Dominion and Divergence: Creighton, Econometrics, and the National Energy Program

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Abstract

This paper evaluates the economic impact of the 1980 National Energy Program (NEP), situating it as both a policy experiment and a turning point in Canadian political economy. Using a newly constructed provincial panel dataset (1975–1995) and modern econometric techniques—including Difference-in-Differences, event-study analysis, and a ridge-regularized Synthetic Control Method—we assess Alberta's trajectory relative to a synthetic counterfactual of other provinces.

We focus on log GDP per capita, log compensation per worker (all industries), and—as a distributional robustness metric—the Compensation-to-GDP (real ratio). Alberta was already outperforming before the NEP; by the late 1980s its GDP per capita exceeded its synthetic control by roughly 25 percent, while compensation per worker rose by only 15 percent, producing a widening gap between growth and labour returns. The Compensation-to-GDP (real ratio) declined relative to a synthetic counterfactual, reinforcing this decoupling.

We interpret these outcomes through a Neo-Laurentian lens.¹ The NEP exposed the limitations of Confederation: Ottawa's attempt to centralize resource rents clashed with a province whose own rents were tied to U.S. capital and markets. Enacted on the cusp of Reagan-era liberalization, it was Canada's last serious attempt at economic nationalism before continental integration became entrenched under CUFTA/NAFTA.

1 Introduction

For Canada, 1980 was a defining moment. While the Quebec referendum loomed large, the more consequential event for the federation was the announcement of the National Energy Program (NEP) in the October federal budget. Introduced by Pierre Trudeau's returning Liberal government, the NEP attempted to reassert Ottawa's fiscal and political dominion over Canada's oil economy. Its stated aims—"security, opportunity, and fairness"—obscured a deeper contradiction: the federal state sought to centralize energy rents just as Alberta's oil industry was becoming increasingly bound to U.S. capital and continental markets.

¹"Neo-Laurentian" refers to a framework in which Canada's political economy centralizes power and resources in the industrial core (Ontario–Quebec), often at the expense of peripheral regions such as Alberta.

The 1975 Syncrude rescue brought Ottawa and Ontario into the oil sands as equity partners, a precedent that the 1980 Budget then generalized—linking "energy security" to "economic security" and proposing revenue reallocation and Canadian ownership—into the National Energy Program.²

This paper argues that the NEP was both the last serious effort at Canadian economic nationalism and a textbook case of the Neo-Laurentian logic of Confederation: federal interventions that, often unintentionally, stabilize the Laurentian core (Ontario-Quebec) while imposing costs on the peripheries. By applying modern causal inference tools to provincial data from 1975 to 1995, we reassess Alberta's economic trajectory during and after the NEP, placing the episode at the hinge between late-stage national economic planning and the continental integration entrenched by CUFTA/NAFTA.

2 Historical Context

If one were to read Donald Creighton in isolation, Canada's economic trajectory might appear as a triumph of east—west development under a firm central authority. From *The Commercial Empire of the St. Lawrence* to *Dominion of the North*, Creighton emphasized geography and statecraft. But this narrative understates the tension between the Laurentian core and the peripheries. The defeats of reciprocity in 1911, the evolving architecture of fiscal federalism, and the ascendance of resource regions (especially after Leduc) preview a structural pattern: Ottawa's efforts to stabilize the centre repeatedly meet regional resistance.

The 1975 Syncrude bailout marked the Laurentian core's first direct equity step into Alberta's oil sands, with Ottawa and Ontario moving from regulator to investor. Five years later, the 1980 Budget framed energy as national political economy: securing supply, reallocating rents, and increasing Canadian control—foreshadowing the NEP's price, revenue, and ownership pillars.³

Peter Lougheed's premiership consolidated Alberta's bargaining position over oil rents, culminating in the Alberta Heritage Savings Trust Fund. By 1980, Ottawa confronted a province capable of contesting fiscal extraction. The NEP thus belongs to a longer chronology: an assertion of federal dominion colliding with a resource province oriented to global (and especially U.S.) markets, followed in short order by the turn to continentalism in the late 1980s and early 1990s.

²See Government of Canada (1980a), pp. 1, 6, 9–11.

³"A budget which sets new directions ... ensuring both energy security and economic security for Canadians" and a National Energy Program "to establish greater Canadian control and ownership of the energy industry, provide a fairer share of petroleum revenues, and guarantee supply at reasonable prices." See Government of Canada, The Budget Speech of the Honourable Allan J. MacEachen, Minister of Finance (Oct. 28, 1980), pp. 1, 6. Further: "new federal taxes on petroleum will ensure that the Government of Canada receives a larger share of resource revenues ... so that all Canadians benefit fairly," and steps "to increase Canadian ownership ... building on initiatives such as Syncrude," pp. 9–11.

3 Data and Methods

3.1 Data Sources and Construction

We use a balanced provincial panel (1975–1995). To ensure consistent macro coverage, we exclude **Prince Edward Island**,⁴ yielding Alberta plus eight comparator provinces (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Quebec, Saskatchewan). Monetary variables are deflated to **1986 CAD** using province-specific CPI (Tables 18-10-0004/0005; see Appendix Table A3). Limited early gaps (1975) are linearly interpolated to preserve balance; robustness checks drop any constructed cells.

Core Indicators (log, 1986 CAD)

- GDP per capita: real GDP (all industries) / population.
- Compensation per worker: real compensation of employees (all industries) / total employment.
- Robustness: Compensation-to-GDP (real ratio) = real compensation / real GDP.⁵

Sources: Statistics Canada (GDP, CPI, population, LFS), Bank of Canada (policy rate), FRED (WTI). Summary statistics for all core outcomes are reported in Appendix Table A1.

Panel construction.

We assemble an annual province—year panel for 1975–1995 covering Alberta and eight comparator provinces (BC, MB, NB, NL, NS, ON, QC, SK); Prince Edward Island is excluded due to early-series gaps. All series are pulled from Statistics Canada bulk tables (Appendix Table A3) and harmonized on (Province, Year) with consistent geography labels.

Prices and deflation.

Province-specific CPI is built from 18-10-0004-01 ("All-items"), averaged within year. Because provincial CPI is incomplete in the mid-1970s, we backfill 1975–1977 by copying the Canada CPI into each province; from 1978 onward we use provincial CPI. All monetary flows are deflated to 1986 CAD by dividing nominal values by the CPI index/100.

GDP.

Sectoral GDP (Mining & oil and gas; Refining; Agriculture; Fishing; Manufacturing; Education) is constructed from 36-10-0380-01 and 36-10-0381-01. For 1975–1983, the industry table reports current dollars, so we deflate with provincial CPI; for 1984–1995, we use the 1986-constant-dollar series directly. Total provincial GDP comes from the income-based aggregates: 36-10-0324-01 for 1975–1980 (current dollars deflated with provincial CPI) and 36-10-0221-01 for 1981–1995, preferring constant/chained dollars when available and otherwise deflating current dollars. In all cases we isolate "gross domestic product at market prices" rows before deflation. Note: industry GDP is reported at basic prices whereas the provincial

⁴PEI is excluded due to missing data in key series (CPI, GDP, employment) in early years, which prevents balanced panel estimation.

⁵Used as a robustness ratio; not the nominal national-accounts labour share.

aggregate is commonly reported at $market \ prices$; sectoral sums therefore track but need not equal the aggregate due to product taxes/subsidies.

Compensation (labour income).

Monthly compensation of employees ("labour income") by industry is sourced from 36-10-0222-01 and summed to annual totals by province and sector, then deflated to 1986 CAD.⁶ We extract a province-level total (all sectors) and sectoral components that map 1:1 to GDP industries (Mining & oil and gas; Refining; Manufacturing; Education). The published "Agriculture, fishing and trapping" labour-income aggregate is allocated across Agriculture and Fishing using each province—year's real GDP weights; where weights are missing, we apply a 50/50 fallback and verify that allocated AGRIC+FISH equals the source.

Population and employment.

Population (July 1, "All ages") is from 17-10-0005-01. Employment is from 14-10-0017-01 (LFS, total employment, total gender, ages 15+), averaged within year; values reported in thousands are scaled by 1,000. Where 1975 is missing but 1976 is present (a known edge case), we copy the 1976 level to 1975 solely to preserve a balanced panel; those copied cells are *excluded* from estimation.

Derived outcomes.

Real GDP per capita is total real GDP divided by population. "Compensation per worker" is real compensation of employees (all industries) divided by total employment. As a distributional robustness metric—the **Compensation-to-GDP** (real ratio), a constructed measure using deflated series (distinct from the national-accounts labour share). (real labour income/real GDP). Synthetic-control ATT results for all three outcomes appear in Appendix Tables A4, A6, and A8, with corresponding donor weights in Tables A5–A9.

Exogenous covariates.

We add the Bank of Canada policy rate (10-10-0122-01, annual average), WTI crude oil (FRED: WTISPLC), coal (WPU051), chemicals (PCU325311325311), and wheat (WPU0121). USD commodity prices are converted to CAD using the annual average USD/CAD (FRED: DEXCAUS); we also include log(USD/CAD) and its first difference. Unless otherwise noted, these covariates are used for descriptive context and sensitivity checks rather than as baseline controls in DiD/SCM.

Balance and checks.

The final province-level estimation file contains $9 \times 21 = 189$ province-years. Before merging, we collapse any accidental many-to-many keys by deterministic summation (which leaves correct data unchanged) and assert key uniqueness for totals and sectors. We verify: (i) GDP sector sums track provincial totals; (ii) allocated AGRIC+FISH labour income equals the source; (iii) outcomes are strictly positive. "Compensation per worker" and "compensation-to-GDP ratio" are log-transformed only for strictly positive series (checked in preprocessing).

3.2 Econometric Framework

We triangulate with three complementary designs:

⁶This is *not* average weekly earnings. It is the national-accounts labour-income aggregate ("compensation of employees") at the provincial/industry level.

⁷Because it uses deflated series in both numerator and denominator, this ratio is a robustness indicator and is not the canonical national-accounts *nominal* labour share; values may exceed one.

- 1. **Difference-in-Differences (DiD)**: Two-way fixed effects with an Alberta×Post interaction; province and year FE. Baseline models use cluster-robust SEs at the province level and avoid collinear Post main effects alongside year FE.
- 2. **Event Study**: Dynamic DiD with event-time indicators (k) from five years before to nine years after the NEP. We set k = -1 as the reference period and report a joint pre-trend test. See full coefficient estimates in Appendix Tables A10–A12.
- 3. Synthetic Control Method (SCM): Ridge-regularized SCM minimizing pre-1981 RMSE with negative weights allowed to improve fit (Ben-Michael, Feller & Rothstein, 2021), which helps improve pre-treatment fit when traditional non-negative constraints fail to capture structural similarity. We report donor weights, pre-fit RMSE, and post-treatment gaps; inference by placebo-in-space and placebo-in-time permutation tests, plus leave-one-out donors. SCM design is summarized in Appendix Table A2.

Model summaries appear in Appendix Table A2. Estimates and figures are referenced below; full tables are delegated to the Appendix.

3.3 Identification and Inference

Internal validity rests on (i) parallel trends (event-study pre-trend tests), (ii) good pre-period fit (SCM RMSE), and (iii) robustness to donor composition and placebo permutations. We report clustered SEs for DiD, permutation-based p-values for SCM, and sensitivity to Alberta×macro interactions.

4 Results

4.1 Summary of Main Outcomes

Across DiD, event studies, and SCM, Alberta diverges sharply from its counterfactual beginning in 1981 and persisting through the early 1990s. Three consistent patterns emerge:

- 1. **GDP** per capita: By the late 1980s Alberta's GDP per capita exceeded its synthetic control by approximately 25 percent. Divergence begins immediately in 1981, peaks mid-1980s, and persists into the 1990s.
- 2. Compensation per worker: Relative underperformance is evident. Alberta's compensation per worker rose only about 15 percent above its synthetic control, significantly less than GDP per capita, indicating a widening split between growth and labour returns.
- 3. Compensation-to-GDP (real ratio): declines relative to counterfactuals, corroborating the decoupling of compensation from GDP.⁸

Placebo-in-space/time tests place Alberta's post-1981 gaps in the upper tail; leave-one-out donor tests yield stable ATTs across specifications.

⁸As a real ratio it may exceed one; we use it as a robustness indicator rather than a nominal labour-share measure.

4.2 Difference-in-Differences Estimates

Figures 1–3 and 4–9 show consistent patterns across designs. In DiD, GDP-based outcomes strengthen post-NEP while compensation per worker lags. Cluster-robust SEs confirm significance; DiD results are interpreted jointly with event studies and SCM to avoid overreliance on a single estimator.

4.3 Event Study Analysis

Event studies (Figures 1–3) show flat pre-trends and sharp post-1981 divergence:

- GDP per capita: upward divergence begins immediately in 1981 and persists.
- Compensation per worker: relative decline emerges after the mid-1980s, widening the GDP-labour gap.
- Compensation-to-GDP (real ratio): falls relative to counterfactuals, reinforcing compensation dynamics.

4.4 Synthetic Control Method

Figures 4–6 show tight pre-period fit and consistent post-1981 gaps. Permutation tests and leave-one-out donors corroborate significance and stability. The split pattern—aggregate growth up, labour returns relatively weaker—is robust to donor composition.

SCM tuning and diagnostics. We implement ridge-regularized SCM with negative donor weights allowed (Ben-Michael, Feller & Rothstein, 2021). The ridge penalty λ is selected by a grid search minimizing pre-1981 RMSE on Alberta's outcome (grid: $\{0, 10^{-6}, 10^{-5}, \dots, 10^{-1}\}$). We report the chosen λ , pre-1981 RMSE, donor weights, and placebo-in-space/time permutation p-values. Event-study models report the joint pre-trend F-test; DiD models report province-clustered standard errors.

4.5 Interpretation

The NEP did not reverse Alberta's ascent; it reshaped it. Capital-intensive growth persisted, but compensation per worker and labour share underperformed relative to counterfactuals, especially after the mid-1980s oil bust. This decoupling is consistent with the NEP as a late-stage assertion of federal dominion colliding with continental market forces. In Neo-Laurentian terms, Ottawa's attempt to stabilize the core via rent centralization imposed regional costs without halting Alberta's capital accumulation.

This divergence also illuminates Alberta's constitutional posture in the late 1980s and early 1990s. The Meech Lake Accord (1987) and Charlottetown Accord (1992) both aimed to reaffirm national unity, yet met sharp resistance in Alberta. The econometric evidence suggests why: by those dates, Alberta's GDP per capita had diverged substantially from the rest of Canada, while labour's share of that growth remained weak. This combination of capital accumulation and exclusion from labour gains likely reinforced a sense of peripheral marginalization—economic divergence feeding constitutional dissent.

Limitations

Our estimates face three constraints. First, the NEP coincided with global oil price volatility and high interest rates, complicating causal separation. Second, the small number of provinces reduces statistical power in DiD and SCM permutation inference. Third, Synthetic Control relies on linear weighting of donors, which may understate structural heterogeneity across provinces. We therefore emphasize triangulation across methods rather than reliance on a single design.

5 Discussion

When Allan MacEachen invoked "security, opportunity, and fairness," Ottawa was responding to a political economy already in motion. Lougheed's Alberta had re-negotiated resource rents and autonomy through the 1970s. The NEP—price controls, revenue sharing, state equity—reasserted federal dominion but collided with an oil patch tied to U.S. capital and markets. Our extended panel through 1995 shows the hinge clearly: the NEP sits at the end of Canadian economic nationalism and just before continentalism⁹ (CUFTA/NAFTA) became the ordering principle. The econometric pattern—GDP up, labour returns relatively weaker—helps explain why the episode deepened regional alienation.

6 Conclusion

The NEP exposed the imperial nature of Canadian Cofederation. It was Canada's last serious attempt at economic nationalism before continental integration became entrenched. Alberta's GDP-based outcomes continued to diverge upward relative to counterfactuals, while compensation per worker and labour share underperformed—a decoupling of capital and labour consistent with both rent centralization and continental market pressures. In Neo-Laurentian perspective, the NEP belongs to a longer pattern: federal stabilization of the core through regional sacrifice. The 1975–1995 evidence suggests that by the early 1990s, continentalism had overtaken the federal capacity to shape regional development unilaterally.

⁹"Continentalism" refers to the increasing integration of Canada's economy into a North American framework, especially under CUFTA (1989) and NAFTA (1994).

Figures

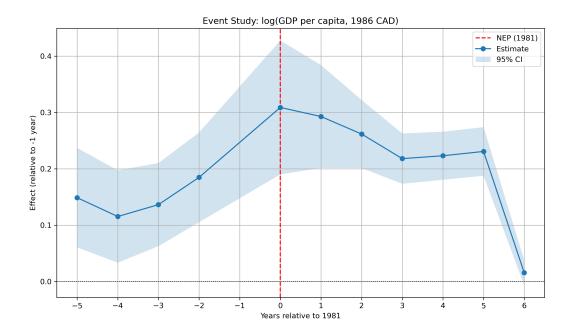


Figure 1: Event study: log GDP per capita (1986 CAD). Points show event-time coefficients $\hat{\beta}_k$ with confidence intervals, relative to the reference period k = -1 (1980). Vertical line marks k = 0 (1981). Dashed horizontal line denotes zero.

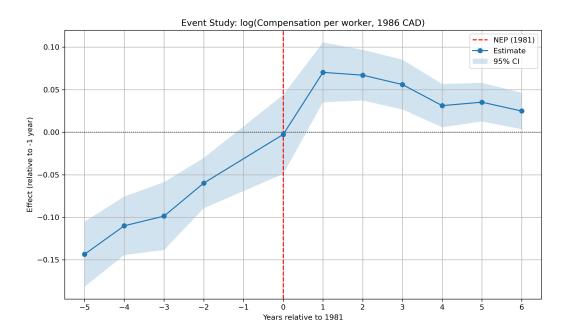


Figure 2: Event study: log compensation per worker. Points show event-time coefficients $\hat{\beta}_k$ with confidence intervals, relative to the reference period k = -1 (1980). Vertical line marks k = 0 (1981). Dashed horizontal line denotes zero.

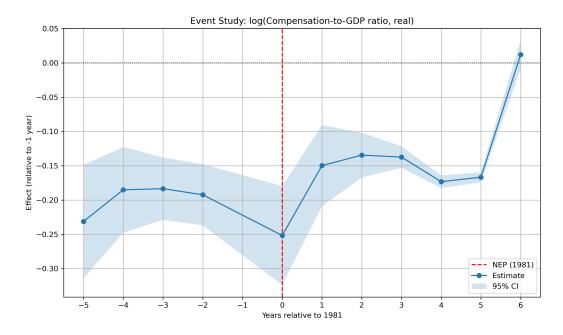


Figure 3: Event study: Compensation-to-GDP (real ratio). Points show event-time coefficients $\hat{\beta}_k$ with confidence intervals, relative to the reference period k = -1 (1980). Vertical line marks k = 0 (1981). Dashed horizontal line denotes zero.

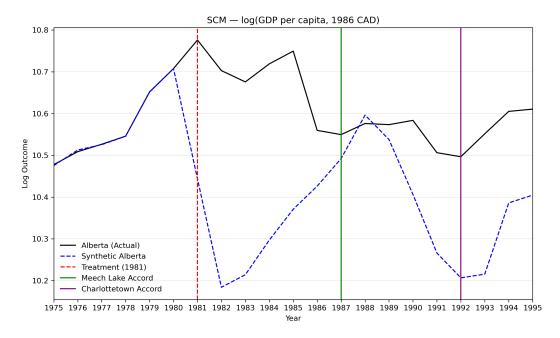


Figure 4: SCM: Log GDP per Capita—Alberta vs. Synthetic. *Note:* Alberta shown as solid line; synthetic/control as dashed.

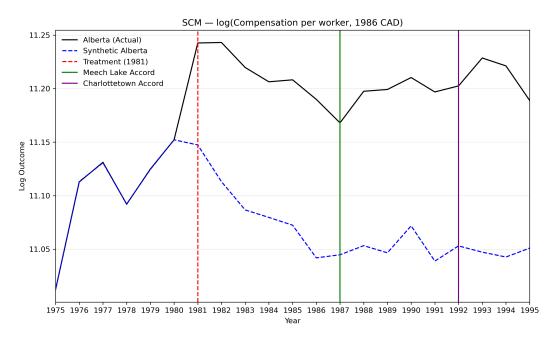


Figure 5: SCM: Log Compensation per Worker—Alberta vs. Synthetic. Alberta shown as solid line; synthetic/control as dashed.

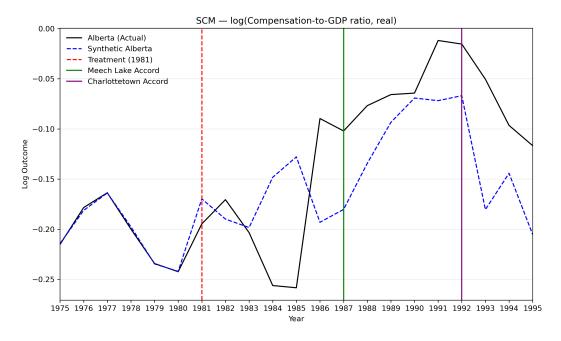


Figure 6: SCM: Compensation-to-GDP (real ratio)—Alberta vs. Synthetic. Alberta shown as solid line; synthetic/control as dashed.

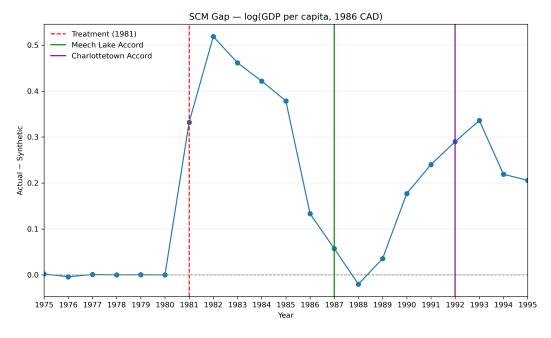


Figure 7: SCM Gap: Log GDP per Capita—Alberta minus Synthetic.

Positive values indicate Alberta > synthetic.

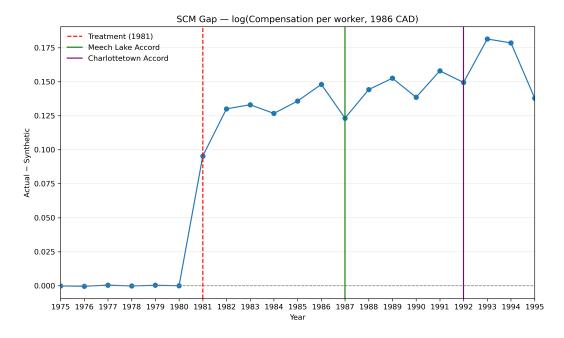


Figure 8: SCM Gap: Log Compensation per Worker—Alberta minus Synthetic.

Positive values indicate Alberta > synthetic.

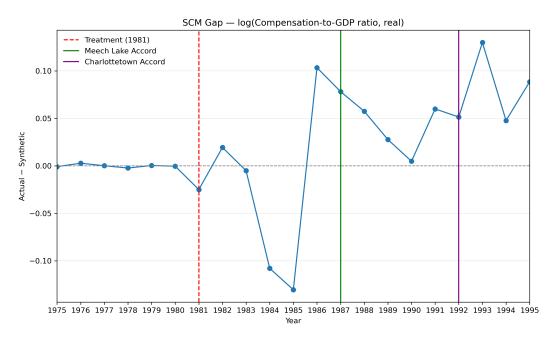


Figure 9: SCM Gap: Compensation-to-GDP (real ratio)—Alberta minus Synthetic.

Positive values indicate Alberta > synthetic.

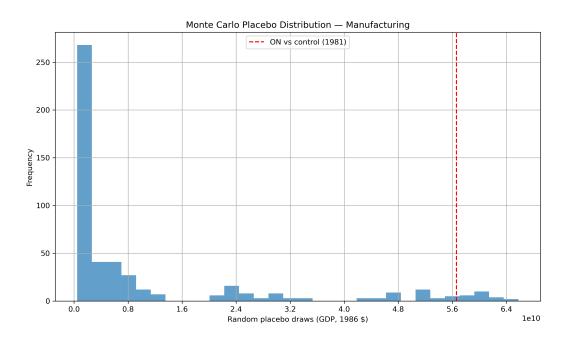


Figure 10: SCM Placebo Permutations and Sensitivity Checks.

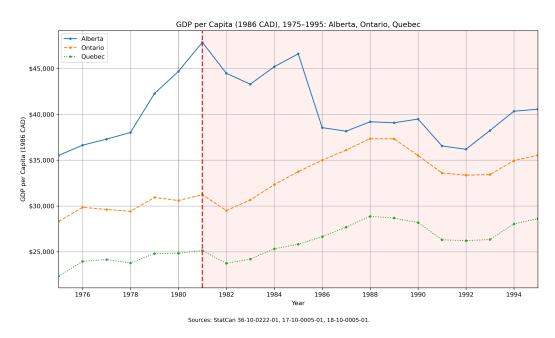


Figure 11: GDP per Capita (1986 CAD), 1975–1995: Alberta, Ontario, Quebec. Vertical line =1981.

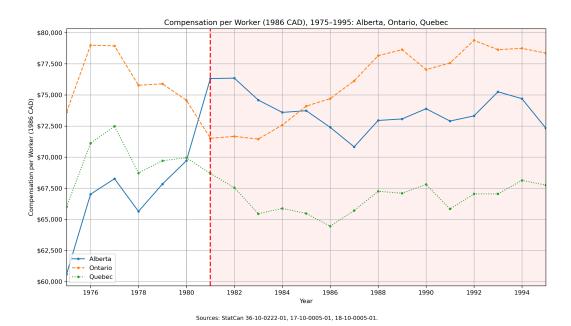


Figure 12: Compensation per Worker (1986 CAD), 1975–1995: Alberta, Ontario, Quebec. Vertical line = 1981.

Appendix: Tables

Appendix Tables Index

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A10-A12	Event Study Coefficients	Coefficients by event time k

Table A1: Summary Statistics

Variable	N	Mean	Std. Dev.	Min	P25	Median	P75	Max
Year	189	1985.00	6.07	1975	1980	1985	1990	1995
GDP_Real_Mining	189	2,708,718,589.81	4,544,024,557.49	76,152,702.03	290,900,000.00	$1,\!210,\!400,\!000.00$	2,379,700,000.00	$25,\!146,\!952,\!789.70$
Wpw_All	189	65,440.89	7,151.42	47,079.73	60,860.66	64,451.48	71,335.72	80,795.63
Population	189	2,873,730.90	3,002,281.81	556,496.00	852,659.00	1,082,495.00	3,292,111.00	10,950,119.00
Employment	189	1,292,741.98	1,416,277.23	158,825.00	321,066.67	486,866.67	1,559,658.33	5,199,008.33
GDP_pc_real_1986	189	27,110.28	6,962.53	13,829.44	23,303.99	27,096.09	30,594.91	47,862.91
GDP_per_worker_real_1986	189	63,176.20	9,436.26	42,738.83	58,350.73	61,676.20	66,386.59	95,466.23

Notes: Monetary values in 1986 CAD; employment in persons.

Table A2: Model Overview

Design	Specification / Inference
DiD	TWFE; AB×Post; province and year FE; cluster-robust SEs
Event study	Leads/lags $k \in [-5, 9]$; $k = -1$ is reference; joint pre-trend test
SCM (ridge)	Pre-1981 fit (RMSE); negative weights allowed; permutation p -values; leave-one-out donors

Table A3: Statistics Canada Web Data Service Tables Used

Hyphenated ID	PID	Description
36-10-0380-01	3610038001	GDP by industry, annual (current \$ pre-1984; also reports constant)
36-10-0381-01	3610038101	GDP by industry (millions of dollars; constant series)
36-10-0324-01	3610032401	Income-based GDP, provincial, 1975–1980 (deflated)
36-10-0221-01	3610022101	Income-based GDP, provincial, 1981–1995 (constant/chained preferred)
36-10-0222-01	3610022201	Compensation of employees, by industry, monthly
18-10-0004-01	1810000401	CPI, annual average ("All-items")
18-10-0005-01	1810000501	CPI, by province
14-10-0017-01	1410001701	Labour force characteristics (employment), monthly
17-10-0005-01	1710000501	Population estimates, July 1 (all ages)
10-10-0122-01	1010012201	Financial market statistics (policy rate), monthly

Notes: Accessed via Statistics Canada WDS; all series deflated to 1986 CAD.

Table A4: SCM ATT Summary: Log GDP per Capita

Outcome	ATT (1981–95)	Pre-RMSE	Post-RMSE
log_GDP_pc_real_1986	0.2525	0.0019	0.2958

Table A5: SCM Donor Weights: Log GDP per Capita

Province	Weight
Ontario	3.080
Quebec	0.922
Newfoundland And Labrador	0.237
Manitoba	0.187
New Brunswick	0.092
British Columbia	-0.528
Saskatchewan	-0.666
Nova Scotia	-2.393

Table A6: SCM ATT Summary: Compensation per Worker

Outcome	ATT (1981–95)	Pre-RMSE	Post-RMSE
log_Wpw_All	0.1422	0.0003	0.1437

Table A7: SCM Donor Weights: Compensation per Worker

Province	Weight
Quebec	1.082
Saskatchewan	0.509
British Columbia	0.350
Nova Scotia	0.221
Newfoundland And Labrador	-0.112
Ontario	-0.255
Manitoba	-0.271
New Brunswick	-0.523

Table A8: SCM ATT Summary: Compensation-to-GDP (real ratio)

Outcome	ATT (1981–95)	Pre-RMSE	Post-RMSE
log_LabourShare_Total	0.0267	0.0015	0.0748

Table A9: SCM Donor Weights: Compensation-to-GDP (real ratio)

Province	Weight
Saskatchewan	1.256
British Columbia	0.989
Quebec	0.533
Newfoundland And Labrador	0.386
Nova Scotia	0.283
New Brunswick	0.253
Ontario	-0.828
Manitoba	-2.175

Table A10: Event Study: log(GDP per capita, 1986 CAD)

Variable	Estimate (s.e.)	95% CI: low	95% CI: high	p-value
Intercept	10.163 (0.002)***	10.160	10.167	0.000
NEP_bin_m5	0.149 (0.045)***	0.061	0.236	0.001

Notes: Province and year FE. Bin -1 omitted as baseline. Significance: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A11: Event Study: log(Compensation per Worker, 1986 CAD)

Variable	Estimate (s.e.)	95% CI: Low	95% CI: High	<i>p</i> -value
Intercept	11.084 (0.001)***	11.082	11.085	0.000
NEP_bin_m5	-0.144 (0.019)***	-0.181	-0.106	0.000
NEP_bin_m4	-0.110 (0.017)***	-0.144	-0.076	0.000
NEP_bin_m3	-0.099 (0.020)***	-0.138	-0.059	0.000
NEP_bin_m2	-0.060 (0.015)***	-0.089	-0.031	0.000
NEP_bin_p0	-0.003 (0.023)	-0.049	0.043	0.911
NEP_bin_p1	$0.070 \ (0.018)^{***}$	0.036	0.105	0.000
NEP_bin_p2	0.067 (0.015)***	0.038	0.097	0.000
NEP_bin_p3	$0.056 \ (0.015)^{***}$	0.027	0.085	0.000
NEP_bin_p4	0.031 (0.013)**	0.006	0.056	0.016
NEP_bin_p5	0.035 (0.011)***	0.013	0.058	0.002
NEP_bin_p6	0.025 (0.011)**	0.004	0.046	0.023

Notes: Province and year fixed effects included. Bin -1 omitted as reference. Significance levels: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A12: Event Study: log(Compensation-to-GDP ratio, real)

Variable	Estimate (s.e.)	95% CI: low	95% CI: high	p-value
Intercept	0.049 (0.001)***	0.047	0.051	0.000
NEP_bin_m5	-0.231 (0.042)***	-0.313	-0.149	0.000
NEP_bin_m4	-0.185 (0.032)***	-0.247	-0.123	0.000
NEP_bin_m3	-0.183 (0.023)***	-0.228	-0.138	0.000
NEP_bin_m2	-0.192 (0.023)***	-0.236	-0.148	0.000
NEP_bin_p0	-0.252 (0.036)***	-0.323	-0.180	0.000
NEP_bin_p1	-0.150 (0.030)***	-0.208	-0.091	0.000
NEP_bin_p2	-0.134 (0.017)***	-0.167	-0.102	0.000
NEP_bin_p3	-0.137 (0.008)***	-0.153	-0.122	0.000
NEP_bin_p4	-0.173 (0.005)***	-0.182	-0.164	0.000
NEP_bin_p5	-0.167 (0.004)***	-0.174	-0.159	0.000
NEP_bin_p6	0.012 (0.010)	-0.008	0.033	0.252

Notes: Province and year FE. Bin -1 omitted as baseline. Significance: * p < 0.10, ** p < 0.05, *** p < 0.01.

References

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