Workplace Litigiousness and Labor Market Outcomes: Evidence from a Workers' Compensation Reform

Appendix

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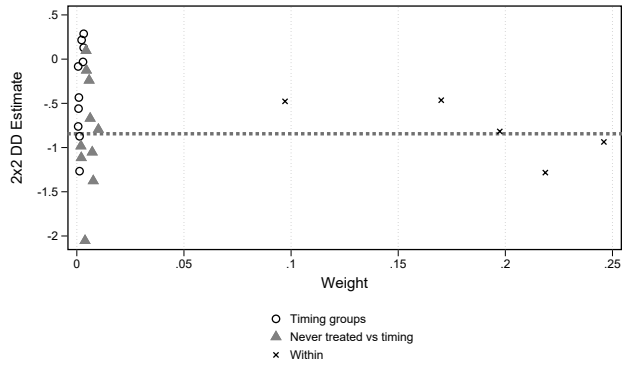
A Goodman-Bacon (2021) decompositions

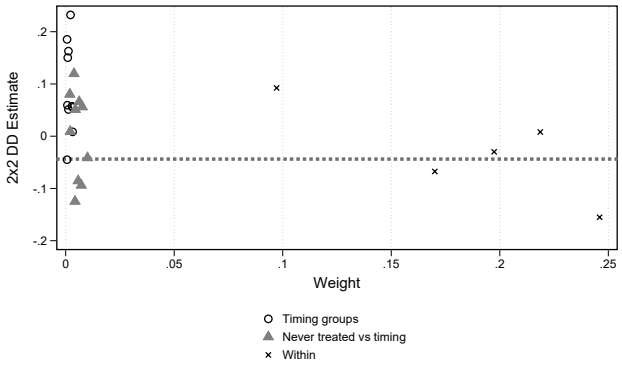
This section presents decompositions based on Goodman-Bacon (2021). Intuitively, with staggered implementation, the difference-in-differences coefficient constitutes a weighted average of post-pre comparisons between early treated units and never treated units and not-yet-treated units, but also "forbidden comparisons" using early treated units as control for late treated units. The decomposition from Goodman-Bacon (2021) assesses the degree to which each type of comparison drives the results. Reassuringly, in our case, the estimation for the difference-in-differences coefficient relies almost exclusively on comparisons between treated units and never-treated units.

Figure A.I: Goodman-Bacon (2021) decomposition of province-level results



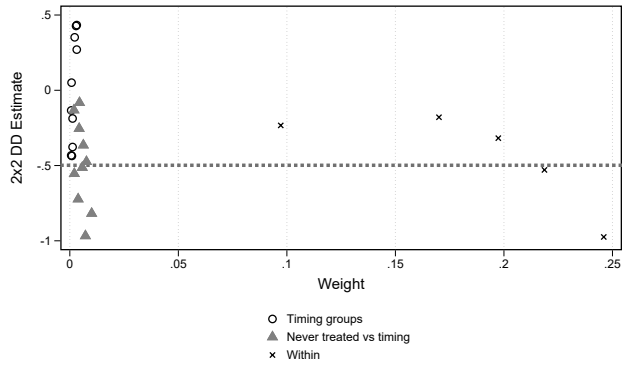
Overall DD Estimate = -.8440417
Within component = -.47738168 (weight = .0971867)

(a) Number of lawsuits (IHS)



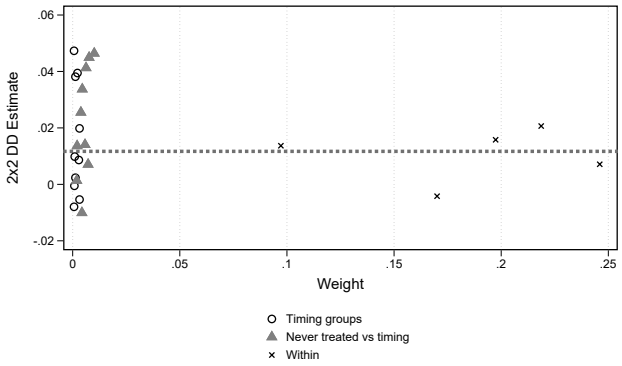
Overall DD Estimate = -.04380522
Within component = .09238346 (weight = .0971867)

(b) Number of accidents (IHS)



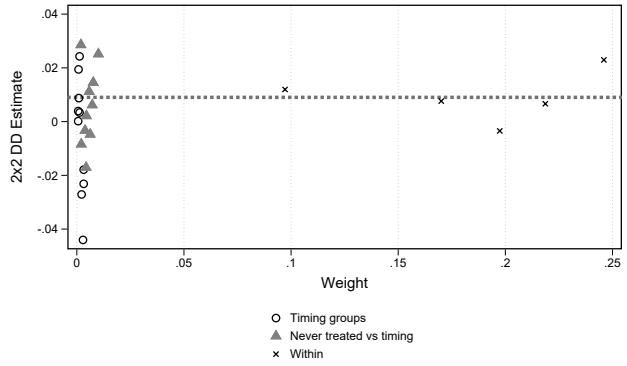
Overall DD Estimate = -.49819303
Within component = -.23336983 (weight = .0971867)

(c) Amount claimed (% of labor costs)



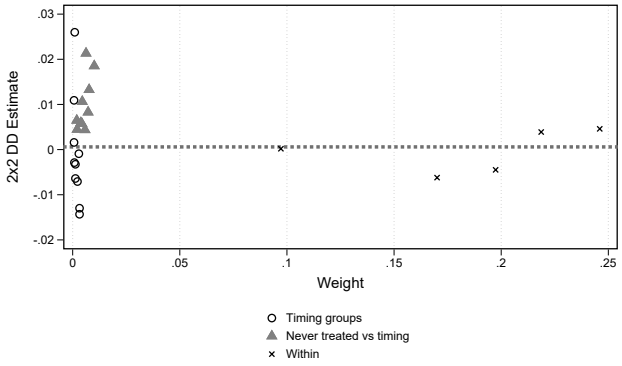
Overall DD Estimate = .01168951
Within component = .01368774 (weight = .0971867)

(d) Employment (IHS)



Overall DD Estimate = .00902352
Within component = .01195077 (weight = .0971867)

(e) Average salary (log)

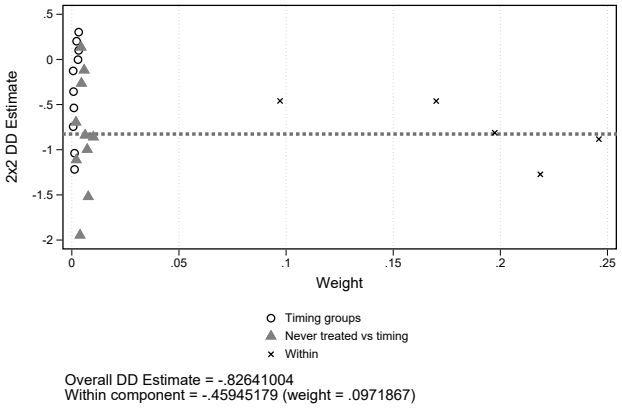


Overall DD Estimate = .00059378
Within component = .00018841 (weight = .0971867)

(f) Number of firms (IHS)

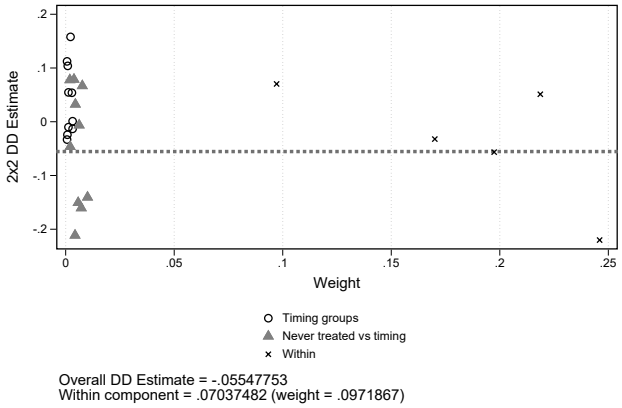
Notes: This figure shows the 2x2 difference-in-difference coefficients and weights assigned by the Goodman-Bacon (2021) decomposition for the estimation of equation (2) including time and province fixed effects using different dependent variables. The unit of observation is a province-by-quarter. The dependent variable in Panel (a) is the inverse hyperbolic sine transformation of the total number of lawsuits reported. The dependent variable in Panel (b) is the natural logarithm of the total number of accidents reported. The dependent variable in Panel (c) is the amount claimed in lawsuits as a share of labor costs (total employment times average salary). The dependent variable in Panel (d) is the inverse hyperbolic sine of the total number of workers. The dependent variable in Panel (e) is the natural logarithm of the average salary. The dependent variable in Panel (f) is the inverse hyperbolic sine of the total number of firms.

Figure A.II: Goodman-Bacon (2021) decomposition of sector-by-province level results



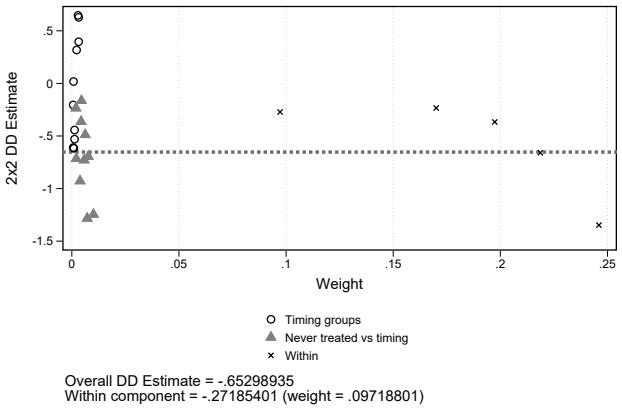
Overall DD Estimate = -.82641004
Within component = -.45945179 (weight = .0971867)

(a) Number of lawsuits (IHS)



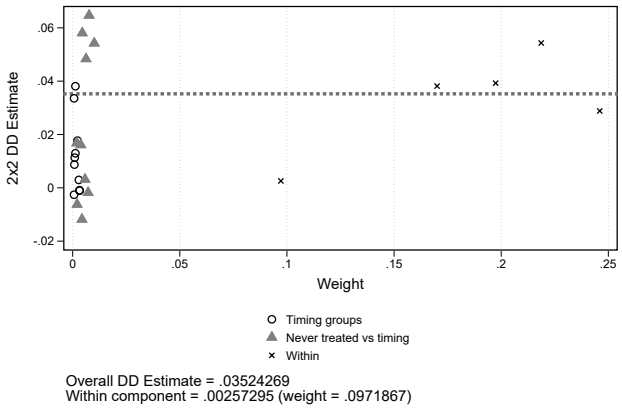
Overall DD Estimate = -.05547753
Within component = .07037482 (weight = .0971867)

(b) Number of accidents (IHS)



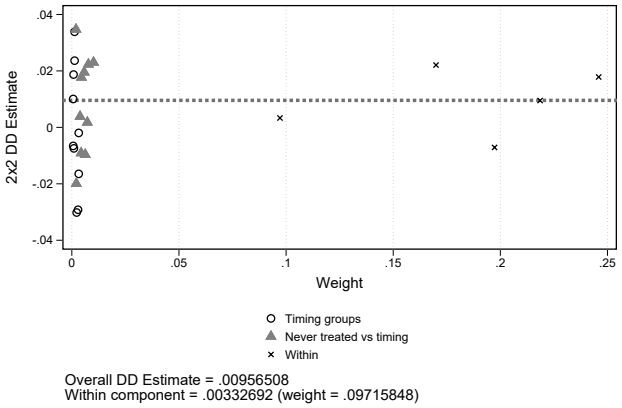
Overall DD Estimate = -.65298935
Within component = -.27185401 (weight = .09718801)

(c) Amount claimed (% of labor costs)



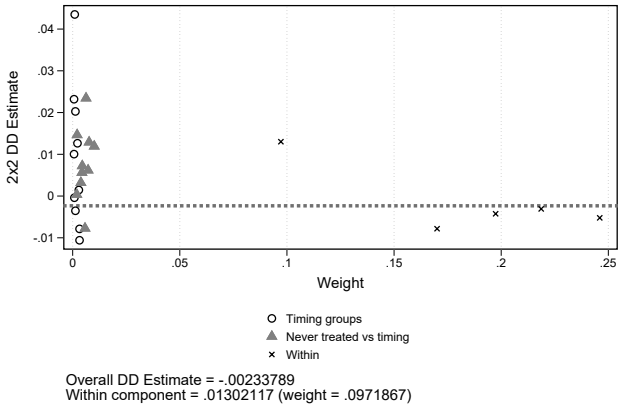
Overall DD Estimate = .03524269
Within component = .00257295 (weight = .0971867)

(d) Employment (IHS)



Overall DD Estimate = .00956508
Within component = .00332692 (weight = .09715848)

(e) Average salary (log)



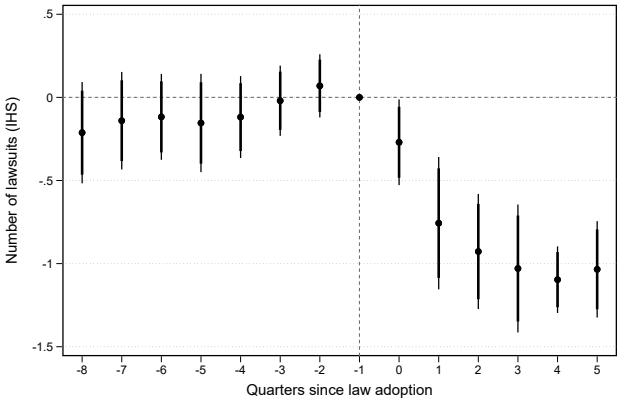
Overall DD Estimate = -.00233789
Within component = .01302117 (weight = .0971867)

(f) Number of firms (IHS)

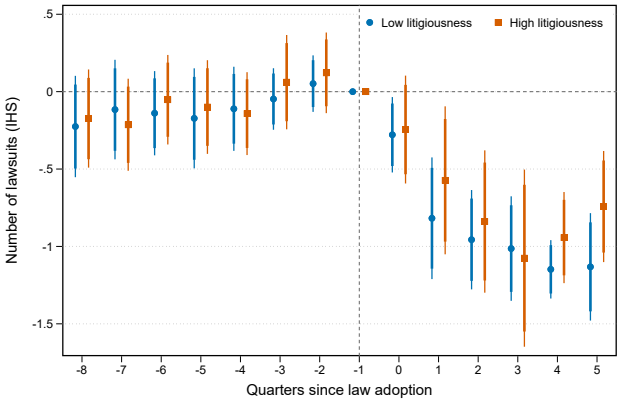
Notes: This figure shows the 2x2 difference-in-difference coefficients and weights assigned by the Goodman-Bacon (2021) decomposition for the estimation of equation (2) including time and province fixed effects using different dependent variables. The unit of observation is a sector-by-province-by-quarter. The dependent variable in Panel (a) is the inverse hyperbolic sine transformation of the total number of lawsuits reported. The dependent variable in Panel (b) is the natural logarithm of the total number of accidents reported. The dependent variable in Panel (c) is the amount claimed in lawsuits as a share of labor costs (total employment times average salary). The dependent variable in Panel (d) is the inverse hyperbolic sine of the total number of workers. The dependent variable in Panel (e) is the natural logarithm of the average salary. The dependent variable in Panel (f) is the inverse hyperbolic sine of the total number of firms.

B Additional results

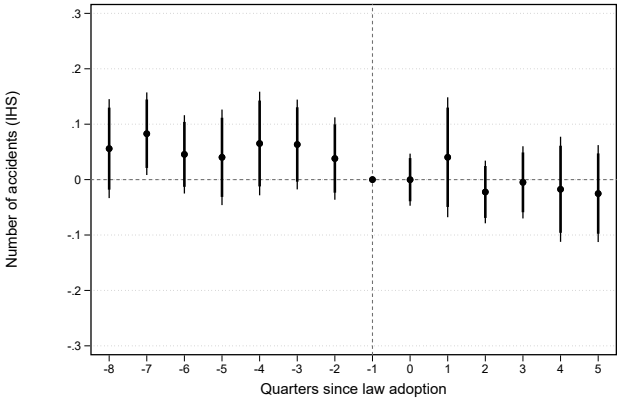
Figure B.I: Sector-by-province level results: Lawsuits and accidents



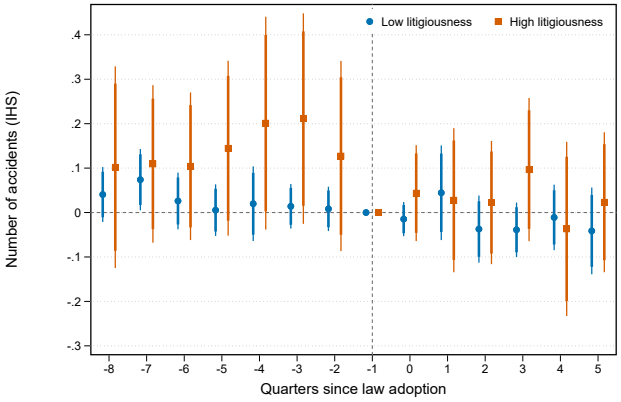
(a) Number of lawsuits (IHS)



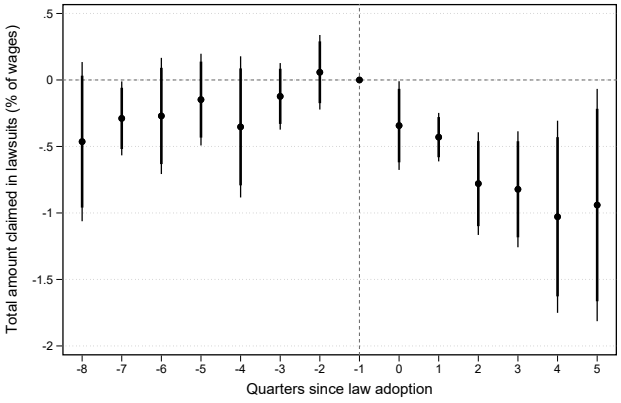
(b) Number of lawsuits (IHS) - Heterogeneity



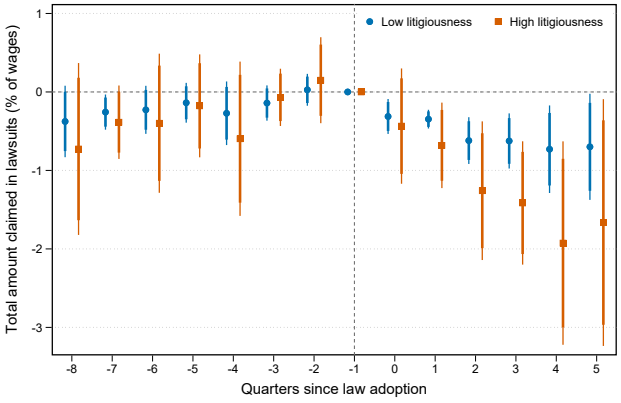
(c) Number of accidents (IHS)



(d) Number of accidents (IHS) - Heterogeneity



(e) Amount claimed (% of labor costs)



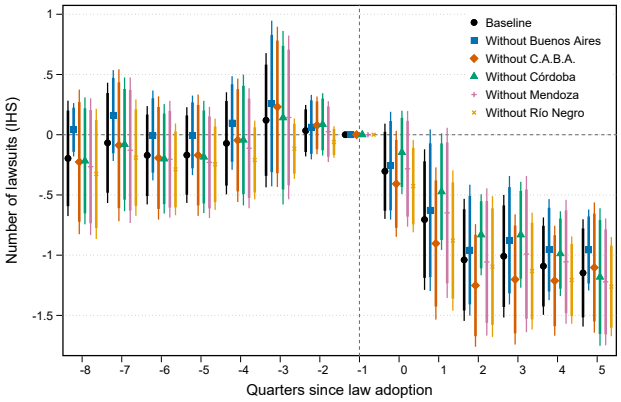
(f) Amount claimed (% of labor costs) - Heterogeneity

Notes: This figure plots the β_k coefficients from equation (1) at the sector-by-province-by-quarter level using different dependent variables. The unit of observation is a sector-by-province-by-quarter. Standard errors are clustered at the province level. Coefficients in orange correspond to the event study for sectors indicated as "high litigiousness" in figure 1: construction, mining, and manufacturing. Coefficients in blue correspond to the event study for the rest of the sectors. Thick vertical bars represent 90% confidence intervals and thin vertical bars represent 95% confidence intervals. The dependent variable in Panels (a) and (b) is the inverse hyperbolic sine transformation of the total number of lawsuits reported. The dependent variable in Panels (c) and (d) is the natural logarithm of the total number of accidents reported. The dependent variable in Panels (e) and (f) is the amount claimed in lawsuits as a share of labor costs (total employment times average salary).

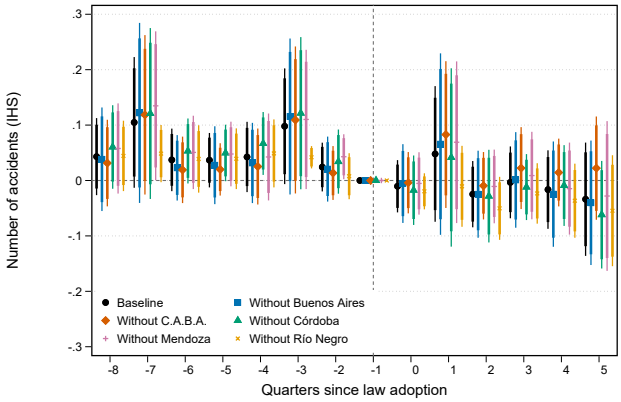
C Leave-one-out regressions

This appendix compares the baseline estimates to leave-one-out alternative specifications, where we sequentially drop one of the 5 treated provinces from the sample and run the event study using the remaining 23 provinces. We first present leave-one-out comparisons for province-level results and then for sector-by-province-level results.

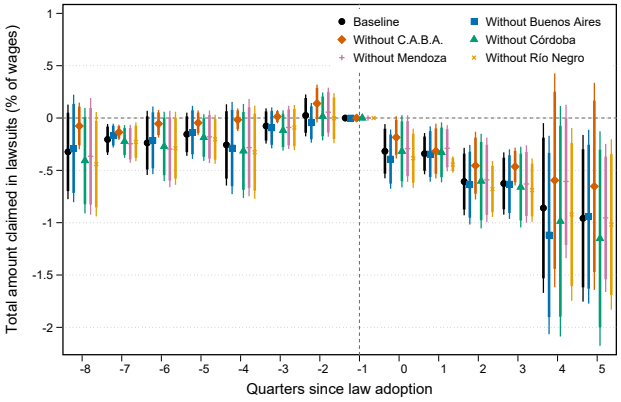
Figure C.I: Leave-one-out regressions: province-level results



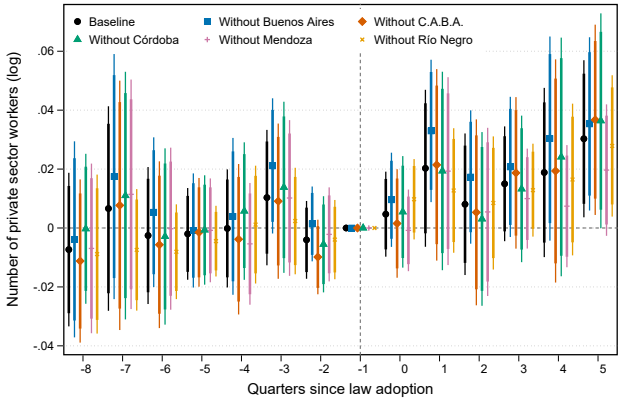
(a) Number of lawsuits (IHS)



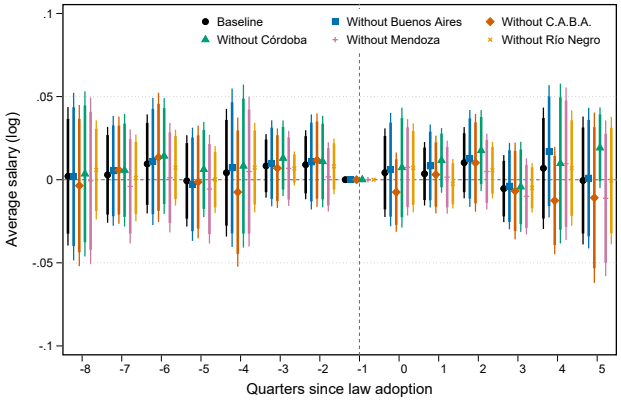
(b) Number of accidents (IHS)



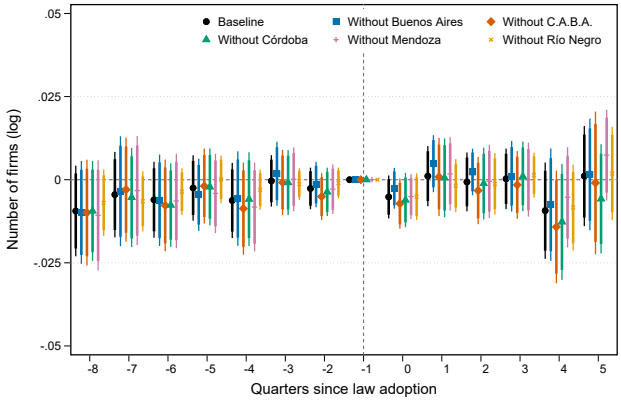
(c) Amount claimed (% of labor costs)



(d) Employment (IHS)



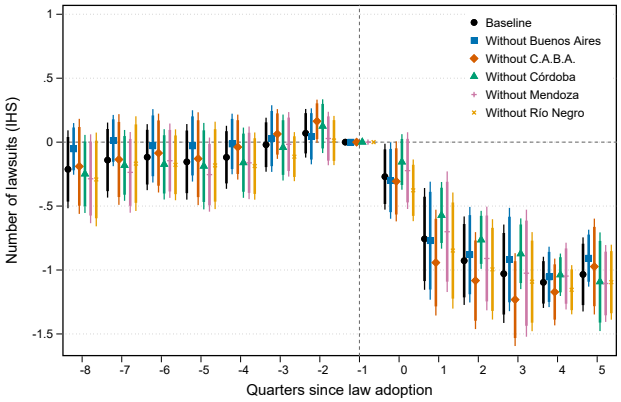
(e) Average salary (log)



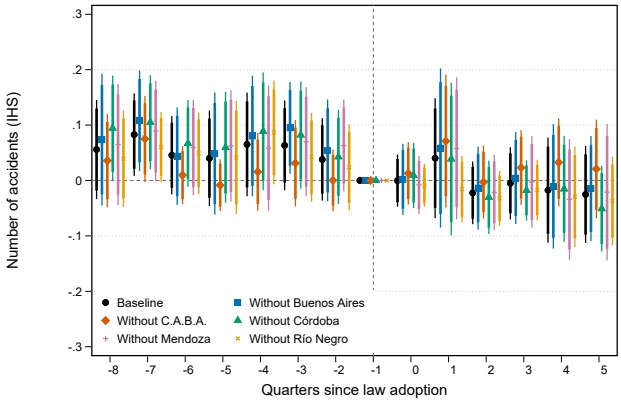
(f) Number of firms (IHS)

Notes: This figure plots the β_k coefficients from equation (1) using different dependent variables. The unit of observation is a province-by-quarter. Standard errors are clustered at the province level. Thick vertical bars represent 90% confidence intervals and thin vertical bars represent 95% confidence intervals. The dependent variable in Panel (a) is the inverse hyperbolic sine transformation of the total number of lawsuits reported. The dependent variable in Panel (b) is the inverse hyperbolic sine of the total number of accidents reported. The dependent variable in Panel (c) is the amount claimed in lawsuits as a share of labor costs (total employment times average salary). The dependent variable in Panel (d) is the inverse hyperbolic sine of the total number of workers. The dependent variable in Panel (e) is the natural logarithm of the average salary. The dependent variable in Panel (f) is the inverse hyperbolic sine of the total number of firms. Black coefficients correspond to our baseline estimates using the full sample. Blue coefficients correspond to estimates dropping the Province of Buenos Aires. Orange coefficients correspond to estimates dropping the Autonomous City of Buenos Aires (C.A.B.A. stands for *Ciudad Autónoma de Buenos Aires*). Green coefficients correspond to estimates dropping the province of Córdoba. Pink coefficients correspond to estimates dropping the province of Mendoza. Yellow coefficients correspond to estimates dropping the province of Río Negro.

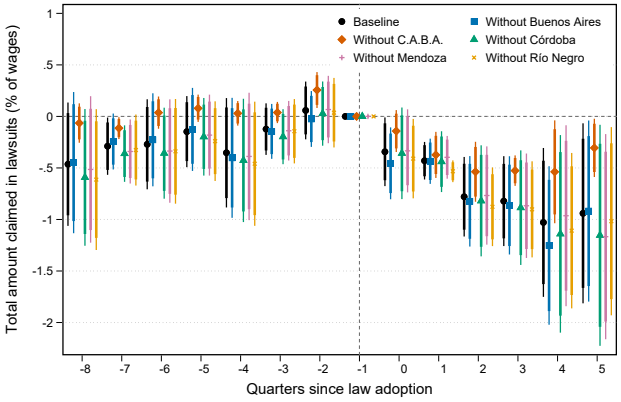
Figure C.II: Leave-one-out regressions: sector-by-province-level results



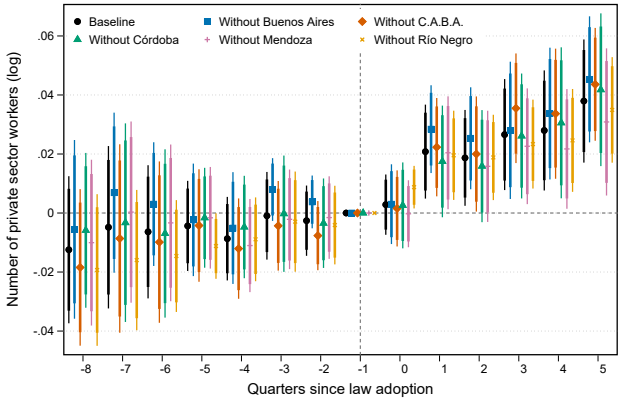
(a) Number of lawsuits (IHS)



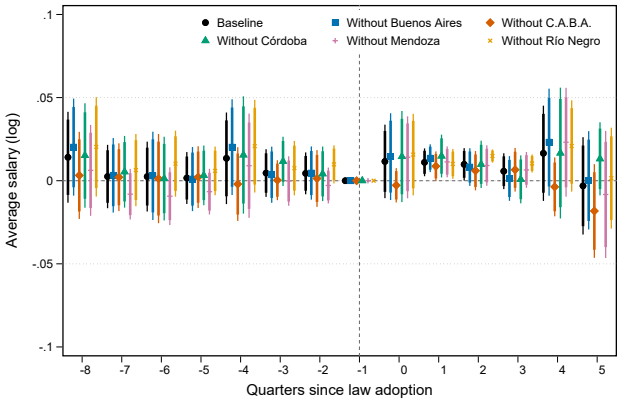
(b) Number of accidents (IHS)



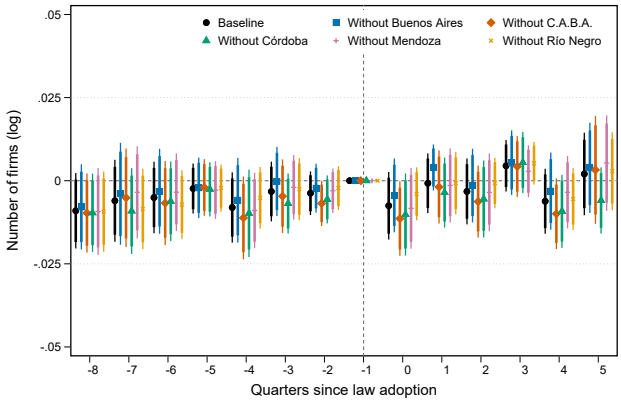
(c) Amount claimed (% of labor costs)



(d) Employment (IHS)



(e) Average salary (log)



(f) Number of firms (IHS)

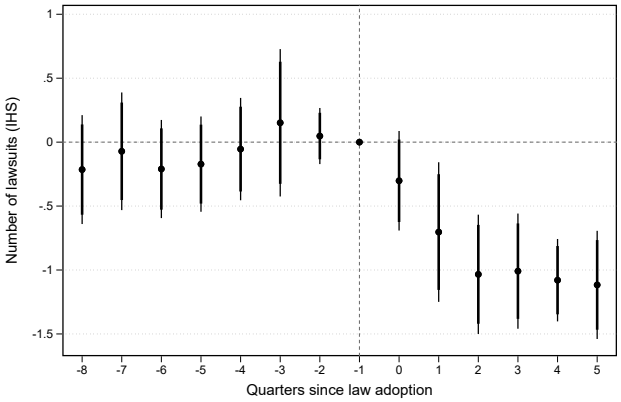
Notes: This figure plots the β_k coefficients from equation (1) using different dependent variables. The unit of observation is a sector-by-province-by-quarter. Standard errors are clustered at the province level. Thick vertical bars represent 90% confidence intervals and thin vertical bars represent 95% confidence intervals. The dependent variable in Panel (a) is the inverse hyperbolic sine transformation of the total number of lawsuits reported. The dependent variable in Panel (b) is the inverse hyperbolic sine of the total number of accidents reported. The dependent variable in Panel (c) is the amount claimed in lawsuits as a share of labor costs (total employment times average salary). The dependent variable in Panel (d) is the inverse hyperbolic sine of the total number of workers. The dependent variable in Panel (e) is the natural logarithm of the average salary. The dependent variable in Panel (f) is the inverse hyperbolic sine of the total number of firms. Black coefficients correspond to our baseline estimates using the full sample. Blue coefficients correspond to estimates dropping the Province of Buenos Aires. Orange coefficients correspond to estimates dropping the Autonomous City of Buenos Aires (C.A.B.A. stands for *Ciudad Autónoma de Buenos Aires*). Green coefficients correspond to estimates dropping the province of Córdoba. Pink coefficients correspond to estimates dropping the province of Mendoza. Yellow coefficients correspond to estimates dropping the province of Río Negro.

D Stacked event studies

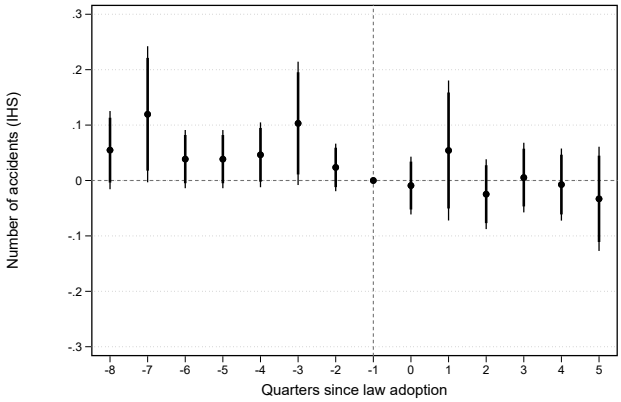
In this subsection we estimate the main event studies of interest using a stacked event study approach (Baker et al., 2022). For each treated province, we define a window of 14 quarters, 8 before the reform and 6 after. We then define an event-specific control group for that province consisting of never treated provinces. This creates a data-set for each specific event. We then stack all the event-specific data-set and estimate event-study regressions quarter-by-region-by-event fixed effects. We include province-by-event fixed effects for the province-level analysis and sector-by-province-by-event fixed effects for the sector-by-province-level analysis. The equation we estimate is given by:

$$Y_{pt} = \alpha_{pe} + \mu_{r(p)te} + \sum_{k=-8}^{5} \beta_k \mathbb{1}\{t = e_p + k\} \times \text{Treated}_p + \varepsilon_{ept}, \tag{D.I}$$

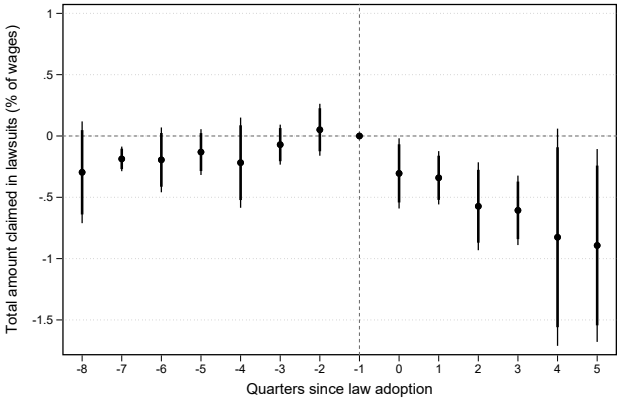
Figure D.I: Stacked event studies: province-level results



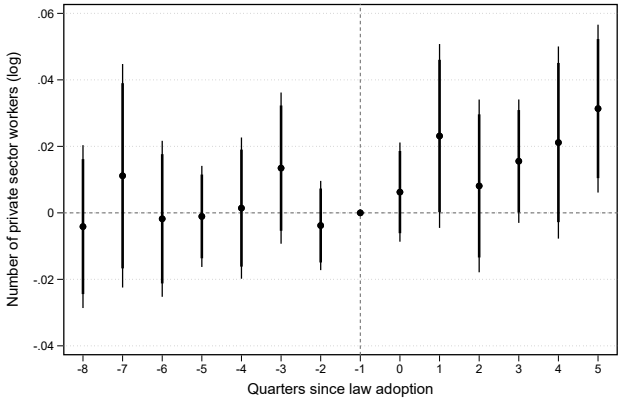
(a) Number of lawsuits (IHS)



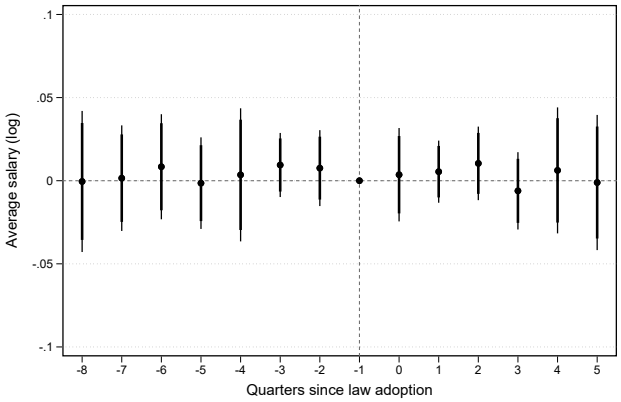
(b) Number of accidents (IHS)



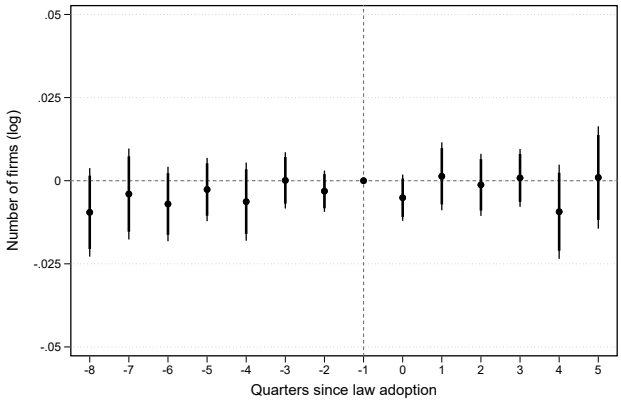
(c) Amount claimed (% of labor costs)



(d) Employment (IHS)



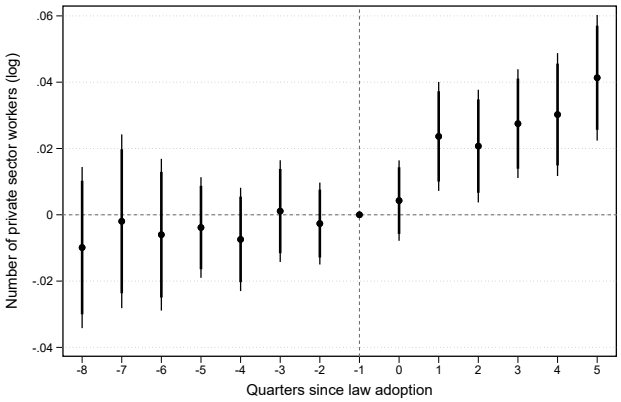
(e) Average salary (log)



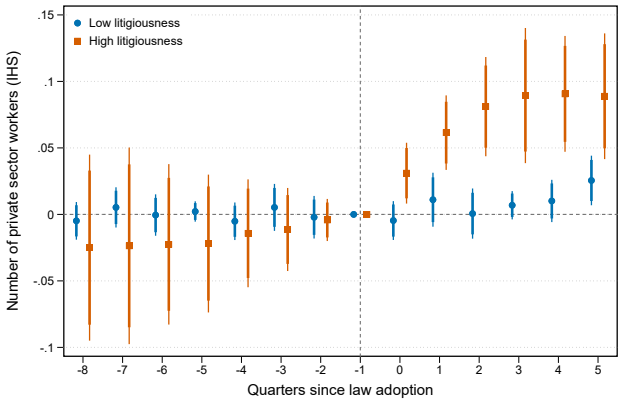
(f) Number of firms (IHS)

Notes: This figure plots the β_k coefficients from equation (D.I) using different dependent variables. The unit of observation is a province-by-quarter. Standard errors are clustered at the province level. Thick vertical bars represent 90% confidence intervals and thin vertical bars represent 95% confidence intervals. The dependent variable in Panel (a) is the inverse hyperbolic sine transformation of the total number of lawsuits reported. The dependent variable in Panel (b) is the inverse hyperbolic sine of the total number of accidents reported. The dependent variable in Panel (c) is the amount claimed in lawsuits as a share of labor costs (total employment times average salary). The dependent variable in Panel (d) is the inverse hyperbolic sine of the total number of workers. The dependent variable in Panel (e) is the natural logarithm of the average salary. The dependent variable in Panel (f) is the inverse hyperbolic sine of the total number of firms.

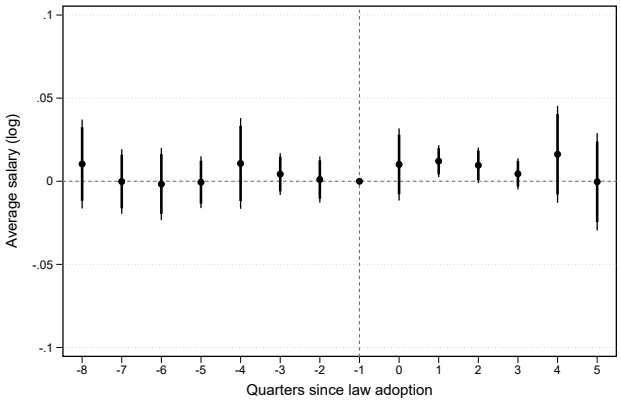
Figure D.II: Stacked event studies: sector-by-province level results - labor market outcomes



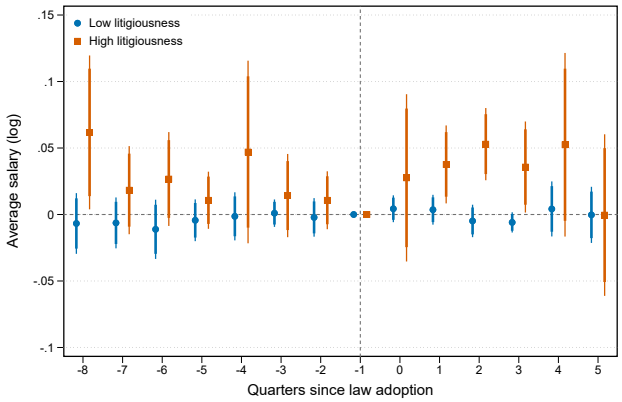
(a) Employment (IHS)



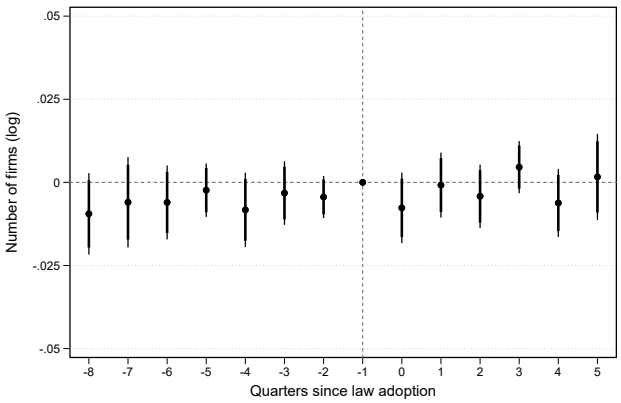
(b) Employment (IHS) - Heterogeneity



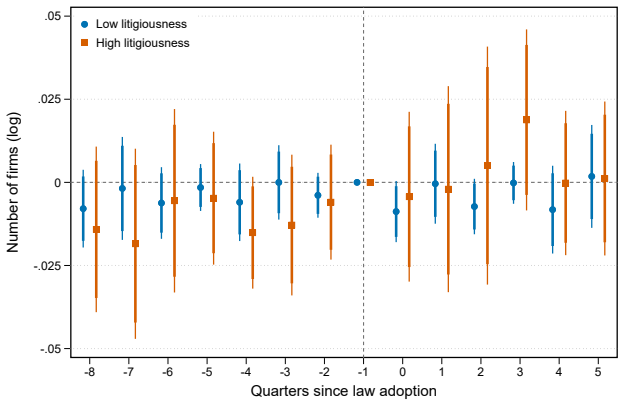
(c) Average salary (log)



(d) Average salary (log) - Heterogeneity



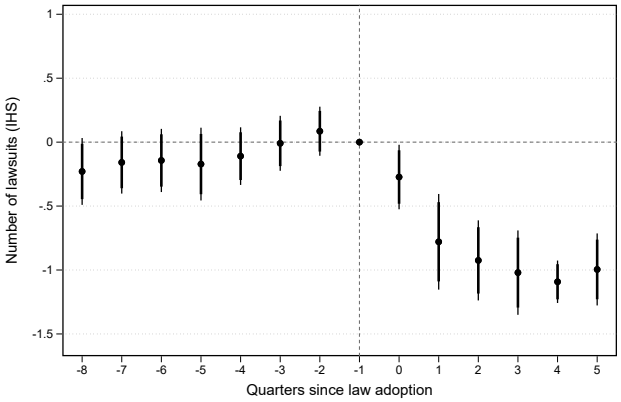
(e) Number of firms (IHS)



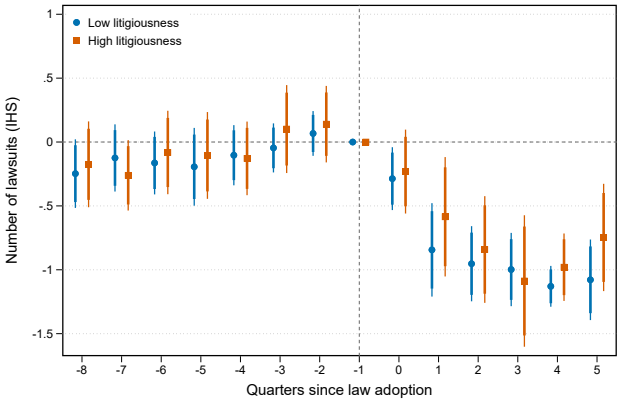
(f) Number of firms (IHS) - Heterogeneity

Notes: This figure plots the β_k coefficients from equation (D.I) at the sector-by-province-by-quarter level using different dependent variables. The unit of observation is a sector-by-province-by-quarter. Standard errors are clustered at the province level. Coefficients in orange correspond to the event study for sectors indicated as "high litigiousness" in figure 1: construction, mining, and manufacturing. Coefficients in blue correspond to the event study for the rest of the sectors. Thick vertical bars represent 90% confidence intervals and thin vertical bars represent 95% confidence intervals. The dependent variable in Panels (a) and (b) is the inverse hyperbolic sine of the total number of workers. The dependent variable in Panels (c) and (d) is the natural logarithm of the average salary. The dependent variable in Panels (e) and (f) is the inverse hyperbolic sine of the total number of firms.

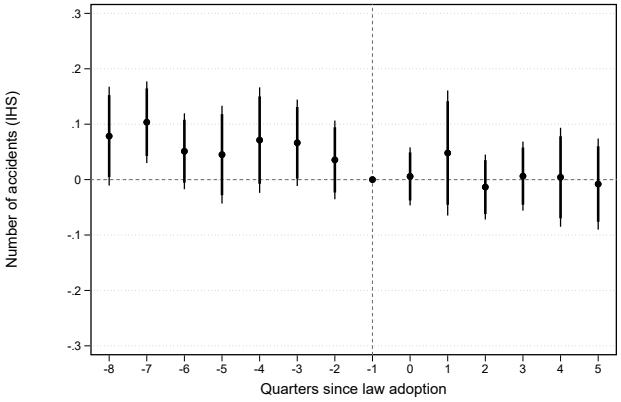
Figure D.III: Stacked event studies: sector-by-province level results - lawsuits and accidents



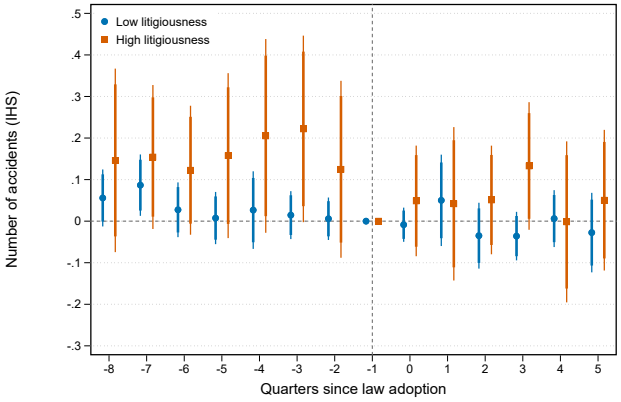
(a) Number of lawsuits (IHS)



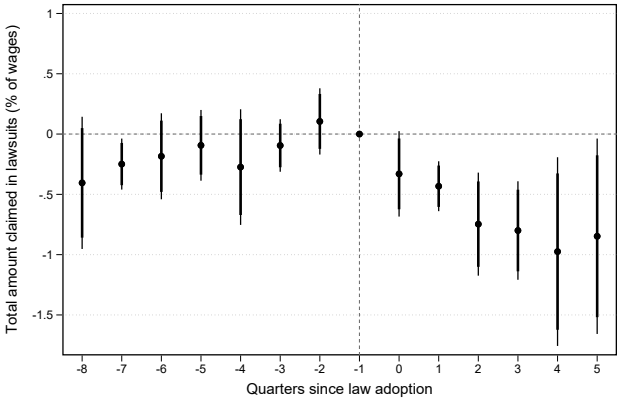
(b) Number of lawsuits (IHS) - Heterogeneity



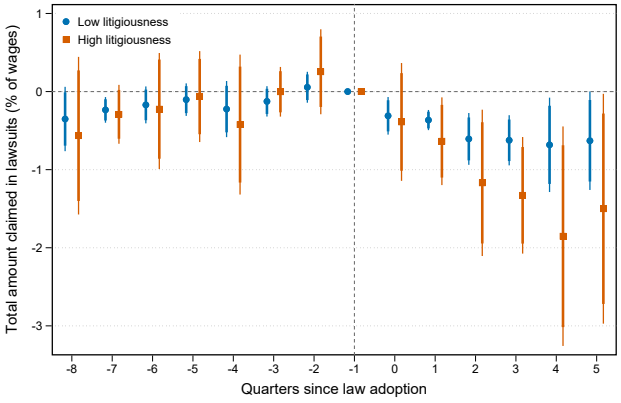
(c) Number of accidents (IHS)



(d) Number of accidents (IHS) - Heterogeneity



(e) Amount claimed (% of labor costs)



(f) Amount claimed (% of labor costs) - Heterogeneity

Notes: This figure plots the β_k coefficients from equation (D.I) at the sector-by-province-by-quarter level using different dependent variables. The unit of observation is a sector-by-province-by-quarter. Standard errors are clustered at the province level. Coefficients in orange correspond to the event study for sectors indicated as "high litigiousness" in figure 1: construction, mining, and manufacturing. Coefficients in blue correspond to the event study for the rest of the sectors. Thick vertical bars represent 90% confidence intervals and thin vertical bars represent 95% confidence intervals. The dependent variable in Panels (a) and (b) is the inverse hyperbolic sine transformation of the total number of lawsuits reported. The dependent variable in Panels (c) and (d) is the inverse hyperbolic sine of the total number of accidents reported. The dependent variable in Panels (e) and (f) is the amount claimed in lawsuits as a share of labor costs (total employment times average salary).