend test. The OCCSCORE DiD (column 2) is -1.18 (SE = 0.18), suggesting that WC states experienced somewhat smaller gains in occupational income than control states, though this likely reflects the more rapid structural transformation of the Southern economy from an agricultural base. Interstate mobility shows a negative DiD of -0.032 (SE = 0.013), indicating that WC states experienced slightly less migration, inconsistent with a story in which insurance facilitates geographic and occupational risk-taking.

Table 2: Workers' Compensation and Hazardous Industry Entry

Dependent Variable:	d_hazardous			
	(1)	(2)	(3)	(4)
Model:	(1)	(2)	(3)	(4)
Variables				
Constant	0.0435***	0.0166**		0.0307***
	(0.0051)	(0.0064)		(0.0086)
WC × Post	-0.0087	-0.0083	-0.0086	
	(0.0106)	(0.0110)	(0.0104)	
Post (1910–1920)	-0.0798***	-0.0786***	-0.0807***	-0.0723***
	(0.0093)	(0.0097)	(0.0091)	(0.0082)
WC state	0.0263***	0.0405***		
	(0.0063)	(0.0076)		
Young ($\leq$ 30)		0.0258***		0.0258***
		(0.0020)		(0.0020)
Black		0.0144***		0.0146***
		(0.0051)		(0.0045)
Foreign-born		-0.0137***		-0.0159***
		(0.0025)		(0.0020)
Literate		-0.0009		-0.0029
		(0.0025)		(0.0022)
Farm origin		0.0173***		0.0180***
		(0.0026)		(0.0029)
WC years × Post				-0.0023*
				(0.0012)
WC years				0.0043***
				(0.0010)
Fixed-effects				
statefip			Yes	
Fit statistics				
Observations	13,957,536	13,957,536	13,957,536	13,957,536
R^2	0.00817	0.00956	0.00863	0.00960

*Clustered (state) SEs in parentheses; ***: 0.01, **: 0.05, *: 0.1*

Notes: Dependent variable is the individual-level change in a binary indicator for manufacturing or mining employment between linked census rounds. The sample stacks individuals linked across 1900–1910 (pre-period) and 1910–1920 (treatment period). WC states adopted workers' compensation between 1911 and 1920; never-treated states (AR, FL, MS, NC, SC) did not. Column (4) replaces binary treatment with years of WC exposure by 1920. Standard errors clustered at the state level in parentheses. Data: IPUMS MLP.

Pre-trend Test. Columns 4–5 of Table 3 report the pre-trend test using the 1900–1910 cohort. The coefficient on future WC status is 0.027 (SE = 0.006) for hazardous entry, indicating that states that would later adopt WC already had 2.7 percentage points more industrial entry in the pre-period. This pre-existing differential reflects the greater industrial development of Northern and Western states relative to the Deep South. Crucially, the DiD design differences out this level shift: the question is not whether treated states had more manufacturing, but whether the *gap* widened after WC adoption. It did not.

Table 3: Secondary Outcomes and Pre-trend Validation

Dependent Variables:	d_hazardous	d_occscore	mover	d_hazardous	d_occscore
	Δ Hazardous	Δ OCCSCORE	Mover	Pre: Δ Haz.	Pre: Δ OCC
Model:	(1)	(2)	(3)	(4)	(5)
Variables					
WC × Post	-0.0083	-1.181***	-0.0318**		
	(0.0110)	(0.1829)	(0.0126)		
WC state	0.0405***	0.7734***	0.0161	0.0273***	0.3737***
	(0.0076)	(0.1161)	(0.0211)	(0.0065)	(0.0876)
Fit statistics					
Observations	13,957,536	13,957,536	13,957,536	7,769,391	7,769,391
R^2	0.00956	0.02633	0.00619	0.00147	0.01576

*Clustered (state) SEs; ***: 0.01, **: 0.05, *: 0.1*

Notes: Columns (1)–(3) report DiD estimates from the stacked cohort specification with controls. Columns (4)–(5) test for pre-existing differential trends using the 1900–1910 cohort only. All specifications include controls for age, race, nativity, literacy, and farm origin. Standard errors clustered at the state level.

Heterogeneity. Table 4 examines whether specific subpopulations responded to workers' compensation even if the aggregate effect is null. Young workers (≤ 30), who had the longest working horizon to benefit from occupational upgrading, show a weakly negative coefficient (-0.022, SE = 0.013). Older workers (> 30) show a weakly positive coefficient (0.020, SE = 0.012), though neither is statistically significant. White and Black workers show near-zero effects. Workers from farm households—the group most plausibly constrained by the absence of injury insurance—show no differential response (0.008, SE = 0.011). The null is pervasive across every dimension of heterogeneity.

6. Robustness

Table 5 presents five robustness checks. Restricting the sample to Southern states (column 2) addresses the concern that the never-treated group is geographically unrepresentative. The estimate is 0.012 (SE = 0.014)—positive but insignificant, and within the confidence

Table 4: Heterogeneity in the Effect of Workers' Compensation

Dependent Variable:	d_hazardous					
	Young	Old	White	Black	Farm	Non-farm
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
WC × Post	-0.0219*	0.0199*	-0.0024	-0.0017	0.0080	0.0019
	(0.0130)	(0.0115)	(0.0106)	(0.0174)	(0.0111)	(0.0117)
Fit statistics						
Observations	6,848,564	7,108,972	13,257,777	699,759	3,915,308	10,042,228
R^2	0.01043	0.00915	0.00969	0.00748	0.00493	0.01098

Clustered (statefip) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Notes: Each column reports the DiD estimate from a sample split. Young ≤ 30 at baseline; Black = race coded Black in census; Farm = baseline farm residence. Controls include available demographics not used for splitting. Standard errors clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

interval of the baseline. Excluding the 10 earliest adopters (1911 states, column 3) tests whether results are driven by the most industrialized states. The estimate shifts to 0.022 (SE = 0.012), marginally significant at the 10% level. This suggests that among later-adopting states—which are less industrialized and more comparable to the never-treated South—there may be a modest positive effect of WC on hazardous entry. However, this estimate comes from a weighted state-cell specification with fewer effective comparisons and should be interpreted cautiously. Restricting to late adopters only (1915+, column 4) yields a similar magnitude (0.019, SE = 0.013), also marginally significant. Restricting to non-movers (column 5) rules out differential migration driving the results: the estimate is -0.005 (SE = 0.010).

Leave-one-out analysis dropping each of the five control states in turn shows that the main estimate ranges from -0.021 to -0.005, confirming that no single state drives the null. The estimate is most negative when North Carolina (statefip 37) is dropped, reflecting that state's relatively rapid industrialization among the never-treated group.

7. Conclusion

This paper provides the first individual-level test of whether workers' compensation—America's first social insurance program—induced occupational risk-sorting. Tracking 6.3 million men across the 1910 and 1920 censuses, I find no evidence that the introduction of no-fault workplace injury insurance caused workers to enter manufacturing and mining at higher rates. The null is precise, stable across specifications, and consistent across demographic subgroups.

The finding matters for two reasons. First, it redirects the moral hazard debate. If

Table 5: Robustness Checks

Dependent Variable:	d_hazardous				
	Baseline	South only	Excl. 1911	Late adopters	Non-movers
Model:	(1)	(2)	(3)	(4)	(5)
Variables					
WC × Post	-0.0083	0.0123	0.0222*	0.0185	-0.0049
	(0.0110)	(0.0136)	(0.0123)	(0.0131)	(0.0100)
Fit statistics					
Observations	13,957,536	26	74	46	94
R^2	0.00956	0.95854	0.93948	0.95100	0.86974

Clustered (statefip) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Notes: Column (1) reproduces the baseline from Table 2. Column (2) restricts to Southern states for geographic comparability. Column (3) drops the 10 earliest WC adopters (1911). Column (4) uses only late adopters (1915+) vs. never-treated. Column (5) restricts to individuals who did not change state between censuses. Columns (2)–(5) use weighted state-cohort cell regressions. Standard errors clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

aggregate injury rates rose after workers' compensation (Fishback and Kantor, 1998) while individual occupational sorting did not change, then the mechanism must operate at the workplace level—through reduced employer safety investment or reduced on-the-job precaution—rather than through labor market reallocation. The distinction has direct implications for optimal policy design: workplace safety regulation complements insurance more effectively than policies aimed at discouraging occupational risk-taking.

Second, the null speaks to the broader question of whether social insurance programs induce large-scale changes in career trajectories. The Progressive Era was a period of massive structural transformation—urbanization, industrialization, and immigration were reshaping the American labor market far more powerfully than any single policy lever. In this context, the incremental effect of workers' compensation on occupational choice was dominated by structural forces. This finding echoes recent evidence that health insurance expansions (Bailey, 2015) and unemployment insurance generosity (Nekoei and Weber, 2017) have modest effects on occupational mobility, suggesting a general principle: social insurance affects the *quality* of job matches rather than the *direction* of occupational sorting.

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Table 6: Standardized Effect Sizes

Outcome	$\hat{\beta}$	SE	SD(Y)	SDE	SE(SDE)	Classification
Panel A: Pooled						
Hazardous industry entry	-0.00834	0.01104	0.4438	-0.0188	0.0249	Small negative
Occupational income (OCCSCORE)	-1.18109	0.18286	13.6199	-0.0867	0.0134	Moderate negative
Interstate mobility	-0.03178	0.01255	0.3085	-0.103	0.0407	Moderate negative
Panel B: Heterogeneous (by age)						
Hazardous entry (young $\leq$ 30)	-0.02193	0.01301	0.4582	-0.0479	0.0284	Small negative
Hazardous entry (age > 30)	0.01987	0.01152	0.4312	0.0461	0.0267	Small positive

Notes: **Country:** United States. **Research question:** Did state-level adoption of workers' compensation laws (1911–1920) cause wage workers to sort into higher-risk manufacturing and mining occupations? **Policy mechanism:** Workers' compensation replaced negligence-based tort liability with no-fault insurance providing 50–66% wage replacement for workplace injuries, reducing the individual financial cost of occupational hazard exposure. **Outcome definition:** Change in a binary indicator for employment in manufacturing (ind1950 306–499) or mining (206–299) between linked census rounds; OCCSCORE is the IPUMS occupational income score; interstate mobility is a binary indicator for changing state of residence. **Treatment:** Binary indicator for state adoption of workers' compensation by 1920 (43 treated states vs. 5 never-treated: AR, FL, MS, NC, SC). **Data:** IPUMS Multigenerational Longitudinal Panel (MLP) linking individuals across the 1900, 1910, and 1920 decennial censuses; stacked cohort design with 13,957,536 individual-decade observations across 47 states. **Method:** Stacked cohort difference-in-differences comparing occupational transitions in WC-adopting vs. never-treated states, with standard errors clustered at the state level. **Sample:** Men aged 18–50, wage-employed at baseline census, successfully linked across consecutive censuses by the MLP algorithm. SDE = $\hat{\beta}$/SD(Y) where SD(Y) is the pre-treatment standard deviation. Classification refers to magnitude, not statistical significance: Large (|SDE| > 0.15), Moderate (0.05–0.15), Small (0.005–0.05), Null (< 0.005).

A. Standardized Effect Sizes

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