Beach Hanlon Results Summary

August 5, 2024

1 Base facts (within the UK)

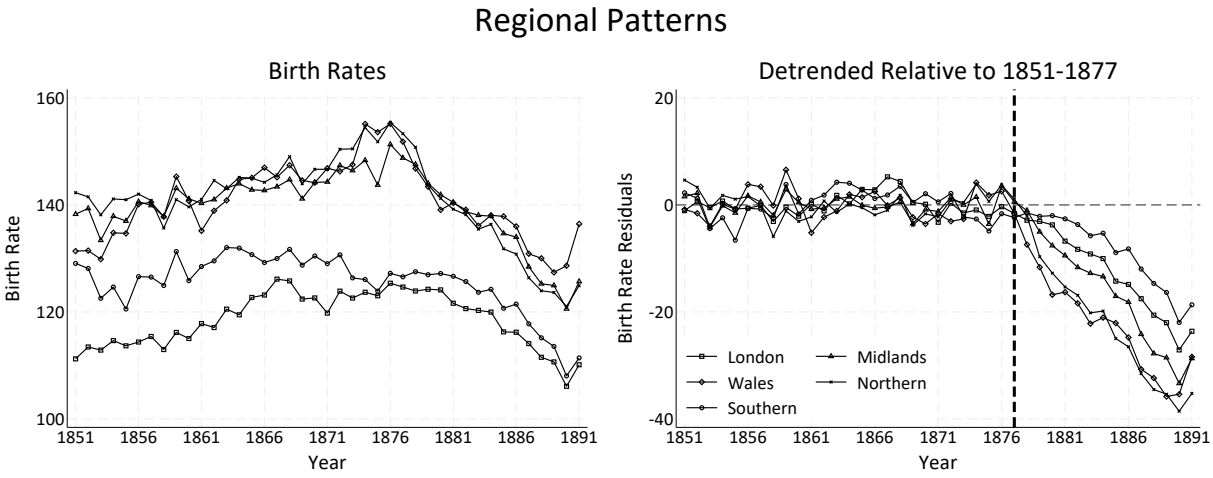

Figure 1: Fertility trends in English and Wales regions before and after 1877

2 Canada

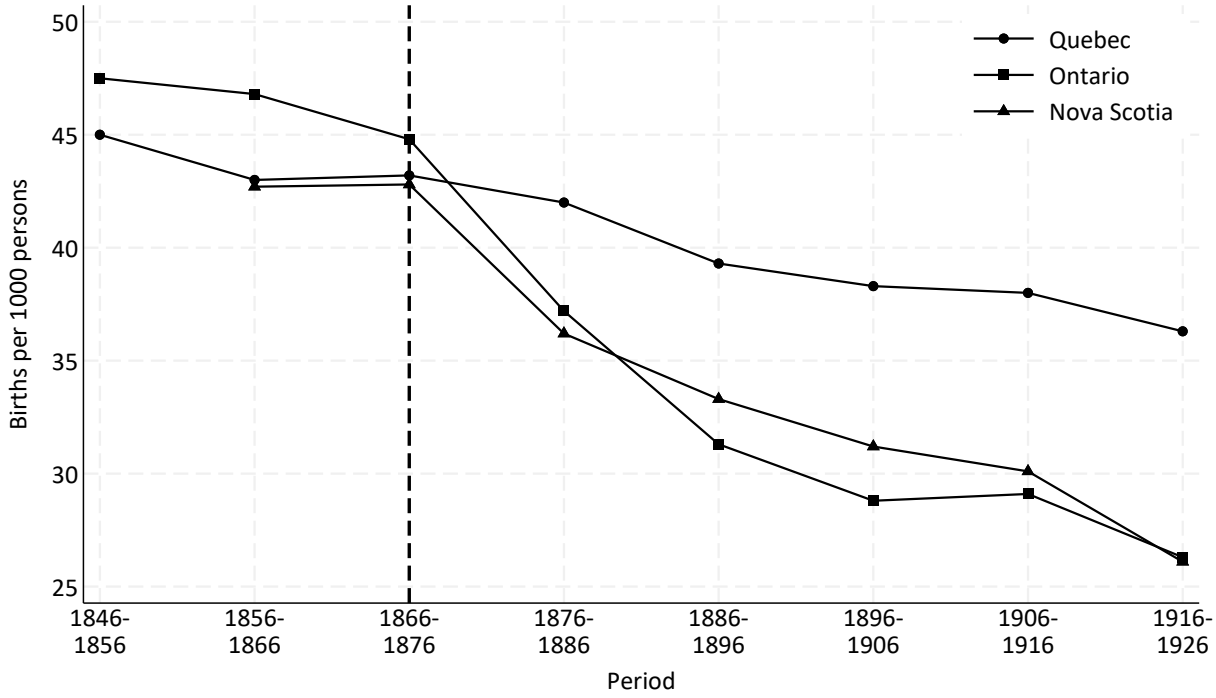

Figure 2: Fertility trends in Canada before and after 1877 - Data Census from IPUMS

2.1 Regression-DID

	(1) Distr Time FE	(2) Distr x Time FE
British Origin	-22.742***	-25.092***
	(2.588)	(2.556)
British × Post 1877	-8.051***	-5.422***
	(1.652)	(1.413)
post	-5.426***	
	(0.432)	
Mother age X Year		-1.479***
		(0.053)
Head Occupation X Year		-1.129***
		(0.076)
Constant	163.418***	205.268***
	(2.262)	(2.723)
Observations	1,525,296	1,525,296

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

		(1) 1872-1880	(2) 1872-1880	(3) 1864-1885
British-origin shr.	× 1864-70 period			-4.256
				(6.247)
British-origin shr.	× 1872-77 period			0.000
				(.)
British-origin shr.	× 1878-80 period	-16.080***	-17.801***	-17.801***
		(1.580)	(2.304)	(2.325)
British-origin shr.	× 1881-85 period			-16.001**
				(6.752)
Observations		202	202	404
Within R-squared		0.530	0.582	0.619
No. of Counties		101	101	101

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

2.2 Code

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Stata Code

reghdfe y density_* pg_* ag_shr_* mf_ratio* youngfertileshare_*

brit_origin_2 brit_origin_4 brit_origin_5 brit_origin_3 [aweight=fem_fertile_pop_1871]

if inrange(period,2,5) &  inlist(province,"ontario","quebec"),

absorb(period loc_code) cluster(loc_code)
```

3 United States

Table 1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.
Births per 1000 women per year	119.148	207.68	0	2000
British Mother	0.235	0.424	0	1
Mother's Age (start of period)	22.783	7.212	15	49
N		913015		

3.1 Regression-DID

	(1) Married Women	(2) Single Women
British Origins	-36.239***	0.008
	(2.810)	(0.130)
British × Post 1877	-2.739**	-0.041
	(1.274)	(0.142)
Constant	202.617***	0.331***
	(0.729)	(0.012)
Observations	563,329	349,686

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

	(1) 1873-77	(2) 1873-76	(3) 1872-77	(4) 1872-76
British × Post 1877	-2.477**	-3.608**	-1.457	-2.283
	(1.219)	(1.558)	(1.135)	(1.428)
Observations	563,329	563,329	542,770	542,770

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

3.2 Code

```
Stata Code
***Married women (1)

reghdfe bc british_hh post_bbXbritish if marst!=6,

absorb(momageXyear cnty_id period) cluster(statefip)

***Single women (2)
```

```
reghdfe bc british_hh post_bbXbritish if marst==6,

absorb(momageXyear cnty_id period) cluster(statefip)
```

4 Europe continent

5 Britain

5.1 Newspaper opening from 1875-1881

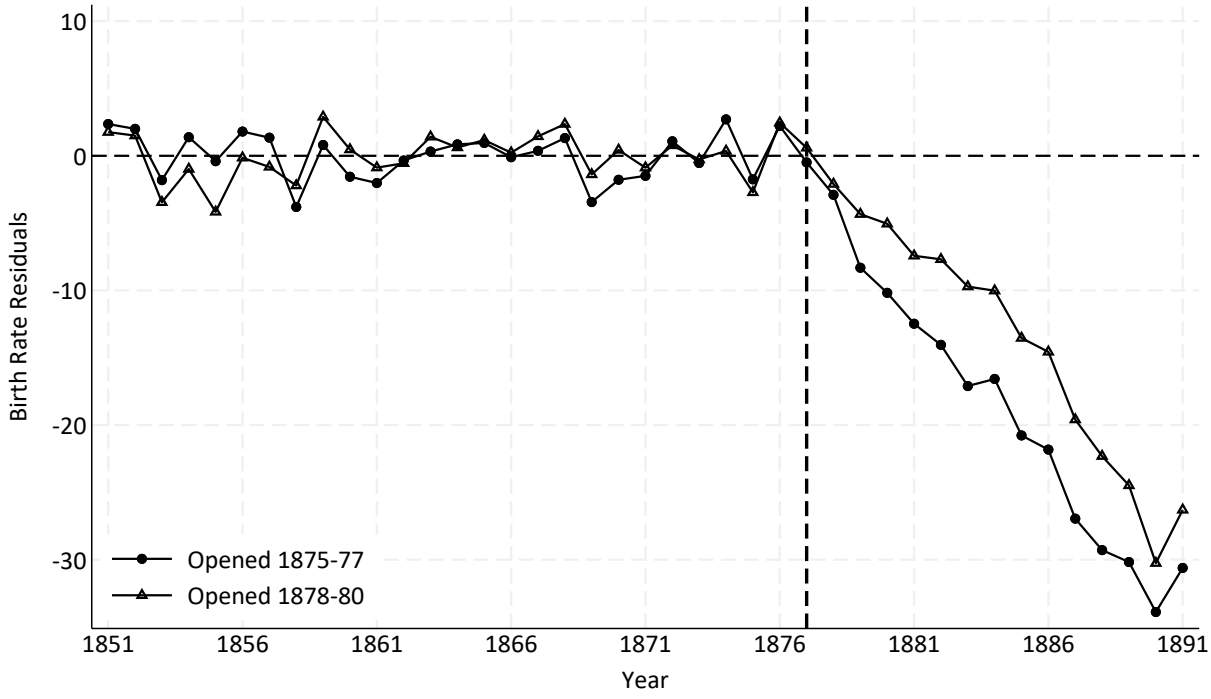

Figure 3: Comparing Birth Rate By Exposure to Besant Trials and Fruits of Knowledge News at County-level (1875-1877 v. 1878-1880 newspapers opening)

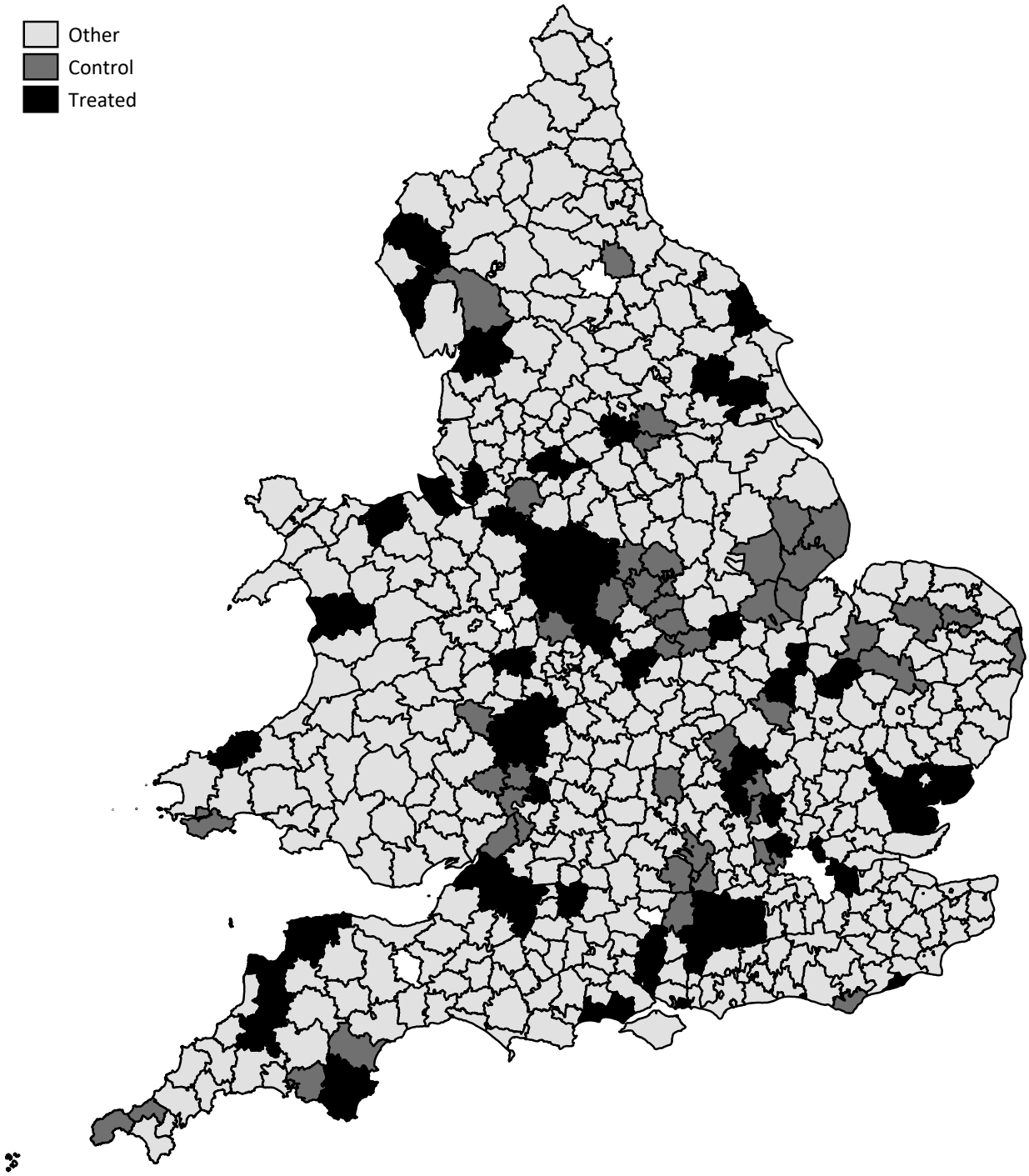

Figure 4: Treatment and Control Group (1875-1877 v. 1878-1880 newspapers opening)

		(1) birth_rate	(2) birth_rate	(3) birth_rate
Newspaper openings (75-77) ×	1868-1872 period			-0.135
				(1.095)
Newspaper openings (75-77) ×	1878-1882 period	-4.544**	-2.673***	-2.974**
		(1.859)	(0.875)	(1.292)
Newspaper openings (75-77) ×	1883-1888 period			-2.552
				(1.775)
estXpost			-0.278	
			(0.222)	
birth_rate_lagged			-0.214***	0.407***
			(0.081)	(0.068)
density_71X1878			-0.032	-0.019
			(0.027)	(0.024)
total_mr_71_80X1878			1036.482**	1101.011**
			(481.023)	(518.209)
under5_mr_71_80X1878			-72.843	-21.403
			(134.872)	(125.746)
illeg_birth_share_73_77X1878			98.061*	45.530
			(52.385)	(50.167)
shr_manufX1878			6.779	1.282
			(6.920)	(6.832)
shr_agricultureX1878			-11.348	4.254
			(9.533)	(10.814)
u30_fert_shr_1871X1878			-153.515***	-38.306
			(53.284)	(47.168)
mar_rate_73_77X1878			-0.192	-0.452**
			(0.141)	(0.185)
density_71X1868				-0.039
				(0.033)
total_mr_71_80X1868				395.602
				(658.894)
under5_mr_71_80X1868				154.045
				(134.235)
illeg_birth_share_73_77X1868				-41.800
				(68.764)
shr_manufX1868				-2.124
				(8.535)

Table 5: Impact of Trial Coverage on Fertility in England and Wales

DV is Births per 1000 fertile-aged women	Reduced Form	IV	IV
	(1)	(2)	(3)
Newspaper Coverage of Trial × 1878-1882 Period	-0.063*	-0.269**	-0.274*
	(0.035)	(0.120)	(0.138)
First Stage			
Newspaper Openings (75-77) × 1878-1882 Period		11.129***	9.756***
		(2.832)	(2.671)
Cragg-Donald F-Statistic		90.491	63.555
District fixed effects	Yes	Yes	Yes
Region-by-period fixed effects	Yes	Yes	Yes
Marriage controls	Yes	Yes	Yes
Other district controls	Yes	Yes	Yes
Lagged fertility control	Yes	Yes	Yes
Est. newspaper control			Yes
No. districts	98	98	98
Observations	196	196	196

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors, clustered at the district level, in parentheses. All regressions weighted by 1871 district population. All controls and sample restrictions follow from Table 4.

Figure 5: Your caption here

5.2 Code

Stata Code

```
* Baseline model
reghdfe birth_rate opened_75_77X1878 [aweight=total_pop_1871]

if inrange(year,1873,1878) & comparison_75_80==1,

absorb(year dist_code regionXyearfes) cluster(dist_code)

** Baseline model with Controls

reghdfe birth_rate birth_rate_lagged $dist_int_1878 $mar_int_1878 estXpost
```

```
opened_75_77X1878 [aweight=total_pop_1871] if inrange(year,1873,1878) &

comparison_75_80==1, absorb(year dist_code regionXyearfes) cluster(dist_code)
```