Union Density and Income Inequality in Canada:

Evidence from Provincial Data, 2000 – 2023

Julia DeChellis

Department of Economics, Wilfrid Laurier University

EC481: Economics Paper and Seminar

December 10th, 2025

Abstract

This paper examines whether provincial union density influences after-tax income inequality in Canada from the years 2000 to 2023. Using a balanced panel of ten provinces and fixed-effects models that control for time-invariant provincial characteristics and nationwide shocks, the analysis finds no evidence that higher union density reduces inequality. Instead, estimated effects are small, stable across lagged models and robustness checks, and positive in the preferred specification. These results suggest that unions no longer exert the equalizing influence observed in earlier decades, and that contemporary inequality dynamics are shaped more strongly by redistribution policies and broader economic conditions.

I. Introduction

Income inequality has become a significant issue in Canada, shaping discussions about how economic opportunities are shared across society. Although market inequality has risen in recent decades, after-tax inequality has remained comparatively stable due to the equalizing impact of taxes and transfers (Fortuna & Neto, 2021). Over the same period, unionization patterns have shifted. Private-sector coverage has declined, public-sector unions now represent a larger share of members, and the composition of unionized workers differs substantially from earlier decades (Morissette, 2022). These changes raise an essential question: do unions continue to influence income inequality in a meaningful way? This paper asks whether changes in provincial union density from 2000 to 2023 are associated with changes in after-tax income inequality in Canada.

Historically, unions played a central role in reducing wage dispersion and improving earnings for lower-paid workers. Earlier empirical studies documented strong wage-compression effects during periods of high private-sector unionization (Card, Lemieux, & Riddell, 2004). However,

today's labour market operates under different institutional and industrial structures, making it unclear whether the traditional relationship between union density and inequality persists, particularly after accounting for taxes and transfers.

Understanding this relationship requires a provincial perspective. Unionization levels vary widely across provinces, as do labour regulations, industrial composition, and redistributive policies (Haddow, 2021; Scrimger, 2020). Examining provincial trends provides insight into whether unions still shape distributional outcomes within Canada's current institutional environment.

This study uses annual provincial data from 2000 to 2023 to examine whether changes in union density are associated with changes in after-tax inequality. Fixed-effects models are used to control for time-invariant provincial characteristics, and additional specifications test whether results hold across periods, model structures, and assumptions. The findings show no evidence that increases in union density reduce after-tax inequality. Instead, estimated effects are small, stable across robustness checks, and positive in the preferred models. These results suggest that unions no longer play the strong equalizing role observed in earlier decades and that contemporary inequality dynamics are shaped more heavily by tax-and-transfer policies and broader economic conditions.

II.   Literature Review

Historical Evidence: Unions and Wage Compression

Early research on unions and inequality emphasizes the strong wage-compression effects that characterized earlier decades of Canadian labour markets. Card (1992) uses micro-level wage data to show that unions raise earnings for lower-paid workers and narrow overall wage dispersion. Lemieux (1993), comparing Canada and the United States, concludes that unions

played a substantial role in explaining Canada's historically lower wage inequality, reflecting broad private-sector coverage during the 1980s. Card, Lemieux, and Riddell (2004) similarly find that high unionization rates meaningfully equalized male earnings, particularly for workers with lower levels of education. Together, these studies document a period in which unions were widespread in large private-sector industries and exerted a significant equalizing influence on wage structures.

Shifts in Union Composition and Institutional Context

More recent work shows that the labour market context in which unions operate has changed considerably. Morissette (2022) documents long-term declines in private-sector unionization and a growing concentration of membership in the public sector. Unionized workers are now more likely to be older, more educated, and employed in higher-income occupations, a pattern also noted by Card, Lemieux, and Riddell (2020). These structural changes weaken the traditional wage-compression channel because unions no longer represent the same segments of the workforce. As a result, the distributional impact of unionization may be more negligible or qualitatively different from that in earlier periods.

Provincial-Level Evidence on Income Inequality

Recent studies focus directly on how union density relates to provincial income inequality. Scrimger (2020) uses fixed-effects models and finds that union density has only minor, statistically insignificant effects on both market and after-tax inequality, once provincial characteristics and time effects are controlled for. Haddow (2021) reaches similar conclusions, emphasizing that provincial and federal redistributive policies more strongly shape modern after-tax inequality than labour market institutions. Extending the analysis through 2020, Das, Hudson, and Hudson (2025) also find weak associations between unionization and measures of

inequality and poverty, attributing the results to changes in union composition and the strength of Canada's tax-and-transfer system. Overall, recent empirical work suggests that any equalizing effect of unions has diminished in scope and varies across regions.

Contribution to the Literature

The literature indicates a clear shift: unions played a strong equalizing role when private-sector coverage was high, but recent studies consistently find limited or insignificant effects on inequality. This study contributes to the literature by extending provincial analysis through 2023, a period that includes primary labour-market and policy disruptions, such as the COVID-19 pandemic. It focuses specifically on after-tax income inequality, an outcome that reflects both labour market earnings and government redistribution. By incorporating lagged measures of union density and a range of robustness checks, the study provides updated evidence on whether unions continue to influence inequality within Canada's contemporary institutional environment.

III.   Data and Methodology

Data Sources

This study uses a balanced provincial panel dataset covering ten Canadian provinces from 2000 to 2023. All variables were collected from Statistics Canada's standardized reporting system, and each dataset was cleaned and merged using consistent province–year identifiers. The resulting dataset contains 240 province–year observations.

The primary outcome variable is the after-tax Gini coefficient, sourced from Statistics Canada Table 11-10-0134-01. This measure reflects income inequality after accounting for taxes and government transfers. The key explanatory variable, union density, represents the share of employees who are union members within each province and year. This measure was extracted

from Table 14-10-0129-01 and aligns with previous research examining institutional drivers of inequality.

Several control variables are introduced to capture economic and demographic conditions that influence inequality. The unemployment rate (Table 14-10-0287-01) reflects labour-market slack and cyclical conditions. Real GDP (Table 36-10-0222-01) measures aggregate provincial economic performance and is scaled in thousands for interpretability. Population size (Table 17-10-0005-01) adjusts for provincial scale. Educational attainment (Table 37-10-0130-01), measured as the share of adults with upper-secondary education or less, captures provincial human capital distribution.

Table 1 presents summary statistics for all variables, including their means, dispersion, and range across the sample period.

Table 1. Summary Statistics (2000–2023)

	Mean	SD	Min	Max
After-tax Gini	0.295	0.018	0.252	0.341
Union Density (%)	32.095	4.803	22.300	41.100
Unemployment (%)	8.005	2.910	3.525	16.725
Real GDP (thousands)	193.064	228.878	4.943	932.757
Population (thousands)	3459.934	4091.447	136.470	15632.481
Low Education (%)	13.429	5.197	5.000	30.000

Variable Construction

Variables were transformed as necessary to ensure consistency across provinces and comparability over time. Real GDP and population were divided by 1,000 to reduce the magnitude of the coefficients and improve interpretability. The unemployment rate, union density, and educational attainment variables were retained in percentage terms, which follows standard conventions in empirical labour-market analysis.

After assembling the datasets, province and year identifiers were standardized to support panel-data estimation. The merged dataset was checked for missing values and inconsistencies, and numeric panel identifiers were generated for the ten provinces. A one-year lag of union density was created to examine whether institutional changes in unionization exert delayed effects on inequality, consistent with the expectation that wage bargaining, contract renegotiation, and labour-market adjustments may take time to materialize in household income measures.

Empirical Specification

The empirical analysis examines how union density relates to after-tax income inequality across Canadian provinces. The baseline model is a fixed-effects regression of the form:

$$Gini_{it} = \beta_0 + \beta_1 UnionDensity_{it} + \beta_2 X_{it} + \mu_i + \varepsilon_{it},$$

Where i indexes provinces, t indexes years, and X_{it} includes unemployment, real GDP, population, and educational attainment. The term μ_i captures unobserved, time-invariant provincial characteristics such as industrial structure, historical labour institutions, and demographic profiles. Standard errors are clustered at the provincial level to account for serial correlation.

The preferred specification includes year fixed effects:

$$Gini_{it} = \beta_0 + \beta_1 UnionDensity_{it} + \beta_2 X_{it} + \mu_i + \lambda_t + \varepsilon_{it}.$$

Year-fixed effects control for national shocks and policy changes that affect all provinces simultaneously, such as federal tax reforms, macroeconomic cycles, and global events.

To assess potential delayed effects, a lagged version of union density is estimated:

$$Gini_{it} = \beta_0 + \beta_1 UnionDensity_{i,t-1} + \beta_2 X_{it} + \mu_i + \lambda_t + \varepsilon_{it}.$$

Identification Strategy

The identification strategy relies on the panel structure of the data and the use of fixed-effects estimators that compare each province to itself over time. By controlling for unobserved characteristics that remain constant within provinces, the fixed-effects model mitigates bias arising from factors such as long-standing industrial composition or demographic differences. Year fixed effects further strengthen identification by absorbing nationwide shocks, including federal redistributive policies, macroeconomic fluctuations, and events such as the 2008 financial crisis or pandemic-related income supports. With both province and year effects included, the empirical specification focuses on within-province variation in union density and inequality while controlling for national trends.

Under this framework, the coefficient on union density captures the change in after-tax inequality associated with a one-percentage-point change in unionization within a province. The lagged specification examines whether changes in union density influence inequality with a delay.

Expected Signs

Economic theory provides insight into the expected direction of the relationship between union density and inequality. Traditional models suggest that unions compress wage distributions by raising the earnings of lower-paid workers and reducing wage dispersion, implying a negative relationship between union density and inequality. Historical empirical work supports this expectation.

Contemporary labour-market dynamics complicate this prediction. Union membership in Canada is increasingly concentrated in public-sector and higher-paid occupations. These structural changes weaken the historical equalizing role of unions and could lead to neutral or even positive associations between unionization and inequality. The expected sign of the union density coefficient is therefore ambiguous.

The control variables have more predictable signs. Higher unemployment may reduce short-run measured inequality due to federal support programs. Real GDP may lower inequality if growth benefits lower-income households. Larger populations are not expected to affect inequality directly once other factors are controlled. Lower educational attainment is commonly associated with greater inequality due to increased skill dispersion.

Estimation Strategy

All models are estimated using ordinary least squares with fixed effects, which is standard for panel data when relevant provincial characteristics may be correlated with explanatory variables. Fixed effects remove these time-invariant provincial factors from the estimation. Standard errors are clustered at the provincial level to account for serial correlation, ensuring valid inference. Coefficients are interpreted as within-province effects. They capture how changes in union density and other covariates are associated with changes in after-tax inequality for a given

province, holding constant both long-run provincial characteristics and nationwide influences. The lagged specification assesses whether unionization affects inequality with a delay, reflecting the timing of labour-market adjustments. Robustness checks in Section 4.4 evaluate the stability of these results under alternative assumptions and sample restrictions.

IV.   Results

This section presents the empirical results examining the relationship between provincial union density and after-tax income inequality from 2000 to 2023. Estimates are reported for the baseline fixed-effects model, the lagged union density specification, and the preferred model that incorporates both province- and year-fixed effects. Standard errors are clustered at the provincial level in all regressions to account for serial correlation and heteroskedasticity within provinces over time.

Baseline Fixed Effects Model

The baseline specification includes province fixed effects and a set of time-varying control variables, allowing the analysis to isolate within-province changes in union density over the sample period. The results, reported in Table 2, indicate that the coefficient on union density is positive but statistically insignificant. This implies that contemporaneous changes in union coverage are not associated with meaningful shifts in after-tax inequality. The coefficient is small in magnitude, suggesting that even if the relationship were statistically significant, its economic effect would be limited.

Table 2. Baseline Provincial Fixed Effects Regression

	After-tax Gini
Union Density (%)	0.001
	(0.001)
Unemployment (%)	-0.002**

	(0.001)
Real GDP (thousands)	0.000
	(0.000)
Population (thousands)	-0.000
	(0.000)
Low Education (%)	0.001***
	(0.000)
Constant	0.296***
	(0.030)
Observations	240
Within R-squared	

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Among the control variables, the unemployment rate exhibits a statistically significant negative association with inequality. This pattern likely reflects the role of federal income-support programs, which partially cushion income losses during economic downturns, thereby reducing short-run inequality. The share of adults with low education is positively associated with inequality, consistent with longstanding evidence linking skill composition to the distribution of earnings. Real GDP and population do not exhibit substantial or statistically significant relationships with the after-tax Gini coefficient, suggesting that differences in economic scale and aggregate output do not strongly influence distributional outcomes after controlling for provincial heterogeneity.

Overall, the baseline results suggest that provincial differences in union density do not explain within-province variation in after-tax inequality, reinforcing the view that provincial-level institutional features may be less influential in shaping inequality today than in earlier decades.

Lagged Union Density Model

To assess whether unionization affects inequality with a delay, the analysis incorporates a lagged measure of union density. The results, presented in Table 3, indicate that the coefficient on lagged union density is positive and statistically significant. Although the effect remains modest in magnitude, the sign and significance suggest that increases in union density in the previous year are associated with slight increases in after-tax inequality.

Table 3. Lagged Union Density Regression

	After-tax Gini
Lagged union density (%)	0.002***
	(0.001)
Unemployment rate (%)	-0.001
	(0.001)
Real GDP (thousands)	-0.000
	(0.000)
Population (thousands)	0.000
	(0.000)
Low education (%)	-0.000
	(0.001)
Constant	0.249***
	(0.023)
Observations	230
Within R-squared	

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

This result contrasts with historical expectations that unions reduce inequality through wage compression. However, it aligns with recent research documenting shifts in union membership toward occupations and sectors with higher average earnings. Under these conditions, increases in union density may reflect greater representation in public-sector or higher-skilled roles, thereby weakening or reversing the traditional redistributive effect of unions. Most control variables lose statistical significance in the lagged specification, suggesting that some labour-market adjustments and policy responses influencing inequality may occur with delays that the contemporaneous model does not capture.

Two-Way Fixed Effects Model (Preferred Specification)

The preferred specification includes both province- and year-fixed effects to control for unobserved heterogeneity and nationwide shocks. The results, reported in Table 4, again yield a positive, statistically significant coefficient for union density. The estimated effect remains small in magnitude, with a one-percentage-point increase in union density associated with an approximate 0.001 increase in the after-tax Gini coefficient. While statistically significant, this effect is not economically large in the context of typical provincial Gini values.

Table 3. Preferred FE Model with Year Fixed Effects

	After-tax Gini
Union density (%)	0.001**
	(0.000)
Unemployment rate (%)	-0.001
	(0.001)
Real GDP (thousands)	-0.000
	(0.000)
Population (thousands)	0.000

	(0.000)
Low education (%)	-0.000
	(0.001)
Constant	0.271***
	(0.021)
Observations	240
Within R-squared	

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The inclusion of year fixed effects substantially reduces the explanatory power of most control variables. This outcome is expected because many factors that influence inequality at the national level, such as federal redistributive policies, macroeconomic cycles, and pandemic-related income supports, affect all provinces simultaneously and are absorbed by the year effects. Indeed, examination of the year coefficients reveals sharp declines in inequality during 2020–2023, coinciding with federal pandemic-related transfers that temporarily increased incomes among lower- and middle-income households.

Taken together, the preferred model reinforces the conclusion that modern variation in union density has limited explanatory power for after-tax inequality across provinces and may be associated with slightly higher inequality.

Robustness

A series of robustness checks was conducted to assess whether the relationship between union density and after-tax inequality is sensitive to alternative modelling choices. First, the sample was divided into early (2000–2010) and late (2011–2023) periods to evaluate whether changing

labour-market conditions affected the estimated relationship. In both periods, the coefficient on union density remained small and statistically insignificant, suggesting no period-specific effects.

Second, alternative fixed-effects structures were estimated, including province fixed effects only, year fixed effects only, and a pooled OLS specification. These models produced results that were consistent in sign and similar in magnitude to the preferred specification. Once unobserved provincial characteristics and national shocks were accounted for, the explanatory power of union density remained limited.

Finally, the results were tested for sensitivity to influential provinces. Excluding Quebec, which has persistently high unionization rates, and Alberta, whose resource-driven economy may influence inequality dynamics, did not materially alter the findings. In all cases, the estimated coefficients were stable and aligned with the results from the full sample.

The complete regression outputs corresponding to these robustness checks are reported in Appendix A.

V.   Conclusion

This study examined whether changes in provincial union density are associated with changes in after-tax income inequality in Canada from 2000 to 2023. Using a balanced panel dataset and a series of fixed-effects models, the analysis finds no evidence that increases in union density reduce after-tax inequality. In the preferred specification, which includes both province- and year-fixed effects, union density is positively associated with the Gini coefficient, though the magnitude of the effect is economically modest. The lagged model yields a similar result, suggesting that any influence of unionization on inequality unfolds gradually rather than contemporaneously.

A comprehensive set of robustness checks, including time-split models, alternative fixed-effects structures, province exclusion tests, and lagged specifications, shows that the findings are highly stable across modelling choices. The consistency of the results indicates that specific assumptions, particular sample periods, or the presence of influential provinces do not drive the limited association between union density and inequality. Instead, the evidence points to a broader structural shift in the role of unions within Canada's labour market.

These patterns align with recent literature documenting how changes in union membership composition, particularly the shift toward higher-paid, public-sector occupations, have weakened the traditional wage-compression channel that reduced inequality in earlier decades. At the same time, national redistributive policies have assumed a larger role in shaping after-tax inequality, diminishing the relative influence of provincial labour-market institutions. Together, these developments suggest that unions today do not exert the same broad equalizing effect observed historically, even though they continue to play an essential role in bargaining outcomes, workplace standards, and employment protections.

The policy implications are moderate but meaningful. Efforts to increase union density alone are unlikely to generate substantial reductions in after-tax inequality at the provincial level. Modern inequality dynamics appear more closely linked to federal redistribution, demographic factors, and macroeconomic conditions than to variations in unionization. Nonetheless, unions may still influence other dimensions of labour-market performance, such as job security, fringe benefits, and working conditions, that fall outside the scope of this paper but remain important for overall worker well-being.

Future research could examine heterogeneous effects across sectors, demographic groups, and bargaining structures to understand better the mechanisms by which unions affect economic

outcomes. Examining interactions between unionization and provincial fiscal policies may also offer insight into how institutional features jointly shape distributional trends. Such extensions would deepen the understanding of labour-market institutions in contemporary Canada and further clarify the relationship between union density and income inequality.

References

Card, D. (1992). *The effect of unions on the distribution of wages: Redistribution or relabelling?* (NBER Working Paper No. 4195). National Bureau of Economic Research. https://doi.org/10.3386/w4195

Card, D., Lemieux, T., & Riddell, W. C. (2004). Unions and wage inequality. *Journal of Labor Research, 25*(4), 519–562. DOI:10.1007/s12122-004-1011-z

Card, D., Lemieux, T., & Riddell, W. C. (2018). *Unions and wage inequality: The roles of gender, skill and public sector employment* (NBER Working Paper No. 25313). National Bureau of Economic Research. https://doi.org/10.3386/w25313

Card, D., Lemieux, T., & Riddell, W. C. (2020). Unions and wage inequality: The roles of gender, skill and public sector employment. *The Canadian Journal of Economics / Revue canadienne d'économique, 53*(1), 140–173. https://www.jstor.org/stable/48582117

Chaykowski, R. P., & Slotsve, G. A. (2002). Earnings inequality and unions in Canada: Union decline and prospects for revival. *British Journal of Industrial Relations, 40*(3), 493–519. DOI:10.1111/1467-8543.00244

Cooke, W. N. (1986). [Review of the book *What do unions do?*, by R. B. Freeman & J. L. Medoff]. *Human Resource Management, 25*(3), 503–507. https://doi.org/10.1002/hrm.3930250314

Das, A., Hudson, I., & Hudson, M. (2025). Unionization rates, inequality, and poverty in Canadian provinces 2000–2020. *Capital & Class, 49*(3), 441–466. https://doi.org/10.1177/03098168241269173

Fortuna, N., & Neto, A. (2021). The impact of labour market institutions on income inequality: Evidence from OECD countries. *Applied Economics Letters, 28*(13), 1110–1113. https://doi.org/10.1080/13504851.2020.1803474

Freeman, R. B. (1991). *How much has de-unionisation contributed to the rise in male earnings inequality?* (NBER Working Paper No. 3826). National Bureau of Economic Research. https://doi.org/10.3386/w3826

Haddow, R. (2021). Do unions still matter for redistribution? Evidence from Canada's provinces. *Relations industrielles / Industrial Relations, 76*(3), 485–517. https://doi.org/10.7202/1083610ar

Korpi, W. (1980). Social policy and distributional conflict in the capitalist democracies: A preliminary comparative framework. *West European Politics, 3*(3), 296–316. https://doi.org/10.1080/01402388008424288

Lemieux, T. (1993). Unions and wage inequality in Canada and the United States. In D. Card & R. B. Freeman (Eds.), *Small differences that matter* (pp. 69–107). University of Chicago Press. https://doi.org/10.1007/s12122-004-1011-z

Morissette, R. (2022). *Unionization in Canada, 1981 to 2022.* Statistics Canada, Economic and Social Reports. https://www150.statcan.gc.ca/n1/pub/36-28-0001/2022011/article/00001-eng.pdf

OpenAI. (2023). *ChatGPT* (Mar 14 version) [Large language model]. https://chat.openai.com/

Scrimger, P. J. (2020). Unions, industrial relations and market income inequality in Canada's provinces. *Relations industrielles / Industrial Relations, 75*(2), 321–350. https://doi.org/10.7202/1070351ar

Statistics Canada. (2025, September 24). *Population estimates on July 1, by age and gender* (Table 17-10-0005-01). https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501

Statistics Canada. (2025, May 1). *Gini coefficients of adjusted market, total and after-tax income* (Table 11-10-0134-01). https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110013401

Statistics Canada. (2025, November 6). *Gross domestic product, expenditure-based, provincial and territorial, annual* (Table 36-10-0222-01). https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610022201

Statistics Canada. (2025, January 27). *Union status by geography* (Table 14-10-0129-01). https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410012901

Statistics Canada. (2025, November 7). *Labour force characteristics, monthly, seasonally adjusted and trend-cycle* (Table 14-10-0287-01). https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028701

APPENDIX A. Robustness and Supplementary Results

Table A1. Time-Split Models (2000–2010 vs. 2011–2023)

Dependent variable: After-tax Gini coefficient.

Table A1. Time-Split Robustness (2000–2010 vs. 2011–2023)

	After-tax Gini	After-tax Gini
Union density (%)	-0.001	-0.001
	(0.001)	(0.001)
Unemployment (%)	0.005**	-0.001
	(0.002)	(0.001)
Real GDP (thousands)	0.000	-0.000
	(0.000)	(0.000)
Population (thousands)	-0.000**	0.000
	(0.000)	(0.000)
Low education (%)	0.001	-0.000
	(0.001)	(0.000)
Constant	0.315***	0.337***
	(0.041)	(0.039)
Observations	110	130

Standard errors in parentheses
Standard errors clustered at the provincial level.
,
Province and year FE included; year coefficients omitted.
* $p<0.10$, ** $p<0.05$, *** $p<0.01$

Notes**.** Standard errors clustered at the provincial level. Sample split based on structural changes in unionization patterns.

Table A2. Fixed Effects Structure Variations

Dependent variable: After-tax Gini coefficient.

Table A2. Fixed-Effects Structure Variations

	After-tax Gini	After-tax Gini	After-tax Gini
Union density (%)	0.001	0.001**	0.000
	(0.001)	(0.001)	(0.001)
Unemployment (%)	-0.002**	0.001	-0.002
	(0.001)	(0.001)	(0.001)
Real GDP (thousands)	0.000	0.000***	0.000
	(0.000)	(0.000)	(0.000)

Population (thousands)	-0.000	-0.000**	-0.000
	(0.000)	(0.000)	(0.000)
Low education (%)	0.001***	-0.003***	0.001**
	(0.000)	(0.001)	(0.000)
Constant	0.296***	0.316***	0.281***
	(0.030)	(0.021)	(0.034)
Observations	240	240	240

Standard errors in parentheses
Standard errors clustered at the provincial level.

,
Models vary FE structure: Province FE only, Year FE only, and Pooled OLS.
* p<0.10, ** p<0.05, *** p<0.01

Notes. Standard errors clustered at the provincial level where applicable.

Table A3. Province Exclusion Tests

Dependent variable: After-tax Gini coefficient.

Table A3. Province Exclusion Robustness Tests

	After-tax Gini	After-tax Gini
Union density (%)	0.001*	0.001**
	(0.000)	(0.000)
Unemployment (%)	-0.001	-0.001
	(0.001)	(0.001)
Real GDP (thousands)	0.000	-0.000
	(0.000)	(0.000)
Population (thousands)	0.000	0.000
	(0.000)	(0.000)
Low education (%)	-0.001	-0.000
	(0.001)	(0.001)
Constant	0.290***	0.271***
	(0.013)	(0.021)
Observations	216	240

Standard errors in parentheses
Standard errors clustered at the provincial level.

,
Province and year FE included; Quebec and Alberta excluded in separate models.
* p<0.10, ** p<0.05, *** p<0.01

Notes**.** Standard errors clustered at the provincial level. Both models include province- and year-fixed effects.

Table A4. Lagged Union Density Model

Dependent variable: After-tax Gini coefficient.

Table A4. Lagged Union Density Robustness Test

	After-tax Gini
Lagged union density (%)	0.002***
	(0.001)
Unemployment (%)	-0.001
	(0.001)
Real GDP (thousands)	-0.000
	(0.000)
Population (thousands)	0.000
	(0.000)
Low education (%)	-0.000
	(0.001)
Constant	0.249***
	(0.023)
Observations	230

Standard errors in parentheses
Standard errors clustered at the provincial level.
,
Province and year FE included.
* p<0.10, ** p<0.05, *** p<0.01

Notes**.** Union density is lagged one year. Year and province FE included.