

Online appendix

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Appendix Table 1. Linear regression models of the total fertility rate (TFR) of the whole country, Finland 3/2015–9/2021.

TFR: Whole country, Model 1 (N=79)				TFR: Whole country, Model 2 (N=316)			
	β	p-value	95 % CI		β	p-value	95 % CI
Time	-0.005	0.024	-0.008, -0.001	Time	-0.005	0.004	-0.008, -0.002
Time ²	0.000	0.095	0.000, 0.000	Time ²	0.000	0.056	0.000, 0.000
Time ³	0.000	0.007	0.000, 0.000	Time ³	0.000	0.001	0.000, 0.000
Pandemic	0.043	0.163	-0.018, 0.105	Pandemic	0.050	0.032	0.004, 0.096
January	0.112	0.000	0.076, 0.147	January	0.117	0.000	0.087, 0.146
February	0.119	0.000	0.065, 0.172	February	0.115	0.000	0.081, 0.149
March	0.127	0.000	0.084, 0.169	March	0.123	0.000	0.090, 0.156
April	0.147	0.000	0.115, 0.178	April	0.144	0.000	0.117, 0.171
May	0.136	0.000	0.097, 0.176	May	0.135	0.000	0.101, 0.168
June	0.201	0.000	0.165, 0.238	June	0.202	0.000	0.173, 0.232
July	0.227	0.000	0.187, 0.266	July	0.229	0.000	0.196, 0.261
August	0.243	0.000	0.209, 0.277	August	0.245	0.000	0.217, 0.272
September	0.220	0.000	0.179, 0.260	September	0.220	0.000	0.188, 0.253
October	0.141	0.000	0.107, 0.175	October	0.140	0.000	0.108, 0.173
November	0.076	0.000	0.038, 0.114	November	0.075	0.000	0.043, 0.106
Constant	1.527	0.000	1.488, 1.567	Helsinki-Uusimaa	-0.195	0.000	-0.213, -0.177
				West-Finland	-0.073	0.000	-0.092, -0.055
				South-Finland	-0.183	0.000	-0.201, -0.165
				Constant	1.655	0.000	1.617, 1.693

Note: Results shown from two separate models. Model 1 uses the country-level TFR as the outcome, and controls for linear, squared and quadratic time trend and month fixed effects. Model 2 uses regional TFR as the outcome, and controls additionally for region fixed effects. CI = Confidence interval.

Appendix Table 2. Linear regression models of the total fertility rate (TFR) of four regions, Finland 3/2015–9/2021.

TFR: Helsinki-Uusimaa, Model 1 (N=79)				TFR: South-Finland, Model 1 (N=79)			
	β	p-value	95 % CI		β	p-value	95 % CI
Time	-0.003	0.223	-0.009, 0.002	Time	-0.007	0.030	0.000, 0.000
Time ²	0.000	0.213	0.000, 0.000	Time ²	0.000	0.838	0.000, 0.000
Time ³	0.000	0.043	0.000, 0.000	Time ³	0.000	0.449	-0.028, 0.199
Pandemic	0.024	0.606	-0.067, 0.115	Pandemic	0.085	0.136	0.062, 0.184
January	0.101	0.004	0.033, 0.170	January	0.123	0.000	0.000, 0.164
February	0.125	0.004	0.042, 0.207	February	0.082	0.050	0.034, 0.185
March	0.144	0.002	0.056, 0.232	March	0.110	0.005	0.065, 0.199
April	0.153	0.000	0.082, 0.223	April	0.132	0.000	0.044, 0.192
May	0.137	0.001	0.060, 0.214	May	0.118	0.002	0.126, 0.253
June	0.189	0.000	0.117, 0.261	June	0.189	0.000	0.148, 0.300
July	0.221	0.000	0.151, 0.292	July	0.224	0.000	0.181, 0.311
August	0.243	0.000	0.170, 0.316	August	0.246	0.000	0.142, 0.268
September	0.213	0.000	0.140, 0.286	September	0.205	0.000	0.062, 0.247
October	0.152	0.000	0.080, 0.223	October	0.155	0.001	-0.021, 0.146
November	0.094	0.023	0.013, 0.174	November	0.063	0.139	1.410, 1.555
Constant	1.404	0.000	1.323, 1.486	Constant	1.483	0.000	0.000, 0.000

TFR: West-Finland, Model 1 (N=79)				TFR: North-East Finland, Model 1 (N=79)			
	β	p-value	95 % CI		β	p-value	95 % CI
Time	-0.006	0.029	-0.012, -0.001	Time	-0.003	0.415	0.000, 0.000
Time ²	0.000	0.408	0.000, 0.000	Time ²	0.000	0.121	0.000, 0.000
Time ³	0.000	0.114	0.000, 0.000	Time ³	0.000	0.022	-0.054, 0.098
Pandemic	0.070	0.138	-0.023, 0.163	Pandemic	0.022	0.563	0.101, 0.199
January	0.092	0.005	0.029, 0.155	January	0.150	0.000	0.060, 0.187
February	0.131	0.000	0.062, 0.201	February	0.123	0.000	0.057, 0.168
March	0.125	0.000	0.071, 0.179	March	0.113	0.000	0.078, 0.178
April	0.165	0.000	0.116, 0.214	April	0.128	0.000	0.045, 0.164
May	0.178	0.000	0.110, 0.246	May	0.104	0.001	0.155, 0.266
June	0.221	0.000	0.159, 0.284	June	0.211	0.000	0.142, 0.282
July	0.257	0.000	0.204, 0.310	July	0.212	0.000	0.189, 0.300
August	0.245	0.000	0.195, 0.295	August	0.244	0.000	0.186, 0.282
September	0.229	0.000	0.142, 0.316	September	0.234	0.000	0.072, 0.166
October	0.136	0.000	0.088, 0.184	October	0.119	0.000	0.016, 0.118
November	0.076	0.010	0.019, 0.133	November	0.067	0.011	1.598, 1.754
Constant	1.607	0.000	1.545, 1.669	Constant	1.676	0.000	0.000, 0.000

Note: Results shown from four separate models. Models 1 use the regional TFR as the outcome, and control for linear, squared and quadratic time trend and month fixed effects. CI = Confidence interval.

Appendix Table 3. Linear regression models of the age-specific fertility rate (ASFR) of women aged 15–24 and 25–29 years, Finland 3/2015–9/2021.

ASFR: 15–24, Model 1 (N=79)				ASFR: 15–24, Model 2 (N=361)			
	β	p-value	95 % CI		β	p-value	95 % CI
Time	-0.202	0.004	-0.336, -0.068	Time	-0.203	0.001	-0.319, -0.087
Time ²	0.001	0.583	-0.003, 0.005	Time ²	0.001	0.560	-0.003, 0.005
Time ³	0.000	0.708	0.000, 0.000	Time ³	0.000	0.715	0.000, 0.000
Pandemic	1.376	0.079	-0.165, 2.917	Pandemic	1.245	0.088	-0.185, 2.675
January	0.076	0.884	-0.965, 1.118	January	0.087	0.862	-0.897, 1.070
February	0.538	0.388	-0.699, 1.774	February	0.469	0.345	-0.507, 1.445
March	0.580	0.326	-0.592, 1.753	March	0.495	0.330	-0.503, 1.494
April	1.542	0.021	0.240, 2.845	April	1.656	0.006	0.470, 2.842
May	0.740	0.184	-0.361, 1.841	May	0.673	0.218	-0.400, 1.747
June	1.541	0.005	0.476, 2.607	June	1.564	0.003	0.520, 2.608
July	1.618	0.005	0.519, 2.717	July	1.674	0.003	0.588, 2.760
August	1.767	0.012	0.407, 3.128	August	1.762	0.002	0.635, 2.890
September	2.377	0.008	0.639, 4.115	September	2.326	0.000	1.093, 3.559
October	1.096	0.047	0.015, 2.177	October	1.075	0.075	-0.107, 2.257
November	0.026	0.960	-1.001, 1.053	November	-0.008	0.988	-1.028, 1.013
Constant	26.958	0.000	25.503, 28.412	Helsinki-Uusimaa	-10.444	0.000	-11.009, -9.879
				West-Finland	-4.843	0.000	-5.488, -4.197
				South-Finland	-6.519	0.000	-7.197, -5.840
				Constant	32.827	0.000	31.506, 34.148

ASFR: 25–29, Model 1 (N=79)				ASFR: 25–29, Model 2 (N=361)			
	β	p-value	95 % CI		β	p-value	95 % CI
Time	-0.386	0.026	-0.723, -0.048	Time	-0.417	0.019	-0.764, -0.070
Time ²	-0.006	0.227	-0.016, 0.004	Time ²	-0.005	0.349	-0.015, 0.005
Time ³	0.000	0.036	0.000, 0.000	Time ³	0.000	0.076	0.000, 0.000
Pandemic	2.900	0.186	-1.429, 7.229	Pandemic	4.227	0.070	-0.353, 8.806
January	7.065	0.000	4.000, 10.130	January	8.043	0.000	5.181, 10.904
February	5.800	0.000	2.818, 8.782	February	6.106	0.000	3.007, 9.206
March	8.792	0.000	5.980, 11.603	March	9.373	0.000	6.523, 12.222
April	10.210	0.000	7.927, 12.493	April	10.805	0.000	8.036, 13.575
May	9.142	0.000	5.728, 12.555	May	9.443	0.000	6.374, 12.513
June	13.455	0.000	10.862, 16.048	June	14.144	0.000	10.951, 17.337
July	15.895	0.000	12.720, 19.071	July	17.099	0.000	13.712, 20.485
August	15.019	0.000	12.575, 17.464	August	16.029	0.000	13.365, 18.693
September	15.735	0.000	12.280, 19.190	September	16.609	0.000	13.451, 19.768
October	7.189	0.000	4.375, 10.004	October	7.520	0.000	4.662, 10.377
November	3.434	0.004	1.145, 5.722	November	3.774	0.014	0.763, 6.784
Constant	90.234	0.000	86.372, 94.096	Helsinki-Uusimaa	-32.729	0.000	-34.494, -30.963
				West-Finland	-5.979	0.000	-7.889, -4.068
				South-Finland	-12.496	0.000	-14.194, -10.797
				Constant	105.637	0.000	101.196, 110.079

Note: Results shown from four separate models. Models 1 use the country-level ASFR as the outcome, and control for linear, squared and quadratic time trend and month fixed effects. Models 2 use the regional ASFR as the outcome, and control additionally for region fixed effects. CI = Confidence interval. ASFR calculated per births per 1,000 women.

Appendix Table 4. Linear regression models of the age-specific fertility rate (ASFR) of women aged 30–34 and 35–49 years, Finland 3/2015–9/2021.

ASFR: 30–34, Model 1 (N=79)				ASFR: 30–34, Model 2 (N=361)			
	β	p-value	95 % CI		β	p-value	95 % CI
Time	-0.437	0.021	-0.805, -0.069	Time	-0.461	0.008	-0.799, -0.123
Time ²	-0.004	0.531	-0.017, 0.009	Time ²	-0.003	0.539	-0.014, 0.007
Time ³	0.000	0.082	0.000, 0.000	Time ³	0.000	0.046	0.000, 0.000
Pandemic	2.903	0.421	-4.253, 10.058	Pandemic	3.064	0.210	-1.731, 7.859
January	10.281	0.000	7.018, 13.543	January	10.579	0.000	7.217, 13.941
February	10.812	0.000	5.842, 15.781	February	10.402	0.000	6.985, 13.820
March	10.480	0.000	5.747, 15.214	March	9.335	0.000	5.852, 12.818
April	10.263	0.000	6.818, 13.708	April	9.216	0.000	6.121, 12.311
May	12.777	0.000	8.447, 17.107	May	12.630	0.000	8.946, 16.314
June	16.062	0.000	12.035, 20.089	June	15.749	0.000	12.601, 18.897
July	17.836	0.000	14.235, 21.438	July	17.403	0.000	13.678, 21.128
August	20.549	0.000	16.634, 24.463	August	20.204	0.000	17.005, 23.402
September	16.953	0.000	13.567, 20.340	September	16.560	0.000	13.284, 19.836
October	12.425	0.000	8.612, 16.238	October	12.245	0.000	8.686, 15.804
November	6.588	0.008	1.757, 11.419	November	6.512	0.000	2.956, 10.068
Constant	98.802	0.000	95.257, 102.348	Helsinki-Uusimaa	1.671	0.086	-0.235, 3.577
				West-Finland	3.148	0.002	1.214, 5.082
				South-Finland	-2.567	0.012	-4.562, -0.572
				Constant	98.619	0.000	94.794, 102.445

ASFR: 35–49, Model 1 (N=79)				ASFR: 35–49, Model 2 (N=361)			
	β	p-value	95 % CI		β	p-value	95 % CI
Time	0.108	0.048	0.001, 0.215	Time	0.101	0.028	0.011, 0.192
Time ²	-0.005	0.008	-0.008, -0.001	Time ²	-0.005	0.002	-0.008, -0.002
Time ³	0.000	0.003	0.000, 0.000	Time ³	0.000	0.001	0.000, 0.000
Pandemic	0.033	0.968	-1.597, 1.662	Pandemic	0.090	0.893	-1.228, 1.408
January	1.601	0.011	0.385, 2.816	January	1.513	0.002	0.559, 2.468
February	2.005	0.011	0.484, 3.526	February	1.873	0.001	0.800, 2.945
March	1.629	0.005	0.509, 2.748	March	1.632	0.002	0.598, 2.665
April	1.935	0.003	0.662, 3.208	April	1.847	0.000	0.932, 2.762
May	1.298	0.025	0.167, 2.429	May	1.163	0.015	0.231, 2.094
June	2.554	0.000	1.432, 3.676	June	2.492	0.000	1.597, 3.387
July	2.792	0.000	1.609, 3.974	July	2.620	0.000	1.646, 3.594
August	3.180	0.000	2.112, 4.249	August	3.065	0.000	2.180, 3.951
September	2.162	0.000	1.160, 3.164	September	2.071	0.000	1.172, 2.970
October	2.136	0.001	0.932, 3.341	October	2.051	0.000	1.081, 3.021
November	1.723	0.002	0.659, 2.787	November	1.571	0.001	0.626, 2.516
Constant	20.845	0.000	19.501, 22.188	Helsinki-Uusimaa	4.318	0.000	3.772, 4.864
				West-Finland	-0.700	0.010	-1.229, -0.170
				South-Finland	-2.820	0.000	-3.373, -2.268
				Constant	20.360	0.000	19.305, 21.415

Note: Results shown from four separate models. Models 1 use the country-level ASFR as the outcome, and control for linear, squared and quadratic time trend and month fixed effects. Models 2 use the regional ASFR as the outcome, and control additionally for region fixed effects. CI = Confidence interval. ASFR calculated per births per 1,000 women.