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Are Men or Women More Unsettled by Fixed-Term Contracts? Gender Differences in Affective Job Insecurity and the Role of Household Context and Labour Market Positions

European Sociological Review

Supplementary Data – Online Appendix

Are men or women more unsettled by fixed-term contracts? Gender differences in affective job insecurity and the role of the household context and labour market positions

SD1: Descriptives

Table SD1.1 Descriptive statistics: sample of analysis

	Men				Women			
	Mean/proportion	**SD**	**Min**	**Max**	**Mean/proportion**	**SD**	**Min**	**Max**
Fixed-term contract (ref. permanent contract)	0.088	0.284	0	1	0.116	0.320	0	1
Age	35.73	6.309	20	45	35.43	6.699	20	45
Educational degree, CASMIN								
Primary, lower secondary education	0.334	0.472	0	1	0.195	0.396	0	1
Intermediate, higher secondary education	0.445	0.497	0	1	0.568	0.495	0	1
Tertiary education	0.222	0.416	0	1	0.237	0.425	0	1
Household typology								
Single household	0.233	0.423	0	1	0.209	0.406	0	1
Living together with partner	0.180	0.384	0	1	0.272	0.445	0	1
Living together with partner and child(ren)	0.587	0.492	0	1	0.519	0.500	0	1
Part-time contract (ref. full time contract)	0.026	0.160	0	1	0.423	0.494	0	1
Overtime (hours)	2.993	4.065	0	46.70	1.756	2.855	0	23.10
Tenure (years)	8.014	6.821	0	30.90	7.155	6.488	0	30.90
Company size (number of employees)								
Less than 20	0.200	0.400	0	1	0.267	0.443	0	1
20-199	0.290	0.454	0	1	0.285	0.451	0	1
200-1999	0.237	0.425	0	1	0.218	0.413	0	1
More than 2000	0.273	0.445	0	1	0.229	0.420	0	1
Income share in household (% deciles) (w/o singles)	4.656	1.859	0	9	2.216	1.718	0	9
Employment status of the partner in the household								
Permanent employment	0.443	0.497	0	1	0.685	0.465	0	1
Fixed-term employment	0.064	0.244	0	1	0.049	0.216	0	1
Not working/unemployed	0.260	0.439	0	1	0.058	0.233	0	1
No partner in the household	0.233	0.423	0	1	0.209	0.406	0	1
Industry NACE v1.1								
Agriculture, forest, fishery	0.016	0.127	0	1	0.008	0.090	0	1

	Men				Women			
	Mean/proportion	**SD**	**Min**	**Max**	**Mean/proportion**	**SD**	**Min**	**Max**
Mining and quarrying	0.005	0.073	0	1	0.0003	0.019	0	1
Manufacturing	0.377	0.485	0	1	0.156	0.362	0	1
Electricity, gas and water supply	0.017	0.130	0	1	0.008	0.087	0	1
Construction	0.113	0.317	0	1	0.017	0.127	0	1
Trade and reparation	0.097	0.296	0	1	0.160	0.366	0	1
Hotels and restaurants	0.017	0.130	0	1	0.030	0.170	0	1
Transport, storage, communication	0.072	0.258	0	1	0.039	0.193	0	1
Financial intermediation	0.039	0.194	0	1	0.052	0.222	0	1
Real estate, renting and business services	0.074	0.261	0	1	0.089	0.285	0	1
Public administration, defence, social security	0.071	0.256	0	1	0.085	0.279	0	1
Education	0.027	0.163	0	1	0.093	0.291	0	1
Health and social work	0.048	0.214	0	1	0.220	0.414	0	1
Other community, social and personal services	0.026	0.159	0	1	0.040	0.196	0	1
Activities of households	0.0002	0.017	0	1	0.003	0.055	0	1
Extra-territorial organizations	0.0004	0.020	0	1	0.0004	0.020	0	1
Erikson-Goldthorpe-Portocarero class scheme, EGP								
Agricultural labour	0.012	0.109	0	1	0.009	0.096	0	1
Semi- and unskilled manual workers	0.171	0.376	0	1	0.079	0.270	0	1
Skilled manual workers	0.321	0.467	0	1	0.063	0.242	0	1
Routine service and sales workers	0.040	0.196	0	1	0.218	0.413	0	1
Routine clerical workers	0.082	0.274	0	1	0.235	0.424	0	1
Lower managerial and professional workers	0.203	0.402	0	1	0.299	0.458	0	1
Higher managerial and professional workers	0.171	0.377	0	1	0.096	0.295	0	1
N (individuals)	12,010				10,302			
n (person-years)	50,320				38,646			

Notes: Pooled sample of individuals in the statistical model with all independent variables of the model and additional information about age and education.

Source: SOEP v33 1994-2016, own calculations

Table SD1.2 Descriptive statistics: sample of changers of employment contract

	Men				Women			
	Mean/proportion	**SD**	**Min**	**Max**	**Mean/proportion**	**SD**	**Min**	**Max**
Fixed-term contract (ref. permanent contract)	0.604	0.489	0	1	0.627	0.484	0	1
Age	32.36	6.375	20	44	32.41	6.670	20	44
Educational degree, CASMIN								
Primary, lower secondary education	0.379	0.485	0	1	0.228	0.420	0	1
Intermediate, higher secondary education	0.428	0.495	0	1	0.536	0.499	0	1
Tertiary education	0.194	0.395	0	1	0.236	0.424	0	1
Household typology								
Single household	0.310	0.463	0	1	0.263	0.440	0	1
Living together with partner	0.193	0.395	0	1	0.255	0.436	0	1
Living together with partner and child(ren)	0.497	0.500	0	1	0.482	0.500	0	1
Part-time contract (ref. full time contract)	0.044	0.205	0	1	0.415	0.493	0	1
Overtime (hours)	2.891	4.277	0	23.10	1.673	2.835	0	23.10
Tenure (years)	3.313	4.484	0	27.70	3.003	3.822	0	25.60
Company size (number of employees)								
Less than 20	0.212	0.409	0	1	0.257	0.437	0	1
20-199	0.340	0.474	0	1	0.321	0.467	0	1
200-1999	0.223	0.416	0	1	0.222	0.416	0	1
More than 2000	0.224	0.417	0	1	0.200	0.400	0	1
Income share in household (% deciles) (w/o singles)	5.073	2.273	0	9	2.476	2.055	0	9
Employment status of the partner in the household								
Permanent employment	0.338	0.473	0	1	0.590	0.492	0	1
Fixed-term employment	0.084	0.278	0	1	0.084	0.277	0	1
Not working/unemployed	0.267	0.443	0	1	0.064	0.244	0	1
No partner in the household	0.310	0.463	0	1	0.263	0.440	0	1
Industry NACE v1.1								
Agriculture, forest, fishery	0.020	0.139	0	1	0.007	0.083	0	1
Mining and quarrying	0.005	0.067	0	1	0.0004	0.021	0	1
Manufacturing	0.341	0.474	0	1	0.158	0.365	0	1

	Men				Women			
	Mean/proportion	**SD**	**Min**	**Max**	**Mean/proportion**	**SD**	**Min**	**Max**
Electricity, gas and water supply	0.011	0.103	0	1	0.011	0.102	0	1
Construction	0.128	0.334	0	1	0.011	0.104	0	1
Trade and reparation	0.108	0.311	0	1	0.171	0.376	0	1
Hotels and restaurants	0.026	0.159	0	1	0.045	0.208	0	1
Transport, storage, communication	0.076	0.265	0	1	0.029	0.167	0	1
Financial intermediation	0.019	0.137	0	1	0.025	0.156	0	1
Real estate, renting and business services	0.069	0.253	0	1	0.085	0.279	0	1
Public administration, defence, social security	0.060	0.237	0	1	0.054	0.226	0	1
Education	0.036	0.187	0	1	0.121	0.326	0	1
Health and social work	0.068	0.252	0	1	0.238	0.426	0	1
Other community, social and personal services	0.032	0.176	0	1	0.042	0.200	0	1
Activities of households	0.002	0.039	0	1	0.003	0.055	0	1
Extra-territorial organizations	0.001	0.034	0	1	0.001	0.036	0	1
Erikson-Goldthorpe-Portocarero class scheme, EGP								
Agricultural labour	0.018	0.133	0	1	0.015	0.123	0	1
Semi- and unskilled manual workers	0.260	0.439	0	1	0.108	0.311	0	1
Skilled manual workers	0.327	0.469	0	1	0.079	0.270	0	1
Routine service and sales workers	0.045	0.208	0	1	0.226	0.419	0	1
Routine clerical workers	0.076	0.265	0	1	0.203	0.403	0	1
Lower managerial and professional workers	0.150	0.357	0	1	0.284	0.451	0	1
Higher managerial and professional workers	0.124	0.330	0	1	0.083	0.276	0	1
N (individuals)	1,777				1,649			
n (person-years)	2,630				2,296			

Notes: Sample of individuals with within-variation on fixed-term employment. Descriptives are calculated for the year of observation before there is a change in the employment contract of the individual.

Source: SOEP v33, own calculations

Table SD1.3 Descriptive statistics of changers before and after changes, separately for each direction of change

	Change from temporary to permanent employment		Change from permanent to temporary employment	
	Before	**After**	**Before**	**After**
	Mean/proportion		**Mean/proportion**	
Job change				
No job change	–	71.60	–	37.70
Job change	–	27.49	–	61.71
Age	31.46	32.76	32.76	34.54
Women (ref.: men)	44.08	44.32	41.76	41.07
East Germany (ref.: West Germany)	19.44	18.94	19.14	19.82
Educational degree, CASMIN				
Primary, lower secondary education	30.23	30.42	34.78	35.66
Intermediate, higher secondary education	46.24	45.61	46.93	46.81
Tertiary education	23.54	23.97	18.29	17.52
Full-time equivalent experience (years)	6.65	7.49	8.79	9.95
Household typology				
Single household	42.41	42.93	36.51	36.61
Living together with partner	23.12	23.08	23.00	21.99
Living together with partner and children	34.47	34.00	40.48	41.39
Part-time contract (ref.: full-time contract)	19.41	15.92	15.91	17.87
Overtime (hours)	2.39	2.59	2.32	2.52
Tenure (years)	2.45	3.05	4.81	2.68
Company size (number of employees)				
Less than 20	19.69	21.91	29.38	20.15
20-199	33.51	30.90	33.51	34.03
200-1999	23.66	22.37	18.38	23.52
2000 or more	23.14	24.83	18.73	22.29
Income share in household (% deciles) (w/o singles)	6.42	6.37	5.98	6.11
Employment status of the partner in the household				
Permanent employment	36.83	37.82	40.87	40.12
Fixed-term employment	7.58	6.15	6.31	7.49
Not working/unemployed	13.18	13.10	16.30	15.78
No partner in the household	42.41	42.93	36.51	36.61
Industry NACE v1.1				
Agriculture, forest, fishery	1.12	1.02	0.96	0.88

	Change from temporary to permanent employment		Change from permanent to temporary employment	
	Before	**After**	**Before**	**After**
	Mean/proportion		**Mean/proportion**	
Mining and quarrying	0.19	0.17	0.37	0.51
Manufacturing	25.46	26.35	27.13	29.13
Electricity, gas and water supply	0.82	0.83	1.18	0.90
Construction	5.61	5.29	11.11	6.90
Trade and reparation	12.21	12.47	16.38	14.58
Hotels and restaurants	3.07	3.38	3.72	2.65
Transport, storage, communication	6.45	6.77	5.94	5.47
Financial intermediation	2.28	2.13	2.36	2.83
Real estate, renting and business services	7.24	8.71	7.54	7.18
Public administration, defence, social security	6.55	6.42	4.57	6.28
Education	9.32	8.63	3.64	5.66
Health and social work	15.00	14.15	11.41	11.94
Other community, social and personal services	4.41	3.45	3.32	4.76
Activities of households	0.14	0.17	0.11	0.11
Extra-territorial organizations	0.12	0.04	0.25	0.23
Erikson-Goldthorpe-Portocarero class scheme, EGP				
Agricultural labour	1.27	1.07	1.55	1.03
Semi- and unskilled manual workers	17.41	16.70	21.21	23.39
Skilled manual workers	19.73	18.69	24.39	21.12
Routine service and sales workers	11.39	10.16	12.26	12.57
Routine clerical workers	13.65	15.72	9.96	10.53
Lower managerial and professional workers	25.84	26.09	19.74	22.14
Higher managerial and professional workers	10.71	11.57	10.88	9.21
n (person-years)	3,003*		1,877*	

Notes: Sample of individuals with within-variation on the fixed-term employment variable. Results are weighted. * n differs for the variables full-time equivalent experience (2,988; 1,872), and educational degree (2,906; 1,836)

Source: SOEP v33, own calculations

SD2: Alternative coding of affective job insecurity

In the main models, affective job insecurity is coded as a dummy whereby all those who report being very concerned about their job are coded as 1 and all those who report being somewhat or not concerned are coded as 0. Here, the models are re-estimated with all those being very or somewhat concerned coded as 1 and all those being not concerned coded as 0. The results are the same. Only the gender interaction coefficient for singles is just not significant and becomes clearly insignificant in the last model.

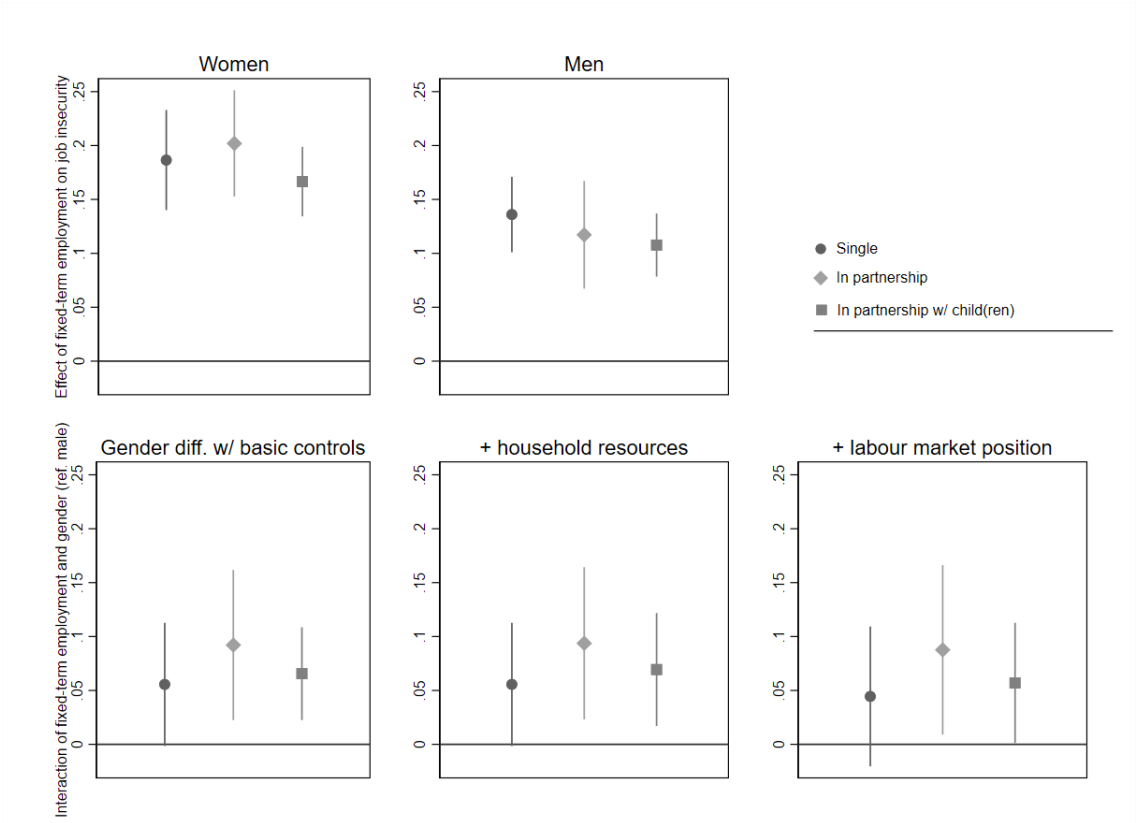

Figure SD2. Alternative coding of affective job insecurity – Predicted effects of fixed-term employment on affective job insecurity and predicted gender differences in these effects with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs

n (person-years): 19,795 for singles, 19,579 for those in partnership, 49,592 for those in partnership w/ child(ren) (pooled models); 8,063 for single women, 10,513 for women in partnership, 20,070 for women in partnership w/child(ren); 11,732 for single men, 9,066 for men in partnership, 29,522 for men in partnership w/ child(ren)

Source: SOEP v33 1994-2016, own calculations

SD3: Conditional logit models

In order to check our assumption of a linear probability relation we repeat the analyses with a conditional logit model. Again, the results are very similar to our main analyses except for the gender difference among singles which becomes insignificant when controlling for the labour market position.

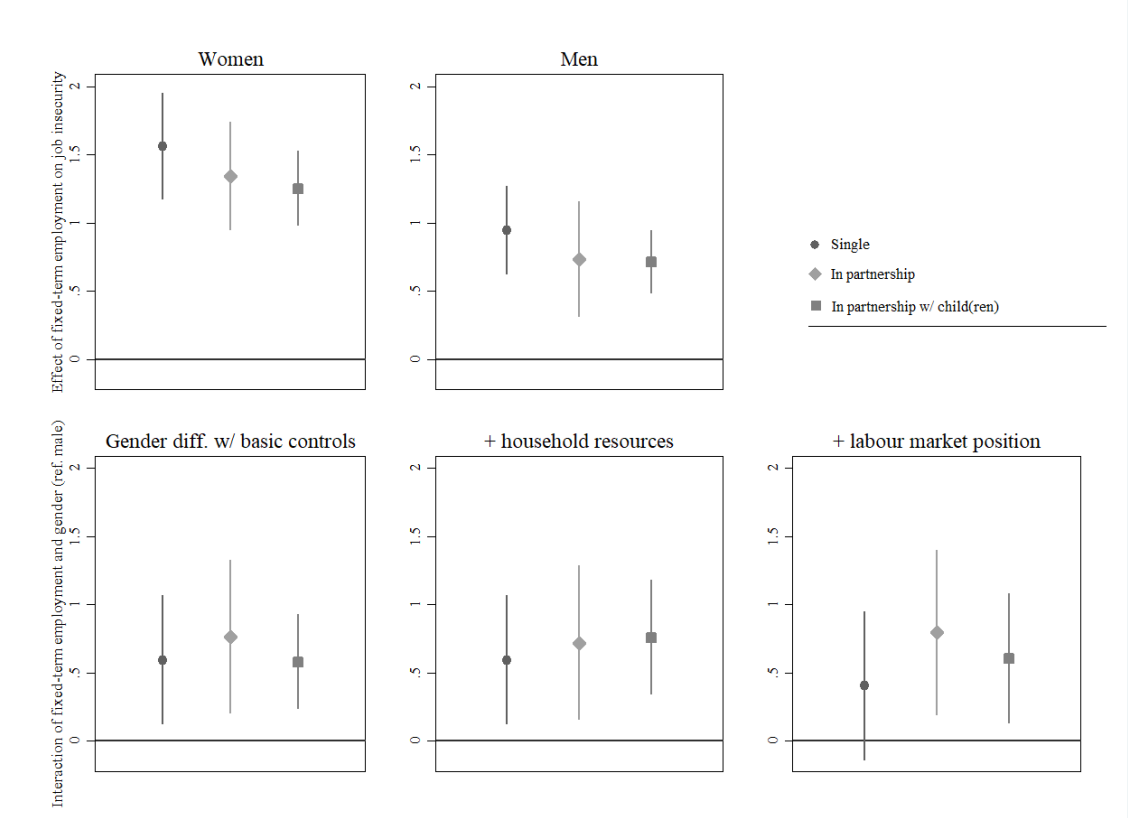

Figure SD3. Conditional logit models – Predicted effects of fixed-term employment on affective job insecurity and predicted gender differences in these effects with incrementally added interacted control variables

Note: Conditional logit models; robust SEs; lines represent the 95% CIs

n (person-years): 6,055 for singles, 5,317 for those in partnership, 15,514 for those in partnership w/ child(ren); 2,418 for single women, 3,013 for women in partnership, 5,672 for women in partnership w/ child(ren); 3,637 for single men, 2,304 for men in partnership, 9,842 for men in partnership w/ child(ren)

Source: SOEP v33 1994-2016, own calculations

SD4: Asymmetric effects

Firstly, we employ the approach of Allison (2019)[1] to estimate asymmetric effects of either changing from a fixed-term to a permanent contract or from a permanent to a fixed-term contract. Thereby it is possible to check how the usual fixed effects estimates containing both directions of change might conceal heterogeneous asymmetric effects. Figure SD4.1 summarises the estimates of the effect of changing from fixed-term to a permanent contract for both women and men and its interaction with gender, incrementally adding the explaining variables. Figure SD4.2 does the same for the effect estimates of changing from a permanent to a fixed-term contract. Both figures show that the point estimates are very similar to those of the main models in figures 2 and 3, suggesting that the conclusions drawn are valid for both directions of change. Only the standard errors are larger for the asymmetric effect estimates rendering some of them insignificant. This is presumably the result of the fewer changes the fixed effects estimators rely on in the case of asymmetric effects. While the main models are based on 4,926 changes, the models in figure SD4.1 are based on 3,028 changes and the models in figure SD4.2 only on 1,898 changes. Therefore we conclude that our results in the main models are robust for both directions of change.

[1] Allison, P. (2019). Asymmetric Fixed-Effects Models for Panel Data. *Socius: Sociological Research for a Dynamic World*, **5**, 1–12.

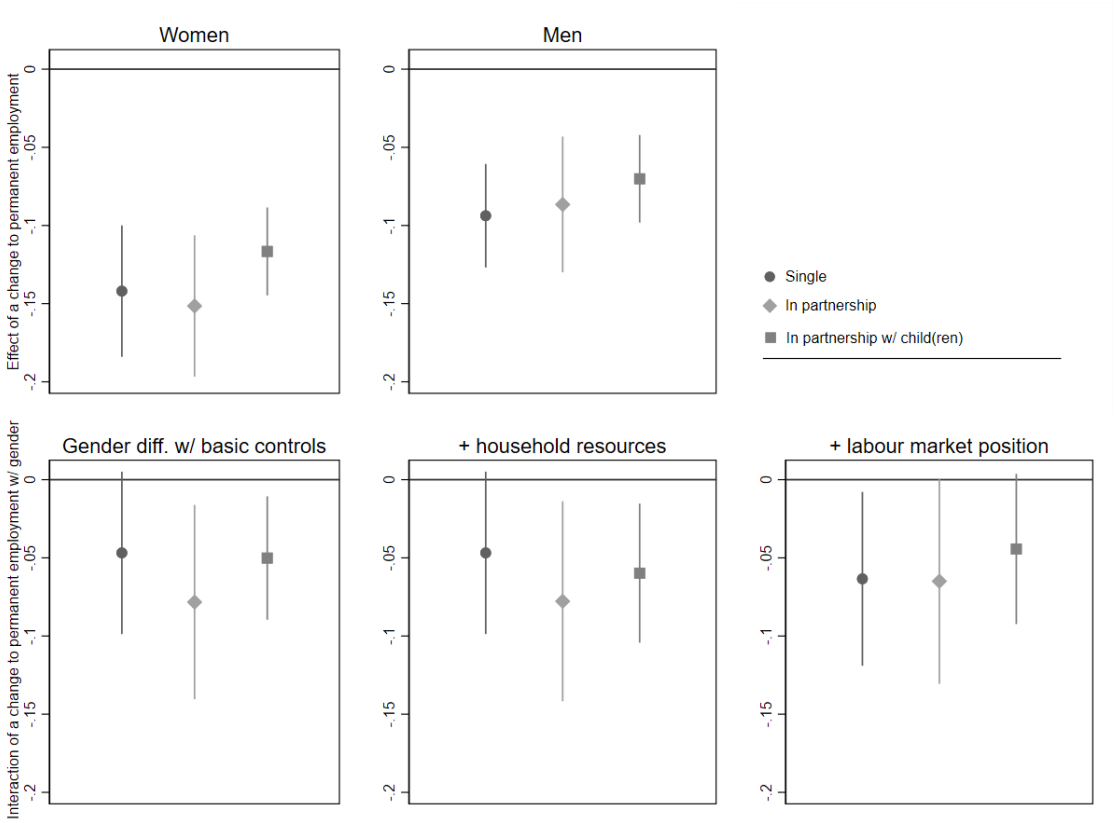

Figure SD4.1. Effects of changes from fixed-term to permanent employment – Predicted fixed effects of changing from fixed-term to permanent employment on affective job insecurity and predicted gender differences in these effects with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs;

n (person-years): 19,778 for singles, 19,511 for those in partnership, 49,552 for those in partnership w/ child(ren); 8,055 for single women, 10,480 for women in partnership, 20,056 for women in partnership w/ child(ren); 11,723 for single men, 9,031 for men in partnership, 29,496 for men in partnership w/ child(ren)
Source: SOEP v33 1994-2016, own calculations

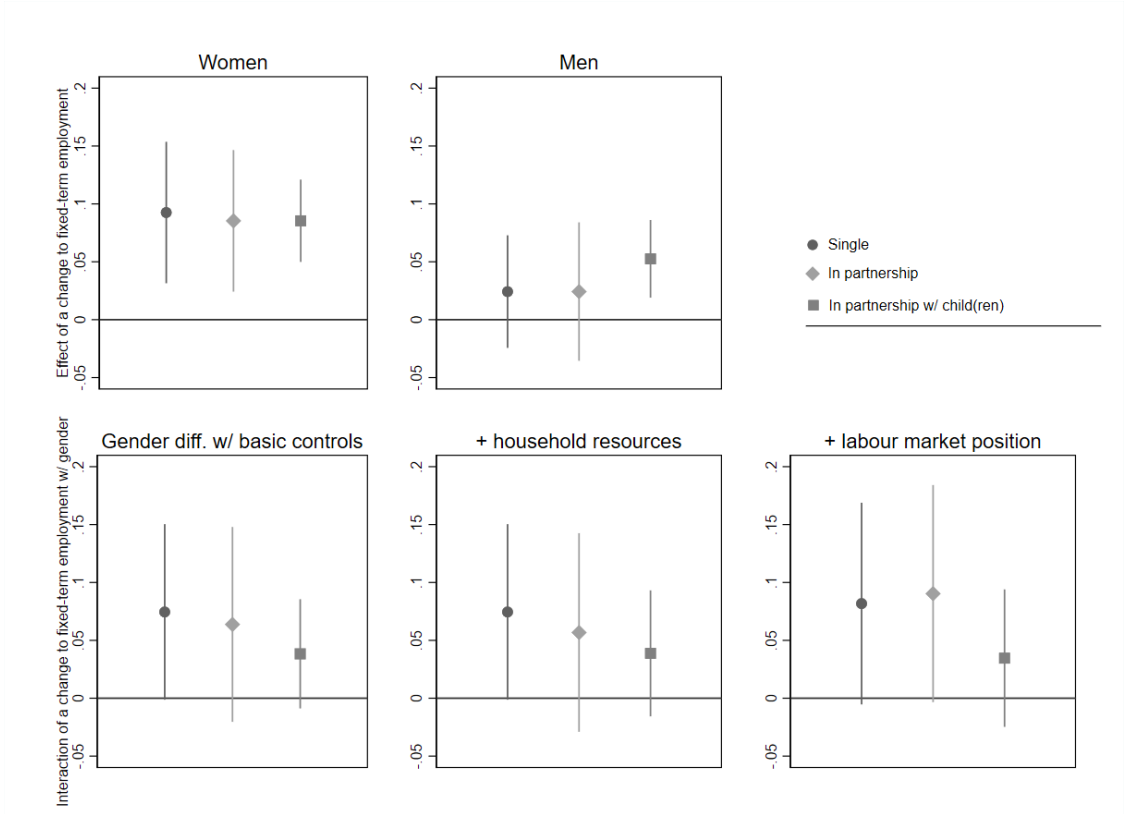

Figure SD4.2. Effects of changes from permanent to fixed-term employment – Predicted fixed effects of changing from permanent to fixed-term employment on affective job insecurity and predicted gender differences in these effects with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs

n (person-years): 19,778 for singles, 19,511 for those in partnership, 49,552 for those in partnership w/ child(ren); 8,055 for single women, 10,480 for women in partnership, 20,056 for women in partnership w/ child(ren); 11,723 for single men, 9,031 for men in partnership, 29,496 for men in partnership w/ child(ren)

Source: SOEP v33 1994-2016, own calculations

Supplementary Data – Online Appendix

SD5: Full regression table

Table SD5.1. Results of the first FE regression model of affective job insecurity

Fixed-term contract (ref.: Permanent contract)	0.12*** (17.34)
Part-time contract (ref.: Full time contract)	0.01 (1.58)
Weekly overtime (in hours, centered)	-0.00 (-1.26)
Tenure (in years, centered)	0.05*** (7.59)
Company size (ref.: <20)	
20 to 199 employees	-0.00 (-0.74)
200 to 1999 employees	0.00 (0.15)
More than 2000 employees	-0.01* (-1.81)
Local unemployment rate (Bundesland)	0.03*** (4.32)
Year fixed effects	Yes
Constant	0.16*** (7.62)
n (person-years)	88,966
adj. R^2	0.021

Note: t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; linear fixed effect probability models; cluster-robust SEs

Source: SOEP v33 1994-2016, own calculations

Table SD5.2. Results of the FE regression models of affective job insecurity across household types both gender-separated and pooled with basic controls

	Single			In partnership			In partnership with child(ren)		
	Women	**Men**	**Interacted**	**Women**	**Men**	**Interacted**	**Women**	**Men**	**Interacted**
Fixed-term contract (ref.: Permanent contract)	0.17***	0.10***	0.10***	0.16***	0.06***	0.06***	0.12***	0.08***	0.08***
	(8.34)	(6.10)	(6.17)	(7.24)	(3.11)	(2.88)	(9.12)	(5.77)	(5.68)
Part-time contract (ref.: Full time contract)	0.07***	0.09**	0.08***	0.01	-0.02	0.00	0.01	0.03	0.01
	(2.86)	(2.41)	(3.73)	(0.44)	(-0.39)	(0.17)	(0.70)	(1.56)	(1.25)
Weekly overtime (in hours, centered)	-0.01	-0.01*	-0.01**	0.00	-0.01	-0.00	0.00	0.00	0.00
	(-1.00)	(-1.68)	(-1.99)	(0.05)	(-1.48)	(-1.09)	(0.44)	(0.00)	(0.14)
Tenure (in years, centered)	0.05*	0.05**	0.05***	0.04*	0.06**	0.05***	0.05***	0.06***	0.06***
	(1.67)	(2.41)	(2.83)	(1.84)	(2.33)	(2.83)	(3.76)	(5.38)	(6.54)
Company size (ref.: <20)									
20 to 199 employees	0.01	0.02	0.02	-0.02	-0.01	-0.02	-0.01	-0.01	-0.01
	(0.44)	(1.10)	(1.19)	(-1.16)	(-0.69)	(-1.28)	(-0.58)	(-0.46)	(-0.76)
200 to 1999 employees	0.02	0.01	0.02	0.01	-0.01	-0.00	0.01	-0.01	-0.00
	(1.00)	(0.50)	(1.10)	(0.31)	(-0.60)	(-0.15)	(0.63)	(-0.57)	(-0.20)
More than 2000 employees	0.01	-0.02	-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
	(0.43)	(-0.90)	(-0.37)	(-0.90)	(-0.93)	(-1.22)	(-0.58)	(-0.52)	(-0.75)
Local unemployment rate (Bundesland)	0.02	0.02*	0.02*	0.06**	-0.02	0.02	0.06***	0.01	0.04***
	(0.82)	(1.67)	(1.78)	(2.53)	(-0.79)	(1.28)	(3.95)	(1.27)	(3.68)
Interaction fixed-term contract - female			0.07***			0.11***			0.05***
			(2.84)			(3.52)			(2.61)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.05	0.11**	0.09**	0.22**	0.16**	0.19***	0.19***	0.19***	0.19***
	(0.85)	(2.19)	(2.27)	(2.43)	(2.13)	(3.22)	(4.04)	(4.74)	(6.33)
n (person-years)	8,063	11,732	19,795	10,513	9,066	19,579	20,070	29,522	49,592
adj. R^2	0.042	0.022	0.029	0.033	0.015	0.024	0.023	0.015	0.017

Note: t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; linear fixed effect probability models; cluster-robust SEs

Source: SOEP v33 1994-2016, own calculations

SD6: Full regression table with controls

Table SD6 Results of pooled FE regression models of affective job insecurity across household types with incrementally added controls

	Single			In partnership			In partnership with child(ren)		
	basic controls	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**
Fixed-term contract (FTC) (ref.: permanent)	0.10***	0.10***	0.15***	0.06***	0.06	0.13*	0.08***	0.08***	0.08***
	(6.17)	(6.17)	(3.80)	(2.88)	(1.22)	(1.68)	(5.68)	(4.48)	(2.71)
Interaction FTC - female	0.07***	0.07***	0.09***	0.11***	0.10***	0.12***	0.05***	0.09***	0.10***
	(2.84)	(2.84)	(3.14)	(3.52)	(3.36)	(3.63)	(2.61)	(4.05)	(3.94)
Part-time contract (ref.: full time contract)	0.08***	0.08***	0.07***	0.00	0.00	0.00	0.01	0.01	0.01
	(3.73)	(3.73)	(3.59)	(0.17)	(0.18)	(0.19)	(1.25)	(1.37)	(1.50)
Weekly overtime (in hours, centered)	-0.01**	-0.01**	-0.01*	-0.00	-0.00	-0.00	0.00	0.00	0.00
	(-1.99)	(-1.99)	(-1.95)	(-1.09)	(-1.09)	(-1.05)	(0.14)	(0.07)	(0.11)
Tenure (in years, centered)	0.05***	0.05***	0.05***	0.05***	0.05***	0.05***	0.06***	0.06***	0.06***
	(2.83)	(2.83)	(2.89)	(2.83)	(2.85)	(2.90)	(6.54)	(6.45)	(6.33)
Company size (ref.: <20)									
20 to 199 employees	0.02	0.02	0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
	(1.19)	(1.19)	(1.09)	(-1.28)	(-1.24)	(-1.27)	(-0.76)	(-0.76)	(-0.80)
200 to 1999	0.02	0.02	0.02	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
	(1.10)	(1.10)	(1.02)	(-0.15)	(-0.11)	(-0.02)	(-0.20)	(-0.23)	(-0.31)
More than 2000	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
	(-0.37)	(-0.37)	(-0.39)	(-1.22)	(-1.21)	(-0.98)	(-0.75)	(-0.76)	(-0.86)
Local unemployment rate (Bundesland)	0.02*	0.02*	0.02*	0.02	0.02	0.02	0.04***	0.04***	0.03***
	(1.78)	(1.78)	(1.66)	(1.28)	(1.29)	(1.30)	(3.68)	(3.62)	(3.61)
Income share in household (centered)					0.00	0.00		0.00	0.00
					(0.23)	(0.15)		(0.23)	(0.19)
Interaction FTC - income share in HH					0.01	0.01		0.05***	0.05***
					(0.43)	(0.30)		(3.25)	(3.06)

	Single			In partnership			In partnership with child(ren)		
	basic controls	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**
Employment status of partner (ref.: not working)									
Permanently employed					-0.01	-0.01		-0.00	-0.00
					(-1.01)	(-1.01)		(-0.21)	(-0.18)
Fixed-term employed					0.01	0.01		0.00	-0.00
					(0.64)	(0.55)		(0.05)	(-0.01)
Interaction FTC – employment status of partner									
FTC – permanently employed					0.02	0.02		0.00	0.00
					(0.44)	(0.46)		(0.17)	(0.14)
FTC – fixed term employed					-0.04	-0.02		0.01	0.01
					(-0.73)	(-0.49)		(0.44)	(0.46)
EGP-Class (ref.: semi- and unskilled manual workers)									
Agricultural workers			-0.09			0.07			0.10**
			(-1.37)			(1.10)			(2.10)
Skilled manual workers			-0.02			-0.05*			0.01
			(-0.82)			(-1.71)			(0.59)
Routine service and sales workers			-0.05*			-0.02			-0.00
			(-1.67)			(-0.56)			(-0.10)
Routine clerical workers			-0.06**			-0.03			0.00
			(-2.04)			(-0.94)			(0.09)
Lower professionals and managers			-0.03			-0.04			-0.00
			(-1.12)			(-1.34)			(-0.17)
Higher professionals and managers			-0.03			-0.03			-0.00
			(-1.21)			(-0.96)			(-0.08)
Interaction FTC – EGP Class									
FTC - agricultural workers			0.24			-0.06			-0.02
			(1.53)			(-0.45)			(-0.19)
FTC – skilled manual workers			-0.02			-0.04			-0.01
			(-0.46)			(-0.63)			(-0.17)
FTC – routine service			-0.01			-0.10			0.01

	Single			In partnership			In partnership with child(ren)		
	basic controls	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**
and sales workers			(-0.23)			(-1.44)			(0.26)
FTC – routine clerical workers			0.00			-0.01			0.01
			(0.05)			(-0.15)			(0.28)
FTC – lower professionals and managers			0.01			-0.04			0.04
			(0.14)			(-0.70)			(1.39)
FTC – higher professionals and managers			-0.04			-0.08			0.00
			(-0.92)			(-1.29)			(0.09)
NACE economic sector (ref.: manufacturing)									
Agriculture, forestry, fishery			-0.00			-0.02			-0.08**
			(-0.02)			(-0.34)			(-2.19)
Mining and quarrying			0.15			-0.08			0.01
			(1.13)			(-0.99)			(0.10)
Electricity, gas and water supply			-0.02			-0.01			0.01
			(-0.46)			(-0.28)			(0.33)
Construction			0.01			0.07**			-0.03*
			(0.21)			(2.47)			(-1.84)
Trade and repair			-0.00			-0.02			-0.01
			(-0.23)			(-0.77)			(-0.56)
Hotels and restaurants			0.05			-0.03			-0.04
			(0.86)			(-0.83)			(-1.28)
Transport, storage, communication			0.05			-0.02			-0.01
			(1.43)			(-0.47)			(-0.49)
Financial intermediation			0.02			-0.05			-0.04
			(0.63)			(-1.42)			(-1.39)
Real estate, renting, business activities			0.02			-0.01			-0.02*
			(0.90)			(-0.25)			(-1.66)
Public administration, defence, social security			-0.03			-0.05			-0.05**
			(-1.23)			(-1.48)			(-2.30)
Education			-0.03			0.01			-0.04*

	Single			In partnership			In partnership with child(ren)		
	basic controls	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**
			(-0.66)			(0.28)			(-1.88)
Health and social work			-0.01			0.04			-0.03*
			(-0.38)			(1.22)			(-1.79)
Other community, social and personal service activities			0.00			0.04			-0.04**
			(0.07)			(1.11)			(-2.02)
Private households			-0.18*			0.14			-0.07
			(-1.73)			(0.47)			(-1.20)
Extra-territorial organisations			-0.01			-0.05			0.32**
			(-0.42)			(-1.40)			(2.13)
Interaction FTC – NACE economic sector									
FTC - Agriculture, forestry, fishery			-0.16			-0.18			0.22**
			(-1.40)			(-0.94)			(2.08)
FTC - mining and quarrying			-0.07			-0.05			-0.03
			(-0.32)			(-0.92)			(-0.26)
FTC – electricity, gas, water supply			0.13			-0.10			0.00
			(1.19)			(-1.08)			(0.03)
FTC – construction			-0.00			0.05			0.05
			(-0.04)			(0.56)			(1.04)
FTC – trade and repair			-0.09**			-0.04			-0.04
			(-2.06)			(-0.66)			(-1.15)
FTC – hotels and restaurants			-0.09			0.02			-0.06
			(-1.43)			(0.24)			(-0.99)
FTC – transport, storage and communication			-0.08			-0.12			-0.07
			(-1.35)			(-1.45)			(-1.63)
FTC - financial intermediation			-0.17**			-0.02			0.01
			(-2.09)			(-0.20)			(0.10)
FTC – real estate, renting, business activities			-0.07			-0.07			-0.03
			(-1.50)			(-1.21)			(-0.74)
FTC – public administration,			-0.06			0.04			0.06

	Single			In partnership			In partnership with child(ren)		
	basic controls	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**	**basic controls**	**+ household resources**	**+ labour market position**
defence, social security			(-1.30)			(0.64)			(1.46)
FTC – education			0.01			-0.04			-0.04
			(0.11)			(-0.80)			(-1.08)
FTC – health and social work			-0.11**			-0.09*			-0.04
			(-2.54)			(-1.71)			(-1.26)
FTC – other community, social and personal service activities			-0.01			-0.05			-0.03
			(-0.24)			(-0.70)			(-0.64)
FTC – private households			0.00			-0.13			-0.08
			(.)			(-0.68)			(-0.95)
FTC – extra-territorial organisations			-0.13**			-1.08***			0.92***
			(-2.37)			(-15.57)			(26.13)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.09**	0.09**	0.12**	0.19***	0.20***	0.22***	0.19***	0.19***	0.20***
	(2.27)	(2.27)	(2.53)	(3.22)	(3.36)	(3.41)	(6.33)	(6.25)	(6.09)
n (person-years)	19,795	19,795	19,795	19,579	19,579	19,579	49,592	49,592	49,592
adj. R^2	0.029	0.029	0.032	0.024	0.024	0.027	0.017	0.017	0.019

Note: t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; linear fixed effect probability models; cluster-robust SEs

Source: SOEP v33 1994-2016, own calculations

SD7: Age differences

While we do not measure intentions to have (more) children directly, we assume they relate to life age, especially for women. To that end, we assess the robustness of our results and compare the gender differences in the effects of fixed-term employment on affective job security for three age groups, 20 to 35, 36 to 45 and 46 to 65. The robustness tests provide further indication that fertility intentions and family formation are important contextual factors for the perception of fixed-term employment: In the highly fertile phase, from ages 20 to 35 (see figure SD 7.1), women across all household types are more strongly worried by fixed-term employment than men. Gender differences are most pronounced in couple households. Furthermore, gender differences are particularly evident after controlling for household resources and individual job position. In the post-fertile age from 46 to 65 (see figure SD7.3), there are no gender differences in the effect of fixed-term employment on affective job insecurity at all. In the age range from 36 to 45 (see figure SD7.2), the gender differences with a higher vulnerability of women are strongest in single households followed by family households. Unexpectedly, there are only small and insignificant gender differences in couple households.

Adopted from the main text

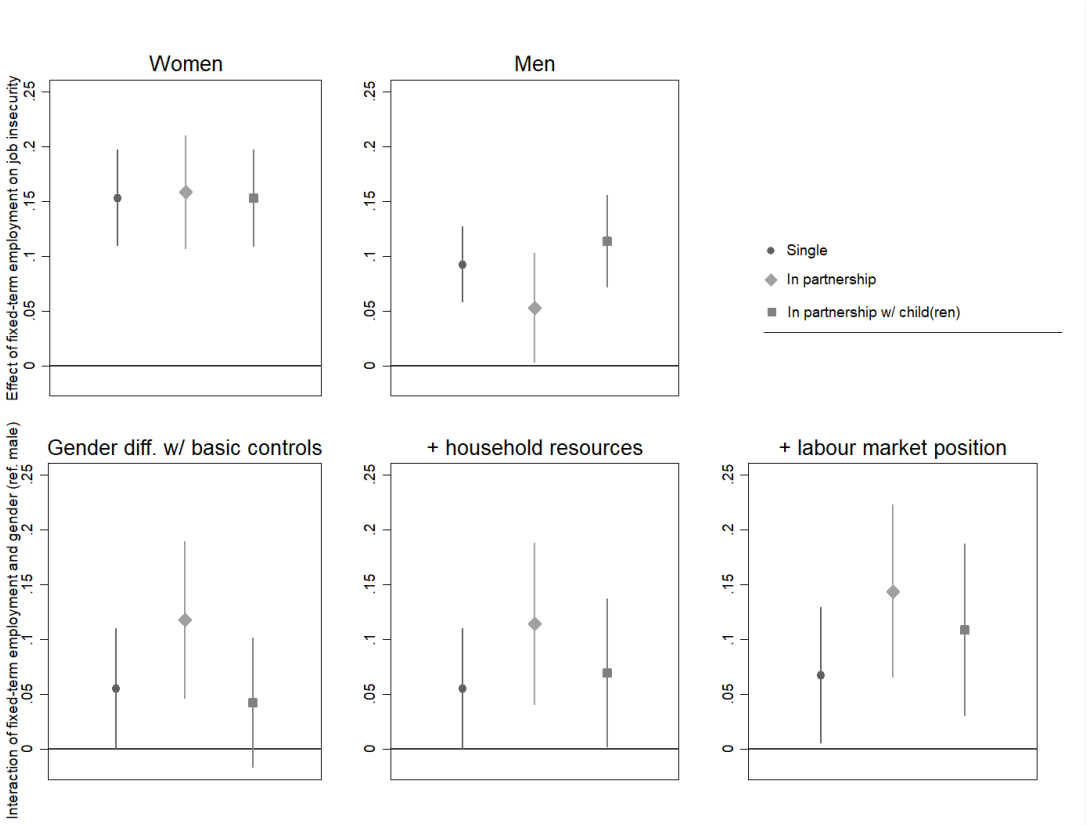

Figure SD7.1. Fertile age: 20 to 35 – Predicted effects of fixed-term employment on affective job insecurity and predicted gender differences in these effects with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs; sample restricted to individuals between 20 and 35 years old.

n (person-years): 13,989 for singles, 11,029 for those in partnership, 15,752 for those in partnership w/ child(ren); 5,812 for single women, 5,896 for women in partnership, 6,221 for women in partnership w/ child(ren); 8,177 for single men, 5,133 for men in partnership, 9,531 for men in partnership w/ child(ren)

Source: SOEP v33 1994-2016, own calculations

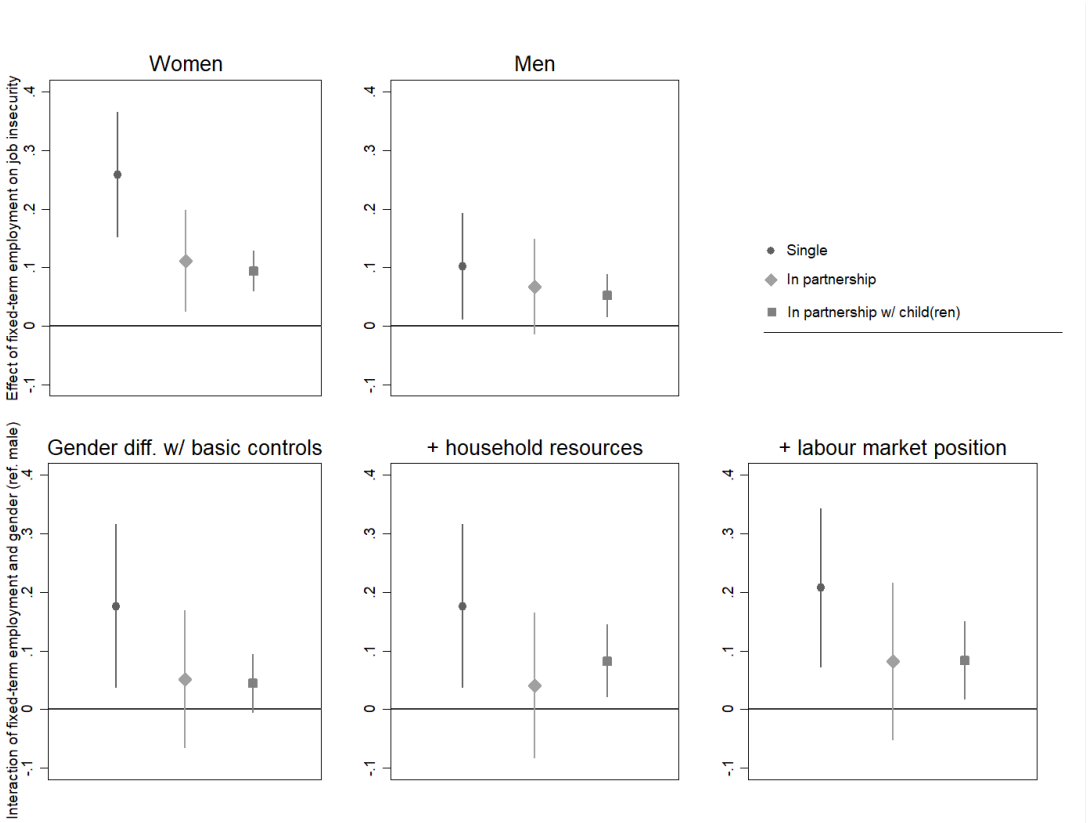

Figure SD7.2. Middle age: 36 to 45 – Predicted effects of fixed-term employment on affective job insecurity and predicted gender differences in these effects with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs; sample restricted to individuals between 36 and 45 years old.

n (person-years): 5,806 for singles, 8,550 for those in partnership, 33,840 for those in partnership w/ child(ren); 2,251 for single women, 4,617 for women in partnership, 13,849 for women in partnership w/ child(ren); 3,555 for single men, 3,933 for men in partnership, 19,991 for men in partnership w/ child(ren)

Source: SOEP v33 1994-2016, own calculations

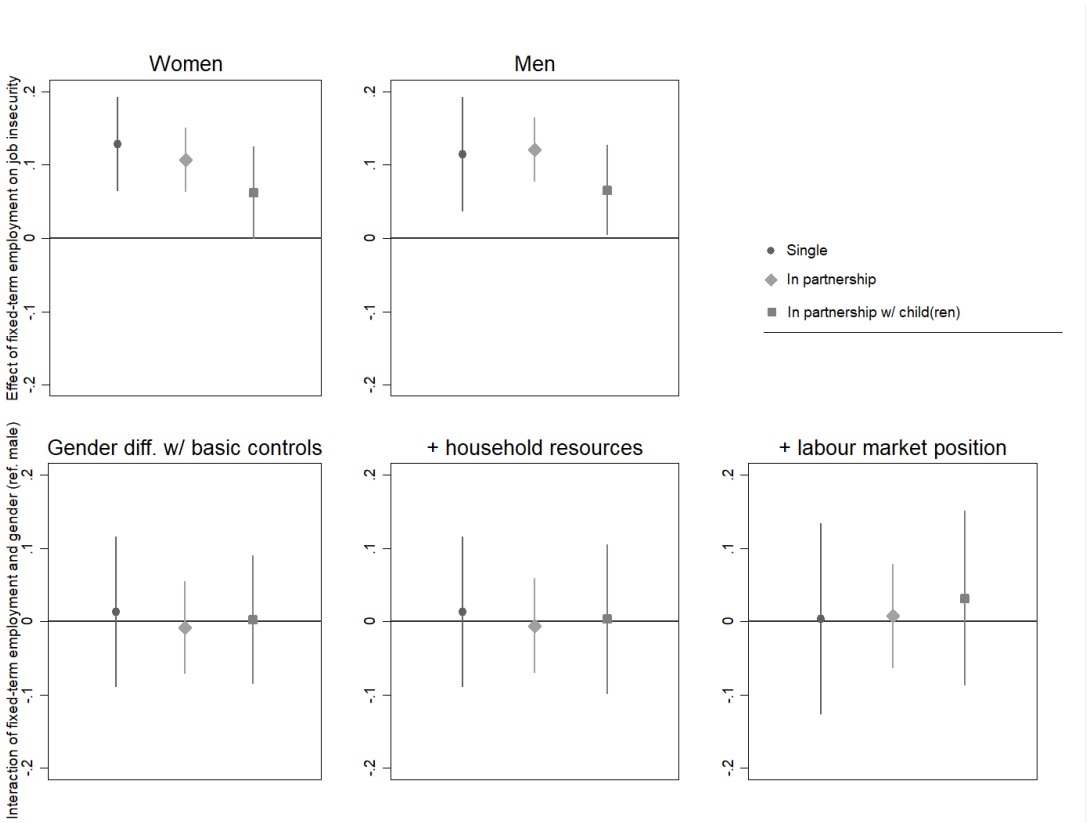

Figure SD7.3. Older age: 46 to 65 – Predicted effects of fixed-term employment on affective job insecurity and predicted gender differences in these effects with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs; sample restricted to individuals between 46 and 65 years old.

n (person-years): 10,693 for singles, 38,709 for those in partnership, 15,418 for those in partnership w/ child(ren); 6,068 for single women, 18,448 for women in partnership, 4,535 for women in partnership w/ child(ren); 4,625 for single men, 20,261 for men in partnership, 10,883 for men in partnership w/ child(ren)

Source: SOEP v33 1994-2016, own calculations

SD8: Sample selection bias

To address a potential dynamic sample selection we need to check whether there are gender differences in the probability to leave the labour market after experiencing fixed-term employment. We run a pooled OLS linear probability model for the years 1994 to 2016 with the same sample as in the main analyses of our study. Our dependent variable is a dummy variable indicating whether a person is unemployed or non-employed at t+1 and t+2. If an individual is employed (fixed-term or permanent) in both years she belongs to the reference group, the same holds for individuals who only experience unemployment or non-employment at t+1 but are employed in t+2. We exclude observations who are in training at t+1 or t+2. We look at two consecutive years instead of only one year to focus on actual drop-outs of the labour market.

In a first model we integrate the same control variables as in the main analyses. We control for part-time work, hours of overtime, tenure, size of the company, EGP Class, industry (NACE), income position in the household and employment status of the partner. We include an interaction term of fixed-term employment and gender as well as interaction terms of fixed-term employment with all other variables in the model, including the household type. The aim is to find out whether men and women still differ in their probability to leave the labour market after working on a fixed-term contract when controlling for all characteristics we already control for in our main models. If the gender difference in the probability to leave the labour market after fixed-term employment only occurs because women have a smaller share in the household income and thus feel safe enough to leave the labour market as an alternative option to an insecure employment biography, a dynamic sample selection is already controlled for in the main analyses by controlling for the income position in the household. We are interested whether, apart from that, men and women differ in their reactions to fixed-term employment.

In a second model we differentiate between unemployed individuals and non-working individuals including parental leave. It might be the case that women more often leave

the labour market for family reasons as an alternative option after fixed-term employment while men more often leave the labour market involuntarily and become unemployed after fixed-term employment. Though men and women might leave the labour market after fixed-term employment with the same probability they might still differ in insecurity levels due to the fixed-term contract as men more often face the threat of unemployment while women more often can rely on alternative care roles in non-employment.

While multinomial logit models would be the usual approach to estimate this competing risk scenario, they are overspecified because of the amount of interaction effects and the resulting multifold covariate structure. We therefore run again pooled OLS linear probability models, one for the probability to follow up on a period of fixed-term employment with at least two years of non-employment and one for the probability to experience at least two years of unemployment. The reference category contains individuals that are employed in both years or are only unemployed at t+1.

Our results show no gender differences in the effect of fixed-term employment on the probability to exit the labour market nor on the probability to become unemployed or non-working in two consecutive years after the fixed-term employment spell (figure SD10). We do not find either any probability gender differences when using logistic models instead of linear probability models. Only when looking at the gender differences in terms of logits we find that women have a significantly smaller chance to drop out of employment after a fixed-term employment spell while there are no gender differences in the chances to fall into either non-employment or unemployment. Overall, these results provide suggestive evidence that dynamic sample selection does not bias our effects or gender differences in the main analyses.

However, this robustness check is only a first explorative look into the question how fixed-term employment might lead to a labour market exit differently for men and women. The thorough investigation of this question is beyond the scope of the paper and an interesting link for further research.

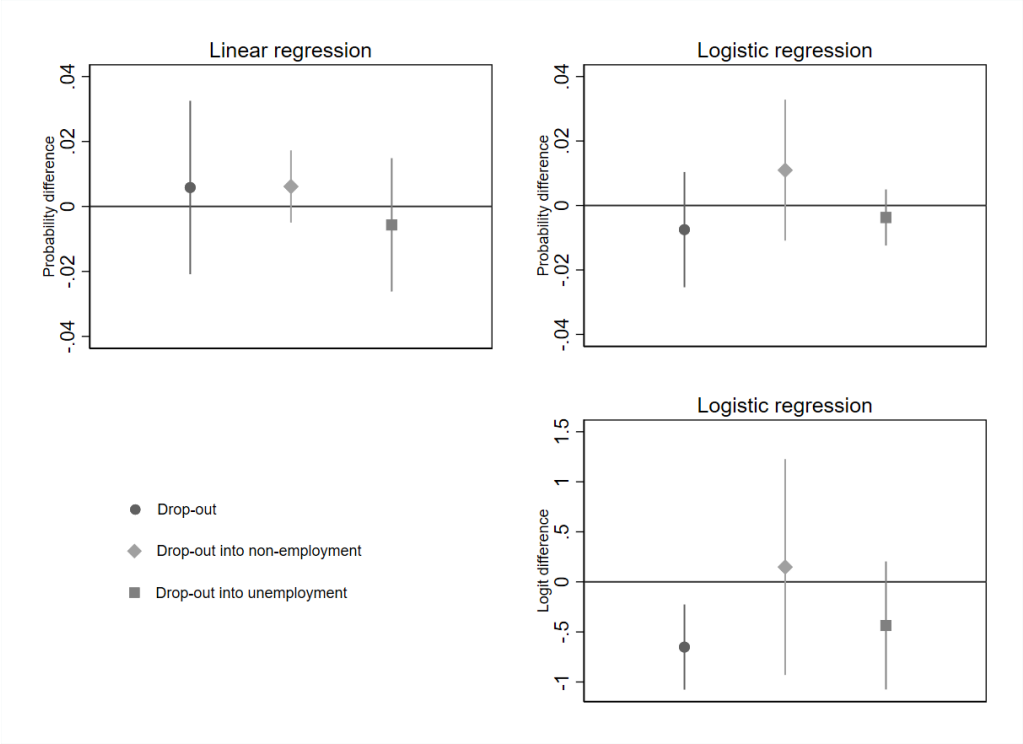

Figure SD8. Gender differences in the probability of labour market drop-out after fixed-term employment. Predicted gender differences in the effect of fixed-term employment on labour market drop-out estimated with a linear probability and a logistic model, the latter both in terms of probabilities and logits.

Note: Cluster-robust SEs; lines represent the 95% CIs

n (person-years): 62,850 for linear drop-out probability, 62,822 for logistic drop-out probability, 62,373 for linear probability of non-employment and unemployment drop-out, 58,278 for logistic non-employment drop-out, 61,185 for logistic unemployment drop-out

Source: SOEP v33 1994-2016, own calculations

SD9: Additional controls – job characteristics

Apart from the industry or occupational position men and women work in, our effects might as well be driven by gender differences in employment characteristics that could also shape unequal vulnerabilities to fixed-term employment. In an additional model we therefore control for interactions of fixed-term employment and part-time employment, overtime, company size and tenure. The results show that these interactions do not explain any gender differences.

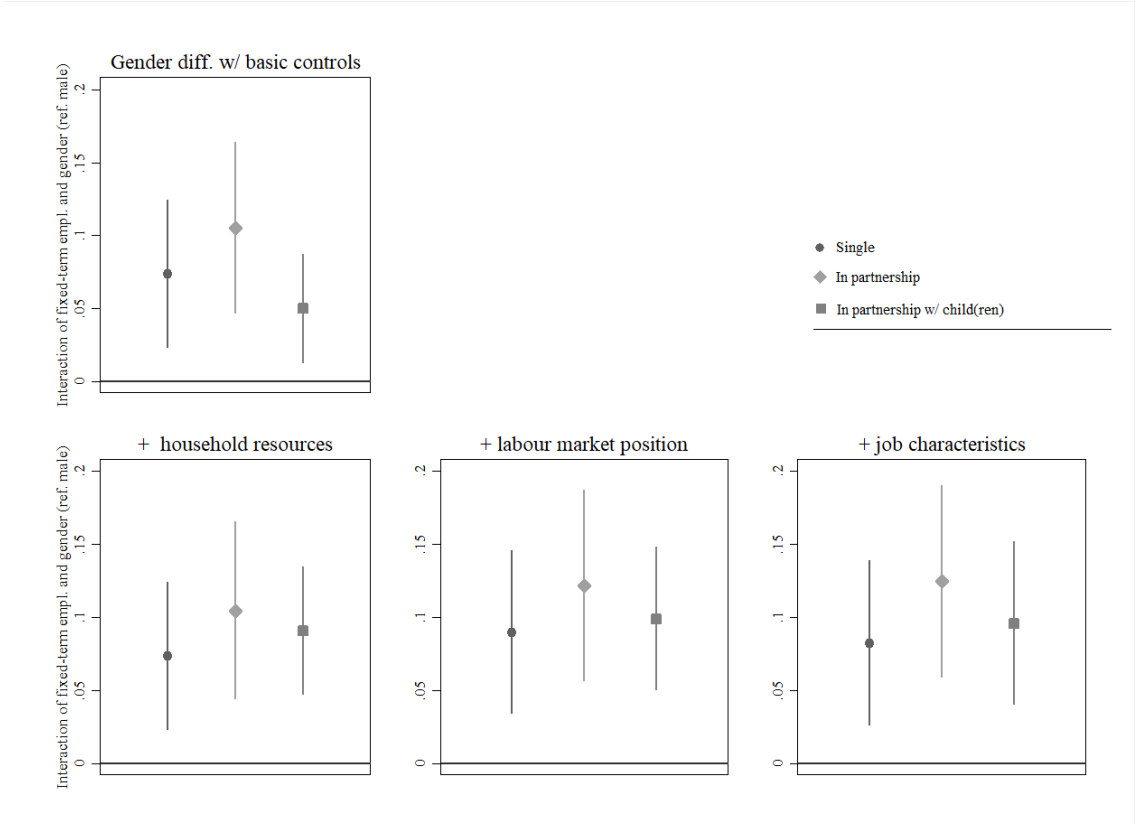

Figure SD9. Additional controls for job characteristics – Predicted gender differences in the effect of fixed-term employment on affective job insecurity with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs; additional controls for job characteristics

n (person-years): 19,795 for singles, 19,579 for those in partnership, 49,592 for those in partnership w/ child(ren)

Source: SOEP v33 1994-2016, own calculations

SD10: Additional controls – personality traits

Next, we test whether personality traits such as risk aversion and the Big Five are important as these could affect the appraisal of fixed-term employment. Individual personality traits may be strengthened over the process of gender-specific socialisation in a way that for example women are more risk averse than men (Muñoz de Bustillo & de Pedraza 2010)[2]. For this robustness test, we have to restrict our sample for the first model to the years 2004, 2006 and 2008 to 2016 as the index of risk aversion was only observed in these years in the SOEP. For the second model we have to impute the values of the Big Five for several years. As we assume them to be relatively stable personality traits we simply impute the missing values by using existing ones in other years. Controlling for the interaction between fixed-term contract and the Big Five indices does not change the results. Controlling for the interaction with the risk aversion index does render the gender difference in families insignificant. However this seems to be more an effect of the missing years as the difference is small and insignificant from the very beginning even when the interaction with risk aversion is not yet controlled for.

[2] Muñoz de Bustillo, R. and de Pedraza, P. (2010). Determinants of job insecurity in five European countries. *European Journal of Industrial Relations*, **16**, 5–20.

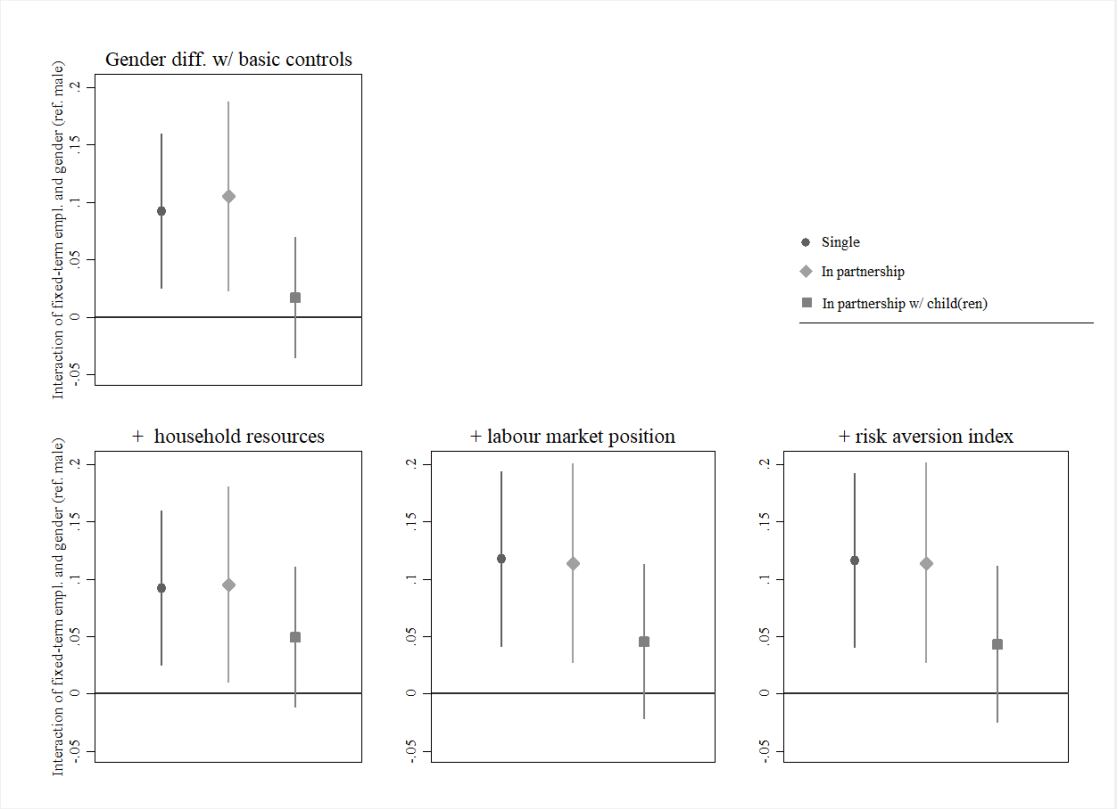

Figure SD10.1. Additional control for risk aversion – Predicted gender differences in the effect of fixed-term employment on affective job insecurity with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs; additional control for risk aversion.

n (person-years): 9,896 for singles, 8,958 for those in partnership, 23,440 for those in partnership w/ child(ren)

Source: SOEP v33 2004, 2006, 2008-2016, own calculations

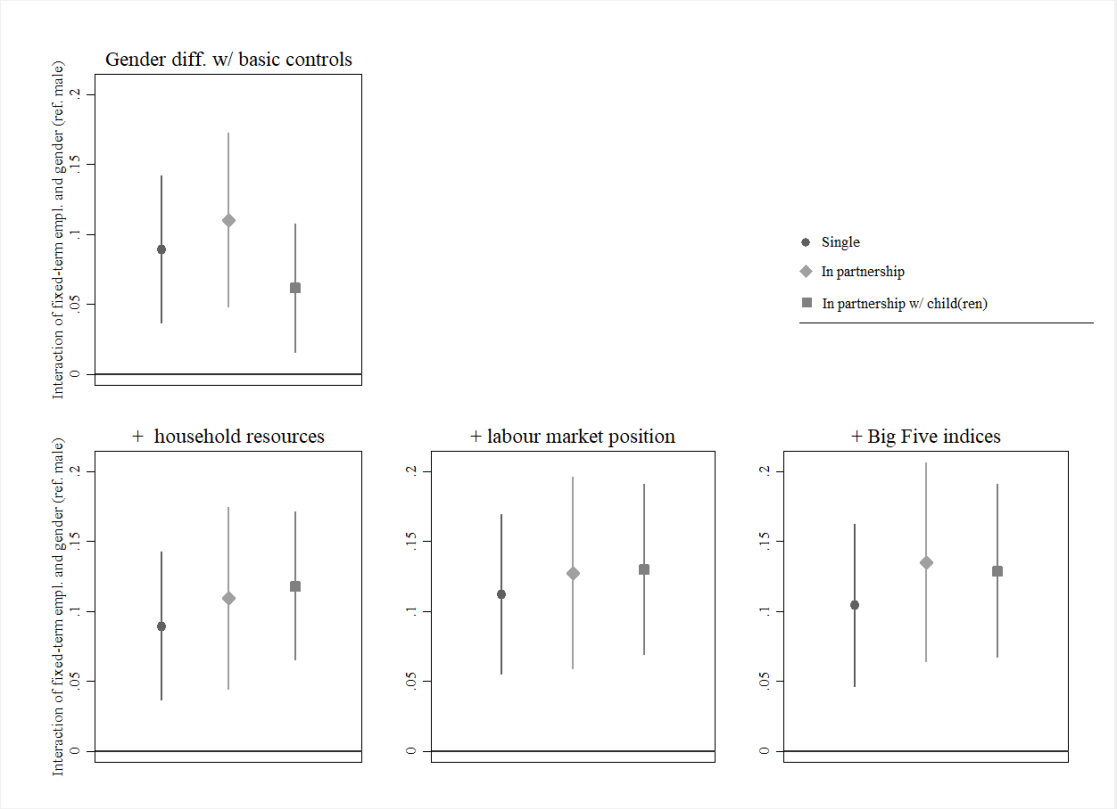

Figure SD10.2. Additional control for the Big Five – Predicted gender differences in the effect of fixed-term employment on affective job insecurity with incrementally added interacted control variables

Note: Linear fixed effects probability models; cluster-robust SEs; lines represent the 95% CIs; additional controls for the Big Five personality traits (partly imputed).

n (person-years): 16,056 for singles, 16,197 for those in partnership, 34,788 for those in partnership w/ child(ren)

Source: SOEP v33 1994-2016, own calculations