Start Me Up -

How Fathers' Unemployment Affects their Sons'

School-to-Work Transitions

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Abstract

Early-career unemployment has long-lasting labor market consequences. Using data
from the German Socio-Economic Panel (SOEP), continuous-time duration models are
applied to examine whether paternal unemployment delays sons' school-to-work tran-
sitions. Controlling for a rich set of fathers' and sons' socio-economic characteristics,
paternal unemployment at the time of the school-to-work transition can be regarded
as "bad luck" (*ceteris paribus*) allowing to identify causal effects. The results show
that fathers' unemployment implies long-run intergenerational costs as it hinders sons'
smooth school-to-work transitions and results in sons' early-career unemployment.

Keywords: School-to-Work Transition, Parental Unemployment, Youth Unemployment

JEL classifications: J64

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1 Introduction

The period between end of education and entry into the first job is called the school-to-work transition. If such a transition is slow, youth unemployment or at least youth labor market inactivity can be observed. According to e.g. Tominey and Gregg (2005) or Burgess, Propper, Rees, and Shearer (2003) youth unemployment has long run negative wage effects and increases the likelihood of further unemployment spells in the future career. Thus, a successful school-to-work transition should be of great personal and societal interest.

Previous research has already examined some of the determinants of successful transitions. Often mentioned aspects are the desired quality of the first job (Gebel, 2009), parental socio-economic status (Marcenaro-Gutierrez and Vignoles, 2009), labor market institutions (Ryan, 2001) as well as the use of networks (for an overview see Ioannides and Datcher Loury (2004)). In this study, the focus is on the role of fathers' unemployment within their adolescent's school-to-work transitions.

The use of networks can help to improve the speed of transitions and the quality of the first job. Previous studies such as Pellizzari (2010) found that the usage of networks results in a faster take-up of the first job and is not punished by e.g. wage losses. Furthermore, even direct transmission of employers from one generation to the next occurs. Corak and Piraino (2011) analyzed the intergenerational transfer of employers as a result of son's usage of parental networks. Their empirical results suggest that about 40% of young Canadian men choose to work for an employer their father worked for before. Thus, parental networks are important and intensively used by young adolescents.

Using data from the German Socio-Economic Panel (SOEP) the effect of relevant paternal unemployment within the school-to-work transition on the duration until the first job is taken up is analyzed. The study contributes to the literature in at least two aspects. First, in contrast to previous studies (e.g. Mäder, Müller, Riphahn, and Schwientek (2014) or Pedersen and Madsen (2002)) this study analyzes the immediate effect of parental unemployment. Here, the effect of parental unemployment at the time of the school-to-work transition is analyzed in contrast to past parental unemployment during childhood. Second, one of the major strength of the SOEP, i.e. parents and children are both respondents to the questionnaire, is used in the analysis to overcome shortcoming of previous studies. Therefore, a potential source omitted variable bias due to the inheritance of unobserved

characteristics can be eliminated. As a result, this study does not suffer of omitted variable bias due to inheritance of e.g. labor market characteristics or work preferences.

By applying duration analysis tools in order to detect the impact of parental unemployment within the school-to-work transition on the duration until the first job is taken up, several noticeable results should be highlighted. First, fathers' unemployment at the time of sons' school-to-work transition significantly delays labor market entry of the sons. The likelihood of transition into the first job is decreased by about 50% at each point in time for those sons whose fathers are in unemployment. Second, this effect varies among educational subgroups. The results show that children of low educated fathers suffer to a larger extend than sons from well educated fathers. Furthermore, the dependence on fathers' labor market status appears to be much more prevalent among high educated sons. The results found are robust to empirical models and variations in sample composition.

The study highlights the importance of intergenerational effects of unemployment. Long-lasting labor market consequences of early-career unemployment have been shown previously. The identification of the substantial role of fathers' labor market status at the beginning of the career of the sons can be regarded as the major contribution of this study. Policy makers need to be aware of such transmissions as the costs of unemployment are much higher than previously thought. Practically speaking, labor market agencies should assist not only the unemployed themselves but also help their adolescents who are about to enter the labor market.

2 Data

The goal of the analysis is to investigate the direct effect of paternal unemployment within the school-to-work transition on the speed and likelihood of the sons' take-up of the first job. Here, the German Socio-Economic Panel (SOEP) appears to be the dataset of first choice. The SOEP includes a reasonable number of sons who enter the labor market for their first time. Due to calendar information and the longitudinal dimension of the dataset, one is able to follow the sons throughout their search for the first job until the take-up can be observed. In the present study it is focused on the transmission of paternal unemployment on sons, as Kramarz and Skans (2010) argue that the effect of fathers are larger than the effects of mothers and sons are more affected than daughters. The biggest strength of the

SOEP is that the father is a respondent of the survey himself. Through a unique person-identifier the data on the sons can be linked to the information of the fathers. Therefore, all information that is available for the son is also available for the father. Further detailed information on the SOEP can be found in Haisken-DeNew and Frick (2005).

The unit of observation i is the son entering the labor market for the first time. The entry into the labor market is identified by the calendar information of the SOEP. Here, the individual reports his labor force status for each month of the previous year. A son enters the labor market when he finishes (tertiary) education, vocational training or military or community service. Biographies might incorporate more than one of these exits, i.e. individuals leave high school, fulfill their military service, complete a vocational training and then add a university degree. In these cases of multiple exits, the latest completion of a spell is counted as the entry into the labor market. To exclude outliers, individuals who are older than 35 when they enter the labor market for the first time are dropped out of the sample.

Then, the individuals are followed on a monthly base (using retrospective calendar information) until their transition into employment can be observed or the spell is censored. The SOEP is a yearly questionnaire. Thus, in the long-format the data includes one row per year for each individual. Monthly information is only available for a limited number of variables. To make use of the monthly information on the labor force status of the child, the dataset is expanded. Now, the data in the long-format contains one row for each month for each individual. While the information on the labor force status varies on a monthly base, the information on most of the other variables (e.g. living in west Germany or handicap level) is held constant for a calendar year.

Finally, the transition into employment of the child is defined as the take-up of a full- or part-time job. As a robustness check the failure variable is reconstructed to indicate the take-up of a first significant job. Here, the entry into the first significant job is defined as the take-up of a full-time position that lasts for at least six further months. Furthermore, according to Baert, Cockx, and Verhaest (2013) being overeducated in the first job can be regarded as a trap and results in a lower likelihood of taking up an adequate job. Thus, as a robustness check the dependent variable is modified that it indicates the take-up of a first job, where the son is not overeducated.[1]

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[1]Results of both robustness checks are available up on request. Conclusions remain the same.

About 4,828 sons are observed to enter the school-to-work transition in the time period from 1991 to 2011 from any of the abovementioned leaving states.[2] The analysis excludes years prior to 1991 to avoid to deal with issues of German reunification. Furthermore, immigrants are excluded from the analysis, as pre-checks have shown that their school-to-work transition seems to depend much more on their parental background, making them less comparable to the group of natives. After restricting the sample to only those non-migrants who entered the labor market at age 35 or younger and whose fathers are 65 or younger (the normal retirement age for most of the sample period) 1,121 sons remain in the sample. By adding the control variables of the final specification another 273 individuals are lost. The final sample consists of 848 individuals where for 529 of them a transition into employment can be observed. In a final step, individuals are assumed to be right censored, if their school-to-work transition lasts at least 24 months. It is assumed that these sons are unlikely to enter employment thereafter and are therefore treated as outliers and excluded of the analysis. The estimation then relies on 8,408 person-months observations.

The analysis includes several control variables on the individual-level that are argued to be relevant determinants of the school-to-work transition. These variables are age, living in West Germany, handicap level, years of education and variables accounting for an exit out of vocational education and military or community service.

In order to control for macroeconomic labor market conditions, monthly unemployment rates on the state level are included in the regression. Furthermore, year-fixed effects are included.

The key variable of interest is an identifier of paternal relevant unemployment. Here, the focus is on a father being unemployed in a specific month of the school-to-work transition of the child, conditional on that his unemployment spell is of at least three months. Thus, a dummy variable is included in the analysis that is equal to one if the parent is in a relevant unemployment spell in the specific month and zero if not. Note, unemployment spells of less than three months are treated as continuous employment spells. Here, it is argued that unemployment spells of such a short time period are not relevant for the son in order to impact his school-to-work transition.[3] To be able to account for labor market inactivity,

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[2]The data used in this paper was extracted using the Add-On Package PanelWhiz for Stata. Panel-Whiz (http://www.PanelWhiz.eu) was written by Dr. John P. Haisken-DeNew (john@PanelWhiz.eu). See Haisken-DeNew and Hahn (2010) for details. The PanelWhiz generated DO file to retrieve the data used here is available from me upon request. Any data or computational errors in this paper are the author's.

[3]Robustness checks for one months and six months spells, show that the results do not change qualita-

another dummy variable is generated that controls for the case that the father is out of the labor force. Thus, the father being in employment is the reference group. Here, one of the major strength of the SOEP is used, as the information of the monthly labor market status of the father is drawn from the calendar information of the father's own questionnaire. Thus, the analysis does not depend on information on the father given by the son, but on information of the father given by himself.

Table 1: Descriptive Statistics

	Mean	Std.Dev.	Min.	Max.
Father in Relevant UE Spell	0.10	(0.29)	0	1
Father Out of Labor Force	0.11	(0.31)	0	1
Age	21.87	(3.34)	17	35
West Germany	0.61	(0.49)	0	1
Handicap Level	2.55	(13.48)	0	100
Years of Education	10.91	(2.07)	7	18
Left Vocational Training	0.42	(0.49)	0	1
Left Military or Community Service	0.05	(0.21)	0	1
Monthly Regional UE Rate	12.33	(5.02)	4	26
Past UE Experience (Father)	1.02	(2.50)	0	20
Years of Education (Father)	11.95	(2.35)	9	18
Age (Father)	50.69	(5.78)	38	65
Handicap Level (Father)	5.48	(17.10)	0	100
N	8408			

Note: Authors' calculations based on SOEP (1991-2012).

Previous literature has raised the concern that the proposed variable does not help to identify a causal effect of parental unemployment (e.g. Lam and Schoeni (1993) or Agnarsson and Carlin (2002)). If solely parental unemployment is included in the analysis an omitted variable bias occurs. That is, the variable of interest reflects intergenerational correlations of e.g. ability, work preferences or genes. If these unobservables are not accounted for, the variable of interests does not show the effect of parental unemployment.

Here, the present study proposes a solution for the abovementioned problem. By controlling for father's age, father's years of education and father's past unemployment experience, the ability, work preferences etc. are sufficiently controlled for. Using these variables as proxies for skills and abilities, the ceteris paribus assumption of the empirical method assures that the variable of interest is net of skill or ability effects. If this assumption is correct, the key variable of interest reflects the "bad luck" of the son that his father is unemployed just in the time the adolescent is in the school-to-work transition. Thus, the key variable of interest is supposed to show the causal effect of paternal unemployment within the school-to-work

tively.

transition.

The reader might be concerned of self selection into the sample. The SOEP is a household questionnaire that interviews all household members who are older than 16 and who are willing to participate in the survey. Thus, the sons who are subject in this study, enter the sample by the age of 17. Now the young adolescents can be divided into four groups.

Table 2: Groups of the Population

	Continues to answer questionnaire	Does not continue to answer questionnaire
Lives with parents	Group A	Group B
Moved out	Group C	Group D

Group A and B stay with their parents until they finish education (or vocational training or military/community service) and enter the labor market. While group A continues to participate in the survey, group B might decide to drop out of the survey to whatever reason. While group A will enter the sample in this study, group B is lost. Furthermore, group C and D decide to leave their parent's household while in education, vocational training or military/community service. While group C decides to stay in the data set and keeps answering the questionnaire every year, group D decides to stop answering the questionnaire. As a result, only group A and C are included in the sample of this study while group B and D are excluded. While group B might be a relatively low share of the population, it is assumed that group D is the majority of the population. If this group systematically differs from the other three groups - or even more important from group A and C - the results of the present study might be not externally valid. In order to get an idea of severity of the potential problem, the descriptives of table 1 are compared to numbers of the statistical office of Germany.

Regarding the statistical office of Germany about 50% of the German population have a vocational degree as the highest educational degree obtained. In the sample only 42% obtained vocational degrees as their hightes educational degree. Concerning the location decision, about 80% of the German population lived in West Germany in 2013, which is about 20% more than the share of West Germans in the sample. Thus, one could be worried that the sample is not representative for Germany and therefore the results are not externally valid. In order to account for the deviation from overall population means, entropy balancing will used in a later stage of the paper. Entropy balancing as introduced

by Hainmueller (2011) adjusts the weights of the observations in the dataset, such that the means of the covariates are equal to given population means. Here, the population means given by the German statistical office will be used to overcome potential problems due to a non-random selection into sample.

3 Empirical Approach

As the empirical method the tool of duration analysis is used. Here, the time-event-relationship - the relationship between the duration of job-search and the likelihood of a transition into employment - is explicitly controlled for. Specifically, the method allows to include all the right censored observations from the dataset, for whom a successful transition into employment cannot be observed. The results presented in the paper are drawn from a COX-proportional hazard model and a parametric model assuming a weibull distribution. The proportional hazard assumption is verified by a graphical test (see figure 1 in the Appendix) and by the log-rank test. In order to relax the proportional hazard assumption, piecewise constant hazard models are run. Here the proportional shift of the baseline hazard is allowed to vary between predetermined time intervals. The results shown in section 4 are confirmed. In another step, the competing risk model suggested by Fine and Gray (1999) is run differentiating between a transition into full- or part-time employment. In line with the other robustness checks the results are confirmed.[4]

4 Results

In the following the results using the COX-proportional hazard method are discussed. Table 3 shows the results. Column one in table 3 suggests that there is a delaying effect of paternal unemployment and labor market inactivity. In column three individual control variables (e.g. age, years of education, health) and year dummies are added to the set of control variables. By controlling for individual characteristics the results do not change.

As argued in section 2 column one and three show hazard ratios which might be biased due to father's unobservable ability which is transferred over generations. In order to control for the unobservable ability of the father, paternal control variables are added to the regression in column three. Paternal controls such as father's age, handicap level, unemployment

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[4]All the tables from the robustness checks are available on request.

Table 3: Paternal Unemployment on Transition to First Job

	(1)	(2)	(3)	(4)	(5)	(6)
Father in Relevant UE Spell	0.558*	0.298***	0.527**	0.287***	0.529*	0.299***
	(0.168)	(0.095)	(0.168)	(0.099)	(0.180)	(0.113)
Father Out of Labor Force	1.117	1.188	0.927	0.870	0.838	0.754*
	(0.101)	(0.147)	(0.090)	(0.126)	(0.093)	(0.122)
log(ρ)		0.532***		0.593***		0.603***
		(0.010)		(0.015)		(0.015)
Individual Controls	No	No	Yes	Yes	Yes	Yes
Year Dummies	No	No	Yes	Yes	Yes	Yes
Paternal Controls	No	No	No	No	Yes	Yes
N	8408	8408	8408	8408	8408	8408

Note: Authors' calculations based on SOEP (1991-2012). *** p<0.01; ** p<0.5; * p<0.1. Robust standard errors in parentheses. Hazard ratios are reported (HR >1 positive effect; HR <1 negative effect).

experience and years of education are argued to proxy a majority of the unobserved abilities of the father. By including these control variables it is argued that father's labor market status variables reflect the "bad luck" of the son that his father is unemployed or inactive just in the time of the son's school-to-work transition. As the ceteris paribus assumption states, the fathers of the sons are equal in terms of observables and the only observable difference is the appearance of fathers' unemployment or labor market inactivity. The hazard ratios from column five suggests that paternal unemployment within the school-to-work transition decreases the likelihood of entering the first job by about 47%. Paternal labor market inactivity shows to decrease the likelihood of transition just as unemployment, but only about 16% (statisticall insignificant). While about 50% of the sons whose fathers' are in employment entered the first job six months into the school-to-work transition, only about 25% of the sons whose fathers' are in a relevant unemployment spell entered the first job by that time.

Column two, four and six show the results for the parametric model assuming a weibull distribution. The results from the COX-Model are confirmed but the size of the effects appear to be much larger. The results imply that the father being in a relevant unemployment spell decreases son's probability to enter a job in a given period by about 70%. Thus, only 15% of the sons took up their first job six months after leaving education when their father is in relevant unemployment, compared to about 40% of the sons whose fathers are in employment. The negative effect of the father being out of the labor force amounts to a reduction in the transition probability six months after leaving school of about 10%. Following Chen and Feng (2011) paternal background proxies the availability of networks

and nepotism in the school-to-work transmission, therefore one has to assume that due to fathers' unemployment sons' are less likely to make use of their fathers' networks and therefore suffer in terms of delayed transitions.

4.1 Sensitivity Checks

The question appears whether this effect is homogenous across different sub-populations or whether differences can be detected. As Kramarz and Skans (2010), Coate (2013) or Marcenaro-Gutierrez and Vignoles (2009) argue the use of parental networks to find the first job significantly differs by the son's own level of education as well as the parent's level of education. Thus, table 4 shows the differences in the effects according to the sons' and fathers' level of education. Only the results of the parametric model assuming a weibull distribution are displayed throughout this section. The results of the COX-Model are in line and available on request.

Table 4: Paternal Unemployment on Transition to First Job (Subgroup Analysis)

	(1)	(2)	(3)	(4)
Father in Relevant UE Spell	0.179***	0.464*	0.633	0.213***
	(0.107)	(0.217)	(0.304)	(0.113)
Father Out of Labor Force	0.607**	0.817	1.038	0.642**
	(0.129)	(0.231)	(0.352)	(0.119)
$\log(\rho)$	0.619***	0.621***	0.591***	0.626***
	(0.024)	(0.021)	(0.028)	(0.020)
Individual Controls	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Paternal Controls	Yes	Yes	Yes	Yes
N	3906	4502	3874	4534

Note: Authors' calculations based on SOEP (1991-2012). *** $p<0.01$; ** $p<0.5$; * $p<0.1$. Robust standard errors in parentheses. Hazard ratios are reported (HR >1 positive effect; HR <1 negative effect).

It can be seen that regardless of the fathers' level of education a delaying effect of paternal unemployment on the duration of sons' school-to-work transition can be found. However, sons whose father's level of education (column one) is below the median suffer much more (decrease of the baseline hazard of about 82%) than sons whose fathers' level of education is above the median (column two; decrease of the baseline hazard of about 54%). This result is interesting, as according to Corak and Piraino (2011) or Kramarz and Skans (2010) one would assume that the effect should be much more pronounced for sons of high educated fathers. The results suggest that there might be more to the story than simply network effects. A loss of self esteem as argued by the non-monetary costs of parental unemployment

(see Kind and Haisken-DeNew (2012b) or Kind and Haisken-DeNew (2012a)) could be part of the story.

In terms of son's own education column three and four of table 4 display the results. Interestingly, the delaying effect of father's unemployment can only be found for sons with above median years of education (column four). Thus, it appears to be the case that especially the higher educated sons suffer from father's unemployment. Here it is important to note that the high educated sons in the sample are a somewhat selected group. In contrast to the majority of the high-skilled population the sons more often stayed at home while studying. Thus, it can be argued that their ties to their families are quite strong. As a result, their father's unemployment might be of much more importance than it is for a average son of the German population.

5 Conclusion

The long-lasting career consequences of youth unemployment have been subject to many studies (e.g. Tominey and Gregg (2005)). The present study contributes to the literature on the determinants of smooth school-to-work transitions and the role of intergenerational transmission (e.g. Kramarz and Skans (2010) and Corak and Piraino (2011)). Here, it is examined whether paternal unemployment while the son is searching for the first job has an effect on the duration of the school-to-work transition. While financial pressure on the household could accelerate school-to-work transition, missing networks or assistance from the father could delay labor market entries. Thus, a careful empirical investigation is needed.

One strength of the SOEP is the possibility to link fathers' labor market biographies to sons' school-to-work transition. Applying continuous time duration models on panel data for the years 1991-2011 sons' school-to-work transitions are analyzed.

The results show that the father being in an unemployment spell - that lasts for at least three consecutive months - delays labor market entry of the sons. The likelihood to take-up the first job in a given period is decreased by about 50-80%. Thus, the share of sons who take-up of their first job six months into the school-to-work transition is decreased from about 40% to about 20% when the father is in relevant unemployment.

The disadvantage of young men whose fathers are unemployed while they are entering the

labor market is of high relevance, as early career unemployment has life-long consequences in terms of wages and employment stability. This highlights once more the importance of intergenerational effects of unemployment. Unemployment agencies have to pay extra attention to unemployed men who are fathers of children entering the labor market.

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A   Appendix

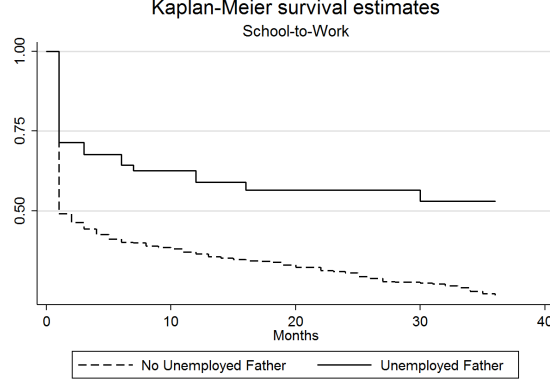Figure 1: Kaplan-Meier Survivor Function.

Kaplan-Meier survival estimates
School-to-Work

Table 5: Paternal Unemployment on Transition to First Job (extended)

	(1)	(2)	(3)	(4)	(5)	(6)
Father in Relevant UE Spell	0.558*	0.298***	0.527**	0.287***	0.529*	0.299***
	(0.168)	(0.095)	(0.168)	(0.099)	(0.180)	(0.113)
Father Out of Labor Force	1.117	1.188	0.927	0.870	0.838	0.754*
	(0.101)	(0.147)	(0.090)	(0.126)	(0.093)	(0.122)
Age			1.076***	1.104***	1.065***	1.089***
			(0.011)	(0.017)	(0.012)	(0.019)
West Germany			0.980	1.061	0.961	1.048
			(0.137)	(0.225)	(0.136)	(0.224)
Handicap Level			0.989*	0.986*	0.988*	0.984**
			(0.006)	(0.007)	(0.007)	(0.008)
Years of Education			1.091***	1.111***	1.082***	1.100***
			(0.018)	(0.029)	(0.018)	(0.029)
Left Vocational Training			1.721***	1.960***	1.782***	2.090***
			(0.143)	(0.225)	(0.154)	(0.251)
Left Military or Community Service			2.342***	3.160***	2.468***	3.432***
			(0.286)	(0.617)	(0.311)	(0.695)
Monthly UE Rate			0.987	0.985	0.989	0.990
			(0.015)	(0.022)	(0.015)	(0.022)
Past UE Experience (Father)					0.981	0.961
					(0.025)	(0.033)
Years of Education (Father)					1.030**	1.058***
					(0.014)	(0.022)
Age (Father)					1.013	1.019
					(0.008)	(0.012)
Handicap Level (Father)					1.003**	1.006***
					(0.002)	(0.002)
$\log(\rho)$		0.532***		0.593***		0.603***
		(0.010)		(0.015)		(0.015)
Year Dummies	No	No	Yes	Yes	Yes	Yes
N	8408	8408	8408	8408	8408	8408

Note: Authors' calculations based on SOEP (1991-2012). *** p<0.01; ** p<0.5; * p<0.1. Robust standard errors in parentheses. Hazard ratios are reported (HR >1 positive effect; HR <1 negative effect).

Table 6: Paternal Unemployment on Transition to First Job (Subgroup Analysis, Extended)

	(1)	(2)	(3)	(4)
Father in Relevant UE Spell	0.179***	0.464*	0.633	0.213***
	(0.107)	(0.217)	(0.304)	(0.113)
Father Out of Labor Force	0.607**	0.817	1.038	0.642**
	(0.129)	(0.231)	(0.352)	(0.119)
Age	1.080***	1.113***	1.047	1.071***
	(0.026)	(0.026)	(0.058)	(0.021)
West Germany	0.779	1.016	1.140	1.003
	(0.269)	(0.277)	(0.516)	(0.250)
Handicap Level	0.999	0.962**	0.982**	0.988
	(0.004)	(0.017)	(0.009)	(0.012)
Years of Education	1.095**	1.100***	0.926	1.037
	(0.042)	(0.040)	(0.109)	(0.035)
Left Vocational Training	1.624***	2.867***	5.192***	1.287
	(0.292)	(0.448)	(1.625)	(0.203)
Left Military or Community Service	3.334***	3.149***	4.842***	2.420***
	(0.886)	(0.886)	(2.156)	(0.603)
Monthly UE Rate	0.941*	1.017	1.021	0.983
	(0.034)	(0.028)	(0.048)	(0.025)
Past UE Experience (Father)	0.962	0.919	1.009	0.952
	(0.044)	(0.064)	(0.052)	(0.038)
Years of Education (Father)	1.272	1.068**	1.009	1.063***
	(0.193)	(0.030)	(0.049)	(0.025)
Age (Father)	1.009	1.042***	1.025	1.022
	(0.017)	(0.017)	(0.022)	(0.014)
Handicap Level (Father)	1.011***	1.004	1.006	1.006**
	(0.003)	(0.003)	(0.004)	(0.003)
$\log(\rho)$	0.619***	0.621***	0.591***	0.626***
	(0.024)	(0.021)	(0.028)	(0.020)
Year Dummies	Yes	Yes	Yes	Yes
N	3906	4502	3874	4534

Note: Authors' calculations based on SOEP (1991-2012). *** $p<0.01$; ** $p<0.5$; * $p<0.1$. Robust standard errors in parentheses. Hazard ratios are reported (HR >1 positive effect; HR <1 negative effect).