

Web Appendix[†]

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[†]This Web Appendix (not for publication) provides additional material discussed in the unpublished manuscript 'Parental Response to Early Human Capital Shocks: Evidence from the Chernobyl Accident' by Martin Halla and with Martina Zweimüller.

A Existing evidence on the effects of the Chernobyl accident on reproductive outcomes

The International Commission on Radiological Protection (ICRP) considers an effective dose of 100 mSv as a threshold for effects after in utero exposure to ionizing radiation, including the induction of cancer. Whether the Chernobyl accident caused any negative health effects on individuals living in European countries is still under debate, despite the much lower radiation dose those individuals were exposed to. (See for example the recent debate in *The Lancet* (Holt, 2010).)

The existing evidence on the health impact of in utero exposure to the Chernobyl accident (summarized below) is mainly based on epidemiological studies analyzing time trends (across differently exposed regions¹) in the rates of live births, stillbirths, spontaneous (and induced) abortions, infant mortality and perinatal and postnatal outcomes (e. g. pre-term birth, low birth weight, congenital malformations, incidence of specific diseases). Any (short-term) deviations from the long-term trend after the Chernobyl accident are cautiously interpreted as evidence for radiation-related health effects. However, most authors acknowledge the limited power of their studies to detect small effects and emphasize that causal inference is hardly possible based on ecological studies. In light of these limitations, most reviews of the existing evidence conclude that there is no consistent evidence of detrimental effects of the Chernobyl disaster except for an increase in thyroid cancer for individuals exposed in childhood, particularly in Belarus, Ukraine and Russia. (e. g. Little, 1993; WHO, 2006; UNSCEAR, 2000).

There is some evidence for an increase in the proportion of stillbirths and the early infant (or perinatal) mortality rate after the Chernobyl accident in Germany.² However, these results have been challenged by other studies using German data and studies for other countries (e. g. Finland, Sweden).³ Furthermore, there is no evidence for a significant relationship between the level of fallout and the rate of miscarriages, congenital malformations or other postnatal outcomes (pre-term birth, low birth weight, childhood cancer).⁴ In contrast, there is some evidence for a decrease in the birth rate (independent of the fallout level) 9-11 months after the accident in Sweden, Finland, Norway and Italy and a temporary increase in the rate of induced abortions in Greece, Italy and Sweden.⁵ Both effects may be attributed to the conflicting information in the media and the anxiety of pregnant women in the first month after the Chernobyl accident.

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¹However, this is not done in a difference-in-difference framework.

²See, Lüning *et al.* (1989); Scherb *et al.* (1999); Körblein and Küchenhoff (1997); Scherb *et al.* (2000).

³See, Blettner (2000); Grosche *et al.* (1997); Auvinen *et al.* (2001); Ericson and Kallen (1994).

⁴See, Auvinen *et al.* (2001); Ericson and Kallen (1994); Irgens *et al.* (1991); Haeusler *et al.* (1992); Harjulehto *et al.* (1989).

⁵See, Auvinen *et al.* (2001); Ericson and Kallen (1994); Bertollini *et al.* (1990); Irgens *et al.* (1991); Trichopoulos *et al.* (1987). Haeusler *et al.* (1992) find no effect on the counseling rate at pregnancy termination clinics in southern Austria.

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B Data and descriptive statistics

Table B.1: Average birth outcomes in communities with and without data on ^{137}Cs ground deposition

	Without data (N=73, 086)	With data (N=103, 531)	Difference Mean (p-value)
	Mean (S.D.)	Mean (S.D.)	
Male birth	51.33 (49.98)	51.24 (49.98)	0.09 (0.71)
Gestation length (in days)	273.54 (12.52)	273.34 (12.60)	0.20 (0.00)
Birth weight (in decagram)	328.12 (53.12)	326.50 (53.27)	1.63 (0.00)
Preterm birth (<37 weeks)	5.03 (21.85)	5.11 (22.02)	-0.08 (0.44)
Low birth weight (<2500 g)	5.52 (22.84)	5.87 (23.50)	-0.35 (0.00)
Apgar score (1 min. after birth)	8.79 (1.24)	8.72 (1.23)	0.07 (0.00)
Apgar score (5 min. after birth)	9.70 (0.80)	9.68 (0.83)	0.02 (0.00)
Apgar score (10 min. after birth)	9.90 (0.54)	9.90 (0.56)	0.01 (0.05)

This table presents average birth outcomes for mothers in communities for which data on ^{137}Cs ground deposition is available (column 2) and communities for which we have no measure of the contamination level at the community level (column 1). The figures are based on birth cohort 0, which was conceived between 08/1984 and 08/1985 and born before the accident. In parentheses standard deviations are reported. Column 3 presents the difference along with the p-value. Estimations are based on individual-level data from the *Austrian Birth Register* before making any restrictions as explained in Section 3.2 of the paper.

Figure B.1: Birth cohorts included in the estimation samples

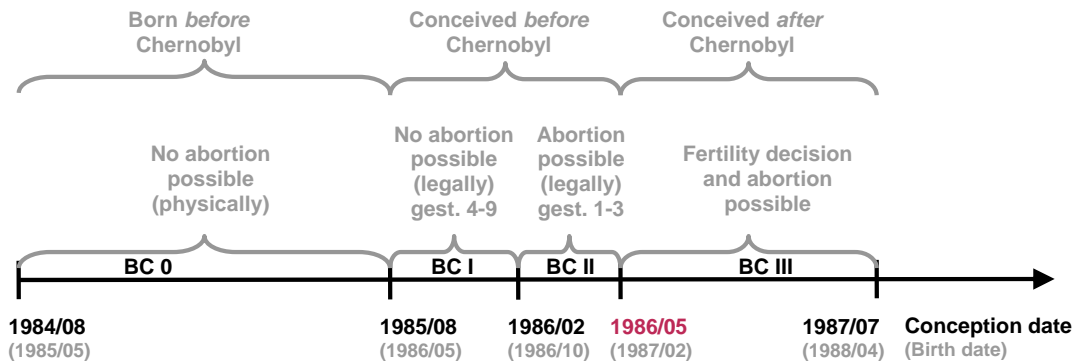


Table B.2: Outcome variables

Outcome	Level of available data	Measurements	Data source
Live births	Community	Absolute number per 1,000 female inhabitants aged 15-39 in 1981 in the respective education group	<i>Austrian Birth Register</i>
Stillbirth	Individual	Binary variable	<i>Austrian Birth Register</i>
Miscarriages	Not observable	Proxied by sex-ratio (binary variable that indicates whether child's sex is male)	<i>Austrian Birth Register</i>
Health at birth	Individual	Gestation length, weight, Apgar scores	<i>Austrian Birth Register</i>
Maternity leave	Individual	Length in days	<i>ASSD</i> ^a
Infant mortality	Individual	Binary variables that indicate whether child is still alive after 24 hours/7 days/1 month/1 year	<i>Austrian Birth & Death Register</i>
Parental leave	Individual	Length in days, take-up	<i>ASSD</i> ^a
Labor market outcomes	Individual	For mother and child: apprenticeship training, employment, wages	<i>ASSD</i> ^a
Post-treatment fertility	Individual	Number of children	<i>Austrian Birth Register/ASSD</i> ^a

^a *Austrian Social Security Database*

Table B.3: Percent share in workforce by age and socioeconomic status of family

Age of child	All families	Low SES	Higher SES
15	59.5	76.3	52.5
17	71.9	86.5	65.8
18/19	89.1	95.6	86.4

Own calculations based on [Knittler \(2011\)](#); see footnote 35.

C Additional estimation output

C.1 Estimation output for pooled sample

In this section, we summarize the main estimation results based on the pooled sample (i.e., this includes families with low and higher socioeconomic background). Table [C.1.1](#) summarizes radiation effects on pre- and postnatal culling, and health at birth. Table [C.1.2](#) summarizes radiation effects on parental response behavior, and shows the estimated effects on fertility and maternal labor force participation for selected years after birth.

Table C.1.1: Pooled sample: Radiation effects on pre- and postnatal culling and health at birth

	Mean	37 kBq	42 kBq	47 kBq
Live birth				
Live birth rate ^a	5.502	-0.092 (0.057)	-0.064 (0.069)	-0.101 (0.078)
Stillbirth				
<i>Prob</i> (Stillbirth) ^b	0.004	0.000 (0.002)	0.003 (0.002)	0.001 (0.002)
Fetal death				
Proxy: <i>Prob</i> (male) ^c	0.508	-0.022 (0.016)	-0.023 (0.020)	-0.037 (0.023)
Infant survival^d				
Alive after 24 hours	0.994	-0.000 (0.002)	-0.003 (0.003)	-0.002 (0.003)
Alive after 7 days	0.992	-0.000 (0.003)	-0.001 (0.003)	0.000 (0.004)
Alive after 1 month	0.990	0.000 (0.003)	-0.000 (0.003)	0.001 (0.004)
Alive after 1 year	0.987	0.002 (0.004)	0.002 (0.004)	0.003 (0.005)
Preterm birth^e				
Culling & scarring	0.049	-0.013** (0.006)	-0.014** (0.008)	-0.018** (0.009)
Scarring	0.048	0.003 (0.006)	0.002 (0.007)	-0.001 (0.008)
Low birth weight^f				
Culling & scarring	0.058	-0.023*** (0.006)	-0.027*** (0.008)	-0.027*** (0.008)
Scarring	0.057	-0.012** (0.006)	-0.016** (0.007)	-0.016** (0.008)
Apgar score^g				
Culling & scarring	9.890	0.021 (0.017)	0.018 (0.020)	0.009 (0.025)
Scarring	9.890	0.008 (0.016)	0.005 (0.019)	-0.004 (0.025)
Maternity leave (post)^h				
Culling & scarring	62.64	-0.957*** (0.356)	-0.917** (0.440)	-1.069** (0.506)
Scarring	62.62	-0.598* (0.349)	-0.558 (0.435)	-0.710 (0.502)

This table summarizes estimation results based on community-level data (first row) and individual-level data covering births conceived between 08/1984 and 07/1987. Each entry represents a separate regression, where the dependent variable is indicated in the first column, and shows the estimated coefficient for treated units from the *BCII*. This cohort was conceived between 02/1986 and 04/1986 and was between 0 and 3 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. ^a The dependent variable is equal to the number of live births per 1,000 female inhabitants aged between 15 and 39 years of age in 1981 (in the respective education group) divided by the respective sample mean. ^b The dependent variable is equal to one if the child is a stillbirth and zero if the child is a live birth. ^c The dependent variable is equal to one if the child is male, and zero otherwise. ^d The dependent variable is equal to one if the child is still alive after the respective time period after birth. ^e The dependent variable is equal to one if the gestation period is below 37 weeks, and zero otherwise. ^f The dependent variable is equal to one if the birth weight is lower than 2,500 grams, and zero otherwise. ^g The dependent variable is equal to the Apgar score after ten minutes. ^h The dependent variable is equal to the number of days on maternity leave after birth of the pivotal child. Further control variable: binary indicator for multiple birth.

Table C.1.2: Pooled sample: Parental response (scarring)

ALL MOTHERS				
	Mean	37 kBq	42 kBq	47 kBq
Fertility				
5 yrs after ^a	0.393	-0.001 (0.020)	-0.025 (0.021)	-0.045* (0.025)
10 yrs after ^a	0.596	-0.003 (0.030)	-0.042 (0.030)	-0.052 (0.036)
15 yrs after ^a	0.664	-0.013 (0.034)	-0.057* (0.033)	-0.074* (0.039)
20 yrs after ^a	0.683	-0.009 (0.036)	-0.057* (0.034)	-0.071* (0.040)
Maternal labor force participation				
5 yrs after ^b	0.478	0.005 (0.021)	0.027 (0.017)	0.040* (0.022)
6 yrs after ^b	0.504	0.002 (0.021)	0.028 (0.018)	0.030 (0.023)
7 yrs after ^b	0.523	-0.016 (0.014)	-0.015 (0.018)	-0.020 (0.021)
8 yrs after ^b	0.547	-0.023* (0.013)	-0.031* (0.017)	-0.040** (0.019)
10 yrs after ^b	0.603	-0.012 (0.016)	-0.003 (0.020)	-0.010 (0.023)
15 yrs after ^b	0.712	0.008 (0.013)	0.014 (0.016)	0.016 (0.018)
20 yrs after ^b	0.741	0.017 (0.012)	0.018 (0.016)	0.017 (0.020)

This table summarizes estimation results based on community-level data (first row) and individual-level data covering births conceived between 08/1984 and 07/1987. Each entry represents a separate regression, where the dependent variable is indicated in the first column, and shows the estimated coefficient for treated units from the BC_{II} . This cohort was conceived between 02/1986 and 04/1986 and was between 0 and 3 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. ^a The dependent variable is equal to the number of children a mother has born until the respective number of years after the birth of the pivotal child. ^b The dependent variable is equal to one if the mother is in the labor force after the respective number of years after childbirth.

C.2 Estimation output for birth cohort I

In this section we summarize the estimated effects for BC_I , which was between 4 and 9 months post conception at the time of the accident. In sum, we observe smaller (or less significant) effects as compared to BC_{II} , which was between 1 and 3 months post conception. This finding is consistent with the existing evidence on the heterogeneous impact of radioactive exposure over the gestation period, where detrimental effects decrease with the gestational age at exposure.

The effects on prenatal culling are summarized in the upper panel of Table C.2.1. For children from low socioeconomic backgrounds belonging to BC_I , we find less significant effects as compared to BC_{II} . The point estimates on live births are somewhat lower but the standard errors are unchanged. The effects on stillbirths are even smaller (and essentially zero). We do not find any evidence on the incidence of fetal death. In the case of children from higher socioeconomic backgrounds, the effects for BC_I are also smaller as compared to those for BC_{II} and provide even less evidence for prenatal culling.

The effects on postnatal culling are summarized in the upper panel of Table C.2.1. In the case of children from low socioeconomic backgrounds, the effects for BC_I are equal to those for BC_{II} (i. e., no evidence for postnatal culling). In the case of children from higher socioeconomic backgrounds, we find some differences. In fact, post-natal culling is the only exception, where we find more pronounced effects for children from BC_I (as compared to BC_{II}). We find reduced infant survival in BC_I (where effects are driven by mortality within the first week after birth). Prenatal exposure to radioactive fallout at a higher gestational age might have not been harmful enough to cause fetal death, but may have caused harm, which lead to death shortly after birth.

Table C.2.2 summarizes the effects on health at birth. In the case of children from BC_I , we find basically no evidence of radioactive exposure on health at birth. This applies to children irrespective of their socioeconomic backgrounds and is in line with our results on prenatal culling. The estimated coefficients for preterm birth, low birth weight, and Apgar scores are all statistically insignificant and essentially zero. The only exceptions are some negative effects on the Apgar scores of treated children from higher socioeconomic backgrounds.

Regarding parental response in BC_I we find a similar pattern for the fertility behavior (see Table C.2.3). As in the case of BC_{II} , there is no significant reaction by families with higher socioeconomic status. For families with low socioeconomic status we find a reduction in fertility, but, the estimated effects are almost half in size and not statistically significant at conventional levels. The effect on maternal labor force participation is summarized in Table C.2.4. For families with low socioeconomic status, we do not observe any significant effects on maternal labor force participation. This is consistent with the insignificant fertility response. For families with higher socioeconomic status, we observe a positive effect on maternal labor force participation in several years after child birth. The effect is between 1.8 and 4.8 percentage points and of varying significance, depending on the level of radioactive

exposure. There are two possible explanations for this finding. First, it may reflect a reinforcing parental behavior in response to a negative scarring effect. We found some evidence that these children had a lower Apgar score at birth (see Table C.2.2). Alternatively, given that we find some evidence for postnatal culling in this group (lower panel of Table C.2.1), these children may be positively selected. A higher labor force participation may then simply reflect the fact that these children have higher cognitive endowments, and less parental tutoring is needed. Given that we also do not find much evidence for scarring effects for these children in our analysis of labor market outcomes (see below), we consider the second explanation as more plausible.

The effects on children's long-term outcomes are summarized in Tables C.2.5 and C.2.6. For children from BC_I , we do not find robust evidence for any long-term effects on human capital outcomes. The vast majority of the estimates have a negative sign (this applies to children from all socioeconomic backgrounds), though, the estimates are mostly statistically insignificant.

In sum, these results corroborate the conjecture that prenatal exposure to radiation is less critical at a higher gestational age.

Table C.2.1: Radiation effects on prenatal and postnatal culling for birth cohort I

	Low SES				Higher SES			
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
PRENATAL CULLING								
Live birth								
Live birth rate ^a	3.031	-0.044 (0.040)	-0.083* (0.047)	-0.093 (0.058)	8.918	0.036 (0.086)	0.083 (0.102)	-0.003 (0.125)
Stillbirth								
Prob(Stillbirth) ^b	0.005	0.000 (0.003)	0.001 (0.004)	0.001 (0.004)	0.004	-0.001 (0.002)	0.000 (0.002)	-0.002 (0.002)
Fetal death								
Proxy: Prob(male) ^c	0.510	0.008 (0.022)	0.010 (0.026)	0.009 (0.033)	0.514	-0.006 (0.013)	-0.004 (0.017)	0.002 (0.021)
POSTNATAL CULLING								
Alive after 24 hours	0.993	-0.001 (0.004)	-0.001 (0.004)	-0.004 (0.005)	0.995	-0.004* (0.002)	-0.004 (0.003)	-0.007* (0.004)
Alive after 7 days	0.990	-0.001 (0.005)	-0.003 (0.005)	-0.003 (0.007)	0.992	-0.004 (0.003)	-0.005* (0.003)	-0.010** (0.004)
Alive after 1 month	0.988	-0.003 (0.005)	-0.001 (0.006)	-0.003 (0.007)	0.991	-0.004 (0.003)	-0.006* (0.003)	-0.009** (0.004)
Alive after 1 year	0.983	-0.004 (0.006)	-0.004 (0.007)	-0.004 (0.008)	0.988	-0.003 (0.003)	-0.006 (0.004)	-0.010* (0.005)

This table summarizes estimation results based on community-level data (first row) and individual-level data (second and third row) from the *Austrian Birth Register* and the *Austrian Death Register* (fourth to seventh row) covering births conceived between 08/1984 and 07/1987. Each entry represents a separate regression, where the dependent variable is indicated in the first column, and shows the estimated coefficient for treated units from *BCI*. This cohort was conceived between 08/1985 and 01/1986 and was between 4 and 9 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Families with a low socioeconomic status (SES) have mothers with compulsory schooling or less. Families with a higher SES have mothers with any degree higher than compulsory schooling. Means refer to the 37kBq-cutoff sample. ^a The dependent variable is equal to the number of live births per 1,000 female inhabitants aged between 15 and 39 years of age in 1981 (in the respective education group) divided by the respective sample mean. ^b The dependent variable is equal to one if the child is a stillbirth and zero if the child is a live birth. ^c The dependent variable is equal to one if the child is male, and zero otherwise.

Table C.2.2: Radiation effects on health at birth of birth cohort I

	LOW SES				HIGHER SES			
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
Preterm birth^a								
Culling & scarring	0.056	0.006 (0.011)	-0.001 (0.012)	-0.001 (0.014)	0.047	-0.005 (0.006)	-0.004 (0.007)	-0.007 (0.008)
Low birth weight^b								
Culling & scarring	0.067	0.017 (0.012)	0.013 (0.015)	0.013 (0.017)	0.054	-0.011 (0.007)	-0.007 (0.008)	-0.003 (0.009)
Apgar score^c								
Culling & scarring	9.870	-0.009 (0.029)	-0.004 (0.032)	-0.000 (0.043)	9.897	-0.026 (0.019)	-0.054** (0.022)	-0.076** (0.028)
Maternity leave (post)^d								
Culling & scarring	62.79	0.562 (0.502)	0.543 (0.561)	0.493 (0.677)	62.59	-0.121 (0.282)	0.013 (0.336)	-0.160 (0.387)

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* covering births conceived between 08/1984 and 07/1987. Each entry represents a separate regression, where the dependent variable is indicated in the first column, and shows the estimated coefficient for treated units from *BCI*. This cohort was conceived between 08/1985 and 01/1986 and was between 4 and 9 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Families with a low socioeconomic status (SES) have mothers with compulsory schooling or less. Families with a higher SES have mothers with any degree higher than compulsory schooling. Means refer to the 37kBq-cutoff sample. ^a The dependent variable is equal to one if the gestation period is below 37 weeks, and zero otherwise. ^b The dependent variable is equal to one if the birth weight is lower than 2,500 grams, and zero otherwise. ^c The dependent variable is equal to the Apgar score after ten minutes. ^d The dependent variable is equal to the number of days on maternity leave after birth of the pivotal child.

Table C.2.3: Radiation effects on fertility of families from birth cohort I

	Low SES				HIGHER SES			
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
2 yrs after	0.110	-0.007 (0.016)	0.016 (0.017)	0.017 (0.021)	0.113	-0.001 (0.007)	-0.009 (0.009)	-0.008 (0.011)
4 yrs after	0.296	-0.010 (0.022)	0.003 (0.029)	-0.023 (0.033)	0.329	0.024** (0.012)	0.010 (0.015)	0.019 (0.018)
6 yrs after	0.429	-0.041 (0.026)	-0.029 (0.033)	-0.055 (0.041)	0.460	0.011 (0.015)	-0.004 (0.018)	-0.005 (0.021)
8 yrs after	0.528	-0.045 (0.030)	-0.035 (0.037)	-0.071 (0.045)	0.544	0.015 (0.016)	0.004 (0.020)	0.009 (0.024)
10 yrs after	0.595	-0.031 (0.033)	-0.028 (0.040)	-0.056 (0.050)	0.597	0.009 (0.018)	-0.009 (0.021)	0.000 (0.024)
12 yrs after	0.638	-0.046 (0.035)	-0.049 (0.044)	-0.072 (0.055)	0.632	0.008 (0.020)	-0.011 (0.021)	-0.005 (0.024)
14 yrs after	0.667	-0.045 (0.037)	-0.048 (0.046)	-0.081 (0.059)	0.652	0.005 (0.020)	-0.013 (0.022)	-0.006 (0.024)
16 yrs after	0.684	-0.046 (0.038)	-0.055 (0.046)	-0.082 (0.058)	0.665	0.001 (0.021)	-0.017 (0.023)	-0.007 (0.025)
18 yrs after	0.696	-0.048 (0.038)	-0.059 (0.047)	-0.085 (0.058)	0.672	0.004 (0.021)	-0.017 (0.023)	-0.006 (0.025)
20 yrs after	0.702	-0.054 (0.039)	-0.067 (0.048)	-0.091 (0.058)	0.676	0.002 (0.021)	-0.020 (0.023)	-0.010 (0.025)
Obs.		24,682	22,952	21,763		68,544	62,742	59,206

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* covering families with births conceived between 08/1984 and 07/1987. The dependent variable is equal to the number of children a mother has born until the respective number of years after the birth of the pivotal child. Each entry represents a separate regression, where the dependent variable is indicated in the first column, and shows the estimated coefficient for treated units from BC_I . This cohort was conceived between 08/1985 and 01/1986 and was between 4 and 9 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Families with a low socioeconomic status (SES) have mothers with compulsory schooling or less. Families with a higher SES have mothers with any degree higher than compulsory schooling. Means refer to the 37kBq-cutoff sample.

Table C.2.4: Radiation effects on maternal labor force participation of families from birth cohort I

	Low SES				Higher SES			
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
2 yrs after	0.355	0.024 (0.022)	0.031 (0.023)	0.009 (0.028)	0.386	-0.020 (0.017)	-0.005 (0.017)	0.001 (0.018)
4 yrs after	0.400	0.021 (0.022)	0.034 (0.026)	0.028 (0.033)	0.449	-0.011 (0.015)	0.001 (0.016)	0.007 (0.018)
6 yrs after	0.470	0.031 (0.022)	0.032 (0.025)	0.021 (0.029)	0.516	0.023 (0.018)	0.042*** (0.015)	0.048*** (0.018)
8 yrs after	0.508	0.017 (0.021)	0.019 (0.024)	0.011 (0.027)	0.560	0.012 (0.012)	0.014 (0.015)	0.010 (0.018)
10 yrs after	0.557	0.019 (0.020)	0.014 (0.024)	0.012 (0.030)	0.619	0.016 (0.012)	0.025* (0.014)	0.016 (0.016)
12 yrs after	0.602	0.033 (0.025)	0.032 (0.029)	0.016 (0.037)	0.669	0.015 (0.012)	0.020 (0.015)	0.013 (0.017)
14 yrs after	0.635	0.024 (0.023)	0.017 (0.027)	-0.009 (0.033)	0.710	0.030*** (0.011)	0.025* (0.014)	0.019 (0.015)
16 yrs after	0.666	-0.015 (0.022)	-0.022 (0.023)	-0.032 (0.027)	0.750	0.008 (0.011)	-0.000 (0.014)	-0.008 (0.016)
18 yrs after	0.671	-0.011 (0.024)	-0.014 (0.026)	-0.027 (0.030)	0.766	0.018* (0.009)	0.002 (0.012)	-0.000 (0.015)
20 yrs after	0.663	-0.010 (0.021)	-0.014 (0.024)	-0.023 (0.029)	0.769	0.022** (0.010)	0.010 (0.013)	-0.001 (0.015)
Obs.		719,541	668,484	632,803		2,053,657	1,879,809	1,773,200

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* covering births conceived between 08/1984 and 07/1987. The dependent variable is equal to one if the mother is in the labor force in the respective number of years after childbirth. Each entry represents the coefficient for treated units from BC_I interacted with years since the birth of the child (ranging from -9 years before to 21 years after birth). This cohort was conceived between 08/1985 and 01/1986 and was between 4 and 9 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Families with a low socioeconomic status (SES) have mothers with compulsory schooling or less. Families with a higher SES have mothers with any degree higher than compulsory schooling. Means refer to the 37kBq-cutoff sample.

Table C.2.5: Children’s long-term outcomes: Radiation effects on labor force participation of birth cohort I

	LOW SES			HIGHER SES				
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
Age 15	0.056	-0.005 (0.013)	-0.003 (0.017)	-0.003 (0.019)	0.025	0.003 (0.005)	0.002 (0.007)	0.002 (0.007)
Age 16	0.475	-0.033 (0.030)	-0.053* (0.032)	-0.030 (0.040)	0.241	-0.027** (0.013)	-0.028* (0.015)	-0.046** (0.020)
Age 17	0.591	-0.040 (0.030)	-0.063** (0.029)	-0.056* (0.033)	0.310	-0.013 (0.014)	-0.017 (0.017)	-0.045** (0.019)
Age 18	0.613	-0.013 (0.025)	-0.014 (0.027)	-0.005 (0.031)	0.325	0.002 (0.015)	0.001 (0.019)	-0.018 (0.021)
Age 19	0.585	-0.014 (0.024)	-0.018 (0.028)	-0.007 (0.032)	0.319	-0.004 (0.017)	-0.009 (0.020)	-0.027 (0.024)
Age 20	0.581	-0.005 (0.024)	-0.001 (0.030)	0.012 (0.035)	0.358	-0.009 (0.014)	-0.021 (0.015)	-0.024 (0.017)
Age 21	0.671	-0.017 (0.022)	-0.023 (0.026)	0.010 (0.029)	0.458	-0.020 (0.015)	-0.019 (0.017)	-0.028 (0.019)
Age 22	0.711	0.011 (0.022)	0.006 (0.025)	0.027 (0.028)	0.513	-0.014 (0.013)	-0.007 (0.016)	-0.016 (0.019)
Age 23	0.727	0.032 (0.020)	0.039* (0.023)	0.039 (0.024)	0.552	-0.014 (0.013)	-0.019 (0.016)	-0.022 (0.020)
Obs.		144,180	133,929	126,576		452,160	413,316	389,538

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* covering births conceived between 08/1984 and 07/1987. The dependent variable is equal to one if the child is in the labor force at the respective age. Each entry represents the coefficient for treated units from BC_I interacted with age. This cohort was conceived between 08/1985 and 01/1986 and was between 4 and 9 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Families with a low socioeconomic status (SES) have mothers with compulsory schooling or less. Families with a higher SES have mothers with any degree higher than compulsory schooling. Means refer to the 37kBq-cut-off sample.

Table C.2.6: Children’s long-term outcomes: Radiation effects on apprenticeship training & labor income of birth cohort I

	LOW SES				HIGHER SES			
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
Apprenticeship training^a								
Age 16	0.378	-0.034 (0.028)	-0.042 (0.033)	-0.029 (0.043)	0.191	-0.003 (0.012)	-0.007 (0.014)	-0.025 (0.016)
Age 17	0.487	-0.036 (0.030)	-0.044 (0.031)	-0.056 (0.036)	0.248	-0.001 (0.014)	-0.002 (0.016)	-0.018 (0.020)
Age 18	0.489	-0.033 (0.029)	-0.029 (0.030)	-0.032 (0.034)	0.257	0.004 (0.014)	0.002 (0.017)	-0.012 (0.021)
Obs.		144,180	133,929	126,576		452,160	413,316	389,538
Income								
Age 15-23 (wage sum) ^b	9.533	-0.040 (0.161)	-0.056 (0.179)	-0.069 (0.190)	7.588	-0.117 (0.126)	-0.111 (0.160)	-0.197 (0.188)
Age 15-23 (total wage sum) ^c	9.702	-0.054 (0.160)	-0.069 (0.178)	-0.072 (0.188)	7.729	-0.112 (0.128)	-0.110 (0.162)	-0.189 (0.191)
Obs.		16,020	14,881	14,064		50,240	45,924	43,282

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* covering births conceived between 08/1984 and 07/1987. Each entry represents the coefficient for treated units from *BC_t* interacted with age. This cohort was conceived between 08/1985 and 01/1986 and was between 4 and 9 months post-conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Families with a low socioeconomic status (SES) have mothers with compulsory schooling or less. Families with a higher SES have mothers with any degree higher than compulsory schooling. Means refer to the 37kBq-cutoff sample. ^a The dependent variable is equal to one if the child is in apprenticeship training at the respective age. ^b The dependent variable is equal to the sum of the deflated annual labor income between ages 15 and 23 in the main job. ^c The dependent variable is equal to the sum of the deflated annual labor income between ages 15 and 23 in all jobs.

C.3 Placebo test for radiation effects on pre- and postnatal culling and health at birth

Table C.3.1: Placebo test for radiation effects on pre- and postnatal culling and health at birth

	LOW SES			HIGHER SES				
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
Live birth								
Live birth rate ^a	3.329	0.013 (0.031)	0.053 (0.035)	0.063 (0.040)	8.575	-0.018 (0.073)	-0.056 (0.086)	-0.052 (0.110)
Fetal death								
Proxy: <i>Prob(male)</i> ^b	0.506	0.007 (0.025)	0.015 (0.024)	0.020 (0.028)	0.513	0.001 (0.010)	0.004 (0.012)	0.002 (0.014)
Health at birth								
Preterm birth ^c	0.057	0.007 (0.009)	0.010 (0.010)	0.016 (0.013)	0.048	0.003 (0.005)	-0.000 (0.005)	-0.004 (0.006)
Low birth weight ^d	0.069	-0.007 (0.010)	-0.014 (0.012)	-0.019 (0.014)	0.054	0.005 (0.005)	0.002 (0.006)	-0.002 (0.007)
Apgar score ^e	9.872	-0.023 (0.032)	0.001 (0.036)	-0.014 (0.039)	9.907	-0.016 (0.011)	-0.005 (0.014)	0.006 (0.014)
Maternity leave (post) ^f	63.02	0.227 (0.478)	0.507 (0.599)	0.182 (0.602)	62.77	0.351 (0.257)	0.084 (0.341)	-0.017 (0.409)

This table summarizes estimation results based on community-level data (first row) and individual-level data covering conceptions between 07/1983 and 06/1985. Each entry represents a separate regression, where the dependent variable is indicated in the first column, and shows the estimated coefficient for units from *BC-A* compared to *BC-B*. The *BC-A* cohort was conceived between 07/1983 and 06/1984; the *BC-B* cohort was conceived between 07/1984 and 06/1985. Both cohorts were not affected by the accident in utero (i. e. they were born before the accident). Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors (clustered at the community level) are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. ^a The dependent variable is equal to the number of live births per 1,000 female inhabitants aged between 15 and 39 years of age in 1981 (in the respective education group) divided by the respective sample mean. ^b The dependent variable is equal to one if the child is male, and zero otherwise. ^c The dependent variable is equal to one if the gestation period is below 37 weeks, and zero otherwise. ^d The dependent variable is equal to one if the birth weight is lower than 2,500 grams, and zero otherwise. ^e The dependent variable is equal to the Apgar score after ten minutes. ^f The dependent variable is equal to the number of days on maternity leave after birth of the pivotal child. Further control variable: binary indicator for multiple birth.

C.4 Radiation effects (culling & scarring) for birth cohort II

Table C.4.1: Radiation effects (culling & scarring) — fertility

	Low SES			
	Mean	37 kBq	42 kBq	47 kBq
2 yrs after	0.110	−0.029 (0.029)	−0.057*** (0.022)	−0.063*** (0.025)
4 yrs after	0.296	−0.030 (0.034)	−0.045 (0.036)	−0.061 (0.041)
6 yrs after	0.429	−0.065 (0.042)	−0.087* (0.047)	−0.100* (0.054)
8 yrs after	0.528	−0.085* (0.048)	−0.104* (0.053)	−0.148** (0.060)
10 yrs after	0.595	−0.071 (0.055)	−0.095 (0.062)	−0.134* (0.070)
12 yrs after	0.638	−0.089 (0.056)	−0.120* (0.062)	−0.156** (0.070)
14 yrs after	0.667	−0.087 (0.058)	−0.120* (0.066)	−0.150** (0.076)
16 yrs after	0.684	−0.098 (0.060)	−0.136** (0.066)	−0.161** (0.077)
18 yrs after	0.696	−0.100 (0.061)	−0.137** (0.068)	−0.156* (0.080)
20 yrs after	0.702	−0.104* (0.061)	−0.144** (0.069)	−0.161** (0.081)
Obs.		24,682	22,952	21,763

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* in the period from 08/1984 through 07/1987. Each entry represents a separate regression, where the dependent variable is indicated in the first column, and shows the estimated coefficient for treated units from *BCII*. This cohort was conceived between 02/1986 and 04/1986 and was between 0 and 3 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. (The results are robust to including indicators for maternal age.) Method of estimation is a least squares. Robust standard errors in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Means refer to the 37kBq-cutoff sample. ^a The dependent variable is equal to the number of children a mother has born until the respective number of years after the birth of the pivotal child.

Table C.4.2: Radiation effects (culling & scarring) — maternal labor force participation

	Low SES			
	Mean	37 kBq	42 kBq	47 kBq
2 yrs after	0.355	0.000 (0.032)	0.012 (0.034)	-0.001 (0.043)
4 yrs after	0.400	0.028 (0.034)	0.038 (0.039)	0.043 (0.049)
6 yrs after	0.471	0.060 (0.040)	0.078** (0.036)	0.064 (0.042)
8 yrs after	0.508	0.021 (0.035)	0.028 (0.035)	0.035 (0.042)
10 yrs after	0.558	-0.007 (0.038)	0.007 (0.039)	0.006 (0.047)
12 yrs after	0.602	0.075** (0.037)	0.098** (0.038)	0.084* (0.045)
14 yrs after	0.635	0.028 (0.030)	0.051 (0.035)	0.048 (0.039)
16 yrs after	0.666	0.017 (0.028)	0.026 (0.033)	0.033 (0.038)
18 yrs after	0.671	0.054* (0.030)	0.065* (0.037)	0.068 (0.045)
20 yrs after	0.663	0.063** (0.027)	0.057* (0.033)	0.069* (0.039)
Obs.		723,323	672,266	636,585

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* in the period from 08/1984 through 07/1987. Each entry represents the coefficient for treated units from the BC_{II} interacted with years since the birth of the child (ranging from 9 years before to 21 years after birth). This cohort was conceived between 02/1986 and 04/1986 and was between 0 and 3 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Means refer to the 37kBq-cutoff sample. ^a The dependent variable is equal to one if the mother participates in the labor force in the respective number of years after childbirth.

Table C.4.3: Radiation effects (culling & scarring) — labor force participation

	Low SES			
	Mean	37 kBq	42 kBq	47 kBq
Age 15	0.056	−0.016 (0.011)	−0.027** (0.011)	−0.028** (0.013)
Age 16	0.475	−0.069** (0.033)	−0.078* (0.040)	−0.082* (0.046)
Age 17	0.591	−0.064* (0.037)	−0.099** (0.040)	−0.098** (0.044)
Age 18	0.613	−0.068 (0.042)	−0.093** (0.041)	−0.082* (0.046)
Age 19	0.585	−0.055 (0.036)	−0.074* (0.039)	−0.052 (0.042)
Age 20	0.581	−0.098** (0.038)	−0.134*** (0.040)	−0.109** (0.044)
Age 21	0.671	−0.022 (0.035)	−0.033 (0.041)	−0.018 (0.047)
Age 22	0.710	−0.063* (0.035)	−0.083** (0.041)	−0.092* (0.048)
Age 23	0.727	−0.058* (0.033)	−0.066* (0.037)	−0.088** (0.044)
Obs.		144,180	133,929	126,576

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* in the period from 08/1984 through 07/1987. Each entry represents the coefficient for treated units from the BC_{II} interacted with age. This cohort was conceived between 02/1986 and 04/1986 and was between 0 and 3 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Means refer to the 37kBq-cutoff sample. ^aThe dependent variable is equal to one if the child participates in the labor force at the respective age.

Table C.4.4: Radiation effects (culling & scarring) — apprenticeship training & income

	Low SES			
	Mean	37 kBq	42 kBq	47 kBq
Apprenticeship training^a				
Age 16	0.378	−0.039 (0.033)	−0.035 (0.039)	−0.051 (0.044)
Age 17	0.487	−0.078** (0.034)	−0.078* (0.040)	−0.090** (0.044)
Age 18	0.489	−0.036 (0.037)	−0.035 (0.042)	−0.024 (0.046)
Obs.		144,180	133,929	126,576
Income^a				
Age 15-23 (wage sum)	9.533	−0.506 (0.325)	−0.719** (0.328)	−0.910** (0.391)
Age 15-23 (total wage sum)	9.702	−0.527 (0.327)	−0.748** (0.329)	−0.940** (0.392)
Obs.		16,020	14,881	14,064

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* in the period from 08/1984 through 07/1987. Each entry represents the coefficient for treated units from BC_{II} interacted with age. This cohort was conceived between 02/1986 and 04/1986 and was between 0 and 3 months post conception at the time of the accident. Each specification controls for community, conception-year, and conception-month fixed-effects. Method of estimation is a least squares. Robust standard errors in parentheses. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent. Means refer to the 37kBq-cutoff sample. ^a The dependent variable is equal to one if the child is in apprenticeship training at the respective age. ^b The dependent variable is equal to the sum of the deflated annual labor income between ages 15 and 23 in the main job. ^c The dependent variable is equal to the sum of the deflated annual labor income between ages 15 and 23 in all jobs.

C.5 Non-radiation effects

Table C.5.1: Non-radiation effects (culling & scarring) on prenatal culling and health at birth

	Low SES				HIGHER SES			
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
Live birth								
ρ_1 (BC I)	3.031	0.034 (0.033)	0.035 (0.034)	0.036 (0.035)	8.918	-0.102 (0.077)	-0.085 (0.079)	-0.110 (0.081)
ρ_2 (BC II)		0.035 (0.058)	0.035 (0.060)	0.034 (0.062)		0.058 (0.130)	0.080 (0.135)	0.031 (0.138)
Fetal death								
ρ_1 (BC I)	0.510	0.006 (0.018)	0.006 (0.018)	0.017 (0.018)	0.514	-0.021* (0.012)	-0.025** (0.012)	-0.023* (0.012)
ρ_2 (BC II)		0.031 (0.034)	0.035 (0.035)	0.049 (0.036)		0.022 (0.024)	0.013 (0.024)	0.016 (0.024)
Preterm birth								
ρ_1 (BC I)	0.056	0.002 (0.010)	0.004 (0.011)	0.004 (0.011)	0.047	-0.006 (0.007)	-0.006 (0.007)	-0.005 (0.007)
ρ_2 (BC II)		0.001 (0.016)	-0.001 (0.017)	0.001 (0.017)		-0.009 (0.009)	-0.007 (0.009)	-0.004 (0.009)
Low birth weight								
ρ_1 (BC I)	0.067	-0.005 (0.011)	-0.004 (0.011)	-0.002 (0.011)	0.054	0.005 (0.006)	0.006 (0.006)	0.005 (0.006)
ρ_2 (BC II)		-0.020 (0.019)	-0.028 (0.019)	-0.021 (0.020)		-0.002 (0.008)	0.001 (0.009)	0.001 (0.009)
Apgar score								
ρ_1 (BC I)	9.870	0.010 (0.023)	0.003 (0.024)	-0.001 (0.024)	9.897	-0.001 (0.013)	-0.003 (0.014)	0.001 (0.014)
ρ_2 (BC II)		-0.008 (0.039)	-0.002 (0.040)	-0.014 (0.040)		0.016 (0.021)	0.010 (0.021)	0.012 (0.022)

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* covering births conceived between 08/1984 and 07/1987. The dependent variable is indicated in boldface; the estimated non-radiation effects on treated units from birth cohorts I and II are displayed below. BC_I was conceived between 08/1985 and 01/1986 and was between 4 and 9 months post conception at the time of the accident. BC_{II} was conceived between 02/1986 and 04/1986 and was between 0 and 3 months post conception at the time of the accident. See notes to Tables 2 and 3 for descriptions of the estimation method, the samples and the outcomes.

C.6 Siblings' human capital outcomes

Table C.6.1: Siblings' long-term outcomes: Radiation effects (scarring) on labor force participation

	LOW SES				HIGHER SES			
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
Age 15	0.052	0.011 (0.017)	0.011 (0.019)	-0.005 (0.022)	0.024	0.004 (0.010)	0.006 (0.012)	0.014 (0.017)
Age 16	0.479	-0.021 (0.038)	-0.018 (0.045)	0.002 (0.051)	0.243	0.050** (0.024)	0.075*** (0.029)	0.094*** (0.032)
Age 17	0.608	-0.003 (0.042)	-0.002 (0.049)	0.047 (0.055)	0.330	0.050* (0.029)	0.070** (0.031)	0.079** (0.034)
Age 18	0.659	-0.010 (0.037)	0.008 (0.040)	0.035 (0.048)	0.372	0.044 (0.032)	0.065** (0.030)	0.068* (0.036)
Age 19	0.629	0.004 (0.037)	0.006 (0.042)	-0.011 (0.050)	0.376	0.016 (0.026)	0.007 (0.030)	0.018 (0.031)
Age 20	0.616	-0.030 (0.039)	-0.036 (0.042)	-0.016 (0.049)	0.412	0.040 (0.028)	0.056* (0.034)	0.032 (0.034)
Age 21	0.696	0.019 (0.035)	0.017 (0.042)	-0.023 (0.051)	0.501	0.049** (0.022)	0.050** (0.025)	0.033 (0.031)
Age 22	0.728	0.061* (0.035)	0.065 (0.041)	0.082* (0.047)	0.553	0.034 (0.022)	0.040 (0.027)	0.025 (0.033)
Age 23	0.738	0.062** (0.031)	0.063* (0.036)	0.078* (0.040)	0.593	0.029 (0.022)	0.035 (0.025)	0.045 (0.034)
Age 24	0.739	0.049 (0.032)	0.044 (0.036)	0.091** (0.040)	0.626	0.025 (0.023)	0.038 (0.024)	0.048 (0.030)
Age 25	0.742	0.038 (0.035)	0.061 (0.038)	0.095** (0.043)	0.660	0.025 (0.026)	0.034 (0.029)	0.037 (0.026)
Obs.		187,011	174,878	164,857		389,147	355,234	330,330

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* covering older siblings of children conceived between 08/1984 and 07/1987. The dependent variable is equal to one if the older sibling is in the labor force at the respective age. Each entry represents the coefficient for siblings of treated units from the BC_{it} interacted with age 15-25. For further details see Table 7. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent.

Table C.6.2: Siblings long-term outcomes: Radiation effects (scarring) on apprenticeship training & labor income

	LOW SES				HIGHER SES			
	Mean	37 kBq	42 kBq	47 kBq	Mean	37 kBq	42 kBq	47 kBq
Apprenticeship training								
Age 16	0.384	-0.003 (0.041)	-0.003 (0.049)	0.022 (0.056)	0.204	0.039* (0.021)	0.061** (0.026)	0.085*** (0.029)
Age 17	0.493	0.008 (0.043)	0.007 (0.050)	0.068 (0.057)	0.271	0.052* (0.027)	0.074** (0.031)	0.086** (0.035)
Age 18	0.500	-0.022 (0.039)	-0.005 (0.044)	0.039 (0.052)	0.288	0.036 (0.030)	0.049 (0.032)	0.058 (0.035)
Obs.		187,011	174,878	164,857		389,147	355,234	330,330
Income								
Age 15-25 (wage sum)	10.517	0.215 (0.176)	0.208 (0.180)	0.370* (0.209)	9.273	0.093 (0.210)	0.061 (0.239)	-0.001 (0.287)
Age 15-25 (total wage sum)	10.667	0.189 (0.178)	0.178 (0.179)	0.342 (0.208)	9.422	0.060 (0.209)	0.015 (0.240)	-0.059 (0.292)
Obs.		17,001	15,898	14,987		35,377	32,294	30,030

This table summarizes estimation results based on individual-level data from the *Austrian Birth Register* and the *Austrian Social Security Database* covering older siblings of children conceived between 08/1984 and 07/1987. Each entry represents the coefficient for siblings of treated units from the *BC11* (interacted with age 15-25). For further details see Table 8. *, **, and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent.