Wealth accumulation over the life course. The role of disadvantages across the employment history

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- version January 2017 -

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Abstract

In this study wealth is employed as an often neglected but highly stratified well-being measure in sociology. I relate the employment history and especially the accumulating disadvantages like non-employment and lower occupations to wealth in old age. In particular, I am interested in determining whether an adverse employment history prevents wealth accumulation and which factors influence wealth accumulation across the life course. I use comparative data from the Survey of Health, Ageing and Retirement and combine it with the retrospective panel SHARELIFE to retrieve information about the complete employment history. The relevance of wealth varies significantly across households and in the wider national context. Hence, a contextual perspective is included to account for the difference in wealth rates and wealth inequality in the European countries. The results show that cumulative non-employment and employment in lower occupations has significant disadvantages for wealth accumulation in old age. However, large differences for men and women persist. Particularly, the household composition and household factors are decisive in the effectuality of these disadvantages. The relation of life course employment and especially disadvantages to accumulated wealth in old aged is stronger in conservative countries than in other welfare regimes.

Keywords: Cumulative disadvantages, wealth, employment history, SHARELIFE, unemployment, welfare regime

Introduction

Whereas the research on wealth and wealth inequality has always been dominated by economists, with a few exceptions (Skopek et al., 2012; Grabka, 2015) sociologists have been quite hesitant in using wealth as an additional indicator of inequality in a society. Social stratification researchers portray inequality primarily through class or status and are largely dismissive of economic inequality, which is, at most, studied with income (Savage et al., 2013; Erikson and Goldthorpe, 2010; Goldthorpe, 2012). Only recently do scholars perceive income and wealth as separate dimensions of inequality and outcomes of social stratification[1]. This is fortunate, since wealth is an important protection against social risks, and its importance is growing in times of increased volatility of the labour market and privatisation of public expenditure. However, this holds only under the premise that wealth can be established and increased with a person's own labour and that certain groups are not excluded from wealth building. I want to study if wealth can indeed be accumulated with one's own employment and how disadvantages over the life course are related to wealth in old age.

Wealth is a stock measure that reflects accumulative processes of advantages and disadvantages occurring over the life course. These advantages could be higher education, higher income or higher status occupation, but also familial advantages like intergenerational transfers or inheritances. Contrary, periods of joblessness or lower occupational employment might inhibit wealth accumulation and create scarring effects in the future. I suggest that wealth is particularly suitable indicator to study these long-term processes, since income is usually dependent on current labour market performance or on social transfers. Income can fluctuate in the short term and it varies considerably by occupation, industry sector and individual experience. Additionally, it reaches its peak far before retirement. Wealth, on the other hand, can be quite stable and illiquid, especially if it is composed of real assets. Although wealth is certainly increased by inflowing income, Skopek et al. (2014) show that wealth inequality is substantially different from income inequality. Hence, wealth research adds to the literature on socio-economic inequality by highlighting that income is not sufficient to reveal social risks of atypical employment and stratification.

This paper analyses the role played by employment history in wealth building across the life course. In particular, I am interested in determining whether an adverse employment history (part-time employment, unemployment, inactivity and years in lower occupations) is related to wealth disadvantages in old age. The paper proceeds as follows: The next section presents previous studies on wealth generation and especially on the role of employment disadvantages. The section thereafter

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[1] Goldthorpe (2012) elaborated how economists and sociologists differ in their perspectives on social inequality. He demonstrated that a one-dimensional view on social inequality can lead to misinterpretation of the reality. In particular, he criticised that economists fail to conceptualise economic inequality in a broader context of social relations. On the other hand, he blamed the disengagement of sociological research with current inequality studies. Goldthorpe furthermore encouraged the application of sociological concepts to inequality research.

highlights the country variation of wealth. In the theoretical section, I outline the concepts of the cumulative disadvantages approach and formulate the hypotheses. The following section presents the data and describes the sample and operationalisation of variables. Next, I present the results and conclude with a discussion.

Wealth generation and employment history

Wealth can be generated in various ways. Semyonov and Lewin-Epstein (2013) showed that wealth in European countries, the US and Israel is mostly generated with labour income and inheritances (see also Karagiannaki, 2015; Kolb et al., 2013). In line with previous studies, they find confirmation for the life-cycle hypothesis (Modigliani, 1988) which assumes that wealth is accumulated across the life course and reaches its peak in old age. Next to age, also household composition is related to ownership of assets (e.g. the household size), the presence of multiple generations and intact family structures (Bover, 2010; Kolb et al., 2013).

In this study I am mainly concerned with the effects of the employment history for wealth and concentrate on wealth in the form of real and financial assets. I analyse if periods of joblessness and adverse employment prevent wealth accumulation. Although similar studies are scarce, there is evidence for the importance of labour market participation patterns for wealth building net of income. Employment experience from adolescence benefits wealth accumulation across the life course (Painter, 2010). From both a cross-sectional and longitudinal perspective, Frick and Grabka (2009) tested the association of labour market participation and wealth with data from the German Socio-Economic Panel (SOEP). They found that employment length is positively related to net worth as well as being self-employed. In contrast, persons with episodes of unemployment and blue collar workers are disadvantaged in wealth accumulation. Between 2002 and 2007, the effect size of own labour decreased for wealth accumulation, while the negative effects of unemployment intensified. At the same time, the importance of inheritances and self-employment grew. These results suggest that labour income loses its relevance for wealth accumulation.

Besides studying the importance of the employment situation in wealth accumulation, studies researching the long-term disadvantages of non-employment are even harder to find. In their analyses of joblessness in later life, Ozturk and Gallo (2013) found that unemployment constrains wealth accumulation for at least six years after the episode. The fall in financial assets is twice as high as housing assets, but both add up to about 10% permanent loss of wealth (Ozturk and Gallo, 2013). Labour market inactivity in the form of military service is also associated with decreased wealth in old age (Fitzgerald, 2006). Moreover, non-standard work, like fixed term or temporary employment, reduces not only the chance to accumulate wealth because of lower and unstable income, but it also decreases future job chances and mobility (McGrath and Keister, 2008). This *scarring effect* of

adverse employment patterns not only lowers income, which is the foundation for wealth building, it also has non-monetary long-term consequences for career trajectories.

As women's labour market participation is less stable than men's (Simonson et al., 2011; Madero-Cabib and Fasang, 2016; Fasang et al., 2013; Lyberaki et al., 2013), their disruptive careers lead not only to disadvantages in income, but also in the accumulation of wealth (Gornick et al., 2009). In partnerships, women possess less individual wealth than their partners (Grabka et al., 2015). In German households, for example, this gaps adds up to 30,000 euros (Sierminska et al., 2010). These disadvantages can be mostly attributed to lower access to education and labour market, since women with comparable educational and occupational attainment do have an advantage over men. Additionally, Bannier and Neubert (2016) showed that women, although being financially literate, underestimate their knowledge and hence could be hesitant to invest and maintain financial assets.

Wealth variation across countries

Among 18 European countries and Israel, Skopek et al. (2014) found high variation in wealth inequality and composition. One of their main results concludes that wealth rates are higher in Southern European countries and Israel, where also wealth inequality is lower. On the contrary, Northern and Eastern European countries have lower wealth rates and higher wealth inequality. Hence, the shape of wealth inequality is quite dissimilar to income inequality, where socio-democratic welfare regimes regularly outperform liberal and Southern welfare states. Previous studies derive similar conclusions and stress that countries like Greece, Spain and Italy dispose over wealth mostly in the form of housing wealth, while Northern and central European countries rather hold financial assets (Christelis et al., 2009; Kolb et al., 2013).

Several authors related this high variation to differences in welfare state generosity that regulates economic security of individuals. If wealth is only regarded from a security function, then the need to save for harder times or for old age should be less relevant in an encompassing welfare state. Various studies confirm a displacement of private wealth in countries with more generous pensions (Hurd et al., 2012; Alessie et al., 2013; Skopek, 2015). Using data from a large cross-national panel study, Alessie et al. (2013) demonstrated that pension wealth can displace private wealth in the form of housing or other real assets. They find an average reduction in private wealth by 47 cents per euro pension wealth. This effect is stronger in Northern European countries with a mostly social-democratic universalistic welfare system than in Southern and Eastern European countries. Further, the displacement effect is stronger for the higher educated. Lower educated individuals, persons with career gaps and persons with limited financial literacy are disadvantaged in wealth building. This increases the exposure to risk in old age. Skopek (2015, Ch. 5) showed a small, albeit significant negative association of pension generosity and private wealth levels. She further finds tentative results

that the ability and the motivation to save could vary along class lines, since those in a lower socio-economic position might not be able to invest in assets (Skopek, 2015: 164).

Semyonov and Lewin-Epstein (2013) challenged the association of wealth and country factors. They do not find any significant effects of economic development, taxation and homeownership rates for the interaction of income and inheritances with wealth. This means that although wealth rates vary across countries, the impact of income and inheritances on wealth are mostly similar across European countries, the United Kingdom and the United States. However, in their study they do not address social policies per se, largely use indicators of economic performance which could underestimate the need for wealth accumulation versus the possibility to accumulate assets and do not address the gender differences in labour market patterns. To the best of my knowledge, no studies explicitly address the interrelation of private wealth and employment history across different countries. However, a few studies show that the employment-related disadvantages in pension wealth may be varying between different welfare states (Warren, 2006; Dewilde, 2012). In a comparative study of the Survey of Health, Ageing and Retirement in Europe, Möhring (2015) showed that the design of the pension system moderates the relevance of the employment history for pension wealth.

Wealth accumulation might vary due to the degree of decommodification provided by social policies It could also be affected by tax regulation or inheritance legislature. Hence, the country variation of wealth is difficult to explain and is beyond the scope of this paper. However, acknowledging this background against the relation of employment history and wealth accumulation, I perform comparative analyses.

Theoretical Background

Originating from cohort analysis, the concept of cumulative advantages and disadvantages (CAD) seeks to explain increasing heterogeneity in the process of ageing (Dannefer, 1987). It suggests that ageing is a longitudinal process differentiating individuals in a cohort over the life course. Differentiation takes plays independently of the individuals' achievements, and it creates a "systemic" difference between individuals (Dannefer, 2003). One of the crucial mechanisms in the process is the so-called Matthew effect, a term which was coined by Merton (1968). He exemplified how the rewarding of scientists is not primarily associated to merit, but rather to recognition. This creates a system where the advantage of credited peers is further accumulating in the scientific community. In his structural functionalism tradition, he suggests that this process is essential to the communication of performance. Even if he acknowledges these socially stratifying processes, Merton does not problematize it until his later revision (Merton, 1988). Other researchers, however, are concerned with the implications of cumulative advantages and disadvantages for the inequality in populations and individuals (DiPrete and Eirich, 2006; Crystal and Shea, 1990; O'Rand, 1996; O'Rand, 2006; Crystal

et al., 2016). Dannefer (2009); (1987) emphasised that differentiation is a process driven by social systems and, hence, concentrates rather on the macro level. Ferraro et al. (2009) took this idea further and develop the theory of cumulative inequality (CI). Incorporating the life course perspective by Elder (1998), they distinguish their propositions of CI from the rather broad CAD and other life course theories. Hence, CI is a more formalised version of CAD, which also addresses and specifies the role of human agency and individual trajectory (Schafer et al., 2009). Since the theory of "cumulative [dis/] advantage is situated at the intersection of the study of social stratification and the sociology of the life course" (Pallas and Jennings, 2009: 214), it allows studying advantages and disadvantages from a two-dimensional perspective, across the life course and between individuals.

I base my hypotheses on three propositions of CI. The first proposition assumes that life-course trajectories are shaped by exposure to accumulating advantages and disadvantages. This means that especially at early stages of the life course, or career in this case, disadvantages can have no impact if they are of short duration. However, with the onset of exposure, they are more likely to leave a scar or even accumulate further. Hence, the first hypothesis covers the effect of duration of individual disadvantages.

> Hypothesis 1: Increasing experience of disadvantages in the employment history is related to lower wealth in old age.

In the second proposition, it is emphasised that advantage is not the inversion of disadvantage. This means that failure to accumulate advantages is not equal to the experience of disadvantages, because "disadvantage increases exposure to risk, but advantage increases exposure to opportunity" (Ferraro et al., 2009: 418). Additionally, individuals must invest more effort to overcome disadvantages and achieve the same position as their advantaged peers. Hence, I study advantages in life course separately and assume that advantages can only partially compensate disadvantages.

> Hypothesis 2: Experience of advantages is positively related to wealth.

Lastly, I incorporate the assumption that inequality is a result of social systems, whose "demographic and developmental processes" (Ferraro et al., 2009) are manifesting (dis)advantages. The literature review showed that accumulation of wealth can be enhanced by individual factors, like own employment, but also through household factors like inheritances or household composition. Hence, I address how household factors contribute to wealth accumulation.

> Hypothesis 3: Household factors moderate the relation of employment disadvantages and wealth.

Since employment patterns display large gender differences across countries (Möhring, 2016; Ponomarenko, 2016; Lyberaki et al., 2013), I expect to find gendered results.

Hypothesis 4: The volatile careers of women are more vulnerable to disadvantages, and the effects of disadvantages vary more strongly for women.

Data and method

Sample construction

Data from the Survey of Health, Ageing and Retirement in Europe (SHARE) (Börsch-Supan and Jürges, 2005) is used to conduct the empirical analyses. Specifically, I combine information from the second wave (2006/07) and the retrospective third wave SHARELIFE (2008/09)[2]. Although SHARELIFE includes respondents from the first and the second wave, it deviates from the regular modules and inquires retrospectively on the life history. Information is provided on e.g. childhood living conditions, employment history and marital history. Havari and Mazzonna (2011) have confirmed the internal plausibility and historical adequacy of the SHARELIFE data. Variables that concern the employment history are provided by SHARELIFE. The dependent variable net worth as well as all socio-economic variables originate from the second wave of SHARE[3].

The sample includes 5,007 men and 4,516 women from 13 countries. While the gender imbalance in favour of men seems unusual for these older cohorts, this is due to availability of data and non-missing information about employment history. In SHARELIFE, 12,158 men (15,482 women) provided data about their employment between the ages 15 and 60. When matching socio-demographic information and economic variables from the second SHARE wave, 1,372 (1,607) respondents could not be matched. In the next step, to exclude younger household members and frail respondents, I consider only those respondents between the ages of 50 and 80. This leads to a reduction of 782 (1,632) respondents. Because I am studying the accumulative effects of labour market participation, I consider only retirees in my analyses as their employment has finished. In this step, a large share of the women, who perceive themselves as homemakers, are also eliminated from the sample. I define retirement as a self-perceived category and, hence, exclude other categories (i.e. unemployed and inactive). This leads to a sample consisting of more men (5,664) than women (5,129). Including only persons with non-missing information in the multivariate analyses, I arrive at the sample of 5,007 men and 4,516 women.

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[2] The wealth data covers the situation before the financial crisis and subsequent recession. Therefore, the results do not apply necessarily for the wealth developments after the year 2007.
[3] Although the employment history is surveyed after the dependent variable, the chronology of events is in the correct order. Since SHARELIFE does not provide current information and only retrospective events, it cannot be used to analyse wealth and other sociodemographic variables in this wave. SHARELIFE re-interviewed only respondents of wave 1 and 2; hence, wave 4 and 5 are not consistently usable with SHARELIFE.

Variables and operationalisation

The variables are operationalised as follows. *Net worth* is composed of real and financial assets minus mortgage and liabilities. Real assets comprise the value of the main residence, other real estate, own business and cars. Financial assets are included in the form of bank accounts, bonds, stocks, mutual funds, retirement accounts (RA), savings and life insurance. The lowest and top 1% are excluded to reduce outliers, and the values are ppp-adjusted to 2007 euros, since the majority of interviews was held in this year. Net worth is measured at the household level. I apply an inverse hyperbolic sine (IHS) transformation that offers the advantages and interpretation of a logarithmic transformation, but it also defined for zeros and negative values (Johnson, 1949; Pence, 2006).

Disadvantages in employment history are operationalised by summing the *years of part-time employment*, *unemployment* and *inactivity* between the ages of 15 to 60. Inactivity as a labour market status was coded if the individual was not employed, unemployed, in schooling or retired in the respective year. Thus, I observe the complete employment history of the respondents. Unemployment and part-time employment are known to have negative effects on income and job mobility (Brandt and Hank, 2014; Chauvel, 2010; Ellwood, 1982; Gangl, 2004; Fouarge and Muffels, 2009; Fouarge and Muffels, 2008) and are therefore considered as disadvantages for the career trajectories as well as for the monetary accumulation. Since labour market inactivity is also a form of joblessness without earned income, it may also be potentially harmful. As for the disadvantages, I am further testing how the sum of *years in lower occupation* are related to wealth in old age. On the other hand, *years in higher occupations* are considered as advantages. Savage et al. (2013) demonstrate that economic resources are distributed along class lines and, more importantly, that type of economic capital differs between classes. Occupations are proxies for class membership and are operationalised by using the ISCO-88 major categories from SHARELIFE. I coded categories from 1-3 (6-9) as higher (lower) occupations and summed the overall years in these categories across the employment history. Since experience of disadvantageous employment statuses and employment in lower occupations could be correlated, these are analysed separately.

Moreover, as an advantage across the job history, I select accumulating *years in self-employment,* as having an own business is presumably tied to advantages in wealth and can even reflect intergenerational transmission of advantages. Dunn and Holtz-Eakin (2000) found that self-employment of sons is related to parental self-employment, even more than on own wealth. They identified the transmission of a taste of entrepreneurship as well as financial means that significantly shape the self-employment of sons. *Inheritances and gifts* are intergenerational advantages from social or familial background and add to the social stratification by transferring resources (money, housing, valuable goods) to the next generation. Therefore, I add a dummy to assess whether an inheritance or

gift, valued at 5,000 euros or more today, has ever been received[4]. This variable was assessed at the household level.

I further include age, gender, educational level, cohort, number of children, household size, retirement length, immigrant background and marital status as socio-demographic control variables. Age is centred on the whole sample before introduction to the analyses to avoid collinearity with employment years. *Marital status* is decisive in the possibility to pool resources like wealth and to accumulate it. Hence, I evaluate relationship information including whether a person lives with a married or registered partner, has never married, is divorced or widowed. *Educational level* was recoded from the ISCED classification into lower, medium and high education. Further, individual *old age income,* composed of public, occupational and private pensions, as well as disability pensions, unemployment benefits and any social assistance, is added as a control. The variable *retirement length,* measured in years since retirement, captures whether wealth has been used up since retirement. Table A1 in the appendix provides descriptive information about the variables and sample. All respondents are retired.

Empirical strategy

Wealth in a shared household is a common good and provides benefits to all household members, even if every member did not contribute to the wealth equally. Hence, the impact of single life courses is difficult to assess. Although some surveys (e.g. SOEP) investigate individual wealth holdings, the majority of surveys collects wealth data at the household level. This complicates the research endeavour of determining the role of individual employment history in wealth accumulation. More so, because the careers of men and women are composed differently and therefore difficult to pool together. While men mostly experienced a full-time employment career, women of older cohorts experienced transitions in and out of the labour market more frequently. However, these two career trajectories could be interdependent in a traditional household. Women's careers could be unstable in a male breadwinner household; however, this might not be disadvantageous for the common economic situation. To disentangle several factors that could impact wealth on different levels, I compute multiple linear regressions to identify under which circumstances employment history has a profound effect for wealth variation.

I first compute several ordinary least squares (OLS) regression models with the pooled data of SHARE and then with subgroups using the main specification as follows:

$$y_{ihs} = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \theta_c + \varepsilon_i$$

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[4] Complete question: Not counting any large gift we may have already talked about, have you or your husband/wife/partner ever received a gift or inherited money, goods, or property worth more than 5000 euros?

The left-hand side variable y_{ihs} indicates the inverse hyperbolic sine transformed household wealth. X_i are the individual measures of advantages and disadvantages of employment history. The set of variables included in Z_i are controls. I include country fixed effects where the analyses are not split by country, since country variation is expected to be large. Lastly, an error term is added.

Results

Descriptive results

The first figure exemplifies the difference in wealth rates across the 13 countries. According to results of previous research, Denmark and Sweden as well as Poland and the Czech Republic have the lowest wealth holdings. It was expected that the Southern European countries have the highest wealth. Although respondents in Italy and Spain accumulated more assets than in Germany, Austria and Switzerland, it is France and Belgium which display the highest wealth values.

Figure 1: Net worth across countries
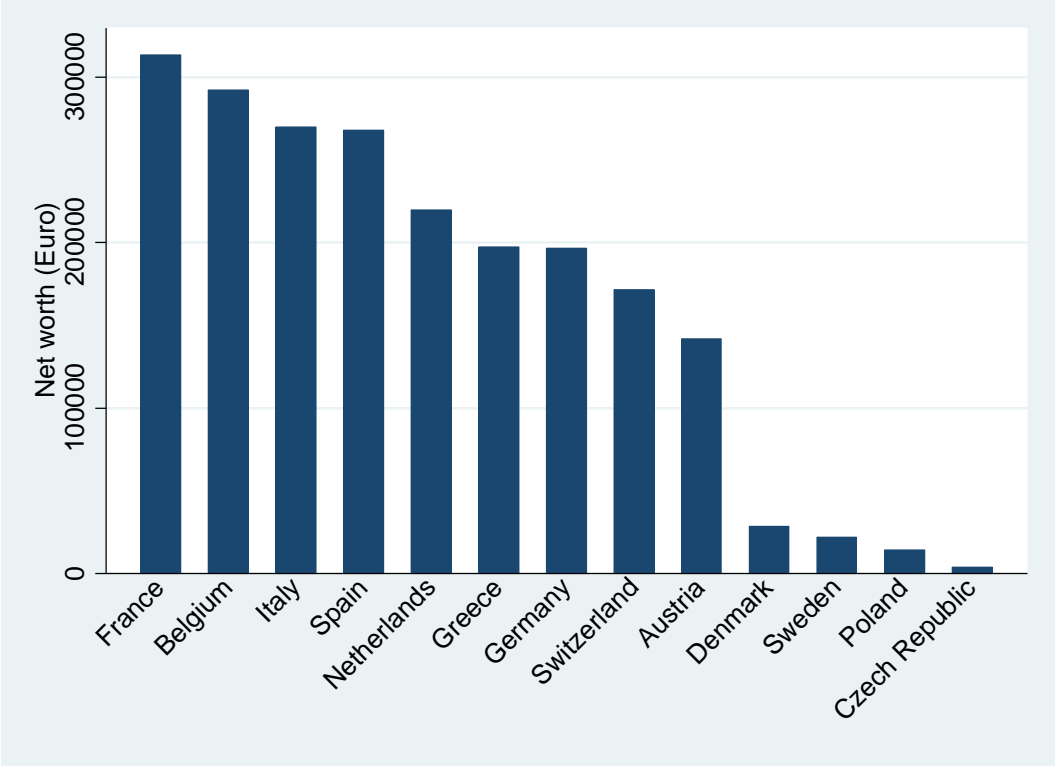
Note: Ppp-adjusted and exchange rate adjusted values in 2007 euros.

Figure 2 presents more detailed information on the type of wealth holdings. With the exception of Switzerland and Sweden, the majority of wealth holdings in all other countries consists of the own housing. In Greece, also a second residence presents almost 40% of a household's wealth. Further, financial assets are of particular importance in Switzerland, Belgium, Sweden and Denmark, where individuals rely on savings in bank accounts and investments in bonds and stocks. Notable is the absence of these in Greece, the Czech Republic and Poland. However, savings in retirement accounts and insurances do not play a significant role in any of the countries.

Although the wealth rates in Figure 1 showed a mostly consistent picture with previous research, no clear demarcation divides wealth type holdings across Northern, Southern and continental welfare regimes. The only difference is found in the far lower relevance of financial assets in Spain and Italy and Greece and the Eastern countries. In Figure 3, the differences in employment history of men and women are displayed. According to the expectations, women experience more non-employment and part-time employment, while men's careers are marked by full-time employment. Also men are more frequently self-employed than women.

Figure 2: Distribution of wealth components
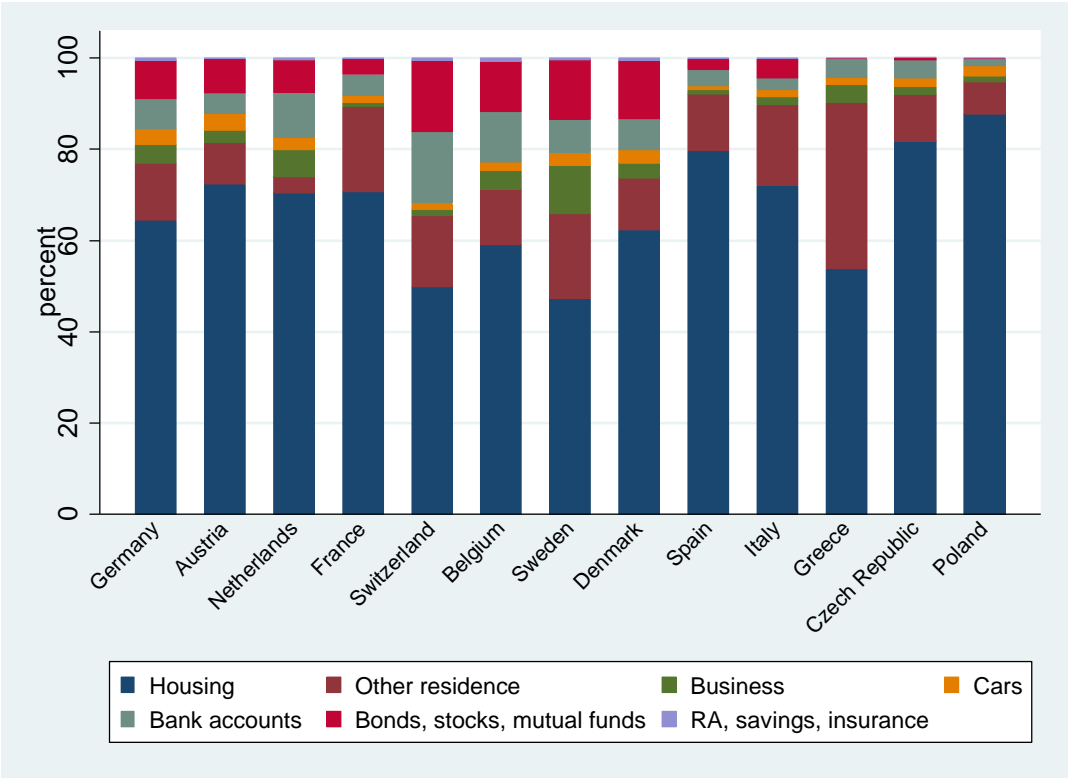
Figure 3: Employment history of men and women
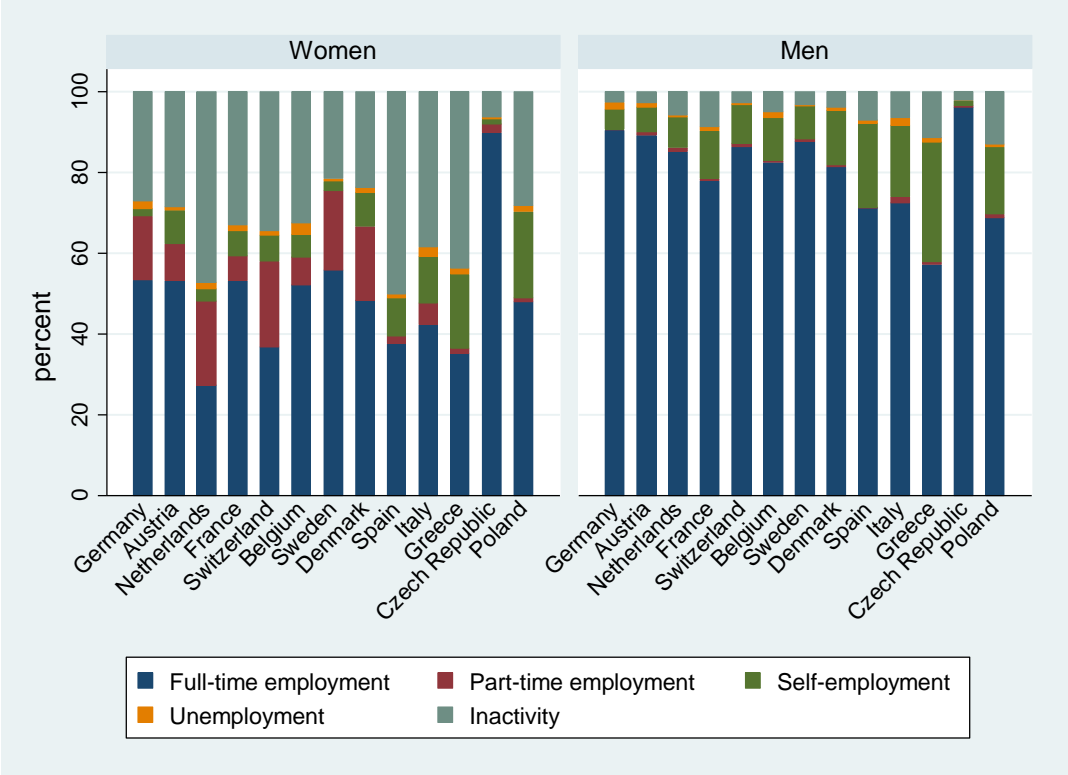
A fair share of women in continental countries like Germany, the Netherlands and Switzerland work in part-time employment, while women in Southern European countries have low levels of full-time employment or drop out of the labour market completely. This could be a result of labour market and family policies that facilitate or prevent women's employment with caring obligations (Kammer et al., 2012). In the sample of men, more incidences of self-employment are found in Italy, Spain and Greece than in other countries. Polish men experience the largest share of inactivity overall. Part-time employment is not relevant in the male population. Surprisingly, being inactive is more common than being unemployed in both samples. Although I portray the employment history of men and women separately, these are interconnected in the sample population. About 75% of the respondents are married or cohabitating, however, employment information on both spouses are present only for 4,056 respondents of the sample, which results in 1,821 couples with non-missing information. Therefore, I can identify whose employment has larger effects on the common household wealth in the next subsection.

Multivariate results

Table 1 displays a series of regression analyses of wealth with different samples. I will discuss mainly the results of the employment history as well as the effect of inheritance or gift reception and the old age income of the individual. The first two columns in Table 1 show the relation of wealth and men's employment history. The first model includes the accumulated years of part-time employment, unemployment, inactivity and self-employment. For men, non-employment is significantly and negatively associated to wealth. In other words, every additional year of unemployment reduces wealth in old age by eight percent and by two percent in the case of inactivity. Although I expected that self-employment would be an advantage in wealth accumulation, there is no evidence to support this in the male sample. The second model repeats the analyses with years spent in higher or lower occupations. Occupations in the "middle range" serve as reference. Here, I can identify a cumulative effect of the advantage of higher occupations for men. According to the expectations, the reception of an inheritance or gift leads to a benefit in wealth accumulation. Further, higher old age income is positively related to wealth as well as medium and higher education. However, being unmarried, having children or having an immigrant background shows negative effects.

In the sample of women, however, I only find a significant effect of employment history negatively related to working in lower occupations. Noticeable in the women's sample is the non-significance of old age income, but a higher contribution of inheritances to wealth. The results for women suggest that they are more vulnerable because their assets are rather inherited than accumulated with own labour. These results are supported by Models 5 and 6. Also women are more disadvantaged when they are unmarried and even more so when they are divorced. The results of Model 2 emphasise that women have lower wealth when they have children and if they are born outside the country of residence. The coefficients of disadvantages are higher than those of men. As discussed in the empirical strategy section, with the division of samples by gender, only the average effects of women's and men's employment history can be shown. However, as wealth is a household commodity, it is worthwhile to evaluate the joint employment history. Models 5 and 6, therefore, only include couples whose employment history is complete for both spouses. In order to identify the contribution of every spouse, I interacted the years of every labour market disadvantage and advantage with the male spouse. This strategy allows me to display whether the unemployment of the wife or the husband is related to household wealth. The effect of women's (non-)employment years is the respective main effect.

Models 5 and 6 show that within the couple, it is rather the labour market disadvantages of men that lead to a reduction in wealth than women's adverse employment. Across the couples, it is the experience of part-time employment or unemployment of men that is negatively associated with household wealth. While the effect of inheritances is still strong, the effect is lower than in the analyses were conducted separately by gender. This finding could indicate that employment history

gains in importance if households received a larger amount of money. Therefore, I split households into those that have received an inheritance worth 5,000 euros (or more) or not. It becomes clear that indicators of disadvantage across the career do not show significant estimates for these households that received additional money. Additionally, the advantage of working in higher occupations still benefits the wealth in old age. While the assessed disadvantages are not relevant for these households, the advantages are beneficial. Although it is beyond the scope of the paper to further analyse this effect, receiving an inheritance is indicative of having family who can provide for the next generation. In other words, experiencing the advantage of inheritance and having access to higher occupations could be interrelated (Pfeffer and Hällsten, 2012), since well-off families could provide both, and these advantages accumulate between generations. For households that did not receive any money, the disadvantages in employment history are significant. Particularly unemployment as well as lower occupations show significant effects. Moreover, negative effects of being unmarried, having children and having an immigration background are stronger for households without inheritances or gifts. Yet the advantage of higher occupations remains significant also for households that did not receive additional money through inheritances and gifts. In conclusion, not only the presence of disadvantages across the life course history of employment plays a significant role for wealth generation and accumulation, but also the household-related factors that moderate these disadvantages.

Disadvantages of employment history show significant effects in the analyses thus far, however, the largest part of the explained variation in wealth in Table 1 stems from the country membership. While Figure 1 indicated that France, Belgium and the Southern European countries have larger wealth and Eastern European countries are mostly excluded from wealth accumulation, Figure 3 shows that also employment patterns vary across countries and that certain labour market statuses are more present in certain countries. Even though the country fixed effects control for relevance of wealth, they cannot outline differential effects of employment history in the country.

Table 1: Analyses of employment history

	Model 1: Men	Model 2: Men	Model 3: Women	Model 4: Women	Model 5: Couples	Model 6: Couples	Model 7: Inherited	Model 8: Inherited	Model 9: Never inherited	Model 10: Never inherited
Years part-time employed	-0.01 (0.01)		0.00 (0.01)		0.00 (0.01)		-0.00 (0.01)		0.01 (0.01)	
*male spouse					-0.05** (0.02)					
Years unemployed	-0.08** (0.03)		-0.02 (0.01)		-0.02 (0.01)		-0.00 (0.01)		-0.05** (0.02)	
*male spouse					-0.06* (0.03)					
Years econ. inactive	-0.02* (0.01)		-0.00 (0.00)		-0.00 (0.01)		-0.00 (0.00)		-0.00 (0.00)	
*male spouse					-0.02 (0.02)					
Years self-employed	0.01 (0.01)		-0.01 (0.01)		-0.00 (0.01)		-0.00 (0.00)		0.00 (0.01)	
*male spouse					0.00 (0.01)					
Years lower occupation		-0.00 (0.00)		-0.01** (0.00)		0.00 (0.00)		-0.00 (0.00)		-0.00* (0.00)
*male spouse						-0.00 (0.00)				
Years higher occupation		0.01*** (0.00)		0.01 (0.01)		0.00 (0.00)		0.01* (0.00)		0.01*** (0.00)
*male spouse						0.01** (0.00)				
Inheritance >5,000	0.64*** (0.07)	0.65*** (0.07)	0.77*** (0.10)	0.76*** (0.10)	0.58*** (0.09)	0.57*** (0.09)				
Old age income	0.20** (0.08)	0.17** (0.06)	0.07 (0.08)	0.08 (0.08)	0.15* (0.08)	0.13* (0.06)	0.06 (0.05)	0.04 (0.04)	0.13 (0.09)	0.11 (0.07)

Household size	0.07* (0.03)	0.07* (0.04)	0.03 (0.07)	0.02 (0.07)	0.10*** (0.02)	0.10*** (0.02)	0.04 (0.09)	0.04 (0.09)	0.04 (0.04)	0.05 (0.04)
Age	-0.03 (0.02)	-0.04 (0.02)	0.07 (0.05)	0.06 (0.05)	-0.00 (0.03)	-0.01 (0.04)	0.04 (0.05)	0.04 (0.05)	0.01 (0.03)	0.01 (0.03)
Age²	0.00 (0.00)	0.00 (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00* (0.00)	-0.00* (0.00)
Male							-0.05 (0.06)	0.08 (0.06)	-0.02 (0.12)	0.09 (0.13)
Marital status (Ref.: Married)										
Never married	-0.76** (0.30)	-0.76** (0.31)	-1.61*** (0.29)	-1.60*** (0.28)			-0.72** (0.26)	-0.69** (0.25)	-1.36*** (0.27)	-1.35*** (0.27)
Divorced/ Widowed	-0.48** (0.17)	-0.50** (0.16)	-1.21*** (0.22)	-1.22*** (0.22)			-0.72*** (0.14)	-0.71*** (0.13)	-1.07*** (0.19)	-1.07*** (0.19)
Number of children	-0.09** (0.03)	-0.08** (0.03)	-0.15*** (0.03)	-0.16*** (0.03)	-0.15** (0.06)	-0.14* (0.07)	-0.04 (0.03)	-0.03 (0.03)	-0.15*** (0.03)	-0.15*** (0.03)
Education (Ref.: low)										
Medium education	0.33*** (0.06)	0.25*** (0.06)	0.33** (0.12)	0.23 (0.14)	0.33*** (0.08)	0.30*** (0.08)	0.31* (0.07)	0.24*** (0.07)	0.36*** (0.08)	0.25** (0.09)
Higher education	0.69*** (0.07)	0.47*** (0.08)	0.72*** (0.15)	0.55*** (0.14)	0.60*** (0.09)	0.49*** (0.09)	0.58*** (0.09)	0.39*** (0.09)	0.80*** (0.11)	0.56*** (0.10)
Immigrant	-0.34* (0.19)	-0.38** (0.17)	-0.48*** (0.15)	-0.49*** (0.15)	-0.22 (0.14)	-0.24 (0.14)	-0.32* (0.15)	-0.30** (0.14)	-0.45*** (0.12)	-0.48*** (0.12)
Country (Ref.: Germany)										
Austria	0.10** (0.04)	0.10* (0.05)	0.56*** (0.16)	0.52*** (0.15)	-0.05 (0.05)	-0.07 (0.07)	0.15* (0.08)	0.16* (0.08)	0.34*** (0.08)	0.36*** (0.08)
Netherlands	0.30*** (0.03)	0.23*** (0.03)	0.69*** (0.09)	0.57*** (0.10)	0.30*** (0.08)	0.24*** (0.07)	0.49*** (0.03)	0.43*** (0.04)	0.38*** (0.06)	0.31*** (0.06)
France	1.06*** (0.04)	0.96*** (0.03)	1.30*** (0.09)	1.20*** (0.07)	1.12*** (0.07)	1.04*** (0.04)	0.99*** (0.06)	0.94*** (0.05)	1.23*** (0.09)	1.15*** (0.06)
Switzerland	0.17*** (0.04)	0.10*** (0.03)	0.09 (0.07)	0.03 (0.06)	-0.30*** (0.04)	-0.32*** (0.04)	0.00 (0.03)	-0.08** (0.03)	0.07 (0.05)	0.04 (0.05)

Belgium	0.94*** (0.04)	0.87*** (0.03)	1.19*** (0.08)	1.14*** (0.08)	0.79*** (0.03)	0.75*** (0.03)	0.78*** (0.04)	0.78*** (0.05)	1.17*** (0.07)	1.08*** (0.05)
Sweden	-1.42*** (0.19)	-1.61*** (0.15)	-1.98*** (0.15)	-2.01*** (0.14)	-1.66*** (0.15)	-1.74*** (0.12)	-1.99*** (0.11)	-2.12*** (0.08)	-1.73*** (0.17)	-1.84*** (0.12)
Denmark	-1.27*** (0.19)	-1.32*** (0.16)	-1.47*** (0.16)	-1.46*** (0.15)	-1.36*** (0.14)	-1.41*** (0.12)	-1.56*** (0.11)	-1.60*** (0.09)	-1.51*** (0.17)	-1.53*** (0.13)
Spain	1.25*** (0.06)	1.24*** (0.07)	1.86*** (0.14)	1.80*** (0.15)	1.33*** (0.08)	1.31*** (0.08)	0.96*** (0.08)	0.94*** (0.08)	1.59*** (0.08)	1.57*** (0.13)
Italy	0.98*** (0.05)	0.92*** (0.05)	1.57*** (0.15)	1.47*** (0.10)	1.11*** (0.07)	1.03*** (0.08)	0.71*** (0.11)	0.67*** (0.09)	1.37*** (0.08)	1.31*** (0.05)
Greece	0.78*** (0.05)	0.81*** (0.04)	1.39*** (0.17)	1.29*** (0.12)	0.59*** (0.10)	0.55*** (0.05)	0.44*** (0.10)	0.44*** (0.08)	1.20*** (0.10)	1.16*** (0.05)
Czech Republic	-2.45*** (0.36)	2.64*** (0.28)	-2.46*** (0.38)	-2.42*** (0.32)	-2.84*** (0.35)	-2.97*** (0.25)	-3.28*** (0.28)	-3.39*** (0.23)	-2.33*** (0.35)	-2.43*** (0.24)
Poland	-2.02*** (0.19)	-2.13*** (0.17)	-2.66 (0.30)	-2.71*** (0.25)	-2.32*** (0.20)	-2.44*** (0.16)	-2.62 (0.22)	-2.68 (0.19)	-2.47*** (0.16)	-2.52*** (0.14)
N	5007	5007	4516	4516	3702	3702	3027	3027	6496	6496
R²	0.42	0.41	0.40	0.40	0.53	0.52	0.48	0.48	0.38	0.38

Note: ***$p<=0.010$; **$p<=0.050$; *$p<=0.100$, robust standard errors clustered by country. Controls also include household size, retirement length and cohort.

Model 5 and 6 as well as Fig. 3 inform us that employment patterns diverge between genders, therefore Table 3 and 4 show couples' employment divergence by country.

Wealth has a high variation across countries that could be related to the welfare state design (Möhring, 2015; Alessie et al., 2013). Therefore, I grouped the countries loosely by the extended welfare regime typology of Esping-Andersen (1990) and Ferrera (1996) to identify similarities of disadvantages in the respective welfare regime type. I again interacted gender with employment history, therefore Tables 2 and 3 include only couples. The coefficients represent disadvantages of each gender in the household. The positive relation of inheritances (and less often income) prevails across the country samples. While the contribution is higher in the conservative countries and Denmark, inheritances and gifts are not related to wealth in old age in countries like Sweden, the Southern regimes and Poland. Income is not related to wealth in the Netherlands, Switzerland, Belgium, Sweden, Spain, Greece and the Eastern countries. So, contrary to Semyonov and Lewin-Epstein (2013) the present study finds differential results of the effect of income and inheritances for wealth. The reasons of these opposing results could be the inclusion of the employment history that could represent not only monetary disadvantages of lower or no income, but also non-monetary accumulative disadvantages of adverse employment trajectories.

Indeed, the employment trajectories are related to different outcomes in the countries. While unemployment or inactivity is negatively associated to men's careers in conservative countries, the opposite emerged for women. Part-time employment or non-participation has positive estimates for women in Germany, Austria, France and Sweden. This could be a case of reverse causality, where lower participation is possible for women in wealthier households. In the Southern European countries, the potential disadvantages in employment history are not relevant for wealth in Spain and only male unemployment in Italy and part-time employment in Greece. Also, in the Czech Republic and Poland, disadvantages of male part-time employment and economic inactivity show negative household wealth results. However, self-employment in Greece and Poland is negatively related to wealth, while self-employment is significantly positive in the Netherlands, France, Belgium, Denmark and Italy. Table 3 further depicts the very divergent results by occupational years in the career. Oddly, experience of lower and higher occupations is related to lower wealth in Germany. However, men working in lower occupations have lower wealth in Austria and France. Even if they worked in higher occupations, men still have lower wealth in Spain. In Denmark, Italy and the Eastern European countries, working in higher occupations makes a difference to wealth accumulation. Looking at the R^2 value, the specification can explain between 17% and 33% of the variation of wealth. However, in the Czech Republic, a mere 8% can be explained. So while the relevance of wealth is fluctuating throughout Europe, its accumulation does not only rely on employment patterns and inheritances.

Table 2: Cumulative effects of labour market experience by country for couples

	DE	AT	NL	FR	CH	BE	SE	DK	ES	IT	GR	CZ	PL
Years part-time employed	0.01* (0.01)	0.02 (0.03)	-0.02 (0.02)	0.02* (0.01)	-0.01 (0.01)	-0.00 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.02 (0.03)	0.00 (0.01)	-0.02* (0.01)	-0.03 (0.02)	0.11 (0.06)
*male	-0.27 (0.20)		-0.15 (0.10)	0.00 (0.02)	0.08 (0.14)	-0.01 (0.02)	0.05 (0.11)	-0.04 (0.06)		-0.06 (0.09)	-0.02** (0.01)	-0.12*** (0.02)	-0.15 (0.11)
Years unemployed	-0.00 (0.03)	0.06 (0.09)	-0.11*** (0.03)	0.05* (0.02)	-0.07 (0.12)	0.00 (0.02)	0.03* (0.02)	-0.00 (0.05)	-0.04 (0.05)	-0.02 (0.03)	-0.04 (0.05)	0.01 (0.03)	-0.08 (0.07)
*male	-0.10** (0.05)	-0.02 (0.15)	-0.34*** (0.10)	0.04 (0.06)	-2.10* (1.24)	0.07* (0.04)	-1.21 (1.41)	-0.11 (0.11)	-0.07 (0.12)	-0.07** (0.03)	-0.03 (0.06)	-0.04 (0.28)	-0.07 (0.14)
Years econ. inactive	0.03** (0.01)	0.04* (0.02)	0.01 (0.01)	0.00 (0.01)	0.04*** (0.02)	0.00 (0.01)	0.00 (0.01)	-0.01 (0.02)	0.00 (0.01)	0.01 (0.01)	-0.00 (0.01)	-0.01 (0.02)	-0.05** (0.02)
*male	-0.02 (0.04)	0.02 (0.03)	0.01 (0.02)	0.00 (0.01)	-0.04* (0.03)	-0.01 (0.02)	-0.01 (0.06)	-0.04 (0.03)	0.01 (0.03)	-0.02 (0.01)	0.00 (0.01)	-0.02 (0.04)	-0.09*** (0.03)
Years self-employed	-0.06 (0.06)	0.01 (0.03)	0.03** (0.01)	0.02* (0.01)	0.01 (0.03)	0.01 (0.01)	-0.00 (0.10)	0.02** (0.01)	-0.01 (0.01)	0.02*** (0.01)	-0.02** (0.01)	0.02 (0.03)	-0.03** (0.02)
*male	0.02 (0.02)	0.02 (0.01)	0.03* (0.02)	0.01 (0.01)	0.04 (0.02)	0.02*** (0.01)	0.02** (0.01)	0.03*** (0.01)	-0.01 (0.01)	0.01* (0.01)	-0.01** (0.00)	0.03 (0.04)	-0.04** (0.02)
Inheritance >5000	0.77*** (0.21)	0.96** (0.43)	0.99*** (0.35)	0.64*** (0.14)	1.68*** (0.60)	0.53*** (0.17)	0.53 (0.34)	0.81*** (0.24)	0.34 (0.27)	0.15 (0.14)	0.11 (0.22)	0.42** (0.17)	-0.02 (0.61)
Old age income	0.41** (0.20)	1.01 (0.64)	0.03 (0.20)	0.24** (0.10)	0.45 (0.40)	-0.08 (0.11)	0.28 (0.34)	0.39** (0.16)	0.05 (0.24)	0.49*** (0.12)	0.01 (0.11)	0.04 (0.14)	0.18 (0.20)
Household size	0.47 (0.36)	0.15 (0.11)	-0.23 (0.65)	0.37*** (0.10)	0.25 (1.45)	0.16 (0.14)	-1.89 (1.94)	0.31** (0.15)	0.00 (0.10)	0.09 (0.08)	0.18 (0.12)	0.01 (0.12)	0.23* (0.12)
Age	0.17* (0.10)	-0.08 (0.11)	-0.29* (0.18)	-0.09 (0.06)	-0.58* (0.31)	-0.06 (0.06)	0.40 (0.32)	-0.01 (0.09)	0.02 (0.07)	-0.10** (0.05)	0.14** (0.06)	0.09* (0.05)	0.01 (0.11)
Age²	-0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.00)	0.02 (0.02)	-0.00 (0.00)	-0.02 (0.02)	-0.01 (0.01)	-0.00 (0.01)	0.00 (0.00)	-0.01** (0.00)	0.00 (0.00)	-0.01 (0.01)
Number of children	-0.41** (0.19)	-0.19 (0.17)	-0.07 (0.18)	-0.17** (0.08)	0.21 (0.26)	-0.03 (0.07)	0.08 (0.16)	-0.02 (0.03)	-0.13** (0.05)	-0.21*** (0.07)	0.21** (0.09)	0.14* (0.08)	-0.51*** (0.19)
Education (Ref.: low)													

Medium education	-0.27 (0.32)	0.68** (0.33)	0.52* (0.34)	0.25 (0.16)	0.38 (0.54)	0.53*** (0.15)	0.51 (0.38)	0.28 (0.26)	0.04 (0.32)	0.31** (0.14)	-0.17 (0.26)	0.14 (0.16)	-0.23 (0.37)
Higher education	0.37 (0.30)	0.59 (0.47)	0.64* (0.43)	0.57*** (0.22)	-0.17 (0.86)	0.60*** (0.30)	0.87*** (0.34)	0.81*** (0.25)	0.72** (0.30)	0.70*** (0.17)	0.30 (0.24)	0.06 (0.21)	-0.06 (0.42)
Immigrant	-0.07 (0.24)	-0.90 (0.67)	1.08** (0.51)	0.13 (0.27)	0.51 (0.50)	-0.10 (0.30)	-0.83* (0.42)	0.99*** (0.23)	0.64 (0.63)	0.18 (0.42)	-0.00 (0.57)	-0.43 (0.38)	-0.81 (1.23)
N	337	147	148	366	115	368	305	309	105	454	215	467	366
R^2	0.25	0.23	0.26	0.22	0.33	0.18	0.17	0.26	0.22	0.19	0.21	0.08	0.20

Note: ***$p<=0.010$; **$p<=0.050$; *$p<=0.100$, robust standard errors clustered by household. Controls also include household size, retirement length and cohort.

Table 3: Cumulative effects of labour market experience by country for occupational years for couples

	DE	AT	NL	FR	CH	BE	SE	DK	ES	IT	GR	CZ	PL
Years lower occupation	-0.02*	-0.01	0.01	-0.01	-0.03	0.00	0.01	0.01	-0.01	0.01***	-0.01***	0.00	0.02
	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	(0.01)	(0.02)	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.02)
*male	-0.01**	-0.02*	0.00	-0.01*	-0.04	0.00	-0.01	-0.00	-0.00	0.00	-0.01**	0.00	0.02
	(0.01)	(0.01)	(0.01)	(0.00)	(0.03)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Years higher occupation	-0.02**	0.01	-0.01	-0.00	-0.01	-0.01	0.02	0.01	-0.04**	0.01	0.01	0.01**	0.03*
	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
*male	-0.02*	-0.00	0.00	-0.00	0.01	0.00	0.01	0.02***	-0.03	0.01*	0.01	0.01	0.05***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.03)	(0.00)	(0.01)	(0.01)	(0.01)
Inheritance >5000	0.81***	0.94**	0.99***	0.61***	1.68***	0.55	0.53	0.84***	0.43	0.19	0.11	0.43**	0.06
	(0.21)	(0.41)	(0.36)	(0.14)	(0 .55)	(0.17)	(0.34)	(0.25)	(0.34)	(0.14)	(0.22)	(0.17)	(0.63)
Old age income	0.19	0.85*	0.01	0.25***	-0.10	-0.12	0.27	0.29*	0.08	0.36***	0.10	0.01	0.29
	(0.12)	(0.45)	(0.19)	(0.08)	(0.31)	(0.10)	(0.31)	(0.16)	(0.21)	(0.13)	(0.10)	(0.14)	(0.20)
Household size	0.40	0.27**	-0.06	0.34***	0.67	0.17	-1.97	0.37**	-0.03	0.08	0.16	-0.00	0.19
	(0.38)	(0.12)	(0.68)	(0.10)	(1.58)	(0.13)	(1.97)	(0.16)	(0.09)	(0.07)	(0.10)	(0.12)	(0.12)
Age	0.20*	-0.04	-0.15	-0.08	-0.34	-0.06	0.49	0.02	0.01	-0.11**	0.13*	0.10*	-0.10
	(0.11)	(0.11)	(0.19)	(0.06)	(0.32)	(0.06)	(0.35)	(0.10)	(0.07)	(0.05)	(0.07)	(0.05)	(0.12)
Age²	-0.01	0.01	0.00	0.01*	0.01	-0.00	-0.02	-0.01	-0.00	0.00	-0.01**	-0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.00)	(0.02)	(0.00)	(0.02)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
Number of children	-0.41**	-0.12	0.01	-0.16**	0.39	-0.03	0.08	-0.03	-0.12***	-0.21***	0.21**	0.15*	-0.54***
	(0.19)	(0.14)	(0.20)	(0.08)	(0.28)	(0.07)	(0.15)	(0.15)	(0.05)	(0.07)	0.08)	(0.08)	(0.19)
Education (Ref.: low)													
Medium education	-0.39	0.64*	0.39	0.22	0.35	0.54	0.19	0.27	-0.00	0.33**	-0.26	0.04	0.29
	(0.32)	(0.38)	(0.35)	(0.16)	(0.52)	(0.15)	(0.26)	(0.27)	(0.32)	(0.14)	(0.28)	(0.17)	(0.44)
Higher education	0.20	0.31	0.46	0.48*	0.27	0.59	0.39**	0.55*	1.36**	0.75***	0.10	-0.18	0.17
	(0.31)	(0.47)	(0.47)	(0.27)	(0.84)	(0.20)	(0.22)	(0.30)	(0.55)	(0.20)	(0.25)	(0.24)	(0.49)
Immigrant	-0.14	-0.84	0.83*	0.10	0.39	-0.09	-0.84**	1.10***	0.14	0.16	0.16	-0.43	-0.90
	(0.25)	(0.61)	(0.46)	(0.25)	(0.52)	(0.29)	(0.42)	(0.30)	(0.24)	(0.42)	(0.51)	(0.38)	(1.17)
N	337	147	148	366	115	368	305	309	105	454	215	467	366

R²	0.23	0.22	0.15	0.21	0.34	0.16	0.16	0.23	0.27	0.15	0.20	0.08	0.14

Note: ***$p \leq 0.010$; **$p \leq 0.050$; *$p \leq 0.100$, robust standard errors, clustered by household. Controls also include household size, retirement length and cohort.

Discussion

In line with previous research, I found that employment history is related to wealth in old age. Particularly, the disadvantages of non-employment and part-time employment show clear negative effects under different configurations. Hence, the first hypothesis can be confirmed. Additionally, periods of self-employment are mostly associated to higher wealth in old age. Even though, this does not apply to all samples, it shows that the advantages can be distinguished from the disadvantages. Therefore, the second hypothesis can also be confirmed. Advantages in forms of inheritances or gifts play a large role in wealth accumulation. The analyses revealed that an inheritance can protect from employment disadvantages across the life course. While they have positive effects in general, the chance to receive larger amounts of money might not be equally distributed. Household composition is therefore crucial for wealth and confirms the third hypothesis. This also becomes clear if we look at couples to identify whose disadvantages contribute to wealth disadvantages. In the older cohorts in this study, women's labour market participation is quite unstable or marked by no or non-standard employment. Therefore, I assumed that they will be more disadvantaged overall and contribute to the household disadvantage. In contrast to expectations, disadvantages of men are more crucial than women's disadvantages. Therefore, the fourth hypothesis has to be rejected. Next, I split the sample to observe differences between countries, since wealth rates differ heavily between them. In conservative countries, employment history and inheritances explain a fair share of wealth variation in the countries. Men's labour is especially crucial for wealth accumulation, whereas women can even benefit if they do not need or want to pursue employment. For the socio-democratic countries, the results suggest that the disadvantages do not have lasting effects, however advantages like self-employment are positively associated to wealth. The results for the Southern countries are quite heterogeneous, and although disadvantages and advantages matter, they are possibly dependent on the household structure. Finally, the results of the Eastern countries do not show a clear picture and confirm that these countries are difficult to compare, because the employment rates of men and women are uniformly high in the Czech Republic, while in Poland, female and male non-participation is high. Additionally, the welfare states are differently composed, which could be a reason why disadvantages in Poland show extensive effects.

This paper contributes to the existing literature in several ways. As studies on determinants of wealth in a sociological context and theoretical framework are rare, I add to this literature by showing that access to wealth varies by family background and success in the labour market. Furthermore, a longitudinal perspective is added to previous research on wealth based on SHARE data (Semyonov and Lewin-Epstein, 2013; Skopek et al., 2014), and I investigated how the employment history relates to other economic resources besides pensions (Möhring, 2015). This study does, however, have some limitations. Receipt of inheritances was observed; however, the true share of intergenerational transfers is hard to estimate since they heavily influence accumulation at different points in time

(Kessler and Masson, 1989). Hence, the use of a dummy is restricted in its interpretability but also takes this bias into account. Additionally, parents also pass on other resources or characteristics like preferences for savings. This means that advantages could be even higher due to family background. Even though I analysed the cumulative effect of disadvantages, they could play only a minor role depending on which point in time they are experienced. Hence, the disadvantage could be overcome if it is early and brief. As I use retrospective data, it is not possible to identify the causal direction. Therefore, it could be the case that persons are selected into unemployment. On the other hand, literature indicates that unemployment leaves a scar and has negative effects, even later in life. The relation of self-employment and wealth could also be similarly reversed. As Dunn and Holtz-Eakin (2000) have shown, a penchant for self-employment and also starting capital could benefit opening an own business.

Last but not least, the insignificance of women's disadvantages could be an artefact of traditional male breadwinner couples. For future generations, this constellation seems very unlikely. Hence, disadvantages nowadays could affect both partners in a couple. The expansion of literature on household polarisation indicates that non-employment and non-standard employment might be an increasing problem of households and not only individuals (Bernardi, 1999; Horemans, 2016; Gornig and Goebel, 2016; Gregg et al., 2010). This is also supported by fact that inheritance or gift receipt makes a difference in employment related disadvantages of households. Risks of non-employment and non-standard employment vary therefore not only at the individual level, but also on the household level.

Appendix

Table A1: Sample statistics

		Men		Women	
Variable	Range	Mean (%)	SD	Mean (%)	SD
Part-time employment years	0 – 46	0.26	2.27	3.74	8.45
Self-employment years	0 – 46	5.39	12.30	3.33	9.85
Unemployment years	0 – 43	0.43	1.72	0.64	2.84
Inactive years	0 – 46	2.46	6.16	11.48	13.93
Lower occupation years	0 – 46	21.17	18.84	11.42	15.35
Higher occupation years	0 – 46	9.68	15.26	5.10	11.51
Logged old age income	2.40 – 13.17	8.75	1.45	8.01	1.51
Age	50 – 80	69.04	5.96	68.40	6.43
Retirement length	0 – 58	9.37	6.63	10.12	7.60
Number of children	0 – 12	2.24	1.37	2.19	1.39
Household size	1 – 10	2.23	0.91	1.95	1.01
Inheritance >5,000 Euro	0/1	(32.31)		(31.20)	
Education					
Lower	0/1	(49.17)		(54.07)	
Medium	0/1	(31.72)		(31.55)	
High	0/1	(19.11)		(14.37)	
Marital Status					
Married	0/1	(85.76)		(61.38)	
Never married	0/1	(3.93)		(5.49)	
Divorced/Widowed	0/1	(10.31)		(33.13)	
Immigrant	0/1	(5.25)		(6.33)	
N		5007		4516	

References

Alessie R, Angelini V and van Santen P. (2013) Pension wealth and household savings in Europe: Evidence from SHARELIFE. *European Economic Review* 63: 308-328.

Bannier CE and Neubert M. (2016) Actual and perceived financial sophistication and wealth accumulation: the role of education and gender. In: Policy" GSoMaERUIP (ed) *Discussion Paper Series.*

Bernardi F. (1999) Does the Husband Matter? Married Women and Employment in Italy. *European Sociological Review* 15(3): 285-300.

Börsch-Supan A and Jürges H. (2005) *The Survey of Health, Aging, and Retirement in Europe – Methodology,* Mannheim: Mannheim Research Institute for the Economics of Aging.

Bover O. (2010) Wealth Inequality and Household Structure: U.S. vs Spain. *Review of Income and Wealth* 56(2).

Brandt M and Hank K. (2014) Scars that will not Disappear: Long-term Associations between Early and Later life Unemployment under Different Welfare Regimes. *Journal of Social Policy* 43(4): 727-743.

Chauvel L. (2010) The Long-Term Destabilization of Youth, Scarring Effects, and the Future of the Welfare Regime in Post-Trente Glorieuses France. *French Politics, Culture & Society* 28(3): 74-96.

Christelis D, Jappelli T, Paccagnella O, et al. (2009) Income, wealth and financial fragility in Europe. *Journal of European Social Policy* 19(4): 359-376.

Crystal S and Shea D. (1990) Cumulative Advantage, Cumulative Disadvantage, and Inequality Among Elderly People. *The Gerontologist* 30(4): 437-443.

Crystal S, Shea D and Reyes AM. (2016) Cumulative Advantage, Cumulative Disadvantage, and Evolving Patterns of Late-Life Inequality. *Gerontologist*.

Dannefer D. (1987) Aging as Intracohort Differentiation: Accentuation, the Matthew Effect, and the Life Course. *Sociological Forum* 2(2): 211-236.

Dannefer D. (2003) Cumulative Advantage/Disadvantage and the Life Course: Cross-Fertilizing Age and Social Science Theory. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences* 58(6): 327-337.

Dannefer D. (2009) Stability, Homogeneity, Agency: Cumulative Dis/Advantage and Problems of Theory. *Swiss Journal of Sociology* 35(2): 192-210.

Dewilde C. (2012) Lifecourse determinants and incomes in retirement: Belgium and the United Kingdom compared. *Ageing and Society* 32(4): 587-615.

DiPrete TA and Eirich GM. (2006) Cumulative Advantage as a Mechanism for Inequality: A Review of Theoretical and Empirical Developments. *Annual Review of Sociology* 32: 271-297.

Dunn T and Holtz-Eakin D. (2000) Financial Capital, Human Capital, and the Transition to Self-Employment: Evidence from Intergenerational Links. *Journal of Labor Economics* 18(2): 282-305.

Elder GH. (1998) The Life Course as Developmental Theory. *Child Development* 96(1): 1-12.

Ellwood D. (1982) Teenage Unemployment: Permanent Scars or Temporary Blemishes? In: Freeman RBW, David A. (ed) *The Youth Labor Market Problem.* Chicago: University of Chicago Press, 349-390.

Erikson R and Goldthorpe JH. (2010) Has social mobility in Britain decreased? Reconciling divergent findings on income and class mobility. *The British Journal of Sociology* 61(2): 211-230.

Esping-Andersen G. (1990) *The Three Welfare-State Regimes,* Princeton, New Jersey: Princeton University Press.

Fasang AE, Aisenbrey S and Schömann K. (2013) Women's Retirement Income in Germany and Britain. *European Sociological Review* 29(5): 968-980.

Ferraro KF, Pylypiv Shippee T and Schafer MH. (2009) Cumulative Inequality Theory for Research on Aging and the Life Course. In: Bengston VL, Gans D, Putney NM, et al. (eds) *Handbook of Theories of Ageing.* 2nd ed. New York: Springer Publishing Company, 413-433.

Ferrera M. (1996) The 'Southern Model' of Welfare in Social Europe. *Journal of European Social Policy* 6(1): 17-37.

Fitzgerald KG. (2006) The Effect of Military Service on Wealth Accumulation. *Research on Aging* 28(1): 56-83.

Fouarge D and Muffels R. (2008) Part-time Work and Childbirth in Europe: Scarring the Career or Meeting Working-time Preferences? In: Muffels R (ed) *Flexibility and Employment Security in Europe.* Edward Elgar Publishing Ltd, 223-254.

Fouarge D and Muffels R. (2009) Working Part-time in British, German and Dutch Labour Market: Scarring for the Wage Career? *Schmollers Jahrbuch* 129: 217-226.

Frick JR and Grabka MM. (2009) Zur Entwicklung der Vermögensungleichheit in Deutschland. *Berliner Journal für Soziologie* 19(4): 577-600.

Gangl M. (2004) Welfare States and the Scar Effects of Unemployment: A Comparative Analysis of the United States and West Germany. *American Journal of Sociology* 109(6): 1319-1364.

Goldthorpe JH. (2012) Back to Class and Status: Or Why a Sociological View of Social Inequality Should Be Reasserted. *Revista Espanola de Investigaciones Sociologicas* 137: 201-216.

Gornick JC, Sierminska E and Smeeding TM. (2009) The income and wealth packages of older women in cross-national perspective. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences* 64(3): 402-414.

Gornig M and Goebel J. (2016) Deindustrialisation and the polarisation of household incomes: The example of urban agglomerations in Germany. *Urban Studies*.

Grabka MM. (2015) Income and wealth inequality after the financial crisis: the case of Germany. *Empirica* 42(2): 371-390.

Grabka MM, Marcus J and Sierminska E. (2015) Wealth distribution within couples. *Review of Economics of the Household* 13(3): 459-486.

Gregg P, Scutella R and Wadsworth J. (2010) Reconciling workless measures at the individual and household level. Theory and evidence from the United States, Britain, Germany, Spain and Australia. *Journal of Population Economics* 23: 139-167.

Havari E and Mazzonna F. (2011) Can we trust older people's statements on their childhood circumstances? Evidence from SHARELIFE. In: SHARE (ed) *Working Paper Series.*

Horemans J. (2016) Polarisation of Non-standard Employment in Europe: Exploring a Missing Piece of the Inequality Puzzle. *Social Indicators Research* 125: 171-189.

Hurd M, Michaud P-C and Rohwedder S. (2012) The Displacement Effect of Public Pensions on the Accumulation of Financial Assets. *Fiscal Studies* 33(1): 107-128.

Johnson NL. (1949) Systems of Frequency Curves Generated by by Methods of Translation. *Biometrika* 36(1/2): 149-176.

Kammer A, Niehues J and Peichl A. (2012) Welfare regimes and welfare state outcomes in Europe. *Journal of European Social Policy* 22(5): 455-471.

Karagiannaki E. (2015) The Impact of Inheritance on the Distribution of Wealth: Evidence from Great Britain. *Review of Income and Wealth*: n/a-n/a.

Kessler D and Masson A. (1989) Bequest and Wealth Accumulation: Are Some Pieces of the Puzzle Missing? *Journal of Economic Perspectives* 3(3): 141-152.

Kolb K, Skopek N and Blossfeld H-P. (2013) The Two Dimensions of Housing Inequality in Europe. Are High Home Ownership Rates an Indicator of Low Housing Values? *Comparative Population Studies* 38(4): 1009-1040.

Lyberaki A, Tinios P and Papadoudis G. (2013) Retrospective explanation of older women's lifetime work involvement: Individual paths around social norms. *Advances in Life Course Research* 18: 26-45.

Madero-Cabib I and Fasang AE. (2016) Gendered work–family life courses and financial well-being in retirement. *Advances in Life Course Research* 27: 43-60.

McGrath DM and Keister LA. (2008) The Effect of Temporary Employment on Asset Accumulation Processes. *Work and Occupations* 35(2): 196-222.

Merton RK. (1968) The Matthew Effect in Science. The reward and communication systems of science are considered. *Science* 159(3810): 56-63.

Merton RK. (1988) The Matthew Effect in Science, II: Cumulative Advantage and the Symbolism of Intellectual Property. *Isis* 79(4): 606-623.

Modigliani F. (1988) The Role of Intergenerational Transfers and Life Cycle Saving in the Accumulation of Wealth. *Journal of Economic Perspectives* 2(2): 15-40.

Möhring K. (2015) Employment Histories and Pension Incomes in Europe. *European Societies* 17(1): 3-26.

Möhring K. (2016) Life course regimes in Europe: Individual employment histories in comparative and historical perspective. *Journal of European Social Policy* 26(2): 124-139.

O'Rand AM. (1996) The Precious and the Precocious: Understanding Cumulative Disadvantage and Cumulative Advantage Over the Life Course. *The Gerontologist* 36(2): 230-238.

O'Rand AM. (2006) Stratification and the Life Course. Life Course Capital, Life Course Risks, and Social Inequality. In: Binstock RH and George LK (eds) *Handbook of aging and the social sciences.* 6th ed. Boston: Academic Press.

Ozturk G and Gallo WT. (2013) Effect of Job Loss on Wealth Accumulation of Older Workers. In: Office CE (ed). CUNY School of Public Health at Hunter College: U.S. Departement of Labour (DOL).

Painter MA. (2010) Get a job and keep it! High school employment and adult wealth accumulation. *Research in Social Stratification and Mobility* 28(2): 233-249.

Pallas AM and Jennings JL. (2009) Cumulative Knowledge about Cumulative Advantage. *Swiss Journal of Sociology* 35(2): 211-219.

Pence KM. (2006) The Role of Wealth Transformations: An Application to Estimating the Effect of Tax Incentives on Saving. *Contributions to Economic Analysis & Policy* 5(1): 1-24.

Pfeffer FT and Hällsten M. (2012) Mobility Regimes and Parental Wealth: The United States, Germany, and Sweden in Comparison. *Research Report.* Population Studies Center Research.

Ponomarenko V. (2016) Cumulative disadvantages of non-employment and non-standard work for career patterns and subjective well-being in retirement. *Advances in Life Course Research*.

Savage M, Devine F, Cunningham N, et al. (2013) A New Model of Social Class? Findings from the BBC's Great British Class Survey Experiment. *Sociology* 47(2): 219-250.

Schafer MH, Pylypiv Shippee T and Ferraro KF. (2009) When Does Disadvantage Not Accumulate? Toward a Sociological Conceptualization of Resilience. *Swiss Journal of Sociology* 35(2): 231-253.

Semyonov M and Lewin-Epstein N. (2013) Ways to Richness: Determination of Household Wealth in 16 Countries. *European Sociological Review* 29(6).

Sierminska EM, Frick JR and Grabka MM. (2010) Examining the gender wealth gap. *Oxford Economic Papers* 62(4): 669-690.

Simonson J, Romeu Gordo L and Titova N. (2011) Changing employment patterns of women in Germany: How do baby boomers differ from older cohorts? A comparison using sequence analysis. *Advances in Life Course Research* 16: 65-82.

Skopek N. (2015) *Wealth as a Distinct Dimension of Social Inequality,* Bamberg: University of Bamberg.

Skopek N, Buchholz S and Blossfeld H-P. (2014) National patterns of income and wealth inequality. *International Journal of Comparative Sociology* 55(6): 463-488.

Skopek N, Kolb K, Buchholz S, et al. (2012) Einkommensreich – vermögensarm? Die Zusammensetzung von Vermögen und die Bedeutung einzelner Vermögenskomponenten im europäischen Vergleich. *Berliner Journal für Soziologie* 22: 163-187.

Warren T. (2006) Moving Beyond the Gender Wealth Gap: On Gender, Class, Ethnicity, and Wealth Inequalities in the United Kingdom. *Feminist Economics* 12(1-2): 195-219.