Supplementary material

Does cutting child benefits reduce fertility in larger
families? Evidence from the UK's two-child limit

March 31, 2022

Table 1: Full summary statistics for administrative births microdata, 2015-2019

| | High-income | | | | | | Low-income | | | | | |
| | Pre | | | Post | | | Pre | | | Post | | |
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Multiple birth	76,751	0.037	0.190	90,945	0.035	0.184	76,313	0.029	0.169	85,585	0.029	0.169
Stillbirth	76,751	0.035	0.183	90,945	0.032	0.175	76,313	0.046	0.209	85,585	0.042	0.201
Previous live births	76,751	0.785	0.953	90,945	0.733	0.929	76,313	1.156	1.280	85,585	1.116	1.272
Maternal age (years)	76,751	32.312	4.869	90,933	32.449	4.864	76,312	28.961	5.665	85,573	29.236	5.667
Paternal age (years)	75,892	34.790	5.961	89,527	34.822	5.933	73,294	32.034	7.072	81,677	32.296	7.077
Income deprivation score	76,751	11.637	8.281	90,945	11.665	8.300	76,313	17.640	10.253	85,585	17.498	10.266
Local 2CL incidence	75,777	1.152	0.557	89,816	1.155	0.559	75,627	1.312	0.596	84,825	1.310	0.592
Low-income occupation	76,751	0.000	0.000	90,945	0.000	0.000	76,313	1.000	0.000	85,585	1.000	0.000
High-income occupation	76,751	1.000	0.000	90,945	1.000	0.000	76,313	0.000	0.000	85,585	0.000	0.000
Single parent	76,751	0.056	0.229	90,945	0.060	0.237	76,313	0.199	0.399	85,585	0.205	0.404

Note: Income deprivation score represents the proportion of the local population who receive means-tested benefits. NS-SEC occupation is combined occupation, where the highest-ranked occupation of the mother and father is selected. Single mothers either register the birth on their own or report that the parents live at different addresses. Local incidence of the two-child limit is the percentage of the population in the child's local authority who are affected by the two-child limit.
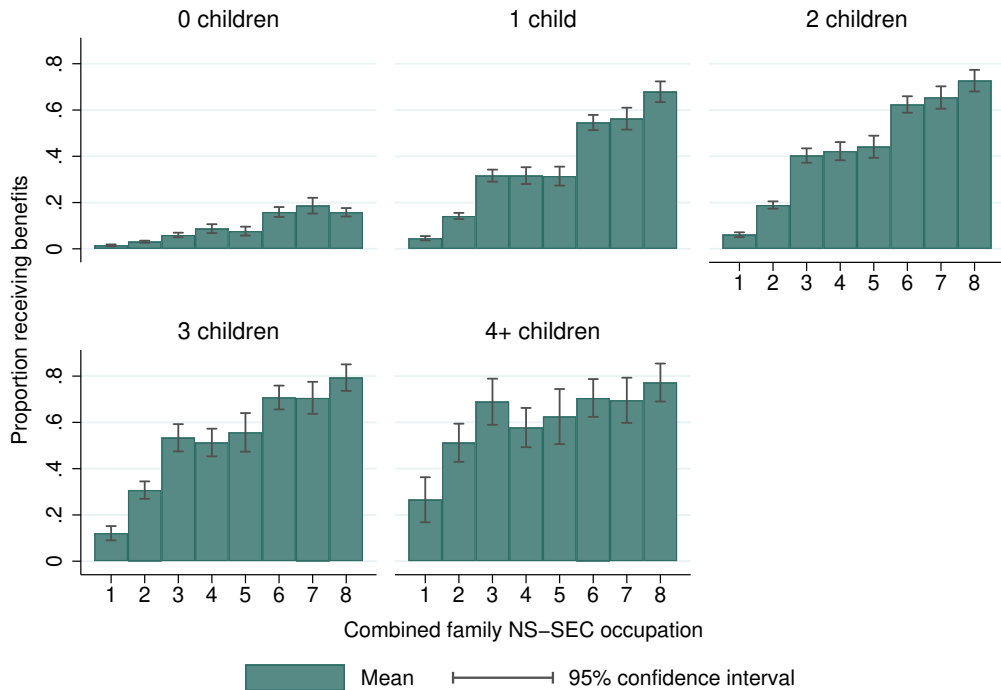
Figure 1: NS-SEC occupation and the probability of benefits receipt, 2017

Note: Data from Annual Population Survey. Sample is adult female respondents aged 16-45 in 2017 (N=52,463). NS-SEC occupation categories are as follows: 1=Large employers, higher management and higher professional; 2=Lower management and professional; 3=Intermediate; 4=Small employers and own-account; 5=Lower supervisory and technical; 6=Semi-routine; 7=Routine; 8=Never worked, long-term unemployed, or not classified. Person-household weightings are utilised to correct for non-response. Number of children refers to the number of dependent children under-16 reported in the family unit. Bars show 95 percent confidence intervals.
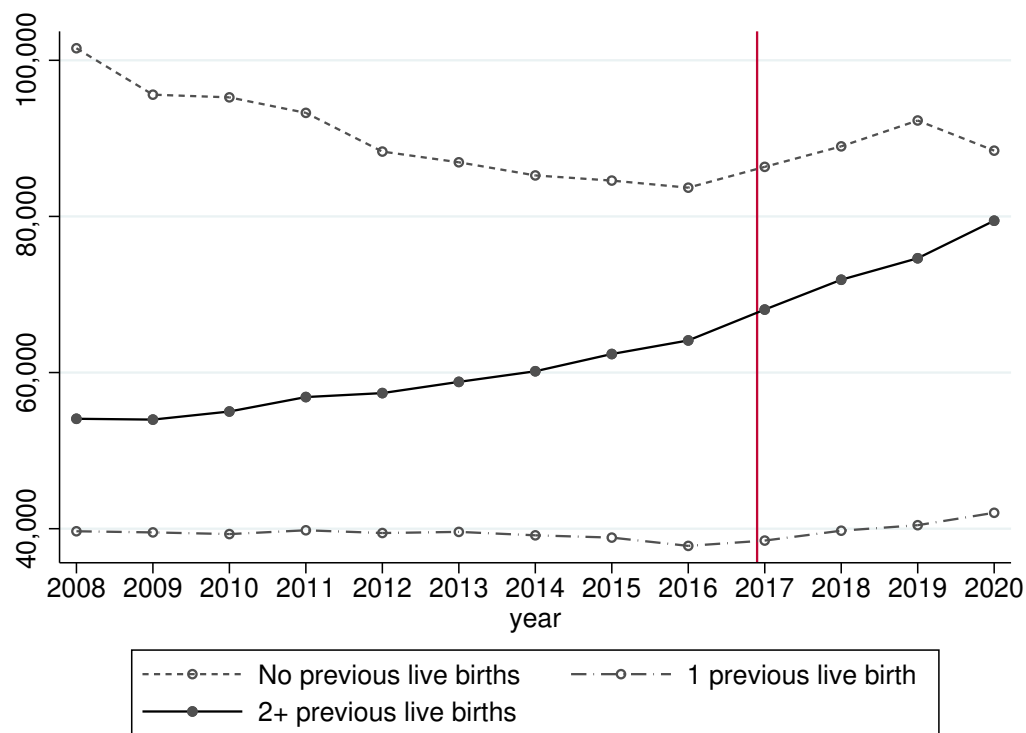
Figure 2: Number of abortions by number of previous live births in England and Wales, 2008-2020

Note: Data from a Freedom of Information request submitted to the Department for Health and Social Care. Vertical red solid line indicates the introduction of the two-child limit; here, this is displayed just before 2017, since the data is yearly and the policy was in place for the majority of 2017.
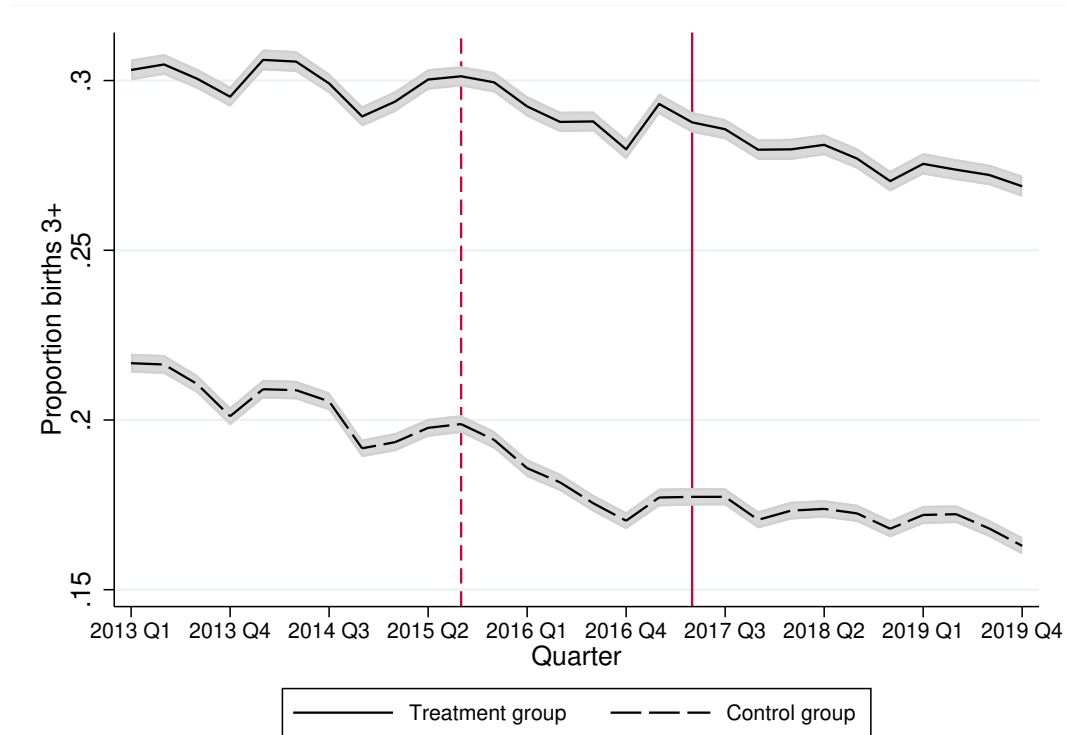
Figure 3: Proportion of total births who are higher order (third or subsequent births), by treatment and control group with treatment defined by local income deprivation

Note: Data from administrative births microdata for England and Wales. Births are in the treatment group if the mother lives in an area with an above-median Income Deprivation Score; births are in the control group if they live in an area with a below-median Income Deprivation Score. Shaded grey areas are 95 percent confidence intervals.
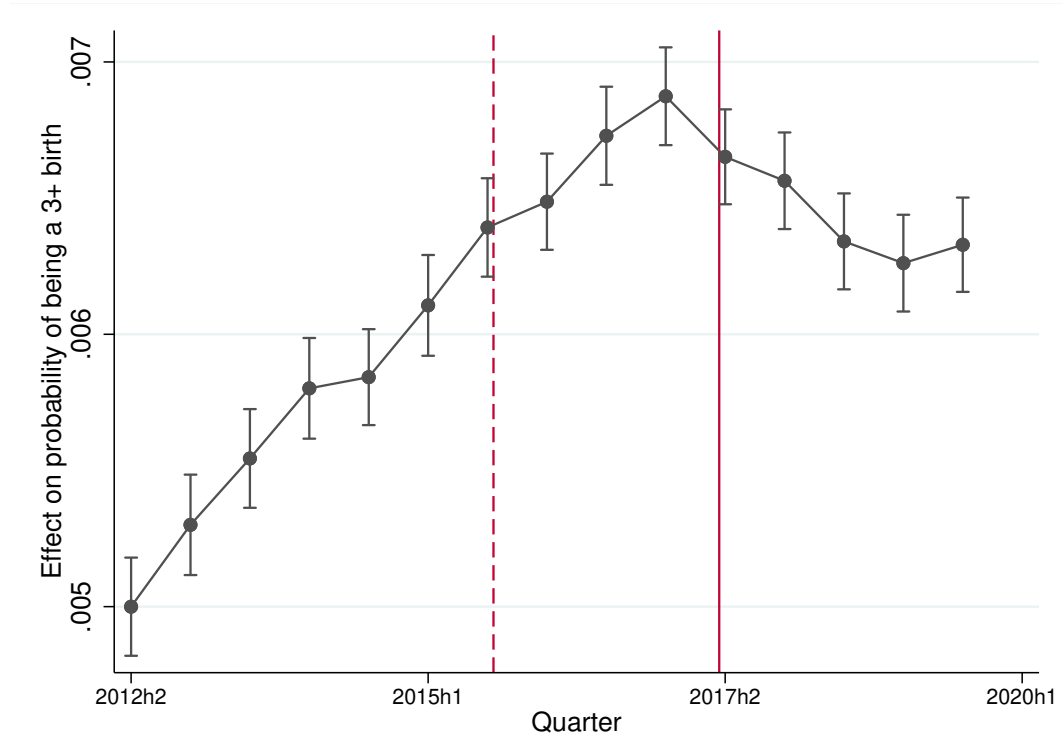
Figure 4: Effect of being in the treatment group on the probability of being a higher-order birth over time (treatment defined by local income deprivation)

Note: Data from administrative birth registrations microdata for England and Wales, 2012-2019. Births are in the treatment group if the mother lives in an area with an above-median Income Deprivation Score; births are in the control group if they live in an area with a below-median Income Deprivation Score. Markers indicate the effect of being in the treatment group on the probability of the child being a third or subsequent birth for each half-year of birth. Grey bars are 95 percent confidence intervals. Red solid line indicates the date of birth cut-off for the introduction of the two-child limit (6 April 2017). Red dashed line indicates the date of the announcement of the two-child limit (5 July 2015).
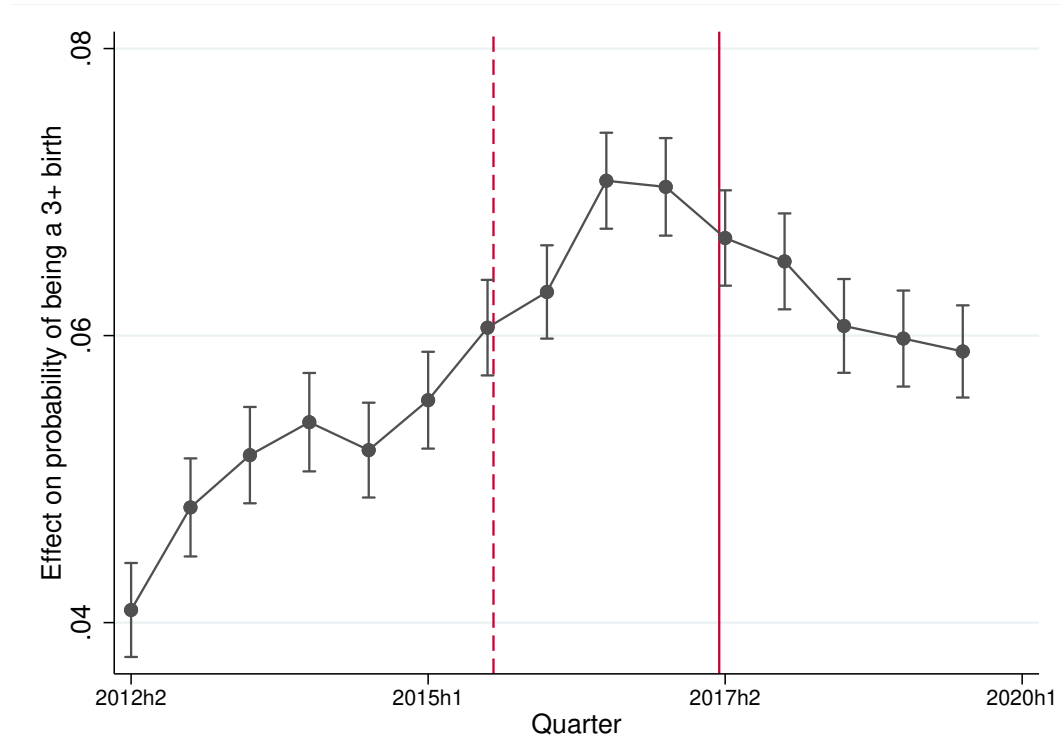
Figure 5: Effect of being in the treatment group on the probability of being a higher-order birth over time (treatment defined by local incidence of the two-child limit)

Note: Data from administrative birth registrations microdata for England and Wales, 2012-2019. Markers indicate the effect of being in the treatment group on the probability of the child being a third or subsequent birth for each half-year of birth. Grey bars are 95 percent confidence intervals. Red solid line indicates the date of birth cut-off for the introduction of the two-child limit (6 April 2017). Red dashed line indicates the date of the announcement of the two-child limit (5 July 2015).
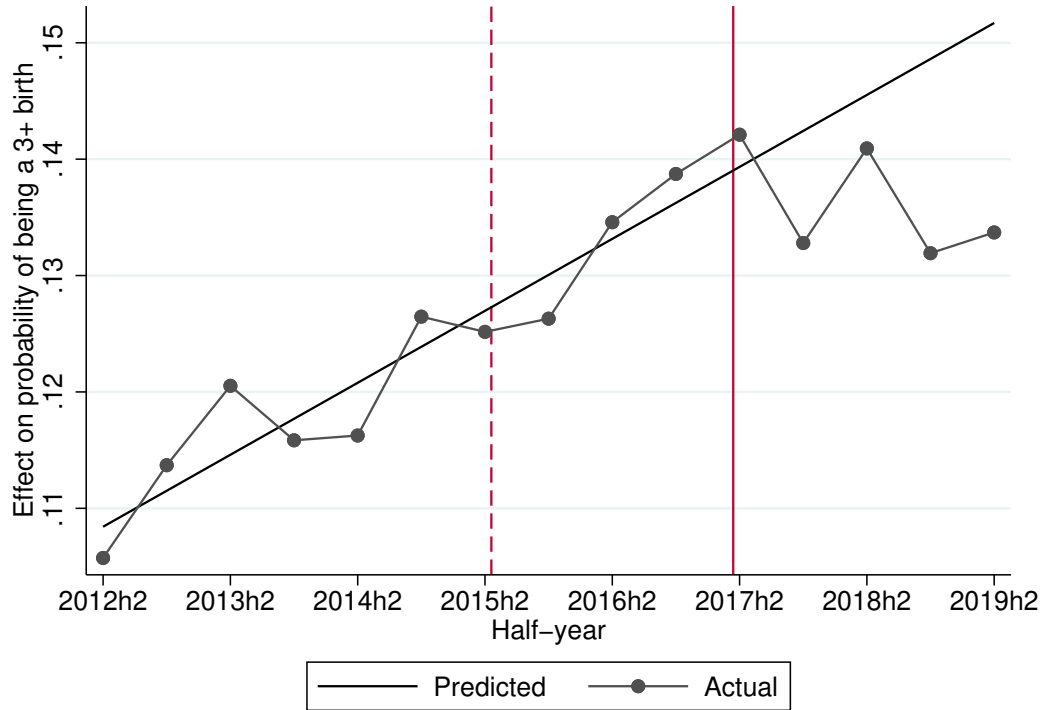
Figure 6: Predicted and actual effects of being in a low-income occupation on the probability of being a 3+ birth

Note: Markers denote the actual effect of being in the treatment group (i.e., with parents in a low-income occupation) on the probability of the child being a third or subsequent birth for each half-year of birth. Linear line of best fit indicates the predicted value of these coefficients based on the coefficients prior to the introduction of the two-child limit. Vertical red solid line indicates the date of birth cut-off for the introduction of the two-child limit (6 April 2017). Vertical pink dashed line indicates the date of the announcement of the two-child limit (5 July 2015). By the final data point (the second half of 2019), the actual coefficient is 11 percent lower than the predicted coefficient.