

## Online Appendix

### Trends in Women's Educational Advantage and Divorce in East and West Germany

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\* This Online Appendix contains additional information regarding the article:  
<https://www.comparativepopulationstudies.de/index.php/CPoS/article/view/605/420>.



**Tab. A1:** Characteristics of hypergamous ( $W < H$ ), homogamous ( $W = H$ ) and hypogamous ( $W > H$ ) by birth cohort, West Germany

	1951-60			1961-70			1971-80			1981-90		
	W < H	W = H	W > H	Total	W < H	W = H	W > H	Total	W < H	W = H	W > H	Total
Number of cases	322	400	255	977	515	724	484	1723	386	647	495	1528
Percent	32.96	40.94	26.10	100.00	29.89	42.02	28.09	100.00	25.26	42.34	32.40	100.00
Divorced												
yes	14.66	14.90	22.89	16.89	15.20	17.96	18.98	17.41	10.90	12.71	15.16	13.02
Wives' education												
Compulsory education	25.00	4.88	-	10.14	14.26	5.03	-	6.40	14.17	4.86	-	5.69
Basic vocational	33.70	46.90	5.90	32.02	26.65	32.82	4.96	23.04	23.44	21.65	4.81	16.84
Lower secondary	30.99	21.01	57.66	33.73	37.28	31.05	58.30	40.67	36.10	24.36	42.32	32.93
Upper secondary	10.31	2.58	17.94	9.06	21.81	6.10	22.25	15.45	26.28	9.15	29.65	19.87
Tertiary education	-	24.63	18.50	15.06	-	25.00	14.50	14.44	-	39.99	23.22	24.66
Husbands' education												
Compulsory education	-	4.88	11.35	4.97	-	5.03	14.20	6.10	-	4.86	12.82	6.12
Basic vocational	16.12	46.90	69.13	42.67	10.82	32.82	61.60	34.32	7.34	21.65	52.07	27.54
Lower secondary	22.14	21.01	16.75	20.27	17.79	31.05	16.74	22.97	18.06	24.36	25.70	23.19
Upper secondary	22.06	2.58	2.78	8.95	20.33	6.10	7.47	10.80	23.96	9.15	9.41	12.97
Tertiary education	39.67	24.63	-	23.14	51.06	25.00	-	25.81	50.64	39.99	-	30.19
Union order												
First union	73.49	76.15	69.61	73.60	80.18	80.73	81.05	80.66	84.61	93.28	88.78	89.69
Higher order union	26.51	23.85	30.39	26.40	19.82	19.27	18.95	19.34	15.39	6.72	11.22	10.31
Mean												
Wife's age at union formation, constant	31.87	32.85	31.79	32.26	30.23	29.17	29.44	29.56	28.35	28.55	27.88	28.29
Husband's age at union formation, constant	34.36	35.31	34.88	34.89	33.01	31.89	32.14	32.30	32.03	32.12	32.00	32.06

Note: Data from SOEP 1984 to 2021, weighted statistics based on the analytical sample, using cross-sectional individual-level weights.

Source: Authors' calculations from SOEP37 data.

**Tab. A2:** Characteristics of hypergamous ( $W < H$ ), homogamous ( $W = H$ ) and hypogamous ( $W > H$ ) by birth cohort, East Germany

	1951-60			1961-70			1971-80			1981-90		
	W < H	W = H	W > H	Total	W < H	W = H	W > H	Total	W < H	W = H	W > H	Total
Number of cases	57	136	73	266	71	339	199	609	121	287	174	582
Percent	21.43	51.13	27.44	100.00	11.66	55.67	32.68	100.00	20.79	49.31	29.90	100.00
Divorced												
yes	9.67	11.93	11.70	33.36	24.00	19.57	18.06	55.55	16.03	16.71	15.08	48.10
Wives' education												
Compulsory education	16.74	0.00	-	3.69	0.97	0.66	-	0.48	5.06	0.10	-	0.96
Basic vocational	35.02	11.88	0.00	13.59	30.38	5.97	0.27	6.73	17.35	3.58	0.00	4.99
Lower secondary	46.37	60.97	37.37	51.03	62.29	74.05	32.79	59.20	63.33	68.12	46.93	60.88
Upper secondary	1.87	0.00	6.32	2.21	6.36	0.21	10.84	4.37	14.26	4.21	25.92	12.55
Tertiary education	-	27.15	56.31	29.48	-	19.11	56.10	29.23	-	23.99	27.16	20.62
Husbands' education												
Compulsory education	-	0.00	2.88	0.82	-	0.66	4.04	1.70	-	0.10	9.25	2.83
Basic vocational	13.38	11.88	53.88	24.19	0.00	5.97	36.42	15.36	3.30	3.58	47.76	16.83
Lower secondary	26.51	60.97	42.03	47.98	17.00	74.05	57.05	62.30	9.40	68.12	40.59	49.25
Upper secondary	21.35	0.00	1.21	5.05	26.07	0.21	2.49	3.75	34.50	4.21	2.40	9.12
Tertiary education	38.76	27.15	-	21.96	56.93	19.11	-	16.89	52.81	23.99	-	21.96
Union order												
First union	47.49	55.30	70.10	57.80	77.81	80.13	82.84	80.77	95.24	93.32	87.94	92.04
Higher order union	52.51	44.70	29.90	42.20	22.19	19.87	17.16	19.23	4.76	6.68	12.06	7.96
Mean												
Wife's age at union formation, constant	41.13	38.27	36.74	38.46	27.3	27.83	28.30	27.93	28.19	28.64	29.31	28.76
Husband's age at union formation, constant	42.91	39.87	39.32	40.38	32.04	30.62	30.73	30.81	32.51	31.01	32.40	31.70

Note: Data from SOEP 1984 to 2021, weighted statistics based on the analytical sample, using cross-sectional individual-level weights.

Source: Authors' calculations from SOEP37 data.

**Tab. A3:** Hazard ratios from the Cox proportional Hazard model for testing the association between partners' relative education and marital dissolution by birth cohort in West and East Germany

	West	East
Assortative mating (Ref: Hypergamy)		
Homogamy	1.29 (0.33)	0.84 (0.43)
Hypogamy	1.93** (0.61)	0.41 (0.29)
Birth cohort (Ref: 1951-60)		
1961-70	1.55** (0.30)	1.31 (0.61)
1971-80	1.30 (0.29)	1.12 (0.51)
1981-90	0.84 (0.27)	1.89 (0.91)
Interaction: Assortative mating*Birth cohort		
Homogamy*1961-70	0.93 (0.24)	0.84 (0.46)
Homogamy*1971-80	0.83 (0.24)	1.29 (0.68)
Homogamy*1981-90	0.97 (0.40)	0.74 (0.43)
Hypogamy*1961-70	0.80 (0.21)	1.36 (0.82)
Hypogamy*1971-80	0.68 (0.20)	1.36 (0.82)
Hypogamy*1981-90	0.86 (0.35)	0.96 (0.63)
Wife's age at marriage	0.96 (0.04)	0.85** (0.06)
Wife's age at marriage squared	1.00 (0.00)	1.00 (0.00)
Husband's age at marriage	0.97 (0.04)	1.14* (0.08)
Husband's age at marriage squared	1.00 (0.00)	1.00* (0.00)
wife's education – husband's education   <sup>a</sup>	1.00 (0.08)	0.98 (0.17)

**Tab. A3:** Continuation

	West	East
Wife's education (Ref: Compulsory)		
Basic vocational	0.50*** (0.09)	1.28 (0.55)
Lower secondary	0.45*** (0.10)	1.38 (0.72)
Upper secondary	0.44*** (0.12)	1.89 (1.24)
Tertiary education	0.41** (0.14)	1.49 (1.12)
Husband's education (Ref: Compulsory)		
Basic vocational	0.84 (0.14)	0.95 (0.36)
Lower secondary	1.04 (0.23)	0.40* (0.19)
Upper secondary	1.07 (0.31)	0.30* (0.20)
Tertiary education	0.71 (0.24)	0.27* (0.19)
Marriage order (Ref: First marriage)		
Higher order marriage	1.77*** (0.21)	2.28*** (0.44)
Observations	5,044	1,752

Note: HR based on Cox regression, S.E. in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

<sup>a</sup> Absolute value of the difference between wife's education and husband's education.

Source: Authors' calculations from SOEP37 data.

**Tab. A4:** Hazard ratios of the association between spouses' relative education and marital dissolution by birth cohort

Relative education Ref: Hypergamy, cohort:	Birth cohort			
	1960	1970	1980	1990
<i>West Germany</i>				
Homogamy	1.29 (0.33)	1.20 (0.23)	1.08 (0.25)	1.26 (0.47)
Hypogamy	1.93** (0.61)	1.54 (0.42)	1.32 (0.40)	1.65 (0.69)
<i>East Germany</i>				
Homogamy	0.84 (0.43)	0.71 (0.32)	1.08 (0.42)	0.65 (0.31)
Hypogamy	0.40 (0.29)	0.55 (0.35)	0.56 (0.32)	0.39 (0.26)

Note: HR based on Cox regression model in Table A3. Standard errors in parentheses,

\*\* p&lt;0.05, \* p&lt;0.1.

Source: Authors' calculations from SOEP37 data.

**Tab. A5:** Hazard ratios of the association between spouses' relative education and marital dissolution by birth cohort. Based on models with inverse probability weights

Relative education Ref: Hypergamy	Birth cohort			
	1960	1970	1980	1990
<i>West Germany</i>				
Homogamy	1.27 (0.32)	1.21 (0.24)	1.06 (0.24)	1.23 (0.47)
Hypogamy	1.85** (0.58)	1.52 (0.42)	1.29 (0.39)	1.57 (0.66)
<i>East Germany</i>				
Homogamy	0.69 (0.35)	0.59 (0.28)	0.89 (0.35)	0.53 (0.27)
Hypogamy	0.27* (0.20)	0.40 (0.26)	0.39 (0.23)	0.29* (0.20)

Note: HR based on Cox regression model in Table A3. Standard errors in parentheses,

\*\* p&lt;0.05, \* p&lt;0.1.

Source: Authors' calculations from SOEP37 data.

**Tab. A6:** Hazard ratios from the Cox proportional Hazard model for testing the association between partners' relative education and marital and union dissolution by birth cohort in West and East Germany. Unions (cohabitations and marriages) formed during the panel

	West	East
Assortative mating (Ref: Hypergamy)		
Homogamy	0.96 (0.28)	1.52 (0.92)
Hypogamy	1.72 (0.63)	1.46 (1.11)
Birth cohort (Ref: 1951-60)		
1961-70	0.79 (0.19)	1.06 (0.61)
1971-80	0.94 (0.23)	1.09 (0.56)
1981-90	0.97 (0.29)	1.21 (0.62)
Interaction: Assortative mating*Birth cohort		
Homogamy*1961-70	1.15 (0.35)	0.92 (0.61)
Homogamy*1971-80	0.95 (0.30)	0.66 (0.39)
Homogamy*1981-90	0.76 (0.28)	0.65 (0.39)
Hypogamy*1961-70	0.93 (0.29)	1.21 (0.85)
Hypogamy*1971-80	0.76 (0.25)	1.46 (0.93)
Hypogamy*1981-90	0.56 (0.21)	0.90 (0.58)
Woman's age at marriage	0.93* (0.04)	0.85*** (0.05)
Woman's age at marriage squared	1.00 (0.00)	1.00** (0.00)
Man's age at marriage	1.00 (0.04)	1.10 (0.06)
Man's age at marriage squared	1.00 (0.00)	1.00* (0.00)
woman's education – man's education   <sup>a</sup>	0.94 (0.08)	0.90 (0.15)

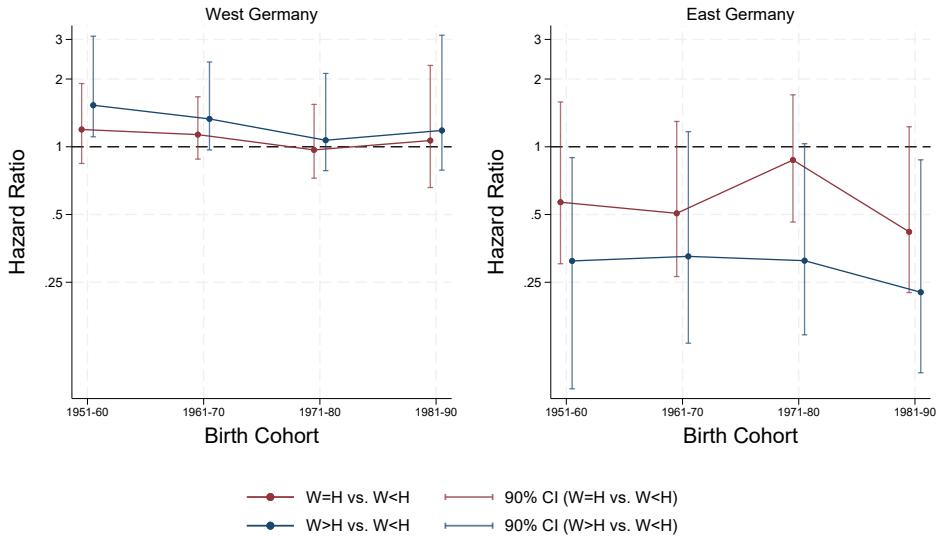
**Tab. A6:** Continuation

	West	East
Women's education (Ref: Compulsory)		
Basic vocational	0.93 (0.17)	0.58 (0.22)
Intermediate secondary	0.59** (0.14)	0.35** (0.15)
Upper secondary	0.65 (0.19)	0.29** (0.16)
Tertiary education	0.57 (0.21)	0.24** (0.16)
Man's education (Ref: Compulsory)		
Basic vocational	0.90 (0.16)	1.17 (0.39)
Intermediate secondary	1.09 (0.25)	1.12 (0.47)
Upper secondary	1.17 (0.35)	1.17 (0.67)
Tertiary education	0.99 (0.36)	1.56 (1.03)
Type of union (Ref: Marriage)		
Cohabitation	7.61*** (0.71)	5.74*** (0.82)
Observations	2,201	936

Note: Hazard Ratios (HR) based on Cox regression; S.E. in parentheses; \*\*\* p<0.01, \*\* p<0.05,  
 \* p<0.1. <sup>a</sup> Absolute value of the difference between wife's education and husband's education.

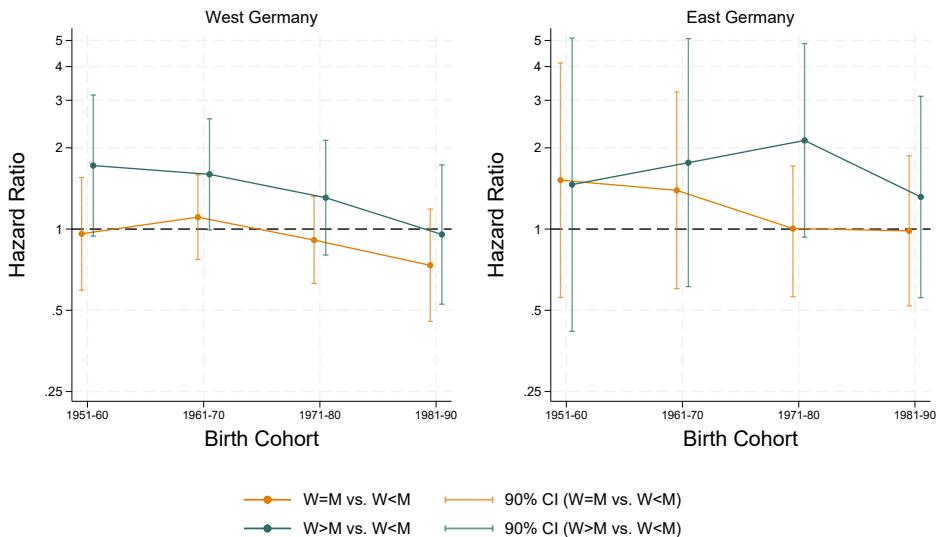
Source: Authors' calculations from SOEP37 data.

**Fig. A1:** Hazard ratios of the association between spouses' relative education and marital dissolution by birth cohort. Based on Models with Inverse Probability Weights



Source: Authors' calculations from SOEP37 data.

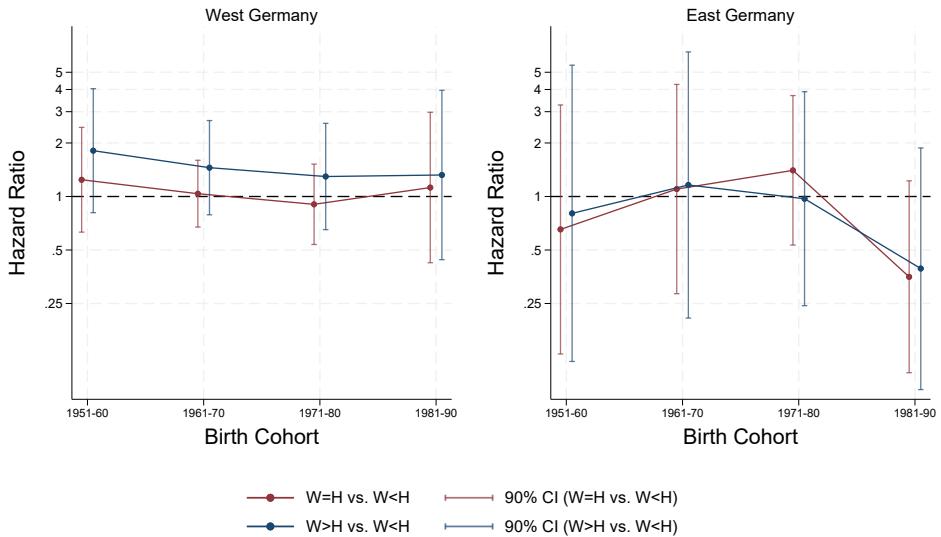
**Fig. A2:** Hazard ratios of the association between couples' relative education and union dissolution by birth cohort. Based on models considering both cohabiting and married unions



Note: Sample selection: married and cohabiting women whose partner was also surveyed, union formation during panel. N: West: 2201 couples, 631 dissolutions; East: 936 couples, 281 dissolutions.

Source: Authors' calculations from SOEP37 data.

**Fig. A3:** Hazard ratios of the association between spouses' relative education and marital dissolution by birth cohort. Based on models considering marriages started during panel



Note: N West: 2016 marriages, 338 divorces; East: 761 marriages, 116 divorces.

Source: Authors' calculations from SOEP37 data.

**Tab. A7:** Hazard ratios of the association between spouses' relative education and marital dissolution by birth cohort. Based on models considering respondents aged 18-40

Relative education Ref: Hypergamy	Birth cohort			
	1960	1970	1980	1990
<i>West Germany</i>				
Homogamy	1.20 (0.33)	1.21 (0.23)	1.09 (0.26)	1.31 (0.49)
Hypogamy	1.83* (0.62)	1.52 (0.44)	1.28 (0.40)	1.62 (0.69)
<i>East Germany</i>				
Homogamy	0.77 (0.48)	0.52 (0.25)	0.84 (0.35)	0.50 (0.25)
Hypogamy	0.32 (0.26)	0.32 (0.22)	0.36 (0.22)	0.25** (0.17)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculations from SOEP37 data.

**Tab. A8:** Hazard ratios of the association between spouses' relative education and marital dissolution by birth cohort. Based on models limiting the entrance in the sample to couples married up to 5 years before entering the panel (for those who started the panel as married)

Relative education Ref: Hypergamy	Birth cohort			
	1960	1970	1980	1990
<i>West Germany</i>				
Homogamy	1.28 (0.35)	1.20 (0.24)	0.97 (0.24)	1.36 (0.55)
Hypogamy	1.85* (0.63)	1.60 (0.45)	1.21 (0.39)	1.87 (0.85)
<i>East Germany</i>				
Homogamy	0.73 (0.46)	0.82 (0.43)	1.30 (0.60)	0.60 (0.33)
Hypogamy	0.37 (0.31)	0.69 (0.51)	0.71 (0.49)	0.48 (0.35)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculations from SOEP37 data.

**Tab. A9:** Hazard ratios of the association between spouses' relative education and marital dissolution by birth cohort. Based on models excluding the control for the difference between the woman's and the man's absolute level of education

Relative education Ref: Hypergamy	Birth cohort			
	1960	1970	1980	1990
<i>West Germany</i>				
Homogamy	1.30 (0.35)	1.20 (0.23)	1.08 (0.25)	1.26 (0.47)
Hypogamy	1.93** (0.61)	1.54 (0.42)	1.32 (0.40)	1.65 (0.69)
<i>East Germany</i>				
Homogamy	0.85 (0.42)	0.72 (0.29)	1.10 (0.40)	0.63 (0.30)
Hypogamy	0.41 (0.29)	0.56 (0.34)	0.56 (0.32)	0.40 (0.26)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculations from SOEP37 data.

**Tab. A10:** Hazard ratios of the association between spouses' relative education and marital dissolution by birth cohort. Based on models considering region of residence at first observation in the sample instead of the region of residence in 1989

Relative education Ref: Hypergamy	Birth cohort			
	1960	1970	1980	1990
<i>West Germany</i>				
Homogamy	1.23 (0.30)	1.18 (0.22)	1.07 (0.23)	1.34 (0.47)
Hypogamy	1.84** (0.58)	1.43 (0.38)	1.21 (0.35)	1.69 (0.68)
<i>East Germany</i>				
Homogamy	1.10 (0.58)	0.86 (0.41)	1.31 (0.57)	0.69 (0.36)
Hypogamy	0.52 (0.42)	0.90 (0.65)	1.12 (0.75)	0.45 (0.35)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculations from SOEP37 data.

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