1 Results

Table 1 presents results the estimation of Equation **??** using patent applications as the explained variable with the province-quarter data. Specification (1) includes a baseline result with no control variables. Specification (2) includes economic controls included to account for factors which may affect the comparability of the treatment and control groups regarding firm activity and overall economic trends which vary across time and provinces. The number of foreign parties in all the province's patent applications is also included, to control for effects that foreign interested parties (particularly U.S.) can have as strategic actors for patent applications. Specification (3) includes additional controls. These are included in the case that the previous controls did not adequately account for differences in trends due to reasons other than economy, or that economic activity is not well captured by standard variables in Specification (2).

The DD estimate for the causal effect of the AITC intervention is the coefficient on Treatment ×Post, showing that the intervention led to an -6.1% to +2.3% change in Albertan patent applications. However, the effect is not statistically distinguishable from zero. Standard errors for this coefficient on all three specifications are small compared to those of the controls, showing that $\hat{\beta}$ is estimated with a fairly good level of precision. This implies that it is the small magnitude of $\hat{\beta}$ which drives the low p-value of the hypothesis test, leading to the preliminary conclusion that the AITC intervention had no effect on innovation in the studied period.

Table 1: Difference-in-differences specifications for quarterly patent applications

	(1)	(2)	(3)
Treatment x Post	−0.061	0.028	0.023
	(0.043)	(0.065)	(0.074)
Ln Full-time employment		0.825	1.104
		(0.651)	(0.664)
Ln Median wage		1.200**	1.078**
		(0.378)	(0.432)
CPI		−0.015**	−0.007
		(0.005)	(0.008)
Ln +1 Business insolvencies		−0.065**	−0.052*
		(0.027)	(0.023)
Ln Intl. exports		−0.087	−0.089
		(0.093)	(0.119)
Ln Intl. imports		0.018	0.023
		(0.125)	(0.125)
Ln Retail sales		−0.272	0.084
		(0.421)	(0.495)
Ln Wholesale sales		−0.139	−0.222
		(0.164)	(0.150)
Ln Manufacturing sales		0.276	0.216
		(0.150)	(0.140)
Ln +1 Foreign patent parties		0.142***	0.136***
		(0.015)	(0.016)
Ln International travellers			−0.129***
			(0.034)
Ln Arriving vehicles			0.007
			(0.005)
Ln Electric power generation			0.070
			(0.118)
Ln Average actual hours			0.109
			(0.275)
New housing price index			−0.003
			(0.002)
Ln Food services receipts			−0.067
			(0.205)
Ln Average job tenure			−0.448
			(0.372)
Explained variable		ln(Patents + 1)	
N	656	656	656
Adj. R^2	0.975	0.980	0.980
Adj. within R^2	0.000	0.205	0.210
RMSE	0.206	0.182	0.180

Notes: Clustered standard errors at the province and quarter level shown in parentheses. All specifications include fixed effects for provinces and quarters. ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.