Online Appendix

Television and the Labor Supply: Evidence from the Digital Television Transition in the UK

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A.1. Transmitter Group Switchover Dates

Table A.1: Transmitter Group Switchover Dates

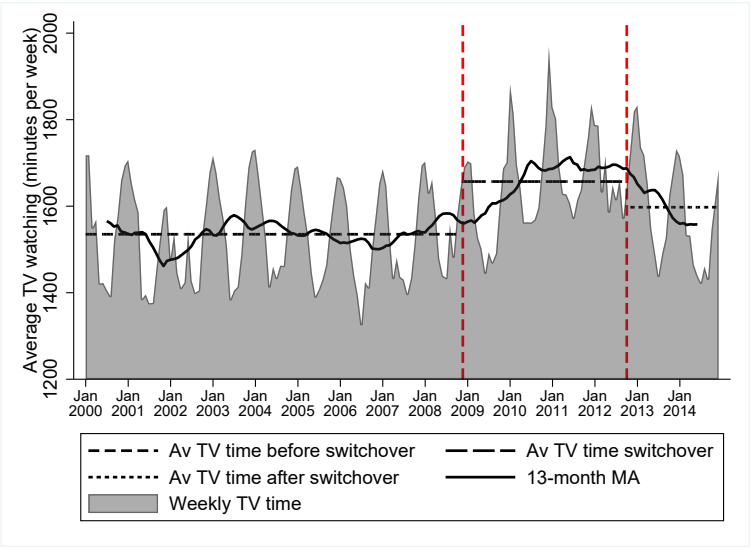
Selkirk	20 Nov 2008	Nottingham	13 Apr 2011
Douglas	16 Jul 2009	Lark Stoke	20 Apr 2011
Caldbeck	22 Jul 2009	Bromsgrove	20 Apr 2011
Beacon Hill	22 Apr 2009	Ridge Hill	20 Apr 2011
Stockland Hill	20 May 2009	The Wrekin	20 Apr 2011
Huntshaw Cross	29 Jul 2009	Waltham	31 Aug 2011
Redruth	5 Aug 2009	Sutton Coldfield	21 Sep 2011
Caradon Hill	9 Sep 2009	Fenton	21 Sep 2011
Kilvey Hill	9 Sep 2009	Oxford	28 Sep 2011
Preseli	16 Sep 2009	Oliver's Mount	17 Aug 2011
Carmel	23 Sep 2009	Belmont	17 Aug 2011
Llanddona	18 Nov 2009	Sheffield	24 Aug 2011
Moel y Parc	25 Nov 2009	Chesterfield	24 Aug 2011
Long Mountain	3 Dec 2009	Emley Moor	21 Sep 2011
Blaenplwyf	10 Mar 2010	Sandy Heath	13 Apr 2011
Wenvoe	31 Mar 2010	Sudbury	20 Jul 2011
Winter Hill	2 Dec 2009	Tacolneston	23 Nov 2011
Mendip	7 Apr 2010	Hannington	22 Feb 2012
Bressay	19 May 2010	Midhurst	14 Mar 2012
Keelylang Hill	26 May 2010	Whitehawk Hill	21 Mar 2012
Rumster Forest	16 Jun 2010	Rowridge	21 Mar 2012
Eitshal	21 Jul 2010	Tunbridge Wells	13 Jun 2012
Skriaig	28 Jul 2010	Heathfield	13 Jun 2012
Angus	18 Aug 2010	Hastings	13 Jun 2012
Durris	15 Sep 2010	Bluebell Hill	27 Jun 2012
Knockmore	22 Sep 2010	Dover	27 Jun 2012
Rosemarkie	20 Oct 2010	Crystal Palace	18 April 2012
Fremont Point	17 Nov 2010	Bilsdale	26 Sep 2012
Torosay	27 Oct 2010	Chatton	26 Sep 2012
Darvel	25 May 2011	Pontop Pike	26 Sep 2012
Rosneath	25 May 2011	Limavady	24 Oct 2012
Craigkelly	15 Jun 2011	Brougher Mountain	24 Oct 2012
Black Hill	22 Jun 2011	Divis	24 Oct 2012

The table shows the dates when the digital switchover took place for each transmitter group in the UK.

A.2. TV Viewing Descriptive Evidence

Figure A.1 provides further descriptive evidence on the overall TV viewing time trend in the UK during the period of 2000–2014. As individuals generally spend more time watching television in winter compared to summer, overall TV viewing is cyclical, and I thus also provide a 13-month moving average in the figure to facilitate the visualization of the overall TV viewing time trend over the period of 2000–2014. In addition, the figure presents three lines for the average TV viewing time over three different periods: before, during and after the switchover. As shown, TV viewing time is stable in the years before the switchover, increases and remains high during the digital transition process and decreases after it. These patterns are similar to those discussed in Section B.

Figure A.1: TV Watching Time



The figure uses data from the Broadcasters Audience Research Board, which I describe in detail in the data section of the paper. It shows the average television viewing time in the UK during the period of 2000–2014, measured in minutes per week. It also shows a 13-month moving average and three straight lines for the average TV viewing time over the periods before, during and after the switchover process, respectively.

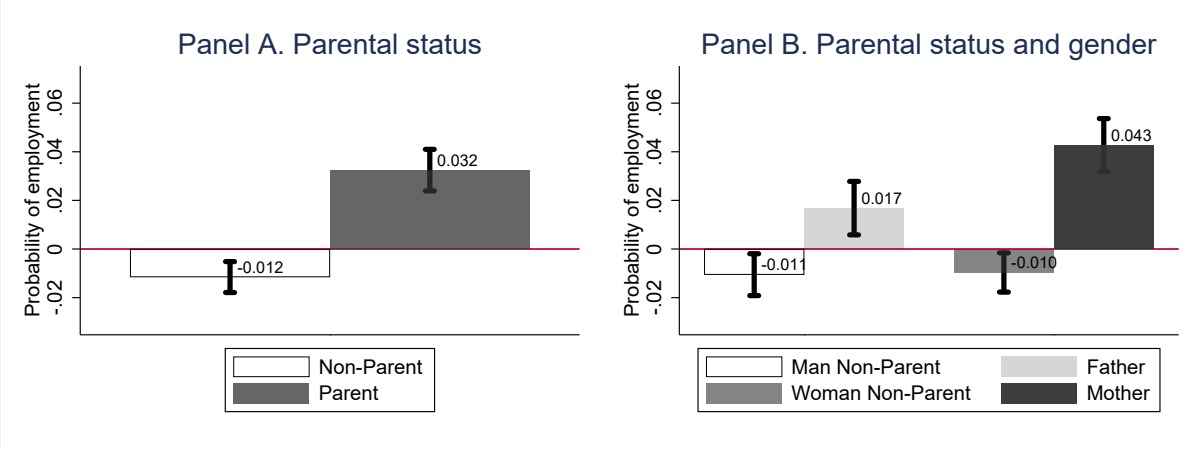
A.3. Sample Restriction

As discussed in the paper, the analysis is based on the sample of individuals present in the dataset before and after their respective switchover dates. This is important because it allows comparing the evolution of the labor outcomes of individuals after the switchover implementation relative to their labor status in the reference period prior to the switchover, which is necessary to understand the effect of the digital transition on employment. Instead, it is not possible to observe the effect of the switchover on employment for individuals only present before the switchover, neither to observe the change in employment due to the digital transition implementation for those only present after. Consequently, the inclusion of individuals that appear only before or only after the switchover would not help towards estimating how employment changes due to the digital transition. However, these individuals may differ from individuals observed both before and after the switchover in terms of sociodemographic characteristics and employment probabilities. Thus, the inclusion of individuals who appear only before or only after the switchover may change the composition of the sample and preclude the possibility of understanding whether the estimates of the effect of the switchover on employment are due to the treatment itself (i.e. the switchover) or due to changes in sample composition.

It is important to note that the restriction implemented in the paper is not based on sociodemographic characteristics of individuals, but only on whether they enter the survey too late or exit too early relative to the switchover date, which minimizes the probability of the estimates obtained in the paper not being representative of the UK population. The sample restriction described in this section leads to a drop of 31% of the sample, and I next further examine whether the estimates of the paper are representative of the UK population by replicating the main findings for mothers, fathers, male nonparents and female nonparents found in Figure 12 but including in the analysis the subsample of individuals who are present only before or only after the switchover. I present the estimates in Figure A.2. For nonparents, I show that the estimates become negative, small in size and statistically significant. There are two possible explanations for this. First, and as previously discussed in the paper, these estimates may be due to the treatment (i.e. the switchover implemen-

tation) increasing the time that nonparents dedicate to TV viewing, thus decreasing the time they have for work. Second, as explained above, changes in sample composition may be biasing the estimates. For parents, I show that the sign, magnitude and significance of the estimates are similar to those provided in Figure 12. The fact that the estimates for parents are robust to the inclusion of individuals who are present only before or only after the switchover confirms the evidence and conclusions provided in the paper, which are driven by parents, and is an important validation of the representativeness of this evidence for the UK population who has a child.

Figure A.2: Sample Restriction



The figure replicates the analysis of Figure 12, based on a sample that includes individuals who are present both before and after their switchover date, or who are present only before or only after the switchover implementation. Panel A presents the estimate of the effect of the switchover on employment for parents and nonparents, while panel B presents this estimate for mothers, fathers, male nonparents and female nonparents, together with the 95% confidence intervals of these estimates. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I cluster standard errors at the LSOA level.

A.4. Summary Statistics

Table A.2: Descriptive Statistics

		Digital television introduction year			
		2009	2010	2011	2012
Female	0.55	0.56	0.54	0.55	0.55
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Born in the UK	0.83	0.91	0.92	0.86	0.75
	(0.37)	(0.29)	(0.27)	(0.35)	(0.43)
Father born in the UK	0.77	0.88	0.91	0.81	0.67
	(0.42)	(0.33)	(0.29)	(0.40)	(0.47)
Mother born in the UK	0.78	0.89	0.91	0.82	0.68
	(0.41)	(0.32)	(0.29)	(0.39)	(0.46)
Non-white British	0.19	0.10	0.07	0.16	0.27
	(0.39)	(0.30)	(0.25)	(0.37)	(0.44)
Father non-white British	0.22	0.12	0.09	0.19	0.32
	(0.41)	(0.32)	(0.28)	(0.39)	(0.46)
Mother non-white British	0.21	0.11	0.08	0.18	0.31
	(0.41)	(0.31)	(0.28)	(0.38)	(0.46)
Age	48.79	49.66	50.01	49.00	48.08
	(17.78)	(17.94)	(17.64)	(17.77)	(17.77)
Single	0.20	0.17	0.17	0.19	0.23
	(0.40)	(0.38)	(0.37)	(0.39)	(0.42)
Married/civil partner	0.55	0.55	0.55	0.56	0.54
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Separated/divorced	0.08	0.10	0.09	0.08	0.08
	(0.28)	(0.30)	(0.28)	(0.28)	(0.27)
Widowed	0.06	0.07	0.07	0.06	0.06
	(0.24)	(0.26)	(0.25)	(0.24)	(0.25)
Living as a couple	0.10	0.11	0.13	0.12	0.08
	(0.30)	(0.31)	(0.33)	(0.32)	(0.27)
Household size	2.90	2.71	2.63	2.86	3.03
	(1.50)	(1.36)	(1.28)	(1.46)	(1.60)
High-qualified	0.24	0.24	0.26	0.22	0.27
	(0.43)	(0.43)	(0.44)	(0.41)	(0.44)
Father high-qualified	0.34	0.32	0.40	0.33	0.35
	(0.47)	(0.47)	(0.49)	(0.47)	(0.48)
Mother high-qualified	0.22	0.20	0.25	0.21	0.24
	(0.41)	(0.40)	(0.43)	(0.40)	(0.43)
N	210,195	16,938	15,313	100,547	77,397

The table presents the averages of several outcomes and sociodemographic characteristics, together with their standard deviations in parentheses. Column 1 presents unweighted summary statistics for the sample. Columns 2–5 split the sample according to the year in which individuals received access to digital signal.

Table A.3: Descriptive Statistics (Continued)

		Digital television introduction year			
		2009	2010	2011	2012
Has siblings	0.85	0.83	0.84	0.85	0.87
	(0.35)	(0.37)	(0.37)	(0.36)	(0.34)
Heterosexual	0.97	0.97	0.98	0.97	0.97
	(0.17)	(0.18)	(0.15)	(0.17)	(0.18)
Religious	0.57	0.55	0.45	0.54	0.65
	(0.49)	(0.50)	(0.50)	(0.50)	(0.48)
Rural	0.23	0.19	0.35	0.23	0.22
	(0.42)	(0.39)	(0.48)	(0.42)	(0.41)
Has moved	0.94	0.94	0.96	0.95	0.92
	(0.24)	(0.24)	(0.21)	(0.22)	(0.27)
Gross household income	3822.92	3595.82	3747.87	3722.19	4018.31
	(2880.38)	(2740.80)	(2539.66)	(2749.92)	(3118.40)
Labor market participation	0.61	0.60	0.63	0.61	0.62
	(0.49)	(0.49)	(0.48)	(0.49)	(0.49)
Has a job	0.56	0.55	0.59	0.57	0.56
	(0.50)	(0.50)	(0.49)	(0.50)	(0.50)
Unemployed	0.05	0.05	0.04	0.05	0.06
	(0.22)	(0.21)	(0.19)	(0.22)	(0.23)
Employee	0.49	0.48	0.51	0.49	0.48
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Self-employee	0.08	0.07	0.07	0.07	0.08
	(0.26)	(0.25)	(0.26)	(0.26)	(0.27)
Full-time employee	0.39	0.39	0.41	0.39	0.39
	(0.49)	(0.49)	(0.49)	(0.49)	(0.49)
Part-time employee	0.29	0.30	0.30	0.29	0.29
	(0.45)	(0.46)	(0.46)	(0.45)	(0.45)
Hours worked	19.79	19.20	21.06	19.83	19.61
	(20.85)	(20.42)	(21.24)	(20.90)	(20.80)
Works from home	0.01	0.01	0.01	0.01	0.01
	(0.11)	(0.11)	(0.11)	(0.11)	(0.10)
Weekly hours of housework	10.35	10.37	10.27	10.38	10.33
	(9.36)	(9.43)	(8.98)	(9.32)	(9.48)
Caring prevents employment	0.31	0.33	0.28	0.31	0.32
	(0.42)	(0.42)	(0.40)	(0.42)	(0.42)
Stops working due to care resp.	0.05	0.04	0.05	0.05	0.06
	(0.22)	(0.20)	(0.22)	(0.21)	(0.24)
Belief family suffers if mother works	0.48	0.48	0.46	0.48	0.48
	(0.28)	(0.28)	(0.27)	(0.28)	(0.28)
N	210,195	16,938	15,313	100,547	77,397

The table presents the averages of several outcomes and sociodemographic characteristics, together with their standard deviations in parentheses. Column 1 presents unweighted summary statistics for the sample. Columns 2–5 split the sample according to the year in which individuals received access to digital signal.

Table A.4: Descriptive Statistics Males

		Digital television introduction year			
		2009	2010	2011	2012
Female	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Born in the UK	0.84	0.91	0.93	0.86	0.76
	(0.37)	(0.29)	(0.26)	(0.34)	(0.43)
Father born in the UK	0.78	0.87	0.92	0.81	0.68
	(0.42)	(0.33)	(0.27)	(0.39)	(0.47)
Mother born in the UK	0.79	0.88	0.91	0.82	0.69
	(0.41)	(0.33)	(0.28)	(0.38)	(0.46)
Non-white British	0.19	0.10	0.06	0.16	0.27
	(0.39)	(0.31)	(0.23)	(0.37)	(0.44)
Father non-white British	0.21	0.12	0.07	0.18	0.31
	(0.41)	(0.33)	(0.26)	(0.39)	(0.46)
Mother non-white British	0.21	0.12	0.07	0.18	0.30
	(0.41)	(0.32)	(0.26)	(0.38)	(0.46)
Age	48.87	49.94	49.78	49.21	48.02
	(17.83)	(17.93)	(17.71)	(17.85)	(17.77)
Single	0.21	0.19	0.19	0.20	0.25
	(0.41)	(0.39)	(0.39)	(0.40)	(0.43)
Married/civil partner	0.59	0.59	0.59	0.59	0.59
	(0.49)	(0.49)	(0.49)	(0.49)	(0.49)
Separated/divorced	0.06	0.07	0.06	0.06	0.05
	(0.23)	(0.26)	(0.24)	(0.23)	(0.22)
Widowed	0.03	0.04	0.03	0.03	0.03
	(0.18)	(0.18)	(0.17)	(0.18)	(0.18)
Living as a couple	0.11	0.11	0.13	0.12	0.08
	(0.31)	(0.31)	(0.34)	(0.32)	(0.28)
Household size	2.92	2.71	2.63	2.88	3.06
	(1.49)	(1.35)	(1.29)	(1.45)	(1.59)
High-qualified	0.25	0.26	0.27	0.23	0.28
	(0.44)	(0.44)	(0.45)	(0.42)	(0.45)
Father high-qualified	0.34	0.32	0.40	0.33	0.34
	(0.47)	(0.47)	(0.49)	(0.47)	(0.47)
Mother high-qualified	0.21	0.19	0.24	0.20	0.22
	(0.41)	(0.39)	(0.42)	(0.40)	(0.41)
N	94,865	7,508	6,980	45,640	34,737

The table presents the averages of several outcomes and sociodemographic characteristics, together with their standard deviations in parentheses. Column 1 presents unweighted summary statistics for males. Columns 2–5 split the sample of males according to the year in which they received access to digital signal.

Table A.5: Descriptive Statistics Males (Continued)

		Digital television introduction year			
		2009	2010	2011	2012
Has siblings	0.85	0.83	0.84	0.85	0.87
	(0.35)	(0.38)	(0.37)	(0.36)	(0.34)
Heterosexual	0.96	0.96	0.98	0.97	0.96
	(0.18)	(0.19)	(0.15)	(0.17)	(0.20)
Religious	0.52	0.47	0.39	0.48	0.60
	(0.50)	(0.50)	(0.49)	(0.50)	(0.49)
Rural	0.23	0.18	0.35	0.24	0.22
	(0.42)	(0.39)	(0.48)	(0.42)	(0.41)
Has moved	0.92	0.93	0.95	0.93	0.90
	(0.26)	(0.25)	(0.21)	(0.25)	(0.29)
Gross household income	3971.39	3725.08	3912.00	3861.58	4180.83
	(2770.28)	(2784.98)	(2623.57)	(2651.71)	(2930.45)
Labor market participation	0.67	0.63	0.67	0.67	0.68
	(0.47)	(0.48)	(0.47)	(0.47)	(0.47)
Has a job	0.61	0.58	0.63	0.61	0.61
	(0.49)	(0.49)	(0.48)	(0.49)	(0.49)
Unemployed	0.06	0.05	0.05	0.06	0.07
	(0.24)	(0.22)	(0.21)	(0.23)	(0.25)
Employee	0.50	0.48	0.53	0.50	0.49
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Self-employee	0.11	0.10	0.10	0.11	0.12
	(0.32)	(0.29)	(0.29)	(0.31)	(0.33)
Full-time employee	0.49	0.47	0.52	0.49	0.49
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Part-time employee	0.21	0.22	0.21	0.20	0.21
	(0.41)	(0.41)	(0.41)	(0.40)	(0.41)
Hours worked	24.27	22.56	25.71	24.42	24.16
	(22.59)	(22.09)	(23.13)	(22.70)	(22.42)
Works from home	0.01	0.01	0.02	0.01	0.01
	(0.11)	(0.11)	(0.13)	(0.11)	(0.10)
Weekly hours of housework	6.25	6.55	6.38	6.29	6.08
	(6.25)	(6.40)	(6.08)	(6.35)	(6.11)
Caring prevents employment	0.20	0.26	0.17	0.19	0.21
	(0.36)	(0.39)	(0.34)	(0.35)	(0.37)
Stops working due to care resp.	0.02	0.02	0.02	0.01	0.02
	(0.12)	(0.13)	(0.15)	(0.11)	(0.13)
Belief family suffers if mother works	0.49	0.49	0.47	0.49	0.50
	(0.27)	(0.27)	(0.26)	(0.27)	(0.27)
N	94,865	7,508	6,980	45,640	34,737

The table presents the averages of several outcomes and sociodemographic characteristics, together with their standard deviations in parentheses. Column 1 presents unweighted summary statistics for males. Columns 2–5 split the sample of males according to the year in which they received access to digital signal.

Table A.6: Descriptive Statistics Females

		Digital television introduction year			
		2009	2010	2011	2012
Female	1.00	1.00	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Born in the UK	0.83	0.91	0.91	0.86	0.75
	(0.38)	(0.28)	(0.29)	(0.35)	(0.44)
Father born in the UK	0.77	0.88	0.90	0.80	0.67
	(0.42)	(0.32)	(0.30)	(0.40)	(0.47)
Mother born in the UK	0.78	0.90	0.91	0.81	0.68
	(0.41)	(0.31)	(0.29)	(0.39)	(0.47)
Non-white British	0.19	0.10	0.08	0.16	0.27
	(0.39)	(0.30)	(0.27)	(0.37)	(0.45)
Father non-white British	0.22	0.11	0.10	0.19	0.32
	(0.42)	(0.32)	(0.29)	(0.39)	(0.47)
Mother non-white British	0.21	0.10	0.09	0.18	0.31
	(0.41)	(0.30)	(0.29)	(0.38)	(0.46)
Age	48.72	49.43	50.21	48.82	48.13
	(17.74)	(17.94)	(17.58)	(17.70)	(17.77)
Single	0.19	0.15	0.15	0.17	0.22
	(0.39)	(0.36)	(0.35)	(0.38)	(0.41)
Married/civil partner	0.52	0.52	0.53	0.53	0.51
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Separated/divorced	0.11	0.12	0.11	0.11	0.11
	(0.31)	(0.32)	(0.31)	(0.31)	(0.31)
Widowed	0.09	0.10	0.10	0.08	0.09
	(0.28)	(0.30)	(0.30)	(0.27)	(0.29)
Living as a couple	0.10	0.10	0.12	0.11	0.08
	(0.30)	(0.31)	(0.32)	(0.32)	(0.27)
Household size	2.88	2.70	2.63	2.85	3.01
	(1.50)	(1.36)	(1.28)	(1.46)	(1.61)
High-qualified	0.23	0.22	0.24	0.21	0.25
	(0.42)	(0.42)	(0.43)	(0.40)	(0.44)
Father high-qualified	0.35	0.33	0.39	0.33	0.35
	(0.48)	(0.47)	(0.49)	(0.47)	(0.48)
Mother high-qualified	0.23	0.21	0.27	0.21	0.25
	(0.42)	(0.41)	(0.44)	(0.41)	(0.43)
N	115,320	9,430	8,333	54,901	42,656

The table presents the averages of several outcomes and sociodemographic characteristics, together with their standard deviations in parentheses. Column 1 presents unweighted summary statistics for females. Columns 2–5 split the sample of females according to the year in which they received access to digital signal.

Table A.7: Descriptive Statistics Females (Continued)

		Digital television introduction year			
		2009	2010	2011	2012
Has siblings	0.86	0.84	0.84	0.85	0.87
	(0.35)	(0.37)	(0.37)	(0.36)	(0.34)
Heterosexual	0.97	0.97	0.98	0.97	0.97
	(0.16)	(0.17)	(0.14)	(0.17)	(0.16)
Religious	0.61	0.60	0.49	0.58	0.69
	(0.49)	(0.49)	(0.50)	(0.49)	(0.46)
Rural	0.23	0.20	0.35	0.23	0.21
	(0.42)	(0.40)	(0.48)	(0.42)	(0.41)
Has moved	0.95	0.94	0.96	0.96	0.93
	(0.22)	(0.23)	(0.20)	(0.20)	(0.25)
Gross household income	3700.91	3492.91	3610.39	3606.56	3886.00
	(2962.40)	(2700.84)	(2458.92)	(2823.80)	(3257.66)
Labor market participation	0.57	0.57	0.59	0.57	0.56
	(0.50)	(0.50)	(0.49)	(0.50)	(0.50)
Has a job	0.52	0.53	0.56	0.53	0.52
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Unemployed	0.04	0.04	0.03	0.04	0.04
	(0.20)	(0.19)	(0.17)	(0.20)	(0.21)
Employee	0.47	0.48	0.50	0.48	0.46
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Self-employee	0.04	0.05	0.05	0.04	0.05
	(0.21)	(0.21)	(0.22)	(0.20)	(0.21)
Full-time employee	0.31	0.32	0.32	0.30	0.31
	(0.46)	(0.47)	(0.47)	(0.46)	(0.46)
Part-time employee	0.36	0.36	0.39	0.36	0.35
	(0.48)	(0.48)	(0.49)	(0.48)	(0.48)
Hours worked	16.21	16.57	17.25	16.15	15.99
	(18.59)	(18.59)	(18.72)	(18.52)	(18.65)
Works from home	0.01	0.01	0.01	0.01	0.01
	(0.10)	(0.11)	(0.09)	(0.11)	(0.10)
Weekly hours of housework	13.54	13.26	13.38	13.58	13.59
	(10.10)	(10.29)	(9.69)	(9.99)	(10.28)
Caring prevents employment	0.38	0.37	0.38	0.38	0.38
	(0.44)	(0.44)	(0.43)	(0.44)	(0.44)
Stops working due to care resp.	0.08	0.06	0.07	0.08	0.09
	(0.27)	(0.24)	(0.26)	(0.27)	(0.29)
Belief family suffers if mother works	0.47	0.47	0.45	0.47	0.47
	(0.28)	(0.29)	(0.27)	(0.28)	(0.29)
N	115,320	9,430	8,333	54,901	42,656

The table presents the averages of several outcomes and sociodemographic characteristics, together with their standard deviations in parentheses. Column 1 presents unweighted summary statistics for females. Columns 2–5 split the sample of females according to the year in which they received access to digital signal.

A.5. Tables from Baseline and Heterogeneity Analyses

Table A.8: Baseline Model – TV Viewing

	Minutes TV viewing per week children 4–9	Minutes TV viewing per week children 10–15	Minutes TV viewing per week adults 16+
Event 37-48 months prior	-8.040	-20.501	-7.104
	(24.651)	(20.417)	(18.643)
Event 25-36 months prior	24.070	15.783	25.316*
	(17.298)	(14.657)	(13.753)
Event 13-24 months prior	11.796	1.355	7.691
	(11.110)	(9.624)	(9.223)
Event 1-12 months prior	0.000	0.000	0.000
	(.)	(.)	(.)
Event 0-12 months after	51.401***	30.450***	1.027
	(11.418)	(9.490)	(8.401)
Event 13-24 months after	57.219***	31.699**	11.382
	(17.395)	(14.629)	(12.941)
Event 25-36 months after	110.557***	67.438***	36.080**
	(23.768)	(20.164)	(18.024)
Event 37-48 months after	142.147***	93.906***	46.781**
	(30.626)	(26.224)	(23.447)
Region dummies	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
Week dummies	Yes	Yes	Yes
Average (untreated)	903.3	831.9	1561.6
Observations	5,408	5,408	5,408

* p<0.10, ** p<0.05, *** p<0.01. The table examines the evolution of the impact of the digital television transition on TV watching time. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of an event study model identical to the baseline one but adapted to use as the unit of analysis that of the aggregate data on TV viewing time, which is the TV region-week level. I also present the standard errors of these estimates in parentheses. In Columns 1–3, I use as the dependent variable the average TV viewing time of children aged 4–9, children aged 10–15 and adults, respectively, aggregated at the TV region-week level.

Table A.9: Baseline Model – Employment

	Probability of employment
Event 37-48 months prior	0.001
	(0.017)
Event 25-36 months prior	-0.003
	(0.010)
Event 13-24 months prior	-0.003
	(0.005)
Event 1-12 months prior	0.000
	(.)
Event 0-12 months after	0.011**
	(0.005)
Event 13-24 months after	0.022**
	(0.010)
Event 25-36 months after	0.027*
	(0.014)
Event 37-48 months after	0.022
	(0.018)
LSOA dummies	Yes
Year dummies	Yes
Average (untreated)	0.557
Observations	210,195

* p<0.10, ** p<0.05, *** p<0.01. The table shows the evolution of the impact of the digital television transition on employment. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of the baseline event study model. I also present the standard errors of these estimates in parentheses. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I cluster standard errors at the LSOA level.

Table A.10: Number of Hours Worked per Week

	Number of hours worked per week
Event 37-48 months prior	-0.178
	(0.712)
Event 25-36 months prior	0.100
	(0.433)
Event 13-24 months prior	-0.090
	(0.224)
Event 1-12 months prior	0.000
	(.)
Event 0-12 months after	0.420**
	(0.213)
Event 13-24 months after	0.776*
	(0.401)
Event 25-36 months after	1.073*
	(0.585)
Event 37-48 months after	1.131
	(0.760)
LSOA dummies	Yes
Year dummies	Yes
Average (untreated)	19.647
Observations	199,411

* p<0.10, ** p<0.05, *** p<0.01. The table shows the evolution of the impact of the digital television transition on the number of hours worked per week. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of the baseline event study model. I also present the standard errors of these estimates in parentheses. I use as the dependent variable the number of hours that individuals work per week. I cluster standard errors at the LSOA level.

Table A.11: Heterogeneity by Parental Status and Gender

	Probability of employment		
	Whole sample	Males	Females
DT	0.002	0.002	-0.001
	(0.003)	(0.005)	(0.004)
Parent × DT	0.032***	0.018***	0.046***
	(0.005)	(0.006)	(0.006)
LSOA dummies	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
Average non-parent (untreated)	0.477	0.501	0.457
Average parent (untreated)	0.729	0.872	0.639
Observations	197,377	85,145	110,480

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for a binary variable equal to 1 if adult *i* lives with a child younger than 16 years of age and 0 otherwise, and for an interaction term between this indicator and the digital transition dummy. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. Column 1 presents the estimates of the effect of the switchover on employment for parents and nonparents, while Column 2 presents these estimates for fathers and male nonparents, and Column 3 for mothers and female nonparents, together with the standard errors of these estimates in parentheses. I cluster standard errors at the LSOA level.

Table A.12: Types of Employment

	Self-employment		Employed	
	Males	Females	Males	Females
DT	0.007**	-0.002	-0.005	0.001
	(0.003)	(0.002)	(0.005)	(0.004)
Parent × DT	-0.006	0.010***	0.023***	0.043***
	(0.005)	(0.003)	(0.007)	(0.006)
LSOA dummies	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Average non-parent (untreated)	0.090	0.035	0.411	0.421
Average parent (untreated)	0.160	0.053	0.712	0.573
Observations	85,104	109,142	85,104	109,142

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for a binary variable equal to 1 if adult *i* lives with a child younger than 16 years of age and 0 otherwise, and for an interaction term between this indicator and the digital transition dummy. Columns 1–2 and 3–4 use as the dependent variable a dummy that takes a value of 1 if the individual is self-employed and an employee, respectively, and 0 otherwise. Columns 1 and 3 (2 and 4) present the estimate of the effect of the switchover on the respective labor outcome for fathers and male nonparents (mothers and female nonparents), together with their standard errors in parentheses. I cluster standard errors at the LSOA level.

Table A.13: Types of Employment

	Part-time employment		Full-time employment	
	Males	Females	Males	Females
DT	0.004	-0.003	-0.003	-0.004
	(0.005)	(0.005)	(0.005)	(0.004)
Parent × DT	-0.004	0.036***	0.018***	0.021***
	(0.007)	(0.006)	(0.006)	(0.006)
LSOA dummies	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Average non-parent (untreated)	0.200	0.298	0.427	0.318
Average parent (untreated)	0.293	0.497	0.794	0.313
Observations	85,145	110,480	85,145	110,480

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for a binary variable equal to 1 if adult *i* lives with a child younger than 16 years of age and 0 otherwise, and for an interaction term between this indicator and the digital transition dummy. Columns 1–2 and 3–4 use as the dependent variable a dummy that takes a value of 1 if the individual is part-time employed and full-time employed, respectively, and 0 otherwise. Columns 1 and 3 (2 and 4) present the estimate of the effect of the switchover on the respective labor outcome for fathers and male nonparents (mothers and female nonparents), together with their standard errors in parentheses. I cluster standard errors at the LSOA level.

Table A.14: Heterogeneity by Cohabitation Status

	Probability of employment	
	Non–cohabiting	Cohabiting
DT	-0.007	0.005
	(0.005)	(0.004)
Parent × DT	0.067***	0.024***
	(0.010)	(0.005)
LSOA dummies	Yes	Yes
Year dummies	Yes	Yes
Average non-parent (untreated)	0.412	0.505
Average parent (untreated)	0.581	0.760
Observations	50,182	146,270

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for a binary variable equal to 1 if adult *i* lives with a child younger than 16 years of age and 0 otherwise, and for an interaction term between this indicator and the digital transition dummy. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. Column 1 presents the estimate of the effect of the switchover on employment for noncohabiting nonparents and noncohabiting parents, while Column 2 reports the estimate for cohabiting nonparents and cohabiting parents. In all columns, I present the estimates together with their standard errors in parentheses. I cluster standard errors at the LSOA level.

Table A.15: Heterogeneity by Socioeconomic Status and Number and Age of Children

	Probability of employment		
DT	0.002	0.006*	0.043***
	(0.003)	(0.003)	(0.004)
1 child × DT	0.027***		
	(0.007)		
2 children × DT	0.037***		
	(0.007)		
>= 3 children × DT	0.035***		
	(0.011)		
Child aged 0-4 × DT		-0.005	
		(0.007)	
Child aged 5-10 × DT		0.030***	
		(0.008)	
Child aged 10-15 × DT		0.020***	
		(0.007)	
HH income Q2 × DT			-0.024***
			(0.006)
HH income Q3 × DT			-0.041***
			(0.005)
HH income Q4 × DT			-0.046***
			(0.005)
LSOA dummies	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
Average 0 child (untreated)	0.477		
Average 1 child (untreated)	0.759		
Average 2 children (untreated)	0.754		
Average >=3 children (untreated)	0.587		
Average child aged 0-4 (untreated)		0.667	
Average child aged 5-10 (untreated)		0.696	
Average child aged 10-15 (untreated)		0.738	
Average HH income Q1 (untreated)			0.195
Average HH income Q2 (untreated)			0.481
Average HH income Q3 (untreated)			0.709
Average HH income Q4 (untreated)			0.798
Observations	197,377	197,322	209,801

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. In Columns 1–3, I also control for a set of dummies for the number of children under 16 years of age living with adult *i*, for whether a child aged 0–4, 5–9 and 10–15 years old lives with adult *i*, and for the household income quartile of individual *i*, respectively, as well as for interaction terms between these indicators and the digital transition dummy. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. In all columns, I present the estimates together with their standard errors in parentheses. I cluster standard errors at the LSOA level.

Table A.16: Housework

	Weekly housework hours		
	Whole sample	Males	Females
DT	0.107	0.195*	0.146
	(0.102)	(0.116)	(0.154)
Parent × DT	-0.689***	-0.262*	-0.974***
	(0.131)	(0.139)	(0.189)
LSOA dummies	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
Average non-parent (untreated)	9.433	6.134	12.220
Average parent (untreated)	13.190	6.417	17.482
Observations	97,149	40,736	53,300

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for a binary variable equal to 1 if adult *i* lives with a child younger than 16 years of age and 0 otherwise, and for an interaction term between this indicator and the digital transition dummy. I use as the dependent variable the number of hours of housework that individuals do per week. Column 1 presents the estimate of the effect of the switchover on housework for parents and nonparents, Column 2 presents this estimate for fathers and male nonparents, and Column 3 for mothers and female nonparents, together with standard errors in parentheses. I cluster standard errors at the LSOA level.

Table A.17: Caring Prevents Employment

	Caring prevents employment		
	Whole sample	Males	Females
DT	-0.008	-0.014	-0.017
	(0.017)	(0.023)	(0.022)
Parent × DT	-0.044**	-0.045	-0.042*
	(0.019)	(0.030)	(0.024)
LSOA dummies	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
Average non-parent (untreated)	0.277	0.231	0.309
Average parent (untreated)	0.382	0.190	0.482
Observations	8,872	3,208	5,235

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for a binary variable equal to 1 if adult *i* lives with a child younger than 16 years of age and 0 otherwise, and for an interaction term between this indicator and the digital transition dummy. I use as the dependent variable a standardized categorical variable measuring how much individuals report that caring prevents them from working. The variable takes higher values when individuals report that caring leads to higher reductions in their labor supply. Column 1 presents the estimate of the effect of the switchover on the degree to which caring prevents parents and nonparents from working, while Column 2 presents this estimate for fathers and male nonparents, and Column 3 for mothers and female nonparents, together with standard errors in parentheses. I cluster standard errors at the LSOA level.

Table A.18: Stops Working to Look After Family

	Stops working to look after family		
	Whole sample	Males	Females
DT	-0.001	0.010	0.012
	(0.013)	(0.010)	(0.029)
Parent × DT	-0.009	-0.021	-0.074
	(0.025)	(0.024)	(0.046)
LSOA dummies	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
Average non-parent (untreated)	0.015	0.008	0.023
Average parent (untreated)	0.146	0.034	0.215
Observations	4,758	1,551	1,634

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for a binary variable equal to 1 if adult *i* lives with a child younger than 16 years of age and 0 otherwise, and for an interaction term between this indicator and the digital transition dummy. I use as the dependent variable a dummy that takes a value of 1 if the individual reports stopping work to look after family and 0 for any other reason. Column 1 presents the estimate of the effect of the switchover on the probability of parents and nonparents reporting that they have stopped working to look after family, while Column 2 presents this estimate for fathers and male nonparents, and Column 3 for mothers and female nonparents, together with standard errors in parentheses. I cluster standard errors at the LSOA level.

Table A.19: Believes the Family Suffers if the Mother Works Full-Time

	Believes the family suffers if the mother works full-time		
	Whole sample	Males	Females
DT	-0.004	-0.006	-0.003
	(0.004)	(0.006)	(0.006)
Parent × DT	-0.014***	-0.006	-0.019***
	(0.005)	(0.008)	(0.007)
LSOA dummies	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
Average non-parent (untreated)	0.477	0.499	0.460
Average parent (untreated)	0.489	0.480	0.495
Observations	55,662	21,921	29,558

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for a binary variable equal to 1 if adult *i* lives with a child younger than 16 years of age and 0 otherwise, and for an interaction term between this indicator and the digital transition dummy. I use as the dependent variable a normalized categorical variable measuring whether individuals report that they believe that families suffer when mothers work full-time. The variable takes higher values when individuals agree more with the statement that families suffer when mothers work full-time. Column 1 presents the estimate of the effect of the switchover on parents' and nonparents' belief that families suffer when mothers work full-time, while Column 2 presents this estimate for fathers and male nonparents, and Column 3 for mothers and female nonparents, together with standard errors in parentheses. I cluster standard errors at the LSOA level.

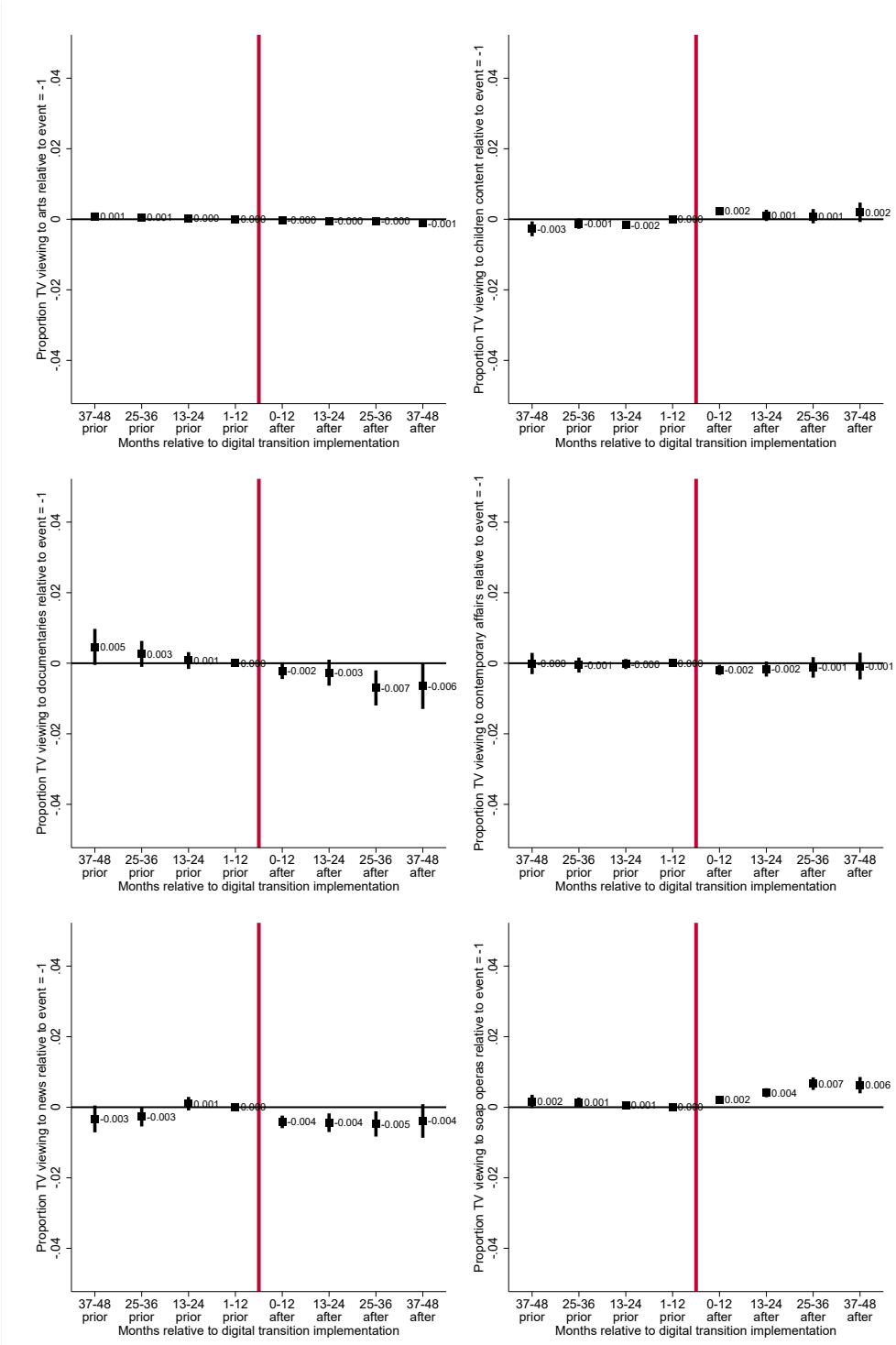
A.6. TV Content

This section explores the effect of the digital transition on TV content as a potential driver behind the effect of the switchover on employment. To do so, I use all the available information on the shares of the different TV content genres contained in the aggregate TV viewing data I described in the data section of the paper and estimate the same model as in Section IV.B.1. I use as the dependent variable the share of TV viewing time that individuals from a TV region dedicate to each of the following TV content genres in a particular week: (i) arts, (ii) children's content, (iii) cinema films, (iv) contemporary affairs, (v) documentaries, (vi) drama series, (vii) educational content, (viii) entertainment, (ix) music, (x) news, (xi) political content, (xii) religious content, (xiii) soap operas, (xiv) TV movies and (xv) other. As shown, the estimates of the effect of the digital transition on the different TV content genres are small and not statistically significant, which suggests that the increase in TV viewing brought about by the new TV channels and programs was shared approximately equally across the different TV content genres, in relative terms. If anything, the digital transition seems to increase the proportion of TV viewing time that individuals dedicate to watching entertainment content and soap operas and decreases the importance of the documentary, news and drama series TV content genres. Taking into account the size and significance of the previous findings, it is unlikely that the effect of the digital transition on employment was due to changes in TV content.

In the paper, I previously showed that the digital switchover increased TV viewing time for adults and children, and especially for children. It is important to note that the findings on the effects of the switchover on TV viewing and content are not incompatible and that it is not necessarily surprising to not find a positive effect of the digital transition on the share of children's content TV genre. There are three reasons for this. First, children are likely to watch several types of TV genres and not only cartoons. Second, the digital transition may have brought new TV programs and channels that not only increase the quality of the cartoons that children can watch but which also make the rest of the TV content genres more accessible to children. Consequently, the increase in TV viewing for children after the switchover could have taken place through increases

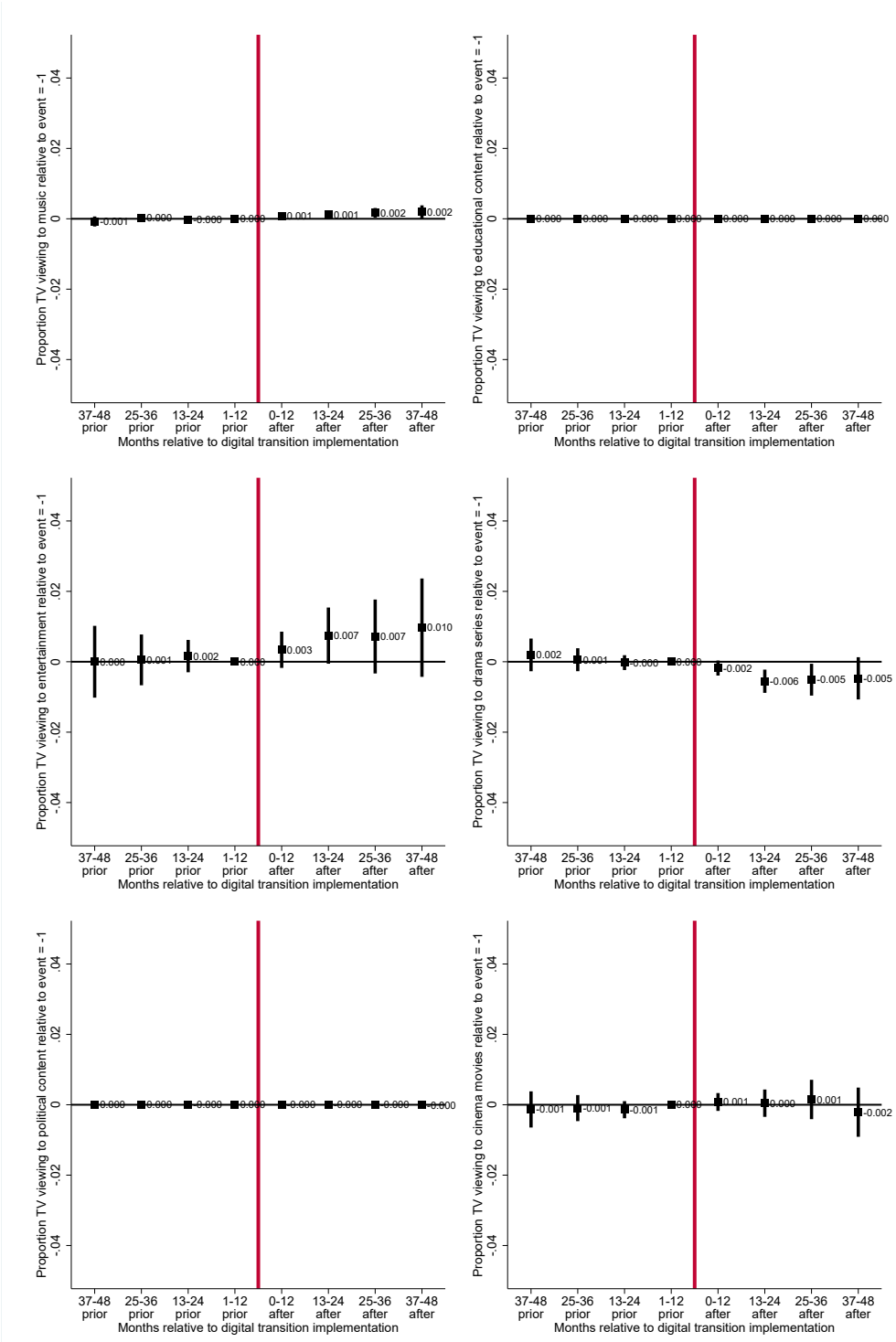
in the TV viewing time that children dedicate to very different genres, and not only cartoons. Lastly, I show that the digital switchover increased the share of the entertainment TV genre, which may be driven by children.

Figure A.3: TV Content



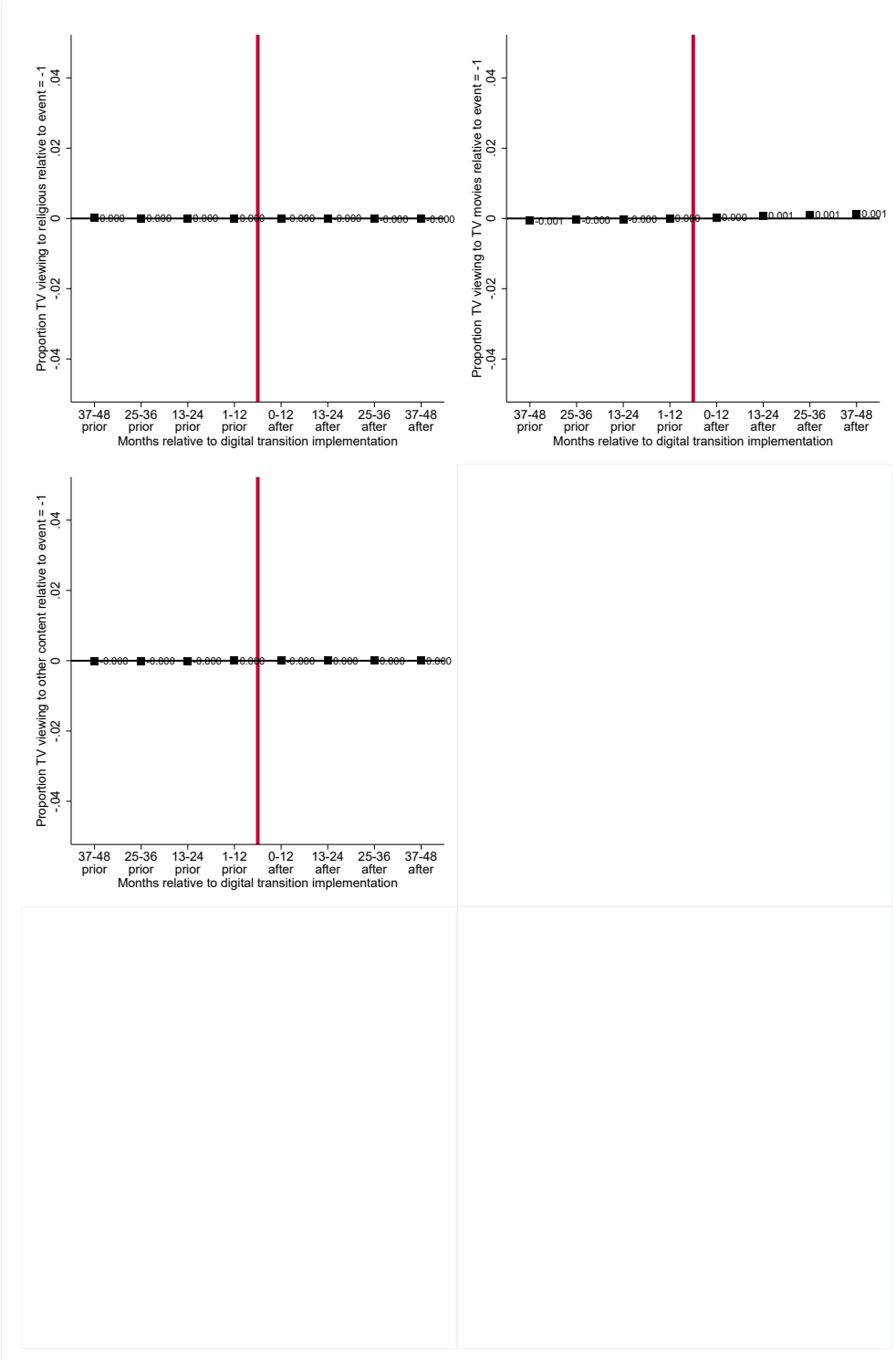
The figure examines the evolution of the impact of the digital television transition on the proportion of TV watching time that individuals dedicate to each television genre. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of an event study model identical to the baseline one but adapted to use as the unit of analysis that of the aggregate data on TV viewing time, which is the TV region-week level. I also present the 95% confidence intervals of these estimates. I use as the dependent variable the average share of each TV content genre for which there is information in the dataset, at the TV region-week level.

Figure A.4: TV Content (Continued)



The figure examines the evolution of the impact of the digital television transition on the proportion of TV watching time that individuals dedicate to each television genre. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of an event study model identical to the baseline one but adapted to use as the unit of analysis that of the aggregate data on TV viewing time, which is the TV region-week level. I also present the 95% confidence intervals of these estimates. I use as the dependent variable the average share of each TV content genre for which there is information in the dataset, at the TV region-week level.

Figure A.5: TV Content (Continued)

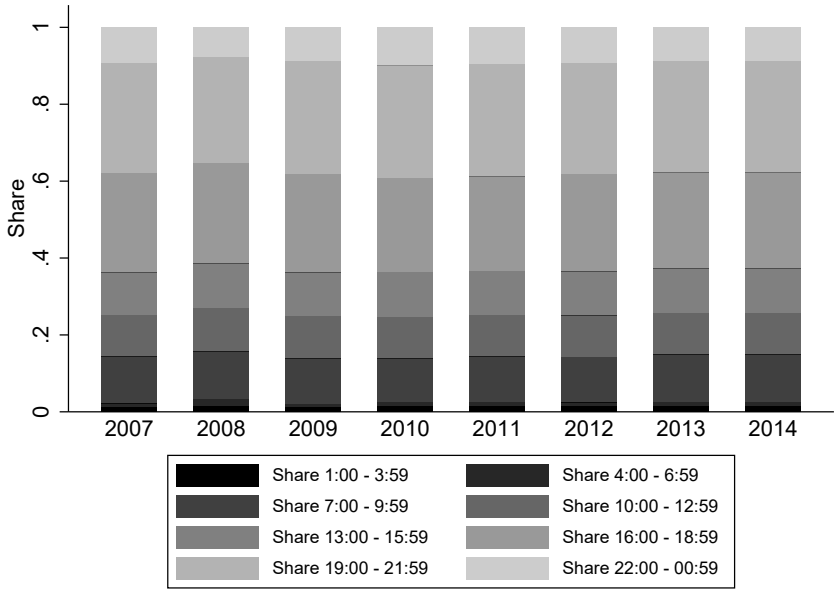


The figure examines the evolution of the impact of the digital television transition on the proportion of TV watching time that individuals dedicate to each television genre. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of an event study model identical to the baseline one but adapted to use as the unit of analysis that of the aggregate data on TV viewing time, which is the TV region-week level. I also present the 95% confidence intervals of these estimates. I use as the dependent variable the average share of each TV content genre for which there is information in the dataset, at the TV region-week level.

A.7. TV Viewing - Time of the Day

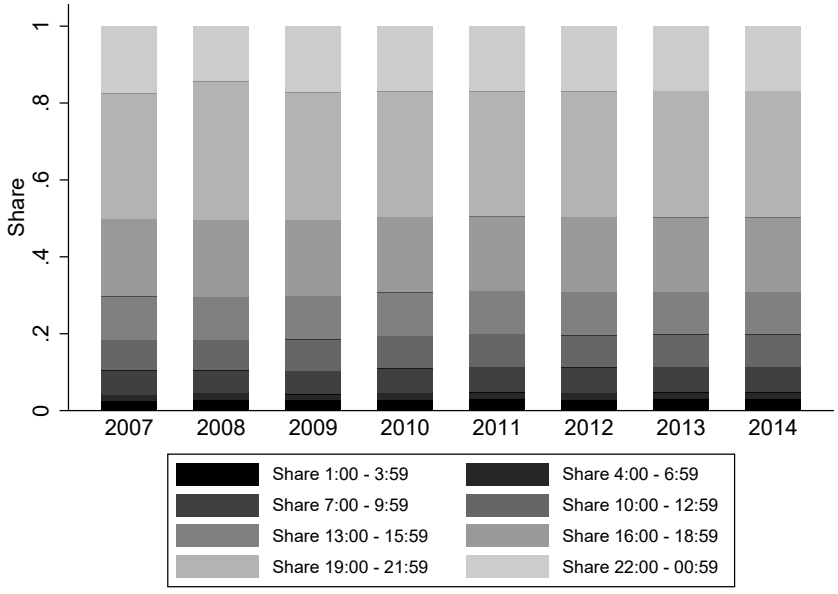
One may wonder whether the digital switchover may have brought about changes in the time of the day when the different types of TV content are available and, therefore, when individuals watch television. The only data available to address this question comes from the Broadcasters Audience Research Board and contains information on the fraction of the total time that individuals spend watching television across the different parts of the day at the UK level. Using this information, it is possible to examine whether there were significant changes in the time of the day when individuals watch television. Figures A.6 and A.7 present descriptive evidence for children aged 4–15 and adults aged 16 or older, respectively, which are the only two groups of the population for which there is information available. I also split the day into intervals of three hours. As shown, the fraction of TV viewing time spent by children and adults in the different parts of the day remains stable over the period of analysis. This evidence, together with the findings presented in Appendix A.6 that the digital transition had a small and generally not statistically significant effect on the shares of the different TV content genres watched suggests that the switchover did not change the times of the day when the different types of TV content were available.

Figure A.6: Fraction of TV Viewing Time by Time of the Day – Children



The figure uses data from the Broadcasters Audience Research Board to show the evolution of the fraction of the total time that individuals spend watching television across different times of the day over the period of analysis. I divide the day into intervals of three hours.

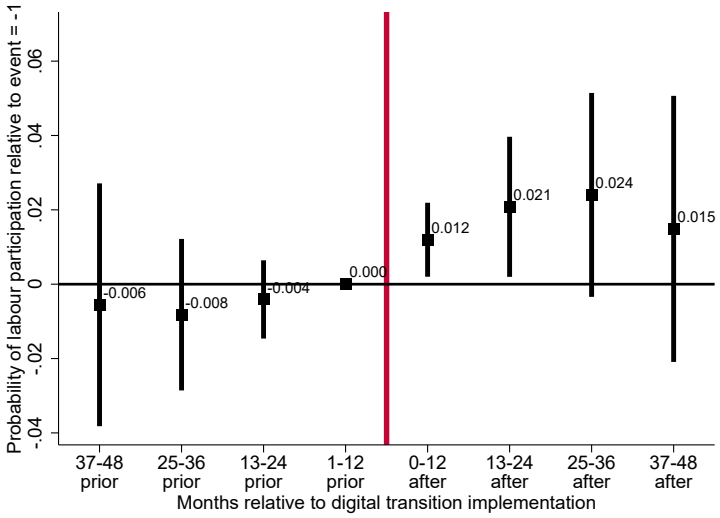
Figure A.7: Fraction of TV Viewing Time by Time of the Day – Adults



The figure uses data from the Broadcasters Audience Research Board to show the evolution of the fraction of the total time that individuals spend watching television across different times of the day over the period of analysis. I divide the day into intervals of three hours.

A.8. Analysis of Labor Market Participation

Figure A.8: The Effect of the Digital Transition on Labor Market Participation



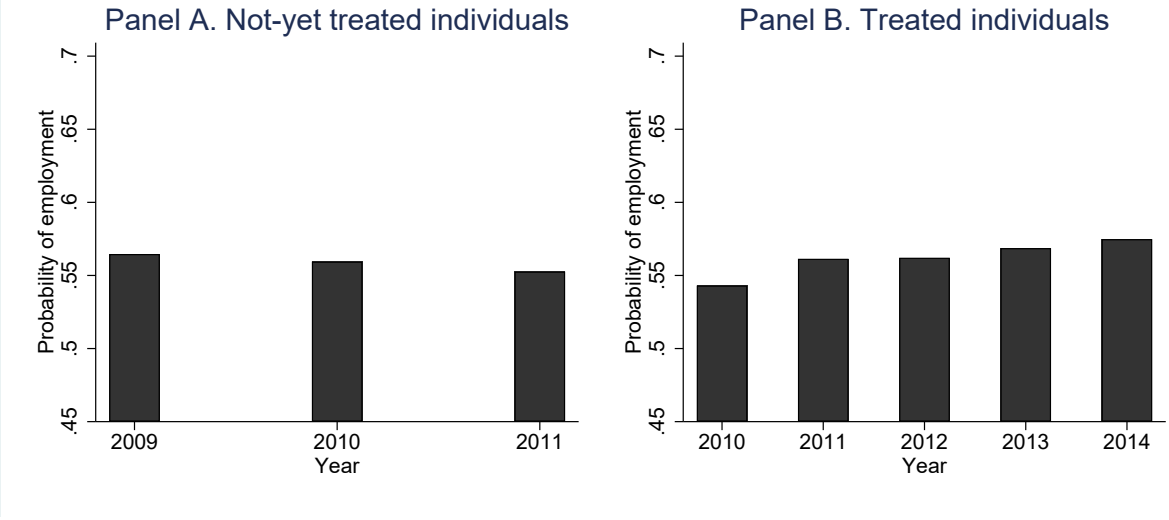
The figure shows the evolution of the impact of the digital television transition on labor market participation. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of the baseline event study model. I also present the 95% confidence intervals of these estimates. I use as the dependent variable a dummy taking a value of 1 if the individual participates in the labor market and 0 otherwise. I cluster standard errors at the LSOA level.

A.9. The Evolution of Employment Levels

The effect of the digital transition on employment may be due to increases in employment after treatment for the already treated individuals or by decreases in employment for the not-yet treated individuals. While there is no way to show whether the baseline estimates stem from changes in the treated or the not-yet treated group in a reliable way, as the analysis exploits variation in the digital transition coming from differences across the treated and not-yet treated groups as well as from differences within groups before and after treatment, while accounting for region and year fixed effects, I next provide some suggestive evidence on this matter. In particular, in Figure A.9 I present the evolution of the average employment levels of the already treated and not-yet treated individuals for the calendar years in which they are present over the period of analysis. As shown, the employment level of the not-yet treated individuals decreases modestly over time, but the size of this change is small relative to the increase in the employment level reported in the same Figure for the already treated individuals over time. All of this suggests that the baseline estimates mainly stem from increases in employment for the treated individuals.

It is also important to realize that while the treated individuals have a lower average employment level in 2010 than the not-yet treated individuals, this could merely be because the switchover occurred earlier in regions with lower employment levels, which shows the importance of accounting for region fixed effects in the analysis.

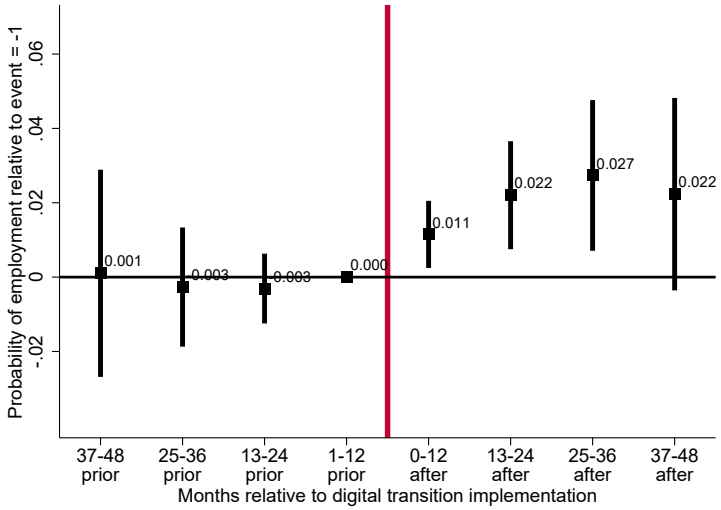
Figure A.9: The Evolution of Employment Levels



The figure shows the evolution of the average employment level for treated and not-yet treated individuals over time, during the years when there are individuals present in these groups.

A.10. Alternative Cluster Level of Standard Errors

Figure A.10: Alternative Cluster Level of Standard Errors

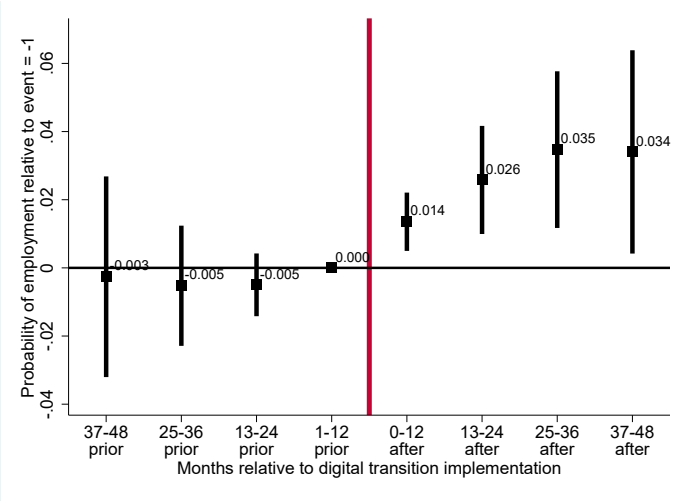


The figure shows the evolution of the impact of the digital television transition on employment. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of the baseline event study model. I also present the 95% confidence intervals of these estimates. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I cluster standard errors at the household level.

A.11. Alternative Specification

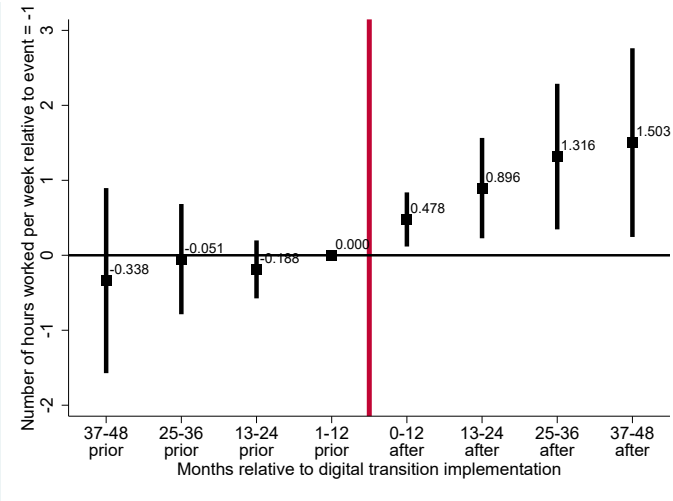
In this section, I explore whether the baseline estimates of the effect of the digital transition on employment are robust to accounting for covariates at the individual level. To do so, I estimate a specification similar to the baseline model but which also controls for individual characteristics such as gender, age, ethnicity, marital status and the number of members in the household. As shown in Figures A.11–A.12 and Tables A.20–A.21, the estimates of the effects of the switchover on the probability of having a job and on the number of hours that individuals work per week are robust to the inclusion of individual covariates.

Figure A.11: The Effect of the Digital Transition on Employment



The figure shows the evolution of the impact of the digital television transition on employment. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date. I also present the 95% confidence intervals of these estimates. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I control for gender, age, ethnicity, marital status and the number of household members, as well as for LSOA and year fixed effects. I cluster standard errors at the LSOA level.

Figure A.12: The Effect of the Digital Transition on the Number of Hours Worked



The figure shows the evolution of the impact of the digital television transition on the number of hours that individuals work per week. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date. I also present the 95% confidence intervals of these estimates. I use as the dependent variable the number of hours that individuals work per week. I control for gender, age, ethnicity, marital status and the number of household members, as well as for LSOA and year fixed effects. I cluster standard errors at the LSOA level.

Table A.20: Employment

	Probability of employment
Event 37-48 months prior	-0.003
	(0.015)
Event 25-36 months prior	-0.005
	(0.009)
Event 13-24 months prior	-0.005
	(0.005)
Event 1-12 months prior	0.000
	(.)
Event 0-12 months after	0.014***
	(0.004)
Event 13-24 months after	0.026***
	(0.008)
Event 25-36 months after	0.035***
	(0.012)
Event 37-48 months after	0.034**
	(0.015)
LSOA dummies	Yes
Year dummies	Yes
Individual covariates	Yes
Average (untreated)	0.558
Observations	204,568

* p<0.10, ** p<0.05, *** p<0.01. The table shows the evolution of the impact of the digital television transition on employment. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date. I also present the standard errors of these estimates in parentheses. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I control for gender, age, ethnicity, marital status and the number of household members, as well as for LSOA and year fixed effects. I cluster standard errors at the LSOA level.

Table A.21: Number of Hours Worked

	Number of hours worked per week
Event 37-48 months prior	-0.338
	(0.630)
Event 25-36 months prior	-0.051
	(0.375)
Event 13-24 months prior	-0.188
	(0.197)
Event 1-12 months prior	0.000
	(.)
Event 0-12 months after	0.478***
	(0.184)
Event 13-24 months after	0.896***
	(0.341)
Event 25-36 months after	1.316***
	(0.495)
Event 37-48 months after	1.503**
	(0.642)
LSOA dummies	Yes
Year dummies	Yes
Individual covariates	Yes
Average (untreated)	19.822
Observations	195,580

* p<0.10, ** p<0.05, *** p<0.01. The table shows the evolution of the impact of the digital television transition on the number of hours worked per week. I present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date. I also present the standard errors of these estimates in parentheses. I use as the dependent variable the number of hours that individuals work per week. I control for gender, age, ethnicity, marital status and the number of household members, as well as for LSOA and year fixed effects. I cluster standard errors at the LSOA level.

A.12. Individual Fixed Effects

Controlling for individual fixed effects allows accounting for time-invariant characteristics of individuals but also considerably limits the variation in employment that can be used in the analysis and reduces statistical power. These limitations are especially relevant in the context of this paper because the number of times that I observe individuals is only 3.84, on average, which limits or even precludes the possibility of exploring the parallel trends assumption of the analysis and the dynamics in the effect of the switchover on employment while accounting for individual fixed effects. Yet, in this section I examine whether the results of the paper are robust to controlling for individual fixed effects, while overcoming the previous problem by estimating a difference-in-differences model that uses as the independent variable of interest an indicator for whether the digital transition has occurred in the LSOA of residence of individuals. In Columns 1–2 of Table A.22, I estimate the model controlling for year and LSOA fixed effects, while in Columns 3–4 I estimate the specification instead controlling for year and individual fixed effects. As in the main analysis, I use the probability of individuals having a job and the number of hours worked per week as the outcome variables. As shown, the estimates are positive, statistically significant and similar in magnitude regardless of the inclusion of LSOA or individual fixed effects.

Table A.22: Comparability between LSOA and Individual Fixed Effects

	LSOA FE		Individual FE	
	Probability of employment	Number of hours of work per week	Probability of employment	Number of hours of work per week
DT	0.013***	0.376***	0.013***	0.422***
	(0.003)	(0.121)	(0.002)	(0.096)
LSOA FE	Yes	Yes	No	No
Ind FE	No	No	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Average (untreated)	0.556	19.631	0.556	19.631
Observations	210,195	199,411	210,195	199,411

* p<0.10, ** p<0.05, *** p<0.01. The table shows the estimates of the effect of the digital television transition on the probability of employment and the number of hours worked per week, with standard errors in parentheses. I use as the independent variable of interest an indicator for whether the digital transition (DT) has occurred in the LSOA of residence of individuals. In Columns 1–2, I control for year and LSOA fixed effects. In Columns 3–4, I instead control for year and individual fixed effects.

A.13. Internet Connectivity

This section examines whether internet connectivity may play a role in the effect of the digital television transition on employment. This is unlikely because the digital transition simply upgraded television transmitters so that they stopped broadcasting analogue television signal and started providing high-power digital television signal. In Columns 1 and 2 of Table A.23, I study whether the digital television transition may be correlated with better internet connectivity by using as the dependent variable the probability of individuals having access to the internet and to broadband connectivity, respectively, and as the explanatory variable of interest an indicator for whether individuals have received access to digital television signal in their LSOA of residence by the time of the interview. I control for LSOA and year fixed effects. As shown, the estimates are small and not statistically significant, which is consistent with the hypothesis that the impact of the digital transition on employment did not take place through improvements in internet connectivity.

Table A.23: Internet and Broadband Access

	Internet access	Broadband access
DT	-0.001	0.000
	(0.002)	(0.003)
LSOA dummies	Yes	Yes
Year dummies	Yes	Yes
Average (untreated)	0.961	0.932
Observations	179,277	178,990

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. In Columns 1 and 2, I use as the dependent variable a dummy taking a value of 1 if the individual has internet and broadband connectivity, respectively, and 0 otherwise. The explanatory variable of interest is a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for LSOA and year fixed effects. The standard errors of the estimates are presented in parentheses. I cluster standard errors at the LSOA level.

A.14. Cable and Satellite Television

Another possible question is whether the introduction of the digital transition, which increased the number of public TV channels that were available from 5 to 40, may be correlated with other forms of private TV watching, such as cable or satellite TV. As other forms of watching television may also have an impact on individuals' labor supply, this section studies whether the digital switchover was correlated with private forms of TV viewing. I explore this possibility in Columns 1 and 2 of Table A.24, where I use as the dependent variable the likelihood of individuals having access to cable and satellite television, respectively, and as the explanatory variable of interest a dummy taking a value of 1 if the digital transition has occurred in the LSOA of residence of individuals by the time of the interview and 0 otherwise. I control for LSOA and year fixed effects. As shown, the estimates of the digital transition are small and not statistically significant, suggesting that the effect of the digital transition on employment was not driven by private forms of TV watching.

Table A.24: Cable or Satellite TV

	Satellite TV	Cable TV
DT	0.001	-0.001
	(0.004)	(0.004)
LSOA dummies	Yes	Yes
Year dummies	Yes	Yes
Average (untreated)	0.495	0.200
Observations	208,900	208,900

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. In Columns 1 and 2, I use as the dependent variable a dummy taking a value of 1 if the individual has satellite and cable TV access, respectively, and 0 otherwise. The explanatory variable of interest is a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I control for LSOA and year fixed effects. The standard errors of the estimates are presented in parentheses. I cluster standard errors at the LSOA level.

A.15. Local TV

Another possible question is whether the impact of the switchover on employment may be (partly) due to the digital transition affecting the local TV sector and, therefore, labor demand. I explore this possibility by estimating whether obtaining access to digital signal changes the likelihood of individuals working in the communications/media sector, while controlling for LSOA and year fixed effects. As shown in Table A.25, the digital transition has a small and not statistically significant effect on the probability of individuals working in the communications/media sector, which suggests that the effect of the digital transition on employment is not due to changes in labor demand.

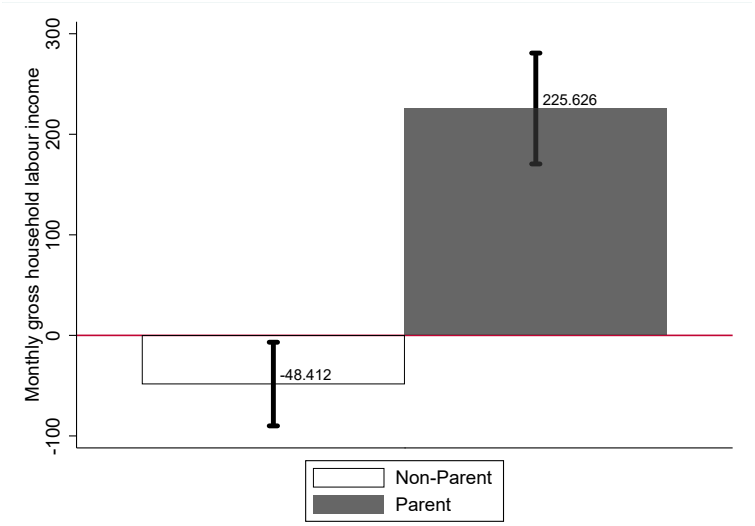
Table A.25: Local TV

	Probability of employment in the communications/media sector
DT	0.000
	(0.001)
LSOA dummies	Yes
Year dummies	Yes
Average (untreated)	0.018
Observations	210,195

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. I use as the dependent variable a dummy taking a value of 1 if the individual has a job in the communications/media sector and 0 otherwise, and as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for LSOA and year fixed effects. The standard errors of the estimates are presented in parentheses. I cluster standard errors at the LSOA level.

A.16. Labor Income

Figure A.13: Labor Income



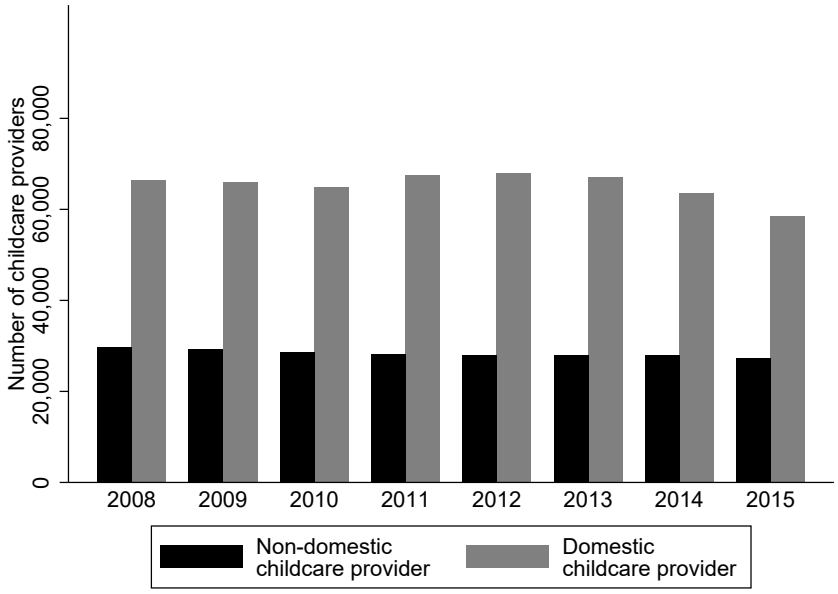
The figure presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. The figure presents the estimates of the effect of the switchover on labor earnings for parents and nonparents, together with their 95% confidence intervals. I use as the dependent variable the gross monthly household labor earnings of individuals. I cluster standard errors at the LSOA level.

A.17. Childcare Provision

Given that the effect of the switchover on employment is driven by parents, it is relevant to provide some context regarding childcare provision in the UK, as well as to examine whether the implementation of the digital transition might have been correlated with access to childcare. In the UK, there are two main types of childcare providers. The first are those based on domestic premises, which can be the home of the childcare provider or the home of the child being taken care of. These providers are generally self-employed individuals and, thus, are private-based. The second type are childcare providers that take care of children on nondomestic premises, such as nurseries and preschools, and two thirds of these are private. Childcare in the UK entails a substantial cost for parents, regardless of whether it is provided by public or private providers. More specifically, the average cost per week of full-time childcare (50 hours per week) in 2021 was 308.5 and 276.19 pounds for private and public providers on nondomestic premises, respectively, and 257.13 pounds per week for childcare providers on domestic premises. Childcare is only fully subsidized for low-income families when children are two years old and is partially subsidized (15 free hours of childcare per week) for any family with children aged 3 or 4 years old.

I next provide two sets of evidence to examine whether childcare provision may have played a role on the effect of the switchover on employment. First, I explore how childcare provision has evolved during the period of study. Using information from the Office for Standards in Education, Children's Services and Skills, Figure A.14 shows that the number of existing childcare providers in the UK was stable over the period of analysis, suggesting that there were no important changes in the degree of childcare provision during this period. Second, I estimate whether obtaining access to digital signal changes the likelihood of individuals using childcare services, while controlling for LSOA and year fixed effects. I present the results in Table A.26. As shown, the estimate of the effect of the digital transition is negligible and not statistically significant, which suggests that the effect of the switchover on employment is not driven by changes in childcare provision.

Figure A.14: Number of Childcare Providers



The figure uses data from the Office for Standards in Education, Children's Services and Skills to show the evolution of the number of domestic and nondomestic childcare providers over the period of analysis.

Table A.26: Childcare Provision

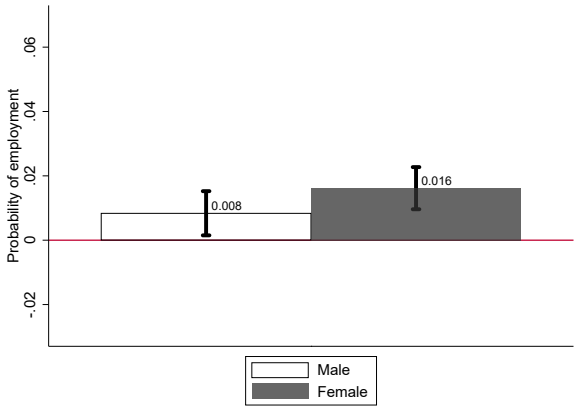
	Probability of using childcare
DT	0.000
	(0.002)
LSOA dummies	Yes
Year dummies	Yes
Average (untreated)	0.079
Observations	174,546

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. I use as the dependent variable the likelihood of individuals using childcare services and as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I also control for LSOA and year fixed effects. The standard errors of the estimates are presented in parentheses. I cluster standard errors at the LSOA level.

A.18. Gender Equality

This section explores whether the effect of the switchover on employment differs by gender, in order to quantify the effect of television on gender equality in the labor market. Figure A.15 displays the estimates. As shown, the switchover increases the probability of females and males having a job and the estimates are significant at the 1% and 5% confidence level, respectively. Moreover, the estimate of the impact of the digital transition for females is double in size compared to that for males. Although the estimates are not statistically different by gender, the magnitudes suggest that the digital transition may reduce gender inequality in the labor market. Regarding the size of this reduction, the digital transition increases the employment probability of females by 1.6 percentage points but only by 0.8 percentage points for males. According to OECD data, in the UK the average employment probability of females was 53.9% in the year prior to the start of the switchover, whereas it was 66.7% for males.[42] Therefore, the introduction of digital television in the UK may have decreased the gender gap in employment probability by 6.3%.

Figure A.15: Gender Equality



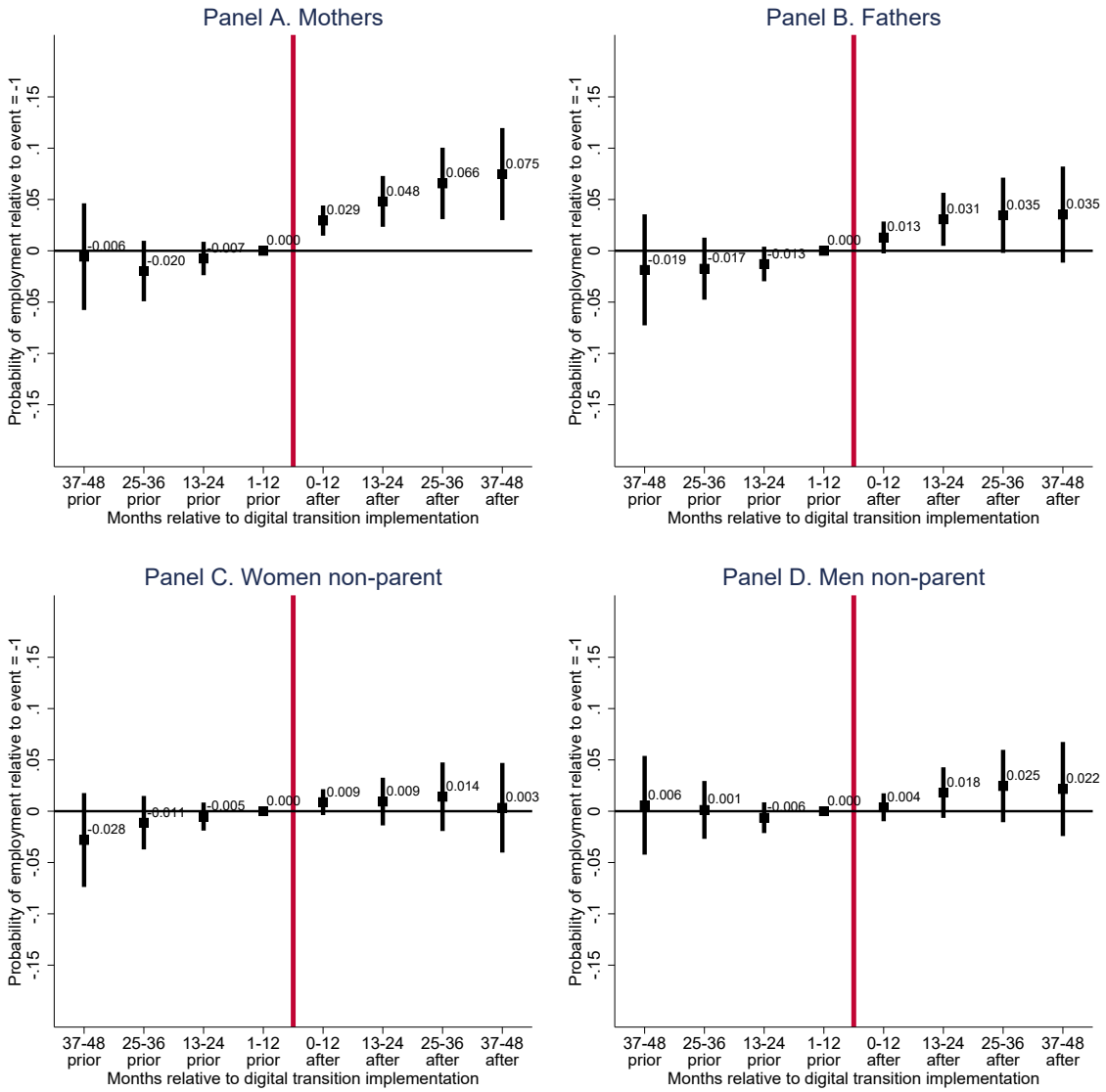
The figure presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. The figure presents the estimates of the effect of the switchover on employment for males and females, together with their 95% confidence intervals. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I cluster standard errors at the LSOA level.

[42] This is reported in https://stats.oecd.org/ (accessed April 15, 2019).

A.19. Event Study Estimates by Parental Status and Gender

This section estimates the baseline event study specification for the subsamples of male nonparents, female nonparents, fathers and mothers. Although it is important to show that the parallel trends assumption holds and how the dynamics of the effect of the switchover on employment differ across these subgroups, which are the key ones of the paper, it is also important to note that this subanalysis is subject to important limitations. For example, these subgroups have a considerably smaller sample size than the full sample, and the event study specification has a complex functional form, which may hinder the exploration of dynamics in the effect of the switchover on employment, as well as lead to imprecisely estimated estimates. I present the estimates in Figure A.16. The estimates of the years prior to the switchover are small and not statistically significant for all subgroups, while the estimates of the years after the switchover are positive and statistically significant for fathers and mothers.

Figure A.16: Evolution of the Effect of the Digital Transition

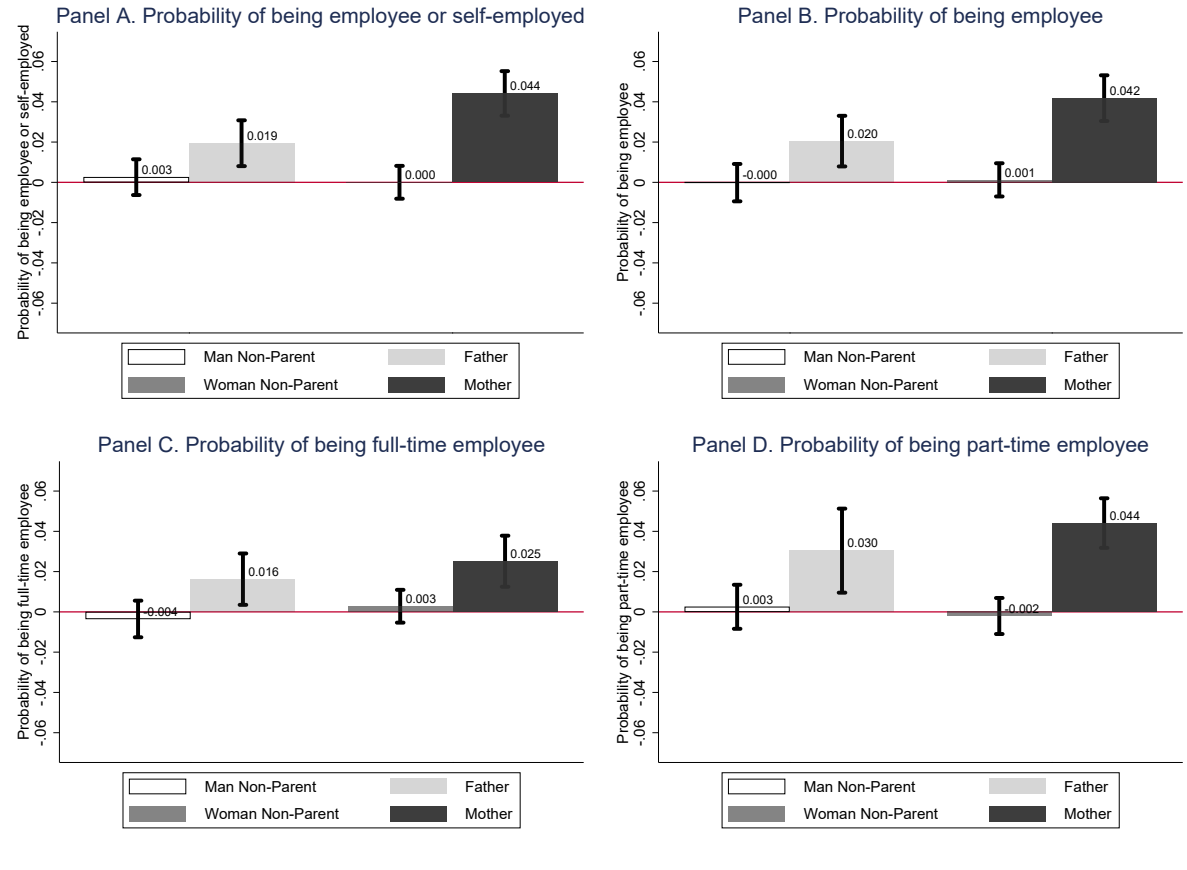


The figure shows the evolution of the impact of the digital television transition on employment. Panels A–D present the estimates of the event dummies for the number of years that have passed or are left relative to the digital transition date of the baseline event study model for mothers, fathers, female nonparents and male nonparents, respectively. I also present the 95% confidence intervals of these estimates. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I cluster standard errors at the LSOA level.

A.20. Type of Employment – Alternative Definitions

In Figure 13, I explored the effect of the digital transition on different types of employment using unconditional definitions of the outcome variables, which took a value of 1 for the labor status of interest and 0 otherwise. This allows exploring the effect of the switchover on different types of employment while accounting for all labor statuses that individuals can have, thus minimizing the risk of selection bias. Yet, it is also relevant to explore whether the effect of the switchover on employment is due to individuals transitioning from inactivity or unemployment to different types of employment, or due to other reasons. I explore this in Figure A.17 by replicating the analysis of Figure 13 but using alternative outcome variables. More specifically, I use a dummy taking a value of 1 if the individual is (i) an employee or self-employed, (ii) an employee, (iii) a full-time employee or (iv) part-time employee in panels A–D, respectively. These dummies take a value of 0 only if the individual is inactive or unemployed. On the one hand, using these alternative definitions of types of employment (which exclude certain labor statuses) as the outcome variable precludes the possibility of knowing whether the estimates of the effect of the switchover on type of employment are driven by the treatment itself or by changes in the sample composition due to selection bias. On the other hand, these dependent variables allow for a better understanding of the labor transitions that lead to the switchover having a positive effect on employment. As shown in Figure A.17, the effect of the switchover on employment is mainly driven by increases in the probabilities of mothers and fathers being employees and part-time employees instead of unemployed or inactive. It is also important to realize that the estimate of the effect of the switchover on part-time employment for fathers is imprecisely estimated, which hinders the comparison of this impact by gender.

Figure A.17: Type of Employment – Alternative Definitions

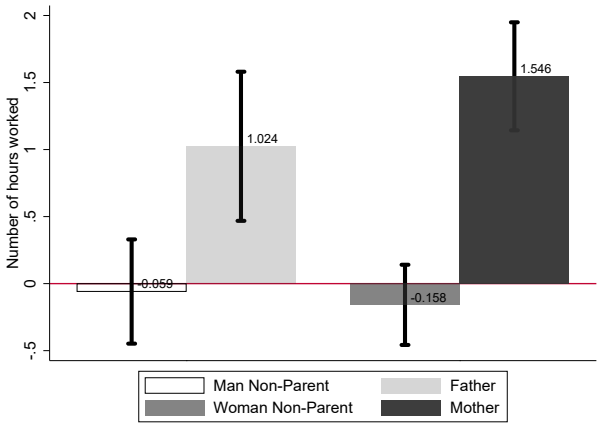


Panels A–D examine the impact of television on the following labor outcomes: the probability of being (i) employed or self-employed, (ii) an employee, (iii) a part-time employee and (iv) a full-time employee, respectively. The outcome variables take a value of 1 for the labor status of interest and 0 if the individual is inactive or unemployed. The explanatory variable of interest is a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I cluster standard errors at the LSOA level.

A.21. Number of Hours Worked

This paper studies whether the digital transition has an impact on employment probabilities. It is also relevant to examine whether television changes the intensive margin of the labor supply. To do so, I reestimate the specification of panel B of Figure 12 and use the number of hours worked per week as the dependent variable. As shown in Figure A.18, the digital transition increases working hours for mothers and fathers, with estimates statistically significant at the 5% confidence level. The magnitude of the estimate for mothers is considerably higher than for fathers, and the estimate for fathers is more imprecisely estimated. A possible explanation for these findings is that by keeping children busy, the digital switchover reduced the childcare burden for parents, and especially for mothers, who were thus able to work more. Lastly, I show that the digital transition has no impact on the number of hours worked for nonparents.

Figure A.18: Number of Hours Worked

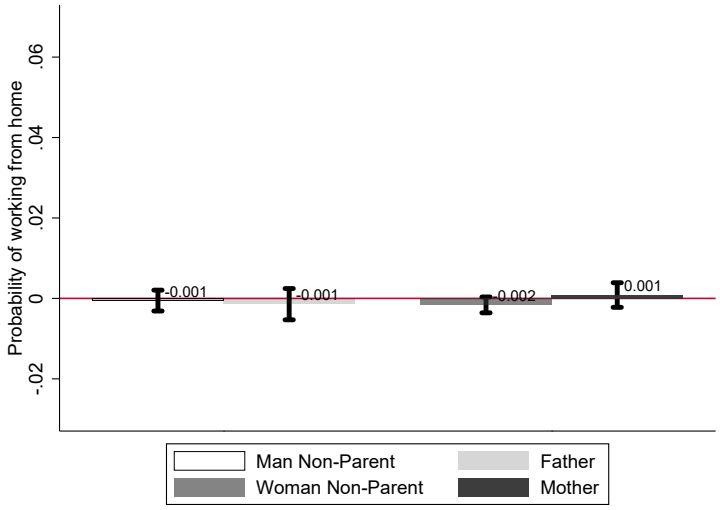


The figure presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. The figure presents the estimate of the effect of the switchover on working hours for mothers, fathers, male nonparents and female nonparents, together with the 95% confidence intervals of these estimates. I use as the dependent variable the number of hours of work that individuals do per week. I cluster standard errors at the LSOA level.

A.22. Work from Home

This subsection explores whether the digital transition has an impact on the probability of adults working from home, by parental status and gender. I reestimate the analysis of panel B of Figure 12 using as the outcome variable a dummy that takes a value of 1 if the individual works from home and 0 otherwise. Figure A.19 shows that the digital transition has no impact on the probability of individuals working from home, independently of their parental status and gender.

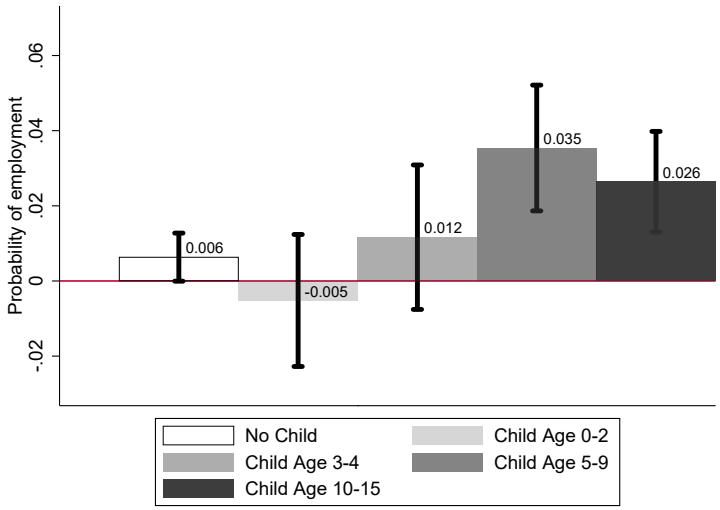
Figure A.19: Work from Home



The figure presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. The figure presents the estimate of the effect of the switchover on the probability of working from home for mothers, fathers, male nonparents and female nonparents, together with the 95% confidence intervals of these estimates. I use as the dependent variable a dummy that takes a value of 1 if the individual works from home and 0 otherwise. I cluster standard errors at the LSOA level.

A.23. Heterogeneity in the Age of Children

Figure A.20: Heterogeneity in the Age of Children



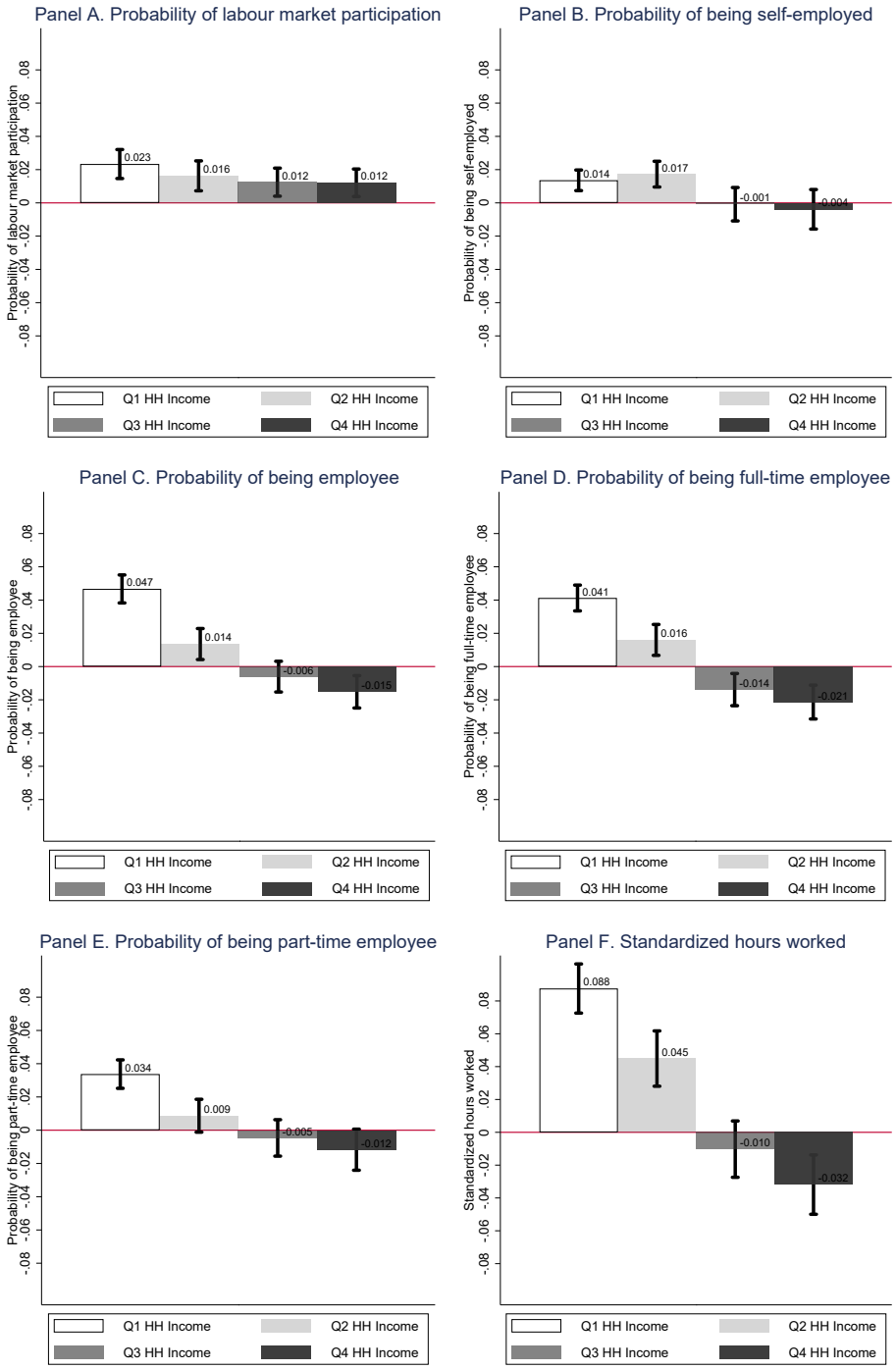
The figure presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. The figure presents this estimate for nonparents and parents of a child aged 0–2, 3–4, 5–9 and 10–15 years old. In all panels, I present the estimates together with their 95% confidence intervals. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I cluster standard errors at the LSOA level.

A.24. Heterogeneity in Income

In this section, I examine whether the effects of the digital transition on the main outcomes that I have used throughout the analysis (other than the probability of employment) are heterogeneous in terms of household income. To explore this, I reestimate the subgroup analysis by household income quartiles in panel D of Figure 14, using as the dependent variable the probability of individuals (i) participating in the labor market, (ii) being self-employed, (iii) being an employee and (iv) holding a full-time or (v) part-time contract. I also use as the dependent variable a standardized outcome of the number of hours of (vi) work and (vii) housework that individuals do per week, to make the estimates more comparable across panels. Lastly, I use as the dependent variable the outcomes regarding whether individuals report that (viii) caring prevents them from working, (ix) they have stopped working to look after family and (x) they believe that families suffer when the mother works full-time. I present the estimates in Figures A.21 and A.22. As shown, the positive effects of the digital transition on labor outcomes are driven by individuals who have a low household income and, thus, higher financial constraints. The digital transition also has a modest but negative effect on some labor outcomes for high-income individuals, which, as previously explained in the paper, has two potential explanations. First, high-income individuals may be more able to access formal childcare and, thus, may not need television keeping their children busy to be able to work more. Second, the digital switchover increased TV viewing time for adults. Although this effect was more modest than for children, it could have come at the cost of adults reducing their labor supply. Aside from labor outcomes, I show that the digital transition only reduces the number of hours of housework for low-income individuals. Moreover, the digital transition seems to reduce family burdens (caring preventing employment) especially for low income individuals, albeit the estimates are imprecisely estimated because the variables on family burdens are based on small samples and, thus, subdividing the analysis further by income quartiles leads to a lack of statistical power. The same issue applies to the variable regarding whether individuals believe that families suffer if the mother works full-time, for which I find modest reductions for high-income individuals as a response to the digital transition. This could be explained by the digital transi-

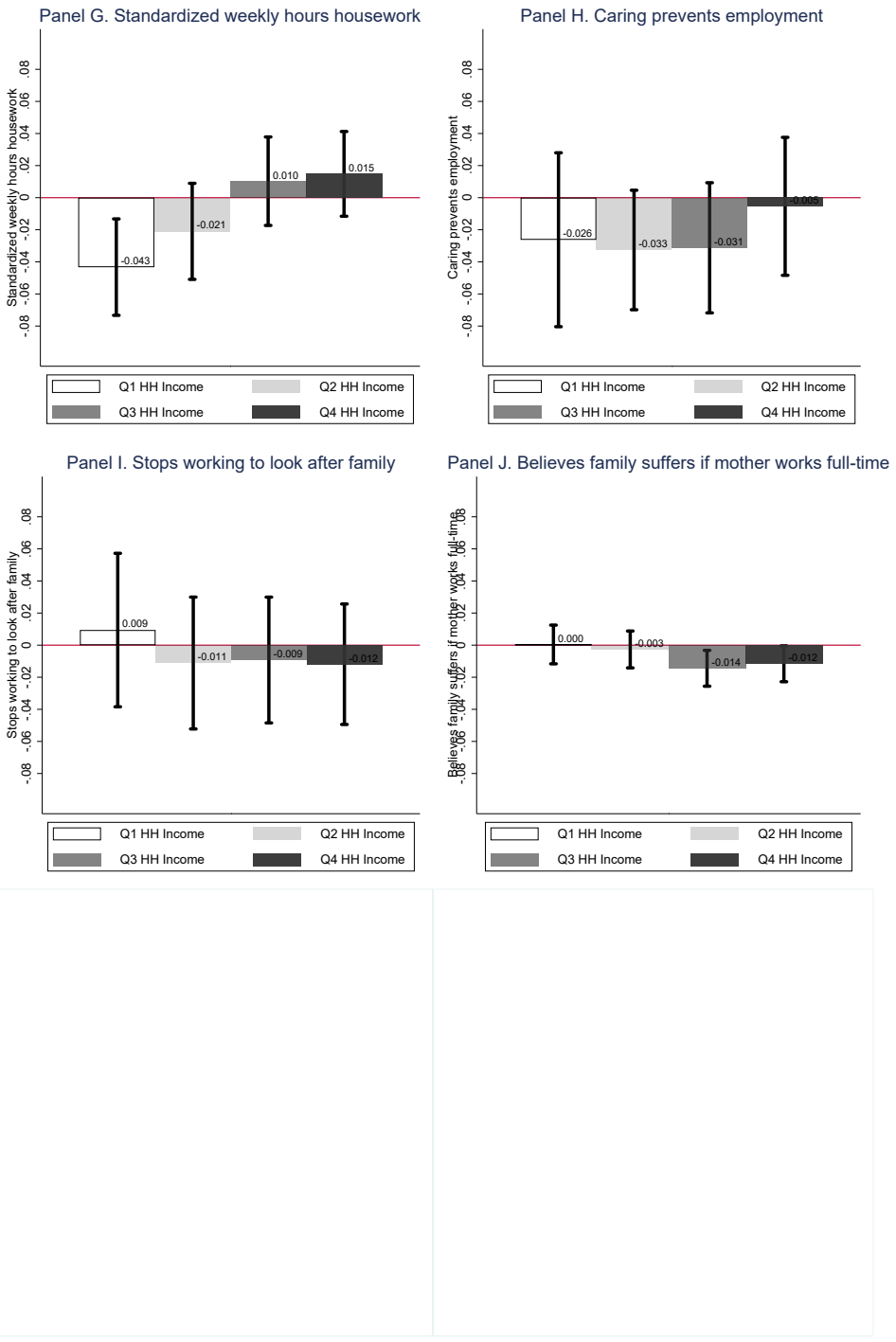
tion also somewhat reducing family burdens for wealthier families or by high-income individuals perceiving that other families (that may be poorer) are suffering less when the mother works more.

Figure A.21: Results by Income Quartile



The figure presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. The figure presents this estimate for individuals by household income quartile. In all panels, I present the estimates together with their 95% confidence intervals. In panels A–E, I use as the dependent variable a dummy taking a value of 1 if the individual is (i) active in the labor force, (ii) self-employed, (iii) an employee, and holds a (iv) full-time or (v) a part-time contract, respectively, and 0 otherwise. In panels F–G, I use a standardized variable on the number of hours worked and the number of hours of housework per week, respectively. In panels H–J, I use the outcome variables on reported family burdens used in Section V.C. I cluster standard errors at the LSOA level.

Figure A.22: Results by Income Quartile (Continued)



The figure presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. The figure presents this estimate for individuals by household income quartile. In all panels, I present the estimates together with their 95% confidence intervals. In panels A–E, I use as the dependent variable a dummy taking a value of 1 if the individual is (i) active in the labor force, (ii) self-employed, (iii) an employee, and holds a (iv) full-time or (v) a part-time contract, respectively, and 0 otherwise. In panels F–G, I use a standardized variable on the number of hours worked and the number of hours of housework per week, respectively. In panels H–J, I use the outcome variables on reported family burdens used in Section V.C. I cluster standard errors at the LSOA level.

A.25. Local Services

It is important to explore whether the impact of television on employment probabilities varies according to the amount of public services provided in the local area. Table A.27 presents the estimates of a model similar to the baseline specification but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. In Columns 1–6, I split the sample according to the quality of (i) primary schools, (ii) leisure activities and (iii) public transport in the local area. In particular, Columns 1–2, 3–4 and 5–6 study the effect of television on employment probabilities when the quality of primary schools, leisure activities and public transport individuals report having in their local area is above/below the average of the sample, respectively. I find that the estimates of the digital transition are positive and statistically significant, independently of the quality of the services of the local area, albeit higher in size when the quality of public transport is poor and when the quality of leisure activities is high. A possible explanation for this is that when the quality of leisure activities is high in the local area, parents may spend more time going to leisure areas with children. By increasing the time that children spend watching television, the digital transition may replace this type of activities, thus saving more time for parents living in high-quality leisure areas. Moreover, parents who live in regions where the quality of public transport is poor may have to spend more time travelling to leisure or extracurricular activities with children. As the digital transition increases children's TV viewing time, keeping them busy, it may reduce the number of alternative activities in which children get involved, thus saving more time for parents who previously had to spend more time on public transport when engaging in alternative activities.

Table A.27: Heterogeneity in Local Services

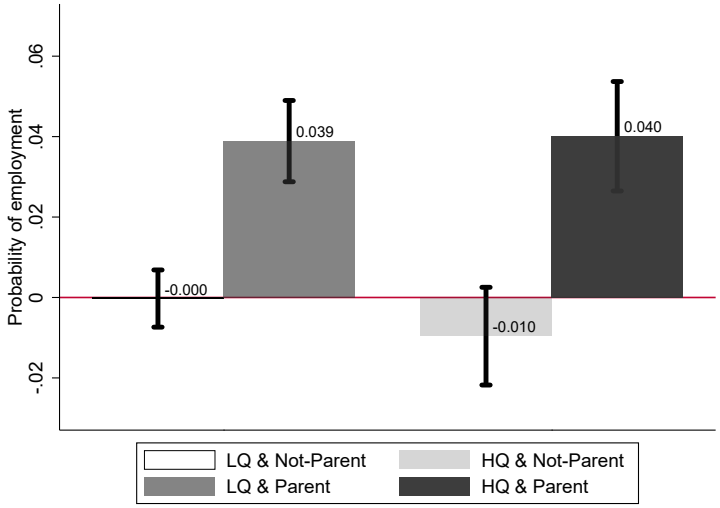
	Probability of employment					
	Primary schools		Leisure activities		Public transport	
	High	Poor	High	Poor	High	Poor
DT	0.013***	0.014***	0.015***	0.011**	0.011***	0.018***
	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
LSOA dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Average (untreated)	0.599	0.545	0.572	0.553	0.535	0.574
Observations	53,042	118,840	107,047	83,617	99,385	83,561

* p<0.10, ** p<0.05, *** p<0.01. The table presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition (DT) has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. Columns 1–2, 3–4 and 5–6 present the estimates of the effect of the switchover on employment for individuals living in areas where the quality of primary schools, leisure activities and public transport is above/below the average quality for the sample, respectively. I also present the standard errors of these estimates in parentheses. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I cluster standard errors at the LSOA level.

A.26. Level of Qualification

This subsection explores whether the impact of the digital transition on employment probabilities varies by parental status and level of qualification. I classify individuals as high-qualified if their highest qualification is a university degree and low-qualified otherwise. Figure A.23 shows that the estimates of the effect of the digital transition on employment probabilities are of similar size and not statistically different between high-qualified and low-qualified parents, suggesting that by keeping children busy, the digital transition increased labor supply for parents independently of their level of education. A possible question is whether the results presented in this analysis are consistent with those of the heterogeneity analysis by income, where I showed that the digital switchover considerably increased the employment probability of low-income individuals and had a null effect on the employment probability of high-income individuals. Here, it is important to bear in mind that the subsample of high-income individuals is not the same as that with high-qualifications. More specifically, the correlation between being a high-income and high-qualified individual is 32%, which is positive but not high, possibly due to the fact that more educated individuals do not necessarily work in occupations that pay the most.

Figure A.23: Parental Status and Level of Qualification

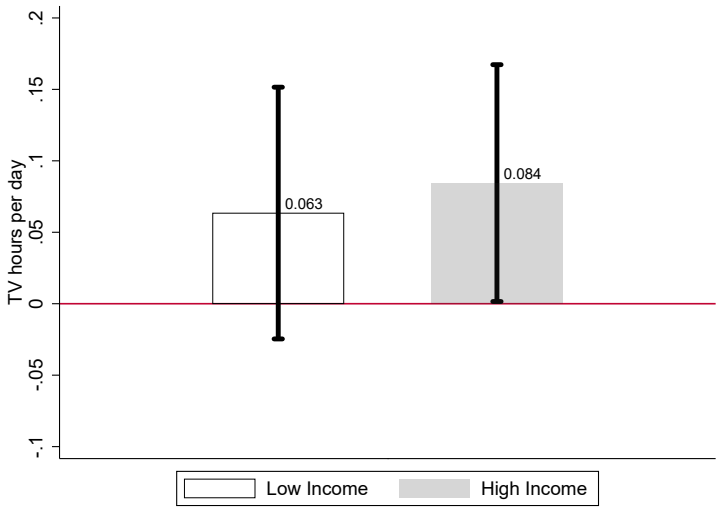


The figure presents the estimates of a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. The figure presents the estimate of the effect of the switchover on employment for low-qualified nonparents, low-qualified parents, high-qualified nonparents and high-qualified parents. In all panels, I present the estimates together with their 95% confidence intervals. I use as the dependent variable a dummy taking a value of 1 if the individual has a job and 0 otherwise. I cluster standard errors at the LSOA level.

A.27. Adults' Television Viewing by Income

I next explore further whether the digital transition may have had a null or modest negative effect on labor supply for high-income adults, due to an increase in their TV viewing time. I do so by estimating the effect of the digital transition on the number of hours that adults spend watching TV per day by income. The TV viewing information I use in this part of the analysis comes from the Understanding Society survey and is subject to an important limitation, which is that there is only TV viewing data for adults in two waves of the survey. This precludes the possibility of estimating dynamic effects or splitting the sample into small subgroups. I address these concerns by using as the explanatory variable a dummy for whether the digital transition has occurred in the LSOA of residence of individuals by the date of the interview and by splitting the sample based on the median household income rather than quartiles. As shown in Figure A.24, I find a positive effect of the switchover on TV viewing time for adults regardless of their household income, albeit the impact is 33% greater in magnitude for high-income individuals. The estimates are not precisely estimated, however, possibly due to the reduced sample size I use in this analysis, which limits the statistical power of the model.

Figure A.24: Adults' Television Viewing by Income



The figure presents the estimates of the effect of the switchover on the TV viewing time of adults while splitting the sample based on the median household income. I use as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I use as the dependent outcome the number of hours that adults spend watching TV per day. I present the estimates together with their 95% confidence intervals. I cluster standard errors at the LSOA level.

A.28. Other Activities

The positive impact of television on employment probabilities may also be driven by television changing the time allocation of adults for activities unrelated to family burdens. Columns 1–11 of Table A.28 test for this hypothesis by examining the effect of the digital transition on the following dependent variables: the number of hours adults spend (i) watching TV, (ii) sleeping and (iii) commuting per day, and the frequency with which individuals (iv) do sports, (v) take part in the arts, (vi) attend arts events, (vii) go for a walk, (viii) eat with family, (ix) visit friends, (x) read and (xi) get involved in any other kind of leisure activity, respectively.[43] One limitation of this part of the analysis is that there is only information in two waves of the Understanding Society survey for most of these time allocation variables. This precludes the possibility of studying the dynamic effect of the digital transition on these outcome variables, and I thus estimate a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. As shown in Table A.28, the digital transition only increases the number of hours of television viewing and reduces reading frequency and sleeping hours. The latter findings are unlikely to explain the positive impact of the digital transition on employment probabilities.

[43] Some of these frequencies are measured using different scales. For example, the frequency of sports ranges from 1 (do not do any sport) to 7 (3 or more times per week). In contrast, the frequency of taking part in the arts or attending arts events ranges from 1 (once in the past year) to 5 (at least once per week). See www.understandingsociety.ac.uk/documentation/mainstage/dataset-documentation (accessed February 1, 2019) for more information.

Table A.28: Time Allocation

	TV hours	Hours of sleep	Hours commuting	Sports	Arts	Arts events	Walk	Eat with family	Visit friends	Read	Other leisure
DT	0.076**	-0.076**	-0.004	-0.006	-0.010	-0.013	0.159	0.029	-0.010*	-0.018**	-0.019
	(0.037)	(0.032)	(0.004)	(0.037)	(0.020)	(0.025)	(0.221)	(0.045)	(0.006)	(0.008)	(0.038)
LSOA dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Average (untreated)	2.934	7.052	0.445	5.359	4.469	2.851	17.562	2.784	0.868	0.659	3.949
Observations	56,354	67,805	99,492	35,710	44,446	43,131	51,189	4,843	56,637	61,127	32,313

* p<0.10, ** p<0.05, *** p<0.01. Columns 1–11 use as the dependent variable the number of hours that adults spend (i) watching TV, (ii) sleeping and (iii) commuting per day, and the frequency with which individuals (iv) do sports, (v) take part in the arts, (vi) attend arts events, (vii) go for a walk, (viii) eat with family, (ix) visit friends, (x) read and (xi) get involved in any other kind of leisure activity, respectively. One limitation of this part of the analysis is that there is only information in two waves of the Understanding Society survey for most of these time allocation variables. This precludes the possibility of studying the dynamic effect of the digital transition on these outcome variables, and I thus estimate a model similar to the baseline one but which uses as the explanatory variable of interest a dummy that takes a value of 1 if the digital transition has occurred in the LSOA of residence of the individual by the time of the interview and 0 otherwise. I present the standard errors of the estimates in parentheses. I cluster standard errors at the LSOA level.