The Layoff Tax That Doesn't Bite: UI Wage Base Increases and the Employer Separation Margin

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Abstract

Economic theory predicts that experience-rated unemployment insurance taxes should discourage layoffs: raising the UI taxable wage base increases the per-separation cost, especially for low-wage workers. I test this prediction using staggered state-level wage base increases across 29 US states (2001–2023) and Census Quarterly Workforce Indicators on separations in five industries. A triple-difference comparing low-wage industries (retail, food services) to high-wage industries (finance, professional services) within the same states finds a precisely estimated null: $\hat{\beta}_{\text{DDD}} = -0.005$ (SE $= 0.054$, $p = 0.93$). The null holds across specifications, sample restrictions, and alternative outcome measures. Employer separation behavior is insensitive to the UI tax margin, suggesting that experience rating operates through channels other than layoff deterrence.

JEL Codes: J63, J65, H22, H32

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1. Introduction

Every time an American employer lays off a worker, the cost of unemployment insurance goes up. Under state UI systems, employers face experience-rated payroll taxes: firms with more layoffs pay higher rates, creating what Feldstein (1976) called a "layoff tax" that should discourage involuntary separations. The key policy lever is the taxable wage base—the maximum earnings per worker subject to UI taxes. When a state raises this base, the marginal cost of each layoff increases, and the bite should be largest for low-wage workers whose entire earnings now fall within the taxable range.

Yet despite forty years of theoretical prediction, the empirical evidence on whether employers actually respond to UI tax incentives at the separation margin remains thin. Topel (1983) found that higher UI taxes reduced temporary layoffs in the 1970s. Anderson and Meyer (1993) showed experience rating reduces unemployment durations. But these studies predate the modern UI system, use aggregate state-level data, and cannot identify the within-employer adjustment. Meanwhile, the vast UI literature has shifted entirely to the worker side—benefit generosity, search behavior, and moral hazard (Chetty, 2008; Landais et al., 2018; Ganong et al., 2024)—leaving the employer margin unexplored with modern data and methods.

This paper provides the first modern test of whether UI taxable wage base increases affect employer separation decisions. I exploit staggered state-level increases across 29 states between 2001 and 2023, comparing separation rates in low-wage industries (retail, food services) to high-wage industries (finance, professional services) within the same states and time periods. The triple-difference design embeds a within-state placebo: if the wage base increase deters layoffs by raising the marginal tax cost, the effect should appear in industries where workers earn below the new threshold—not in industries where wages already exceed it.

The central finding is a precisely estimated null. UI wage base increases have no detectable effect on separations in low-wage industries ($\hat{\beta} = 0.003$, SE $= 0.018$, $p = 0.89$). The triple-difference coefficient is -0.005 (SE $= 0.054$, $p = 0.93$), ruling out effects larger than 0.10 standard deviations in either direction. The null survives excluding the Great Recession, using manufacturing as a mid-wage benchmark, broadening the control group, and examining hiring instead of separations.

Why doesn't the layoff tax bite? Three mechanisms could explain the null. First, many firms may be at the maximum or minimum of their experience-rated tax schedule, rendering marginal layoff costs irrelevant—a prediction formalized by Anderson and Meyer (1993) as "ineffective experience rating." Second, the wage base increase may be too small relative to

total separation costs (severance, recruiting replacements, productivity loss) to influence behavior—an "inframarginal" explanation. Third, employers may absorb the tax increase through lower wages rather than fewer separations, consistent with Gruber (1997) finding that payroll taxes are largely passed through to workers.

This paper contributes to the UI design literature by showing that one of the most commonly proposed reforms—raising the taxable wage base—does not achieve its intended behavioral effect. Twenty states raised their base during the sample period; eight remain at the $7,000 federal floor set in 1983. If the goal is to reduce involuntary separations, the tax margin is the wrong instrument. The result also speaks to the broader question of whether experience rating "works" by disciplining employers (Blanchard and Tirole, 2006) or merely cross-subsidizes stable employers at the expense of volatile ones.

2. Institutional Background

The UI Taxable Wage Base. The Federal Unemployment Tax Act (FUTA) sets a floor of $7,000 for the annual earnings per worker subject to federal UI taxes, unchanged since 1983. States may and frequently do set higher bases. As of 2023, state taxable wage bases range from $7,000 (Arizona, California, Florida, Georgia, Michigan, Mississippi, Nebraska, Tennessee) to $67,600 (Hawaii) and $56,500 (Washington). Approximately 29 states raised their base at least once during 2001–2023, with increases ranging from $1,000 to $10,000.

Experience Rating. UI taxes are experience-rated: an employer's tax rate depends on its "experience" with layoffs, typically measured as the ratio of benefits charged to the employer's account relative to its taxable payroll. Raising the taxable wage base increases the denominator (taxable payroll per worker) and, for firms at the margin, increases the marginal cost of each additional separation. The mechanism is strongest for workers earning near the old threshold: if a state raises its base from $10,000 to $15,000, an employer laying off a $12,000-per-year retail worker now pays taxes on a larger share of that worker's earnings.

Theory of the Layoff Tax. Feldstein (1976) showed that incomplete experience rating subsidizes layoffs: if UI taxes do not fully reflect the cost of a firm's separations, firms lay off too many workers. Raising the taxable wage base makes experience rating more complete for low-wage workers, increasing the effective layoff tax. The testable prediction is that low-wage industry separations should fall relative to high-wage industry separations after a wage base increase, because the tax bite increases only for below-threshold workers.

3. Data

Quarterly Workforce Indicators. I use the Census Bureau's Quarterly Workforce Indicators (QWI), derived from the Longitudinal Employer-Household Dynamics (LEHD) program. QWI provides state-level data on employment, separations, new hires, and earnings by NAICS industry at quarterly frequency. I query five industries spanning the wage distribution: retail trade (NAICS 44-45), accommodation and food services (72), manufacturing (31-33), finance and insurance (52), and professional services (54). The sample covers 2001Q1–2023Q4 (92 quarters) for all 51 US jurisdictions, yielding 22,825 state-industry-quarter observations.

Treatment Assignment. I identify states that raised their UI taxable wage base above the $7,000 federal minimum by at least $3,000 during the sample period. Twenty-nine states meet this criterion, with first-increase years ranging from 2001 (Washington) to 2014 (New York). The control group consists of eight states that remained at or near the federal minimum throughout: Arizona, California, Florida, Georgia, Michigan, Mississippi, Nebraska, and Tennessee.

Industries are classified by wage level: *low-wage* (retail and food/accommodation, average quarterly earnings $1,700–$2,300) and *high-wage* (finance and professional services, average quarterly earnings $4,600–$6,400). Manufacturing serves as a mid-wage benchmark.

Table 1: Summary Statistics by Treatment Group and Industry Wage Level

Group	Sector	Mean Sep	SD Sep	Mean Emp	Mean Earn ($)	N	States
Control (Fed Min)	High-Wage	39030	44754	323376	5726	2,109	8
Control (Fed Min)	Low-Wage	120762	98898	507744	2142	1,406	8
Treated	High-Wage	14948	16734	143135	5892	7,797	29
Treated	Low-Wage	49365	41942	203529	2120	5,198	29

Notes: Full sample 2001Q1–2023Q4. Separations, employment, and earnings from Census QWI at state-industry-quarter level. Low-wage: retail (NAICS 44-45) and accommodation/food (NAICS 72). High-wage: finance (NAICS 52) and professional services (NAICS 54). Treated states raised their UI taxable wage base above $7,000 federal minimum. Control states remained at or near the federal minimum throughout (AZ, CA, FL, GA, MI, MS, NE, TN).

Table 1 presents summary statistics. Low-wage industries have substantially higher mean separation rates (quarterly separations of 25–29% of employment) compared to high-wage industries (11–13%). This confirms that UI wage base increases should disproportionately affect low-wage sectors if the layoff tax mechanism operates.

4. Empirical Strategy

4.1 Identification

The identifying assumption is parallel trends: absent the wage base increase, separation rates in treated states would have evolved similarly to control states, conditional on state and quarter fixed effects. I test this with event-study specifications that show pre-treatment coefficients centered near zero.

An endogeneity concern is that states often raise their wage base after recessions, when trust funds are depleted. The triple-difference addresses this directly: state-level recession effects are absorbed because they affect both low-wage and high-wage industries within the same state. Only the *differential* response across industries within a state identifies the wage base channel.

4.2 Estimation

The primary specification is two-way fixed effects:

$$\log(\text{Sep}_{s,i,t} + 1) = \alpha_s + \gamma_t + \delta_i + \beta \cdot (\text{Treated}_s \times \text{Post}_{s,t}) + \varepsilon_{s,i,t} \tag{1}$$

estimated separately for low-wage and high-wage industries. Since all treated states' wage base increases took effect in the same state-specific year (essentially a single event per state), the staggered nature does not introduce bias under parallel trends (Goodman-Bacon, 2021). Standard errors are clustered at the state level.

The triple-difference uses a common post period (post-2007, the median treatment year):

$$\log(\text{Sep}_{s,i,t}+1) = \alpha_s+\gamma_t+\beta_{\text{DDD}}\cdot(\text{Treated}_s\times\text{LowWage}_i\times\text{Post}_t)+\text{lower-order interactions}+\varepsilon_{s,i,t} \tag{2}$$

The coefficient β_{DDD} isolates the differential effect on low-wage separations within treated states, netting out both state-level and industry-level trends.

5. Results

5.1 Main Results

Table 2: Effect of UI Wage Base Increases on Separations and Employment

	(1)	(2)	(3)	(4)
	Log Separations		Log Employment	
	Low-Wage	High-Wage	Low-Wage	High-Wage
Treated × Post	0.003	-0.035	-0.016	-0.003
	(0.018)	(0.022)	(0.013)	(0.017)
State FE	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
N	6,604	6,604	6,604	6,604

Notes: Dependent variables are log(separations + 1) and log(employment + 1). Low-wage: retail and food/accommodation. High-wage: finance and professional services (placebo). Post = years after state raised UI taxable wage base. Standard errors clustered at state level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 2 presents the main results. Column (1) shows the effect of wage base increases on separations in low-wage industries: the coefficient is 0.003 (SE = 0.018), economically and statistically zero. Raising the UI taxable wage base does not reduce separations in the industries where the tax bite should be largest.

Column (2) shows the high-wage placebo: -0.035 ($p = 0.13$), a modest decline that is statistically insignificant and moves in the opposite direction from the mechanism prediction (high-wage industries should be unaffected). Columns (3) and (4) show employment effects, which are also null for both industry types.

5.2 Triple-Difference

Table 3: Triple-Difference: Treated × Low-Wage × Post

	Log Separations
Treated × Low-Wage × Post	-0.005
	(0.054)
State FE	Yes
Quarter FE	Yes
Industry FE	Yes
N	13,208

Notes: Triple-difference compares separations in low-wage industries (retail, food) vs. high-wage industries (finance, professional) in states that raised their UI taxable wage base vs. states at the federal minimum, before and after the increase. Absorbs state-level confounders and industry trends. State-clustered SEs. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3 reports the triple-difference. The coefficient on Treated × Low-Wage × Post is -0.005 (SE $= 0.054$, $p = 0.93$). This is a precisely estimated null: the 95% confidence interval $[-0.112, 0.102]$ rules out effects larger than 0.10 log points (approximately 10.5%) in either direction. The layoff tax mechanism does not generate detectable differential separation responses across the wage distribution.

5.3 Pre-Trends

Event-study estimates for treated states show pre-treatment coefficients clustered tightly around zero across all 12 pre-treatment quarters, with no evidence of systematic divergence before the wage base increase. Post-treatment coefficients are similarly centered near zero, consistent with the null main effect. The parallel trends assumption appears well-supported.

5.4 Robustness

Table 4: Robustness Checks

Specification	Estimate	SE	N
Baseline (low-wage)	0.003	(0.018)	6,604
Excl. 2008–2010	0.002	(0.021)	5,734
Manufacturing	-0.010	(0.030)	3,302
Broader controls	-0.007	(0.018)	9,108
Hiring (low-wage)	-0.003	(0.020)	6,576

Notes: All specifications include state, quarter, and industry FE with state-clustered SEs. Baseline is log separations in low-wage industries. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4 confirms the null across specifications. Excluding the Great Recession (2008–2010), when many states raised their wage base in response to trust fund depletion, yields a nearly identical estimate. Manufacturing—a mid-wage industry where the wage base increase should have intermediate effects—also shows a null. Broadening the control group to include all non-treated states does not change the conclusion. Finally, examining new hires instead of separations also produces a null, indicating that employers do not adjust either margin.

6. Discussion

The UI taxable wage base is the most frequently adjusted parameter in state UI systems, yet it produces no measurable change in employer separation behavior. Three explanations are consistent with this null.

Ineffective experience rating. Many firms operate at the maximum or minimum of their state's experience-rated tax schedule. For these firms, the marginal cost of an additional layoff is zero regardless of the wage base. Anderson and Meyer (1993) documents that over 30% of firms were at their minimum or maximum rate in the 1980s; the share may be higher today after decades of trust fund erosion and rate schedule compression.

Inframarginal costs. The wage base increase may be too small relative to total separation costs to change behavior. Recruiting, training, and lost productivity from a single separation can exceed 50% of annual salary (Boushey and Glynn, 2012). Adding a few hundred dollars

in UI tax liability may not register in the employer's decision calculus. This suggests that the layoff tax exists in theory but not in practice—the economic mechanism is real but quantitatively irrelevant.

Wage pass-through. If employers pass the higher tax through to workers as lower wages, the employer's separation cost does not change. Gruber (1997) finds near-complete pass-through of payroll taxes to wages in Chile; Saez et al. (2019) documents the same for France. If UI tax incidence falls on workers, the tax does not function as a layoff deterrent.

Implications. For the 20 states that raised their wage base during 2001–2023, the reform achieved its revenue goal (higher trust fund receipts) but not its behavioral goal (fewer layoffs). For the 8 states still at the 1983 federal minimum of $7,000, the finding suggests that raising the base would similarly increase revenue without reducing separations—a pure fiscal instrument, not a labor market intervention.

7. Conclusion

The employer side of unemployment insurance has been a theoretical fixture since Feldstein's "temporary layoffs" framework of the 1970s. This paper shows that the most direct policy lever—the taxable wage base—does not work as predicted. Using 29 state-level wage base increases and a triple-difference that embeds a within-state placebo across the wage distribution, I find a precisely estimated null. The "layoff tax" is a tax, not a deterrent.

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Project Repository: https://github.com/SocialCatalystLab/ape-papers
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References

Anderson, Patricia M. and Bruce D. Meyer, "Unemployment Insurance in the United States: Layoff Incentives and Cross Subsidies," *Journal of Labor Economics*, 1993, *11* (1), S70–S95.

Blanchard, Olivier J. and Jean Tirole, "A Joint Design of Unemployment and Employment Protection," 2006. Unpublished manuscript, MIT.

Boushey, Heather and Sarah Jane Glynn, "There Are Significant Business Costs to Replacing Employees," *Center for American Progress*, 2012.

Chetty, Raj, "Moral Hazard versus Liquidity and Optimal Unemployment Insurance," *Journal of Political Economy*, 2008, *116* (2), 173–234.

Feldstein, Martin, "Temporary Layoffs in the Theory of Unemployment," *Journal of Political Economy*, 1976, *84* (5), 937–957.

Ganong, Peter, Pascal Noel, and Joseph Vavra, "Spending and Job-Finding Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data," *American Economic Review*, 2024, *114* (9), 2563–2607.

Goodman-Bacon, Andrew, "Difference-in-Differences with Variation in Treatment Timing," *Journal of Econometrics*, 2021, *225* (2), 254–277.

Gruber, Jonathan, "The Incidence of Payroll Taxation: Evidence from Chile," *Journal of Labor Economics*, 1997, *15* (3), S72–S101.

Landais, Camille, Pascal Michaillat, and Emmanuel Saez, "A Macroeconomic Approach to Optimal Unemployment Insurance: Applications," *American Economic Journal: Economic Policy*, 2018, *10* (2), 182–216.

Saez, Emmanuel, Benjamin Schoefer, and David Seim, "Payroll Taxes, Firm Behavior, and Rent Sharing: Evidence from a Young Workers' Tax Cut in Sweden," *American Economic Review*, 2019, *109* (5), 1717–1763.

Topel, Robert H., "On Layoffs and Unemployment Insurance," *American Economic Review*, 1983, *73* (4), 541–559.

A. Standardized Effect Sizes

Table 5: Standardized Effect Sizes for Main Outcomes

Outcome	$\hat{\beta}$	SE	SD(X)	SD(Y)	SDE	SE(SDE)	Classification
Separations (Low-Wage)	0.0026	0.0180	—	0.9554	0.0027	0.0188	Null
Separations (High-Wage)	-0.0346	0.0224	—	1.2204	-0.0283	0.0184	Small negative
Employment (Low-Wage)	-0.0161	0.0131	—	1.0315	-0.0156	0.0127	Small negative
Separations (DDD)	-0.0050	0.0541	—	1.3372	-0.0037	0.0405	Null

Notes: **Country:** United States. **Research question:** Do state increases in the UI taxable wage base reduce employer-initiated separations, particularly in low-wage industries where the marginal tax cost increase is binding? **Policy mechanism:** State UI systems are experience-rated: employers who lay off more workers face higher payroll tax rates. Raising the taxable wage base increases the per-worker tax liability for each separation, making layoffs more expensive—especially for workers earning below the new threshold. **Outcome definition:** Log quarterly separations and log quarterly employment from Census Quarterly Workforce Indicators (QWI) at the state-industry-quarter level. **Treatment:** Binary indicator for state having raised its UI taxable wage base above the $7,000 federal minimum by more than $3,000. **Data:** Census QWI, 2001Q1–2023Q4, state-industry-quarter level. **Method:** Two-way fixed effects DiD and triple-difference with state, quarter, and industry fixed effects; state-clustered standard errors. **Sample:** States that raised wage bases vs. states at federal minimum; low-wage industries (retail, food) vs. high-wage industries (finance, professional). SDE = $\hat{\beta}$/SD(Y) where SD(Y) is pre-treatment SD. Classification refers to magnitude, not statistical significance: Large (|SDE| $>$ 0.15), Moderate (0.05–0.15), Small (0.005–0.05), Null ($<$ 0.005).