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Florida's Minimum-Wage Step-Ups and Their Effects on Real Wages and Employment in the Hospitality Industry

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Abstract

Florida's 2020 Amendment 2 established a pre-announced schedule of one-dollar minimum-wage step-ups each September 30 from 2021 through 2026. This paper studies whether the quarter immediately following each step-up is associated with changes in real weekly wages and employment in the hospitality sector (NAICS 72). It builds a county–quarter panel from BLS QCEW data for 2020Q1–2024Q4 and implements a border-county difference-in-differences design that compares Florida counties contiguous with Georgia or Alabama to adjacent counties across the state line. The main specifications include county fixed effects and year-by-quarter fixed effects and control for local labor-market conditions, sector scale, and county demographics. In the full wage specification, the Florida × Post point estimate is positive and roughly 2 percent, though it is not statistically distinguishable from zero at conventional levels. The corresponding employment estimate is small and also not statistically distinguishable from zero. Results are similar when the wage outcome is winsorized to reduce sensitivity to extreme observations. The findings should be interpreted as conditional associations within a border-county design over the COVID-19 recovery window.

Keywords: minimum wage, hospitality, wages, employment, border-county difference-in-differences, Florida

Introduction

In November 2020, Florida voters approved Amendment 2, committing the state to a sequence of scheduled minimum-wage increases from $8.56 to $15.00 (Florida Department of State, Division of Elections, 2020) through one-dollar step-ups implemented each September 30 from 2021 through 2026, with inflation indexing thereafter. Because these increases are pre-announced and occur on a fixed annual date, firms and workers can anticipate the policy and potentially adjust wages, hiring, hours, and pricing around the implementation quarter. The setting is especially relevant in leisure and hospitality, where many jobs pay near the wage floor and the sector accounts for a sizable share of nonfarm employment (U.S. Bureau of Labor Statistics, 2024a). This paper examines whether Florida's scheduled minimum-wage step-ups are

associated with higher real hospitality-sector wages in the post-step-up quarter and whether they are accompanied by detectable changes in employment.

Using private accommodation and food services (NAICS 72), I construct a QCEW county–quarter panel for 2020Q1 through 2024Q4. The hypothesis is that Florida's scheduled minimum-wage step-ups are associated with higher real hospitality-sector wages in the first full post-step-up quarter, with little or no detectable short-run decline in employment.

The border-county design compares Florida counties that border Georgia or Alabama with nearby counties across the state line. This improves comparability because neighboring counties on opposite sides of a state border are more likely to share similar regional labor-market conditions, seasonal patterns, and local economic shocks than counties compared across an entire state. It asks whether outcomes changed more on the Florida side in Q4 of 2021–2024 after controlling for local economic conditions, sector scale, and county demographics.

This study relates to the empirical minimum-wage literature that estimates effects on earnings and employment using policy variation across jurisdictions. Card and Krueger (1994) find that minimum-wage increases raise pay in low-wage work without clear evidence of job losses in their setting, while Manning (2003) provides a monopsony-based framework in which wage gains can occur alongside limited employment effects. More recent work using broader data likewise emphasizes that earnings tend to rise for low-wage workers and that estimated employment effects are typically close to zero on average (e.g., Cengiz et al., 2019; Dube & Lindner, 2024). The study most closely aligned with this identification strategy is Dube et al. (2010), which improves local comparability by comparing contiguous counties across state borders. I apply a similar border-comparison approach to Florida's scheduled September 30 minimum-wage step-ups. The full wage specification produces a positive point estimate of roughly 2 percent for the post-step-up quarter on the Florida side relative to adjacent Georgia/Alabama border counties, while the corresponding employment estimate is close to zero and not statistically distinguishable from zero.

Data and Sample

The primary dataset is a county–quarter panel for NAICS 72 (Accommodation and Food Services) covering all 67 Florida counties from 2020Q1 through 2024Q4 (1,340 county–quarter observations). The analysis uses two NAICS 72 variables from the U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) (U.S. Bureau of Labor

Statistics, 2024a): average weekly wage and monthly employment (measured as the third month of each quarter). Local labor-market conditions are measured using the BLS Local Area Unemployment Statistics (LAUS) (U.S. Bureau of Labor Statistics, 2025), including the county unemployment rate and total county employment. I restrict the sample to county–quarters with non-missing values for these variables and with strictly positive values for wage, employment, establishments, and population so that log transformations are well-defined and to exclude observations with missing or suppressed values. These restrictions exclude 142 of the 1,340 possible Florida county-quarter observations, leaving 1,198 observations in the Florida-only sample. Because excluded observations are not used in the regressions, the estimates describe only county-quarters with reported, positive NAICS 72 wage, employment, establishment, and population values. I do not directly test whether excluded observations are systematically related to county size or hospitality-sector size, so this should be treated as a sample limitation rather than as direct evidence about the pattern of QCEW suppression. The estimates therefore describe the observed county-quarter sample used in the regression, not every possible county-quarter in the full set of Florida counties. For the main border-county design, I further restrict the data to Florida counties that share a land border with Georgia or Alabama and the adjacent counties immediately across the state line, yielding 461 county–quarter observations in the border sample.

Dependent Variables

Real weekly wages in the hospitality industry

The primary outcome is the real average weekly wage in NAICS 72. For each county–quarter from 2020Q1 to 2024Q4, I use QCEW data on the average weekly wage for private accommodation and food-service establishments. To convert nominal wages to real terms, I deflate wages using the CPI-U (all items) (U.S. Bureau of Labor Statistics, 2024b), first averaging the monthly CPI-U to the quarter level and then normalizing the price index so that 2020Q1 = 1. Real wages are constructed as nominal average weekly wage divided by this relative CPI measure. The wage outcome used in the regressions is the natural logarithm of real weekly wage, so coefficients can be interpreted as approximate percentage changes in real pay.

Employment in the hospitality industry

The second outcome is NAICS 72 employment. QCEW reports monthly employment counts (employees on payroll) for NAICS 72 in each county. I measure county–quarter employment using the third month of each quarter (the last month) as a proxy for end-of-quarter employment,

since QCEW employment is reported monthly for the pay period that includes the 12th day of the month. I take the natural logarithm of this measure to obtain log employment. Using logs for both outcomes improves comparability across counties of different sizes and allows regression coefficients to be read as approximate percentage changes.

Key Independent Variables and Controls

Post-step-up quarter indicator

The key policy-timing variable is an indicator for the quarter immediately following Florida's annual minimum-wage step-up. For each county–quarter observation, Post equals 1 in Q4 of the step-up years (2021–2024) and 0 otherwise. Because the step-ups occur each September 30, Q4 is the first full quarter after each increase and is therefore the main post-step-up quarter used in the baseline specification. However, because the increases were pre-announced, firms and workers may have adjusted wages, hiring, hours, or pricing before the formal September 30 implementation date. For this reason, the Q4 indicator should be interpreted as capturing the immediate post-step-up quarter rather than the entire adjustment window. I address this possibility below by estimating an alternative specification that defines the post period as both Q3 and Q4 of each step-up year.

Border-county treatment indicator and interaction

To isolate policy-related changes from common seasonality and broader regional shocks, the main design uses a border-county difference-in-differences (DiD) framework. I restrict the sample to Florida counties that share a land border with Georgia or Alabama and the adjacent counties across the state line. Florida equals 1 for Florida border counties and 0 for Georgia/Alabama border counties in the matched sample. The coefficient of interest is the interaction Florida × Post, which equals 1 for Florida border counties observed in Q4 of step-up years and 0 otherwise. Intuitively, Florida × Post measures whether outcomes in Florida border counties rise (or fall) more in the post-step-up quarter than outcomes in neighboring border counties not subject to Florida's minimum-wage schedule.

Fixed effects

All DiD specifications include county fixed effects and year-by-quarter fixed effects. County fixed effects absorb time-invariant differences across counties (e.g., baseline tourism intensity, local amenities, or persistent industrial structure). Year-by-quarter fixed effects absorb shocks and seasonality that are common across the border region within each quarter-year (e.g.,

macroeconomic conditions, regional cycles, and seasonal demand patterns in hospitality). With these fixed effects, identification comes from comparing within-county changes over time in Florida border counties to contemporaneous within-county changes in neighboring border counties in the same quarter-year.

Control variables

In the main border-county DiD specification, I include time-varying controls that capture county labor-market conditions, sector scale, and county characteristics. Specifically, I control for the county unemployment rate (LAUS), the log number of NAICS 72 establishments (QCEW), and the log of total county employment (LAUS). I also include time-varying county demographics and income: log population, female share, the share aged 65 and older, median age, and log per capita income. The demographic controls come from the American Community Survey, and per capita income comes from BEA regional data (U.S. Census Bureau, 2024; U.S. Bureau of Economic Analysis, 2024).

Summary Statistics

Table 1 reports summary statistics for the border-county sample used in the main DiD analysis (Florida counties contiguous with Georgia or Alabama and the adjacent counties immediately across the state line), covering 2020Q1–2024Q4 ($N = 461$ county–quarter observations).

Table 1. Summary statistics (border-county sample: Florida border vs adjacent Georgia/Alabama border counties, 2020Q1–2024Q4)

Variable	N	Mean	SD	Min	Max
Inflation-adjusted weekly wage (2020 USD)	461	362.160	88.741	240.298	731.461
Employment (workers)	461	4517.852	5301.237	80.000	18085.000
Unemployment rate	461	3.885	1.492	1.867	11.000
ln(LAUS employment)	461	10.133	0.979	8.235	11.996
Establishments	461	236.278	253.739	10.000	842.000
Q4 (Post)	461	0.193	0.395	0.000	1.000
Florida	461	0.523	0.500	0.000	1.000
Florida × Post	461	0.100	0.300	0.000	1.000
ln(inflation-adjusted weekly wage)	461	5.867	0.217	5.482	6.595
ln(employment)	461	7.561	1.446	4.382	9.803
ln(establishments)	461	4.834	1.189	2.303	6.736
ln(population)	461	11.028	0.920	9.547	12.701

Variable	N	Mean	SD	Min	Max
Female share	461	0.501	0.019	0.424	0.528
65+ share	461	0.187	0.030	0.125	0.249
Median age	461	40.302	4.113	31.000	48.700
ln(per capita income)	461	10.784	0.210	10.356	11.401

Notes: Summary statistics for the border-county DiD sample (Florida counties contiguous with Georgia or Alabama and adjacent counties across the state line), 2020Q1–2024Q4. Wages are average weekly wages in NAICS 72 deflated to 2020 dollars using CPI-U. Post equals 1 in Q4 of 2021–2024 and 0 otherwise. Florida equals 1 for Florida counties and 0 for Georgia/Alabama counties. Logged variables are natural logarithms. Source: Author's calculations using BLS QCEW and LAUS, plus county demographic and income data from the U.S. Census/ACS and BEA.

The mean inflation-adjusted weekly wage in NAICS 72 is $362 (2020 dollars; *SD* = $89), and mean employment is 4,518 workers (*SD* = 5,301). Local labor-market conditions also vary, with an average unemployment rate of 3.89 percent (*SD* = 1.49), and counties have an average of 236 NAICS 72 establishments (*SD* = 254). Post equals 1 in about 19 percent of observations, consistent with defining Post as Q4 in the step-up years 2021–2024. Florida counties account for about 52 percent of the border sample, and the Florida × Post interaction equals 1 in about 10 percent of observations.

Empirical Strategy and Results

Econometric specification

On the border-county sample, I estimate the following difference-in-differences model:

$$y_{ct} = \alpha + \delta(FL_c \times Post_t) + X'_{ct}\theta + \mu_c + \tau_{yq} + \varepsilon_{ct},$$

Here y_{ct} is either log real weekly wage or log employment in NAICS 72 for county c and quarter t. Florida equals 1 for Florida border counties (and 0 for the neighboring Georgia/Alabama border counties), and Post equals 1 in Q4 (October–December) of 2021–2024 and 0 otherwise. County fixed effects (μ_c) absorb time-invariant county differences, and year-by-quarter fixed effects (τ_{yq}) absorb common shocks and seasonality at the quarter-by-year level. The vector X_{ct} includes time-varying controls for local economic conditions, sector scale, and county demographics. The coefficient of interest is δ, which captures the differential change in outcomes for Florida border counties in post quarters relative to adjacent Georgia/Alabama border counties.

The identifying assumption is that absent Florida's minimum-wage step-ups, NAICS 72 wages and employment in Florida border counties would have followed similar quarter-to-quarter changes as adjacent border counties in Georgia and Alabama. The border-county design

is intended to strengthen comparability by focusing on geographically proximate counties that are exposed to similar regional conditions.

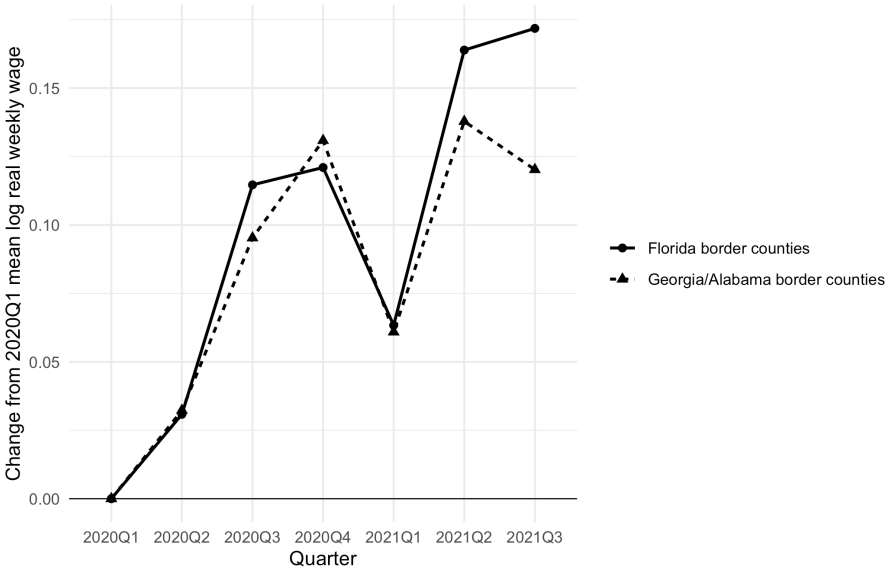

Figure 1. Pre-step-up trends in log real weekly wages. Note. Figure plots average log real weekly wages for Florida border counties and adjacent Georgia/Alabama border counties from 2020Q1 through 2021Q3, normalized to each group's 2020Q1 mean. The first full post-step-up quarter is 2021Q4.

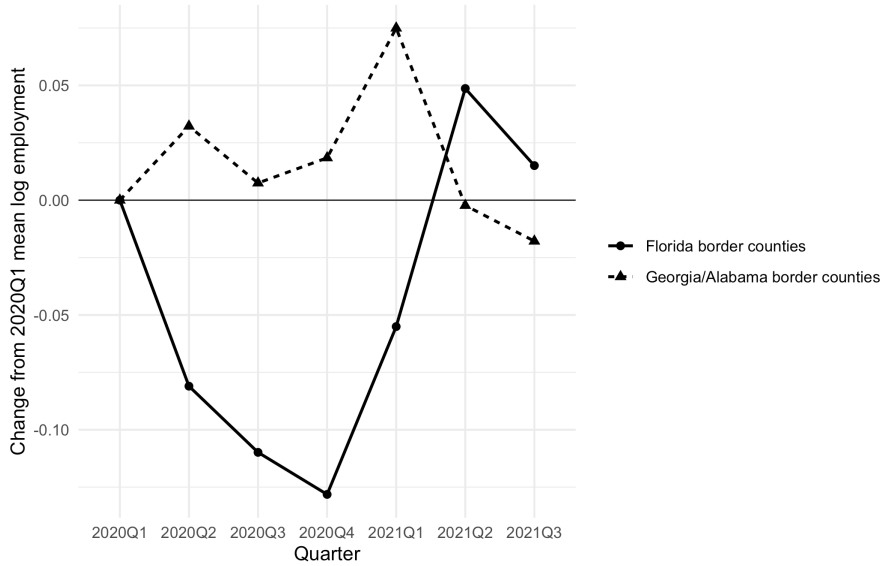

Figure 2. Pre-step-up trends in log employment. Note. Figure plots average log employment for Florida border counties and adjacent Georgia/Alabama border counties from 2020Q1 through 2021Q3, normalized to each group's 2020Q1 mean. The first full post-step-up quarter is 2021Q4.

As a diagnostic for the parallel-trends assumption, I compare pre-step-up trends in Florida border counties and adjacent Georgia/Alabama border counties before the first full post-step-up quarter. Figures 1 and 2 plot mean log real weekly wages and log employment, normalized to

each group's 2020Q1 level, for 2020Q1 through 2021Q3. The wage series move in broadly similar directions before the first step-up, but the employment series is more volatile during the COVID-19 recovery period and provides less clear visual support for parallel trends. Because of this visible volatility in employment, I do not interpret the pre-trend evidence as strong support for parallel employment trends. The employment estimates should therefore be interpreted with particular caution.

Main results

Table 2 reports the wage DiD estimates with controls added sequentially. The specifications include county fixed effects and year-by-quarter fixed effects and control for local labor-market conditions, sector scale, and county demographics. In the full specification, the estimated Florida × Post coefficient is 0.0210 (*SE* = 0.0127), which corresponds to roughly a 2.1 percent higher real average weekly wage in Florida border counties in the post-step-up quarter, conditional on fixed effects and controls, though the estimate is not statistically distinguishable from zero at conventional levels. The modest size of the wage estimate is expected because the dependent variable is average real weekly wages for all NAICS 72 workers, not hourly wages for only minimum-wage workers. Many hospitality workers earned above the minimum wage before each step-up, so the policy would directly affect only part of the sector's wage distribution. In addition, QCEW average weekly wages reflect both pay rates and labor-market composition, including possible changes in hours, staffing, and the mix of establishments. Finally, the estimate measures the differential change in Florida border counties relative to adjacent Georgia/Alabama border counties, not the full raw increase in Florida wages after each statutory step-up. Across columns, the wage estimate remains positive but declines as additional controls are included. Overall, the results are consistent with a modest positive wage differential in the post-step-up quarter, while employment effects are imprecisely estimated and remain consistent with small changes in either direction.

Table 2. Wage DiD results, controls added sequentially (Florida border vs adjacent Georgia/Alabama border counties)

Variable	(1) Demog+income	(2) +Estabs	(3) +Unemp	(4) +LAUS emp	(5) +Median age
Florida × Post	0.0300**	0.0272**	0.0277**	0.0214*	0.0210
	(0.0111)	(0.0112)	(0.0113)	(0.0125)	(0.0127)

Variable	(1) Demog+income	(2) +Estabs	(3) +Unemp	(4) +LAUS emp	(5) +Median age
Unemployment rate			−0.0124***	−0.0110**	−0.0111**
			(0.0043)	(0.0042)	(0.0042)
ln(establishments)		−0.1228*	−0.0937	−0.0662	−0.0678
		(0.0656)	(0.0613)	(0.0648)	(0.0643)
ln(LAUS employment)				0.5152**	0.5338**
				(0.1975)	(0.2002)
ln(population)	0.0214	−0.0103	−0.0234	−0.5086	−0.5288
	(0.3683)	(0.3115)	(0.3055)	(0.4203)	(0.4213)
Female share	−0.6261	−0.6998	−0.6932	−0.7662	−0.8441
	(1.6269)	(1.3756)	(1.3488)	(1.2395)	(1.1985)
65+ share	1.2884	2.5485	2.5623	1.9440	3.3989
	(2.1727)	(2.1910)	(2.1061)	(1.9428)	(2.5950)
Median age					−0.0160
					(0.0298)
ln(per capita income)	0.0685	0.1003	0.0602	−0.1486	−0.1349
	(0.2280)	(0.1741)	(0.1599)	(0.1672)	(0.1627)
Observations	461	461	461	461	461
Adj. R^2	0.955	0.956	0.957	0.959	0.959
County FE	Yes	Yes	Yes	Yes	Yes
Year-by-quarter FE	Yes	Yes	Yes	Yes	Yes

Notes: County-clustered standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports an OLS DiD regression of ln(real weekly wage) on Florida × Post with county fixed effects and year-by-quarter fixed effects. Observations are at the county–quarter level; $N = 461$ in all specifications.

Table 3 reports the corresponding employment DiD estimates under the baseline Q4 post indicator and an alternative Q3–Q4 post indicator that allows for possible anticipatory adjustment. In the baseline employment specification, the Florida × Post coefficient is −0.0157 (*SE* = 0.0154), implying about a 1.6 percent decrease in hospitality employment in Florida border counties relative to adjacent Georgia/Alabama border counties in the post-step-up quarter, but the estimate is not statistically distinguishable from zero at conventional levels. When the post period is expanded to Q3 and Q4, the estimate is −0.0257 (*SE* = 0.0132) and is marginally significant at the 10 percent level. Because this alternative specification uses a broad quarterly anticipation window during a short COVID-19 recovery sample, it should be interpreted as

suggestive rather than definitive. Overall, the employment results do not provide precise evidence of short-run employment losses.

Table 3. Employment DiD with Post = Q4 and Post = Q3–Q4 (anticipation window)

Variable	**Post = Q4**	**Post = Q3–Q4**
Florida × Post	-0.0157	-0.0257*
	(0.0154)	(0.0132)
Unemployment rate	0.0033	0.0036
	(0.0051)	(0.0053)
ln(establishments)	0.9586***	0.9582***
	(0.1307)	(0.1317)
ln(LAUS employment)	0.6113***	0.6930***
	(0.2168)	(0.2039)
ln(population)	0.0393	-0.0114
	(0.3025)	(0.2992)
Female share	-4.1178***	-4.0126***
	(1.4371)	(1.4003)
65+ share	4.2596	4.3589
	(4.2596)	(4.2690)
Median age	0.0056	0.0031
	(0.0325)	(0.0326)
ln(per capita income)	-0.6259*	-0.6617*
	(0.3473)	(0.3420)
Fixed-effects		
county_fips	Yes	Yes
yrq	Yes	Yes
Fit statistics		
Observations	461	461
Adjusted R^2	0.999	0.999

Notes: The dependent variable is ln(employment) in NAICS 72 (QCEW). Standard errors clustered by county are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The Post = Q4 column defines Post = 1 in Q4 of step-up years (2021–2024) and 0 otherwise. The Post = Q3–Q4 column defines Post = 1 in Q3 and Q4 of step-up years (2021–2024) and 0 otherwise. Both specifications use the border-county DiD sample and include county fixed effects and year-by-quarter fixed effects. Controls include the county unemployment rate (LAUS), ln(NAICS 72 establishments) (QCEW), ln(total county employment) (LAUS), ln(population), female share, 65+ share, median age, and ln(per capita income).

Robustness

A first robustness check addresses sensitivity of the wage results to extreme observations. Table 4 repeats the same sequence of specifications as Table 2 (adding the same controls sequentially across columns) but uses winsorized ln(real weekly wage) (1st/99th percentiles within the border-county sample). In the full specification, the Florida × Post estimate is 0.0213 (*SE* = 0.0126), essentially the same magnitude as the baseline estimate in Table 2 (0.0210; *SE* = 0.0127), indicating the wage result is not driven by extreme wage observations.

Table 4. Robustness: winsorized real weekly wages (1st/99th percentiles), controls added sequentially

Variable	(1) Demog+income	(2) +Estabs	(3) +Unemp	(4) +LAUS emp	(5) +Median age
Florida × Post	0.0299**	0.0272**	0.0277**	0.0217*	0.0213
	(0.0112)	(0.0113)	(0.0114)	(0.0124)	(0.0126)
Unemployment rate			−0.0127***	−0.0114***	−0.0115***
			(0.0041)	(0.0041)	(0.0040)
ln(establishments)		−0.1197*	−0.0898	−0.0635	−0.0650
		(0.0632)	(0.0596)	(0.0629)	(0.0625)
ln(LAUS employment)				0.4936**	0.5108**
				(0.1844)	(0.1871)
ln(population)	0.0991	0.0682	0.0549	−0.4101	−0.4287
	(0.3257)	(0.2697)	(0.2626)	(0.3599)	(0.3608)
Female share	−0.3658	−0.4377	−0.4310	−0.5009	−0.5726
	(1.4920)	(1.2463)	(1.2155)	(1.1122)	(1.0671)
65+ share	0.9130	2.1410	2.1552	1.5627	2.9035
	(2.0715)	(2.0982)	(2.0020)	(1.8594)	(2.4772)
Median age					−0.0147
					(0.0295)
ln(per capita income)	0.0373	0.0682	0.0272	−0.1729	−0.1602
	(0.2135)	(0.1582)	(0.1443)	(0.1667)	(0.1628)
Observations	461	461	461	461	461
Adj. R^2	0.956	0.957	0.958	0.960	0.960
County FE	Yes	Yes	Yes	Yes	Yes
Year-by-quarter FE	Yes	Yes	Yes	Yes	Yes

Notes: County-clustered standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Dependent variable is ln(real weekly wage) winsorized at the 1st and 99th percentiles within the border-county sample. Each column mirrors the Table 2 specifications (same controls added sequentially across columns). All specifications include county fixed effects and year-by-quarter fixed effects.

A second robustness check addresses the possibility that labor-market adjustment may occur before the September 30 step-up date. Because the analysis is conducted at the quarterly level, I approximate a pre-policy anticipation window by defining Post(Q3–Q4) = 1 in both Q3 and Q4 of step-up years (2021–2024), rather than Q4 alone. Table 5 reports results under this alternative post indicator. In the full specification, the Florida × Post(Q3–Q4) estimate is 0.0135 (*SE* = 0.0076), compared with 0.0210 (*SE* = 0.0127) in the baseline specification (Table 2). The smaller magnitude is consistent with the possibility that some adjustment begins prior to Q4, although this remains a coarse approximation given quarterly data. This pattern is also consistent with a dynamic labor-demand interpretation: when a scheduled wage floor is announced in advance, firms may adjust wages, staffing, or hours gradually rather than waiting until the formal implementation date. In a setting with labor-market frictions or monopsonistic features, employers may also raise wages before the legal deadline to retain workers, reduce turnover, or adjust staffing plans ahead of the new wage floor.

Table 5. Alternative post indicator (Post = 1 in Q3–Q4 of step-up years), controls added sequentially

Variable	**(1) Demog+income**	**(2) +Estabs**	**(3) +Unemp**	**(4) +LAUS emp**	**(5) +Median age**
Florida × Post (Q3–Q4)	0.0266***	0.0243***	0.0249***	0.0142*	0.0135*
	(0.0072)	(0.0065)	(0.0061)	(0.0071)	(0.0076)
Unemployment rate			−0.0124***	−0.0111**	−0.0111**
			(0.0042)	(0.0042)	(0.0041)
ln(establishments)		−0.1221*	−0.0927	−0.0686	−0.0702
		(0.0644)	(0.0601)	(0.0639)	(0.0635)
ln(LAUS employment)				0.4901**	0.5102**
				(0.1984)	(0.2020)
ln(population)	0.0015	−0.0285	−0.0420	−0.4920	−0.5128
	(0.3641)	(0.3078)	(0.3019)	(0.4202)	(0.4222)
Female share	−0.7190	−0.7851	−0.7806	−0.7935	−0.8656
	(1.6257)	(1.3766)	(1.3519)	(1.2349)	(1.1955)
65+ share	1.3231	2.5729	2.5874	1.9849	3.3873
	(2.1583)	(2.1642)	(2.0823)	(1.9449)	(2.5994)
Median age					−0.0154
					(0.0300)
ln(per capita income)	0.0764	0.1073	0.0671	−0.1339	−0.1216
	(0.2239)	(0.1725)	(0.1580)	(0.1620)	(0.1577)

Variable	(1) Demog+income	(2) +Estabs	(3) +Unemp	(4) +LAUS emp	(5) +Median age
Observations	461	461	461	461	461
Adj. R^2	0.955	0.957	0.957	0.959	0.959
County FE	Yes	Yes	Yes	Yes	Yes
Year-by-quarter FE	Yes	Yes	Yes	Yes	Yes

Notes: Dependent variable is ln(real weekly wage). County-clustered standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Post(Q3–Q4) = 1 in Q3 and Q4 of step-up years (2021–2024) and 0 otherwise. Each column mirrors Table 2 by sequentially adding the same controls across columns. All specifications use the same border-county sample and include county fixed effects and year-by-quarter fixed effects.

Tables 6–8 report additional sensitivity checks and descriptive comparisons.

Additional Sensitivity and Descriptive Checks

Table 6 reports a sensitivity check that drops ln(total county employment) from the employment model. Because total county employment mechanically includes hospitality employment, this check assesses whether the baseline employment estimate is sensitive to including a potentially related labor-market control.

Table 6. Sensitivity check: dropping ln(total county employment) from the employment model

Dependent Variable:	ln_employment	
Model:	(1)	(2)
Variables		
Florida × Post	-0.0158	-0.0081
	(0.0154)	(0.0169)
Unemployment rate	0.0033	0.0018
	(0.0051)	(0.0051)
ln(establishments)	0.9586***	0.9280***
	(0.1307)	(0.1251)
ln(LAUS employment)	0.6113***	
	(0.2168)	
ln(population)	0.0393	0.6172**
	(0.3025)	(0.2817)
Female share	-4.118***	-3.973**
	(1.437)	(1.687)
65+ share	4.260	3.848
	(4.260)	(4.635)
Median age	0.0056	0.0180
	(0.0325)	(0.0329)
ln(per capita income)	-0.6259*	-0.3947

	(0.3473)	(0.3663)
Fixed-effects		
county_fips	Yes	Yes
yrq	Yes	Yes
Fit statistics		
Observations	461	461
Adjusted R^2	0.99860	0.99855

Notes: The dependent variable is ln(employment) in NAICS 72 (QCEW). Column (1) reports the baseline border-county DiD employment specification; Column (2) drops ln(total county employment) to assess sensitivity to including a potentially mechanically related labor-market control. Both specifications include county fixed effects and year-by-quarter fixed effects. Controls include the county unemployment rate (LAUS), ln(NAICS 72 establishments) (QCEW), ln(population), female share, 65+ share, median age, and ln(per capita income). Standard errors are clustered at the county level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 7 reports a Florida-only descriptive benchmark that compares Q4 outcomes in step-up years (2021–2024) to other quarters. Because this comparison does not use an external control group, it is interpreted as descriptive and may reflect seasonality or other statewide shocks.

Table 7. Florida-only OLS: Q4 in step-up years, NAICS 72, 2020Q1–2024Q4

Dependent Variables:	ln_real_wage	ln_employment
Model:	(1)	(2)
Variables		
Constant	5.959***	8.351***
	(0.0238)	(0.2307)
Post (Q4 in 2021–2024)	0.0346***	0.0871*
	(0.0058)	(0.0440)
Fit statistics		
Observations	1,198	1,198
R^2	0.04003	0.00317

Notes: Florida-only OLS using NAICS 72 county–quarter data, 2020Q1–2024Q4. Post = 1 for Q4 in step-up years (2021–2024), 0 otherwise. Year fixed effects included. No additional controls. Standard errors clustered by county. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

For the Florida-only panel, I estimate a descriptive specification that compares outcomes in the quarter immediately following each September 30 minimum-wage step-up (Q4) to outcomes earlier in the same year:

$$y_{ct} = \alpha + \beta Post_t + \gamma_y + \varepsilon_{ct},$$

In this descriptive model, Post equals 1 in Q4 (October–December) of 2021–2024 and 0 otherwise, with year fixed effects included.

Table 8. Average outcomes and covariates in Q1–Q3 vs Q4 (border-county sample, 2020Q1–2024Q4)

Variable	Q1–Q3	Q4	Q4 − Q1–Q3
Inflation-adjusted weekly wage (2020$)	358.349	374.036	15.687
Employment (workers)	4521.201	4507.420	-13.781
Unemployment rate	3.991	3.557	-0.434
Establishments	233.444	245.107	11.663
ln(inflation-adjusted weekly wage)	5.856	5.901	0.045
ln(employment)	7.552	7.588	0.036
ln(establishments)	4.818	4.886	0.068
ln(LAUS employment)	10.123	10.166	0.043
ln(population)	11.020	11.052	0.032
Female share	0.501	0.501	0.000
65+ share	0.188	0.187	-0.001
Median age	40.330	40.216	-0.114
ln(per capita income)	10.782	10.789	0.006

Notes: Table reports unconditional means of the listed variables in the border-county sample, grouped by quarter (Q1–Q3 versus Q4) over 2020Q1–2024Q4. The final column reports the difference (Q4 minus Q1–Q3). Inflation-adjusted weekly wages are expressed in 2020 dollars. Logged variables are natural logarithms.

Conclusion

This paper examines how Florida's scheduled September 30 minimum-wage step-ups are associated with wages and employment in the hospitality sector (NAICS 72) using county–quarter QCEW data from 2020Q1 to 2024Q4. The main empirical strategy is a border-county difference-in-differences design comparing Florida border counties to adjacent counties across the Georgia/Alabama state line. Specifications include county fixed effects and year-by-quarter fixed effects and control for local labor-market conditions, sector scale, and county demographics.

The main hypothesis was that Florida's scheduled minimum-wage step-ups would be associated with higher real hospitality-sector wages in the post-step-up quarter, with limited negative effects on employment. The results provide partial support for this hypothesis. In the full specification, the estimated Florida × Post coefficient for real weekly wages is 0.0210 (*SE* = 0.0127), implying a positive point estimate of roughly 2.1 percent, though it is not statistically

distinguishable from zero at conventional levels. The corresponding employment estimate is −0.0157 (*SE* = 0.0154) and is also statistically indistinguishable from zero. Results are similar when ln(real weekly wage) is winsorized at the 1st and 99th percentiles.

The main limitations are the short COVID-19 recovery window, possible local shocks not removed by the border design, and the absence of hours and worker-flow measures in QCEW. For that reason, the estimates should be interpreted as conditional associations within the border-county design rather than definitive long-run causal effects.

Overall, the estimates are consistent with modest wage increases in the post-step-up quarter and do not provide precise evidence of short-run employment losses in this border-county hospitality sample. Economically, the small wage estimate is plausible because QCEW measures average weekly sector wages rather than hourly pay for minimum-wage workers only; any policy effect may be diluted by workers above the wage floor, changes in hours, and shifts in employment mix. For policy evaluation, the results point to the value of using local labor-market data and considering timing, anticipation, hours, and business composition when assessing scheduled minimum-wage increases.

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