

1 Appendix: Data sources and descriptive statistics for province-month panel

Table 1: Descriptive statistics for variables in the province-month panel

	Mean	SD	Min	Median	Max
Ln +1 Patent applications	3.187	1.400	0.000	3.178	5.714
Ln Full-time employment	6.927	1.034	5.614	6.733	8.722
Ln Median wage	2.945	0.193	2.487	2.956	3.411
CPI	118.994	12.717	93.400	119.000	148.900
Ln +1 Business insolvencies	3.327	1.388	0.000	3.135	5.974
Ln Intl. exports	14.709	1.141	12.585	14.754	16.767
Ln Intl. imports	14.543	1.204	12.453	14.274	17.340
Ln Retail sales	14.864	1.028	13.312	14.691	16.902
Ln Wholesale sales	14.811	1.292	12.762	14.785	17.400
Ln Manufacturing sales	14.928	1.179	13.241	14.689	17.127
Ln International travellers	11.367	1.790	2.944	11.293	14.833
Ln Arriving vehicles	10.784	3.625	0.000	11.436	14.855
Ln Electric power generation	15.112	0.999	13.197	15.088	16.981
Ln Average actual hours	3.514	0.059	3.235	3.517	3.676
New housing price index	87.826	17.020	42.500	94.100	129.500
Ln Food services receipts	12.638	1.107	10.911	12.462	14.766
Ln Average job tenure	4.634	0.089	4.373	4.651	4.847
Ln +1 Foreign patent parties	2.545	1.862	0.000	2.773	5.927

Notes: All statistics based on a balanced panel of $N = 1,968$ province-monthly observations from January 2001 to June 2021. The sample includes all Canadian provinces except NL, PE, YT, and NU.

Table 2: Data sources

Variable	Source	Note
Ln + 1 Patent Applications	IP Horizons (CIP0 2023)	Linking PT_Main and PT_Interested_Party.
Ln + 1 Patent parties by type	IP Horizons (CIP0 2023)	Linking PT_Main and PT_Interested_Party.
Ln + 1 Foreign patent parties	IP Horizons (CIP0 2023)	Linking PT_Main and PT_Interested_Party.
Ln + 1 Patent Applications by IPC section	IP Horizons (CIP0 2023)	Linking PT_Main, PT_Interested_Party and PT_IPC_Classification.
Ln Full-time employment	Statistics Canada (2024d)	From the Labour Force Survey (LFS), data table 14-10-0287-03.
Ln Median wage	Statistics Canada (2024c)	From the LFS, data table 14-10-0063-01.
Consumer price index (CPI)	Statistics Canada (2024f)	From data table 18-10-0004-01.
Ln Intl. exports	Statistics Canada (2024a)	From data table 12-10-0175-01.
Ln Intl. imports	Statistics Canada (2024a)	From data table 12-10-0175-01.
Ln Retail sales	Statistics Canada (2023)	From data table 20-10-0008-01.
Ln Wholesale sales	Statistics Canada (2024h)	From data table 20-10-0074-01.
Ln Manufacturing sales	Statistics Canada (2024e)	From data table 16-10-0048-01.
Ln Arriving vehicles	Statistics Canada (2024k)	From data table 24-10-0052-01.
Ln International travellers	Statistics Canada (2024i)	From data table 24-10-0005-01.
Ln Electric power generation	Statistics Canada (2008; 2024)	Binding data tables 25-10-0001-01 and 25-10-0015-01.
New housing price index	Statistics Canada (2024g)	From data table 18-10-0205-01.
Ln Food services receipts	Statistics Canada (2024i)	From data table 21-10-0019-01.
Ln Average job tenure	Statistics Canada (2024b)	From data table 14-10-0050-01.
Ln + 1 Business insolvencies	ISED (2024)	Extracted from the Open Government API using the <i>rgovcan</i> R package.

Notes: The IP Horizons Patent Researcher data compose three tables: PT_Main, PT_Interested_Party and PT_IPC_Classification.. PT_Main is the master table that contains the basic information on patent applications filed, with a common identifier ("patent number") to link to other tables. Data from Statistics Canada were extracted using the *statcanR* R package.

Table 3: Differences in means between treated and control provinces in province-month panel

Treatment		Pre	Post
Control	Ln +1 Patent applications	3.048	2.990
	Ln +1 Interested parties	4.526	4.314
	Ln +1 Inventors	3.604	3.606
	Ln +1 Applicants	3.074	3.018
	Ln +1 Owners	3.608	3.083
	Ln +1 Total population	7.537	7.637
	Ln +1 Section A applications	1.641	1.660
	Ln +1 Section B applications	1.388	1.252
	Ln +1 Section C applications	0.827	0.732
	Ln +1 Section D applications	0.137	0.060
	Ln +1 Section E applications	0.843	0.831
	Ln +1 Section F applications	0.942	0.797
	Ln +1 Section G applications	1.140	1.280
	Ln +1 Section H applications	1.027	0.821
	Ln +1 Multiple section applications	1.918	2.034
Treatment	Ln +1 Patent applications	4.281	4.131
	Ln +1 Interested parties	5.691	5.539
	Ln +1 Inventors	4.622	4.821
	Ln +1 Applicants	4.279	4.148
	Ln +1 Owners	4.781	4.225
	Ln +1 Total population	7.952	8.143
	Ln +1 Section A applications	1.681	1.832
	Ln +1 Section B applications	1.900	1.963
	Ln +1 Section C applications	1.602	1.592
	Ln +1 Section D applications	0.062	0.100
	Ln +1 Section E applications	2.984	2.608
	Ln +1 Section F applications	1.488	1.396
	Ln +1 Section G applications	2.014	1.816
	Ln +1 Section H applications	1.032	0.898
	Ln +1 Multiple section applications	3.013	3.007

Notes: Calculations based on a balanced panel of $N = 1,968$ province-monthly observations from January 2001 to June 2021. The sample includes all Canadian provinces except NL, PE, YT and NU. The treatment group is Alberta, and the control group includes all remaining provinces. Post-intervention periods are those after April 2016.