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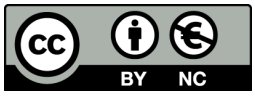
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The consequences of non-standard working and marital biographies for old age income in Europe: Contrasting the individual and the household perspective

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Abstract

The article addresses the question of how individuals with non-standard work or family histories fare under different national pension systems in terms of their individual and household income in old age. It provides a comprehensive overview of the relationship of life course with later life individual and household income, and thereby goes beyond previous research that either focuses on one or the other. Life history data for 12 European countries of the Survey of Health, Ageing and Retirement in Europe (SHARE) are used to examine old age individual and household income of individuals (a) with non-standard working histories (e.g., non-standard employment or unemployment), (b) with family instabilities (e.g., divorce or single parenthood). The results show that non-employment and low-status employment are old age income risks for both genders. Having children represents a burden for household income and for women's individual income only if associated with employment interruptions. Cross-national variation is stronger for the relationship of old age income with the employment history than with the fertility history. Especially Beveridge-plus countries that provide unconditional basic pension schemes mitigate previous life course inequality.

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KEYWORDS
gender, life course, pension, SHARELIFE

1 | INTRODUCTION

Individuals' life courses in Europe are marked by two fundamental developments, which imply consequences for their situation in old age. First, European societies face a de-standardization of employment histories, and simultaneously increasing female employment. Second, family ties become more flexible, and life-long male breadwinner arrangements are less common. However, the "Fordist normal biography" implying a continuous full-time career and life-long marriage still builds the normative foundation of the majority of European pension systems (Hinrichs & Jessoula, 2012). Furthermore, recent reforms have mostly led to a marketization of pensions with implies a further diminishing of redistribution through pension systems (Ebbinghaus, 2015). On this background, the financial situation of retirees in Europe is a highly researched and discussed topic. It has been shown that the level of later life income is determined by developments and achievements over the previous life course (Fasang, Aisenbrey, & Schömann, 2013; Sefton, Evandrou, Falkingham, & Vlachantoni, 2011) and that institutional characteristics, as the design of the pension system and the labour market structure, shape the relationship of individuals' later life well-being (Ebbinghaus, 2021; Ebbinghaus & Neugschwender, 2011; Möhring, 2015, 2018). However, previous research in the field mostly suffers from a drawback: when analysing the financial well-being of retirees, previous studies either look at *individual* income (Fasang et al., 2013; Sefton et al., 2011), or use some measure of *household* income, as the poverty risk (Been, Caminada, Goudswaard, & van Vliet, 2017; Dewilde, 2012). Distinguishing household and individual income measures is important not only in an empirical sense but also for theoretical reasons. In fact, both approaches are based on divergent assumptions and can lead to fundamentally different conclusions. This is essential especially when addressing gender differences in later life financial well-being. As any measure calculated from household income assumes equal redistribution of resources in the household, it implies a tendency to overestimate women's financial situation. This is not the case when using individual income as measure, however, when focussing only on individual income the de-facto living standard is neglected to some degree as individuals without or with low income may live together with a high-income spouse. This study is the first to systematically contrast both, the individual and the household perspective, in order to provide a comprehensive picture of the financial well-being of retirees in Europe and its links to the previous life course.

It addresses the question of how individuals with non-standard working careers and/or non-standard family arrangements fare under different national pension regulations. Do these individuals form one general risk group in terms of old age individual and household income, or do different national developments and regulations lead to distinct effects of life course risks? Basis of my empirical analyses is the Survey of Health, Ageing and Retirement in Europe (SHARE) life history data (wave 3, 2008/09) and income information from waves 4 and 5 (2010, 2013) for 12 European countries: Austria, Belgium, Czech Republic, Denmark, France, Germany, Italy, The Netherlands, Poland, Spain, Sweden, and Switzerland. I focus on two groups of individuals: (a) those with non-standard working histories due to frequent unemployment, care-related breaks, or low-income jobs and (b) those with non-standard family biographies due to divorce and/or lone parenthood. I use Country Fixed Effects regressions to estimate the individual and household income of those groups, and in a second step, examine cross-national differences in the relationship of life course and old age income by integrating country slopes for selected characteristics of the employment and family history in the regression models.

The next session gives an overview of previous research and sets out a theoretical framework to analyse the relationship of life courses, later life well-being, and pension systems. Then, after describing the data, operationalization, and methods, I will present the multivariate results, first on the individual-level relationship of life course and later life individual and household income, second on cross-national differences in these relationships. The article closes with a summary of the results and conclusion.

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2 | THEORETICAL AND SOCIAL POLICY BACKGROUND

2.1 | Life course determinants of old age income from individual and household perspective

When analysing financial well-being in later life, two perspectives are possible. First, one can put the focus on individual income. This perspective to some degree disregards the actual standard of living as other income sources in the household are not considered. However, when analysing the relationship of working history and old age well-being, it is plausible to look at individual income since it reflects life course developments and decisions of one individual. In fact, especially when women's financial well-being in later life is analysed, the individual income represents an unambiguous measure that is not concealed by spouses' income. Many previous studies that analyse women's old age income therefore use personal income (Fasang et al., 2013; Möhring, 2018; Sefton et al., 2011). Second, one can put the focus on household income. This perspective considers redistribution of incomes on the household level and more clearly reflects the actual living standard (Been et al., 2017; Dewilde, 2012; Ebbinghaus, 2021). As poverty risk is calculated based on household income, an individual might not face a poverty risk even though their individual income is low. Vice versa, those with sufficient incomes on the individual level might be confronted with poverty if other household members do not contribute additional incomes.

From the individual-level perspective, those who are excluded from participation in the labour force are also disfavoured in terms of social rights, which are typically acquired by economic activity (Korpi, 2000). This applies especially to pension rights which are in the majority of European countries tied to previous activity on the labour market. Consequently, a sufficient standard of living in old age depends on previous labour market success. Pension systems are an integral element of the governmental life course policy as these include an evaluation of individuals' careers. Therefore, pension policies are "life course sensitive" as they evaluate the previous life course ex post at the time of retirement (Leisering, 2003; Möhring, 2015). The normative models typically underlying evaluation of individuals' life courses in Europe's pension systems are the "normal biography" of continuous regular full-time employment and the male breadwinner model including a stable lifelong marriage with a devotion to family care for the depend female spouse (Hinrichs, 1996; Kohli, 1985). Adaption to these patterns as a rule guarantees a sufficient standard of living retirement for both, individuals active on the labour market as well as dependent spouses engaging in non-paid care-work.

From the household perspective, the living standard of spouses does not only depend on their own but also their partners' accumulated pension rights and savings as couples typically pool their pension incomes (Möhring & Weiland, 2018). Mostly, women either opt-out from the labour market or reduce working hours to assume unpaid care tasks (Drobnič & Blossfeld, 2004). However, depending on the institutional context, this male breadwinner constellation might pay off for the couple in terms of their household income. Joint taxation or derived social security rights as well as pension care entitlements and generous widow pensions are examples of such institutional elements that support the unequal distribution of care tasks in couples. Consequently, women will be at a higher risk to achieve a low individual income when they are old, which however, might not necessarily translate in a low household income.

2.2 | The role of pension systems

As the vast majority of European pensioners is dependent on public pensions, the regulations inherent in national pension systems have a large impact on their financial well-being (OECD, 2015). These life course sensitive rules and regulations translate the individual biography into a specific pension income and are related to normative assumptions about life courses, employment relationships and gender roles (Leisering, 2003; Leitner, 2001). All European public pension systems include redistributive elements that compensate non- or unemployment. These "institutional

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buffers" implemented in national pension systems show great variation across countries, and thus, differently influence the relationship between life course and later-life income (Leitner, 2001; Möhring, 2015). The extent of compensation is dependent on whether the type of career interruption is incorporated as "normal" or "legitimate" into a country's institutional framework (Leisering, 2003). Here, the appraisal of career breaks related to care provision differs from interruptions due to unemployment. While a high diversity exists in Europe with regard to the compensation of care interruptions, the maintenance of pension rights in the case of unemployment is on a lower level and generally limited to periods of benefit recipiency (OECD, 2015). Only unemployment at the end of the working career represents an exception from this pattern as these are incorporated as legitimate retirement pathway in many European pension systems (Ebbinghaus & Hofäcker, 2013). Pension and labour market reforms that have been implemented in many European countries since the late 1990s and early 2000 involve a further cutback of compensation for unemployment periods, while the support for (working) parents is expanded (Bonoli, 2005).

Based on previous literature, especially the following aspects of national pension systems might be relevant for the compensation of interrupted careers. First, the degree of redistribution determines the strength with which is level of pension benefits is related to achievements in working life. In the majority of European pension systems, earnings-related pension benefits are the dominant income source of retirees. Both public earnings-related and occupational pensions link the individual benefit level to previous contributions from working income, duration of employment, and sometimes even tenure in a specific company (OECD, 2015). In contrast, redistributive elements work in the opposite direction through either guaranteeing an unconditional retirement income or providing a flat-rate income for those whose regular pension income is below a certain threshold. While strictly earnings-related pension systems will lead to a significant reduction in retirement income due to career breaks and/or part-time work, basic or minimum pensions tend to mitigate the relationship between working history and retirement income (OECD, 2015).

A well-established differentiation of pension systems is the categorization along the two ideal-types Beveridge and Bismarckian. While the latter are largely composed of a public earnings-related pension scheme that is designed to secure the previous living standard in retirement, the former are multi-pillar systems focused on equality of incomes and/or poverty reduction through universal or targeted public benefits, while the maintenance of the living-standard is relayed to non-state schemes. Previous research suggests that we cannot conclude from the simple dichotomy of Beveridge and Bismarckian on the systems' de-facto performance in terms of redistribution and poverty prevention (Ebbinghaus, 2021; Möhring, 2015). In fact, a closer look on the design of the specific pension system elements is necessary.

First, the design of the first pension tier, which includes some form of basic pensions, is relevant for the mitigation of income risks in old age (Ebbinghaus, 2021). Here, universal pension schemes have to be differentiated from other types of minimum and targeted schemes (Queisser & Whitehouse, 2006). While the former are typically only residence based and do not link benefits to the previous employment history or current income, the latter tie benefits to further conditions. Targeted benefits are only granted if the current income is below a certain threshold; minimum pension schemes in addition require a minimum number of contribution years. In terms of the link of previous life course and old age income, universal and targeted pension schemes are most redistributive. A lower degree of redistribution is present in minimum pension schemes, which indeed weaken the link of pension income and previous earnings, but still require a minimum number of contribution years. The least redistributive are national pension systems without a specific redistributive tier (Queisser & Whitehouse, 2006). Second, non-state pensions embrace a high diversity of pension schemes, such as occupational pension schemes based on mutual agreements of employers and trade unions, or purely personal private pensions from capital market investments and insurances (Ebbinghaus, 2011). How strongly private pensions reinforce inequalities in old age depends on the concrete design of these schemes and their embedding in the pension system as a whole (Ebbinghaus & Neugschwender, 2011).

Based on these characteristics, the countries included in the study's sample can be differentiated in the following way. The group of countries with Beveridge multi-pillar pension systems includes Denmark, the Netherlands,

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Sweden, and Switzerland. Among these, Denmark, the Netherlands, and Sweden are considered as Beveridge-plus countries as they combine a system of well-established occupational and private pensions with a universal basic pension scheme that grants a certain amount of flat-rate pension based on years of citizenship. However, Sweden has moved towards a more Bismarckian type system since the late 1990s (Ebbinghaus, 2021), what is yet of minor relevance for the birth cohorts included in the sample of this study.

Denmark and the Netherlands are the only countries in the study's sample without a public earnings-related pension system. Instead, both national systems are universal and feature a public basic pension scheme that grants a certain amount of flat-rate pension based on years of citizenship. These schemes tend to mitigate the relationship between working history and retirement income (OECD, 2015). In addition, both countries also have well-established occupational pension schemes whose later benefits dependent on previous occupation, earnings, and other job-related characteristics (Ebbinghaus, 2021). In Switzerland, in contrast, the first-tier consists of an earnings-related scheme with a low ceiling and a means-tested supplement (Bonoli, 2017). Therefore, access to the first-tier pensions in Switzerland is more restricted than in the Beveridge-plus countries described above.

All other countries included in this study have Bismarckian social insurance pension systems. Among them, differences exist in the benefit level provided by the public pay-as-you-go system as well as the design of additional basic pension schemes. Ebbinghaus (2011, 2021), describes Southern European countries as Bismarckian-lite due to their relatively lean benefits. With respect to the design of first-tier pensions, Germany and Austria are the only European countries without specific first-tier pension schemes; here, low-income retirees rely on the general social assistance. Minimum pension schemes that provide a flat-rate benefit for those with long contribution histories exist in Belgium and France, as well as in Italy and Spain. In the Eastern-European countries Czech Republic and Poland, social insurance systems have been initiated after the fall of the iron curtain, along with mandatory private funded pensions, and in addition a mix of minimum and basic pensions.

A further redistributive element that is included in almost all European pension systems are pension care entitlements. These are granted for parenthood and/or periods of childcare and aim to compensate for income loss due to career interruptions and/or reduced earnings (Horstmann & Hüllsman, 2009; Möhring, 2018). The generosity of pension care entitlements varies within the group of Bismarckian countries. Belgium, France, as well as the multi-pillar Sweden grant the most generous pension care entitlements, followed by Bismarckian-lite Spain. No or low pension care entitlements exist in the basic pension countries Denmark and the Netherlands and also in multi-pillar Switzerland and Bismarckian Poland (Möhring, 2018).[1]

2.3 | Hypotheses

Based on these considerations, I derive the following hypotheses on the relationship of life course and later life individual and household income. First of all, a deviation from the pattern of continuous standard employment due to non-employment, atypical work, and low-status jobs will result in a lower old age income for both men and women (Hypothesis 1). Furthermore, non-standard employment at the end of the career will be less harmful for the financial well-being in old age than non-standard employment in earlier career stages because reduced working hours and unemployment are institutionalized as a legitimate pathway to retirement in many countries (Hypothesis 2). With respect to gender differences, I assume that women will generally face stronger risks for their individual income, while for men more the household income is affected (Hypothesis 3). Furthermore, factors related to the family history will be more relevant for women than for men. A deviation from the pattern of lifelong marriage will have a positive effect on their individual income, but be associated to a lower household income (Hypothesis 4).

Due to country differences in institutions that shape employment careers and in pension systems, the relationship of life courses and old age financial well-being will vary cross-nationally. Generally, the compensational effect of institutional characteristics will be stronger in countries with pension systems including a basic pension with no or

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low requirements related to the previous employment history, and countries providing sufficient benefits in their main pension scheme (Hypothesis 5).

3 | MATERIALS AND METHODS

The empirical analysis is based on data from the Survey of Health, Ageing and Retirement in Europe (SHARE) waves 4 and 5 (2010, 2013) and employment and family history information from SHARELIFE (wave 3, 2008/09; Börsch-Supan et al., 2013; Börsch-Supan, 2020a, 2020b, 2020c; Schröder, 2011). The analysis sample consists of 5,777 men and 6,135 women who were not active in the labour force and between 60 and 91 years old at the time of the interview, hence born in 1919–1948 and reaching retirement age throughout the 1980s, 1990s, and 2000s. The sample comprises the 12 countries Austria, Belgium, Czech Republic, Denmark, France, East and West Germany, Italy, the Netherlands, Poland, Spain, Sweden, and Switzerland.

3.1 | Operationalization

The first dependent variable of the empirical analysis is the individual income including statutory, occupational, and private pension benefits as well as other income, for example, from side jobs. As second dependent variable the household income is used, equivalized with the OECD-modified equivalence scale (OECD, 2013). Incomes are logarithmized with values of zero set to the minimum income in the sample. The multiple imputations as provided in SHARE are used and analysed with the Stata-mi module (Christelis, 2011; StataCorp., 2019).

The individual employment history is described with six variables: the number of years a respondent was in regular employment between age 20 and 59 years; the number of years a respondent was in non-standard employment (including part-time and fixed-term contract jobs) between age 20 and 59 years; the number of years a respondent was unemployed between age 20 and 59 years; two variables for the number of years a respondent was in regular employment between age 20 and 49 years, and 40 and 59 years, respectively; and the occupational status operationalized on the basis of the International Socio-Economic Index of Occupational Status (Ganzeboom & Treiman, 1996). The two-digit ISEI code of each job was summarized to the mean over the career and set to 0 for respondents who were never employed. The family history is described with five variables: the number of children (values higher than six have been recoded to six); the number of years a respondent was married between age 20 and 59 years; a similar variable indicating the number of years divorced; a "double burden" indicator for the percentage of years a respondent was working during their child(ren) were below 16 years; and finally, a variable holding the number of years a respondent was in single parenthood. The life course factors span the period from the year 1940, when the oldest sample members were 20 years old, to 2008, when the youngest became 59 years old. As control variables marital status (married as reference category, remarried, divorced, widowed, never married), years of education, homeownership, and age at the time of the interview are included. Tables A1 in the Appendix includes the sample statistics for all variables.

3.2 | Estimation strategy and method

For the multivariate estimations, I use linear regression models for the two outcome variables: logarithmized individual and logarithmized equivalized household income. All models include country dummy variables to estimate Country Fixed Effects regressions. These regression models control for the residual variance on the country level (Allison, 2009; Möhring, 2012). The equation is

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$$y_{ij} = \gamma_0 + \beta_1 x_{1ij} + \ldots + \beta_k x_{kij} + \alpha_1 u_{j1} + \ldots + \alpha_{N-1} u_{jN-1} + e_{ij}$$

with y_{ij}: Individual-level outcome of observation i in country j. γ_0: Intercept over all countries. $\beta_k x_{kij}$: Estimator of individual-level variable number k of observation i in country j. $\alpha_1 u_{j1} + \ldots + \alpha_{n-1} u_{jN-1}$: fixed effects for the $N - 1$ countries. e_{ij}: Residual variance for observation i within country j.

To further examine differences between the countries in the sample, interaction effects of the country dummies with individual-level variables of interest are integrated into the Country Fixed Effects regressions (Möhring, 2012). With integrating these country slopes in the models, it is possible to assess how relationships between life course indicators and old age income vary between countries. The equation for these extended models is

$$y_{ij} = \gamma_0 + \beta_1 x_{1ij} + \ldots + \beta_k x_{kij} + \alpha_1 u_{j1} + \ldots + \alpha_{N-1} u_{jN-1} + \alpha_1 u_{j1} x_{1ij} + \ldots + \alpha_{N-1} u_{jN-1} x_{1ij} + e_{ij}$$

additionally with $\alpha_1 u_{j1} x_{1ij} + \ldots + \alpha_{N-1} u_{jN-1} x_{1ij}$: $N - 1$ interactions of fixed effects for the $N - 1$ countries and individual-level variable x_{1ij}.

4 | RESULTS

4.1 | Country and gender differences in employment patterns

Figure 1 and Table A2 in the Appendix give an overview of the employment patterns of men and women in the countries included in the study sample. In all countries, the average of years in regular employment of men is higher than of women, while the reverse applies to mean years in non-standard employment, which is mostly composed of part-time employment. The highest averages of years in standard employment among men can be found in Czech Republic (36.9 years), Germany (34.1 years), and Austria (33.7 years), followed by Switzerland (33.0 years) and the Netherlands (32.6 years), while the lowest averages exist in Poland (25.4 years), Italy (26.6 years), and Spain (27.4 years). Among women, the highest mean years in regular employment can be found in Czech Republic (33.6 years), followed with a large gap by Sweden (21.7 years), France (20.9 years), Germany (19.4 years), and Denmark (19.0 years), while the lowest averages exist in the Netherlands (9.33 years), Spain (10.0 years), and Italy (12.0 years), followed by Switzerland (14.0 years). While standard full-time employment is not common among Swiss and Dutch women, the averages of non-standard part-time employment among women are high in these countries (11.4 and 10.8 years), followed by Denmark (9.2 years), Sweden (8.7 years), and Germany (8.2 years). Taken standard and non-standard employment together, women in Czech Republic (34.7 years) and Sweden (30.4) have the highest labour market attachment over the life course.

Non-standard employment plays only a very minor role in men's employment histories: the highest, albeit very low averages exist in Italy (1.1 years), Sweden (1.1 years), and Denmark (0.9 years). The same applies to unemployment for which the highest averages can be found in Italy (1.0 years) and Poland (0.6 years) for men and in Italy (2.1 years), Poland (1.5 years), and Spain (1.1 years) for women. Surprisingly, women report more unemployment over the life course than men. However, as described above, the recording of unemployment episodes in SHARELIFE may imply under-reporting.

Germany is a specific case as biographies of men and women in the Eastern part have taken place during the Socialist regime of the German Democratic Republic, while those of people in the Western part are more shaped by the male-breadwinner orientation of the West German welfare state in the post-war era. This especially plays a role

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for women's labour market attachment. While the average of regular employment is close to Czech Republic among women in Eastern Germany (27.5 years compared to 16.8 years in Western Germany), mean years in non-standard employment is higher among women in Western Germany (9.2 years compared to 5.0 years in Eastern Germany).

To sum up, employment histories vary between countries and the differences are roughly, yet not entirely, in line with common welfare state typologies (Möhring, 2016). Women's labour market attachment is high in Nordic countries and in post-Socialist Czech Republic and Eastern Germany. However, women and men in Poland show a comparatively low average of years in employment that is close to the low levels in Southern European countries. Employment level of men is high and of women is on a medium level in the Continental European countries Germany, Austria, and the Netherlands. However, France and Belgium deviate from this pattern with a relatively high average of years in regular employment of women compared to a relatively low average of men in France and a low average of both genders in Belgium.

4.2 | Individual-level relationships

Tables 1 and 2 show the regression results for the dependent variables individual and household income for women and men older than 60 years. The results for the employment history indicators are summarized in Table 1; for the family history indicators in Table 2. Each regression model includes the control variables current marital status, age, years of education, homeownership, and additional variables as indicated. Full models are included in Appendix Tables A3–A6. The coefficients of the employment and family history indicators reflect the change in the dependent

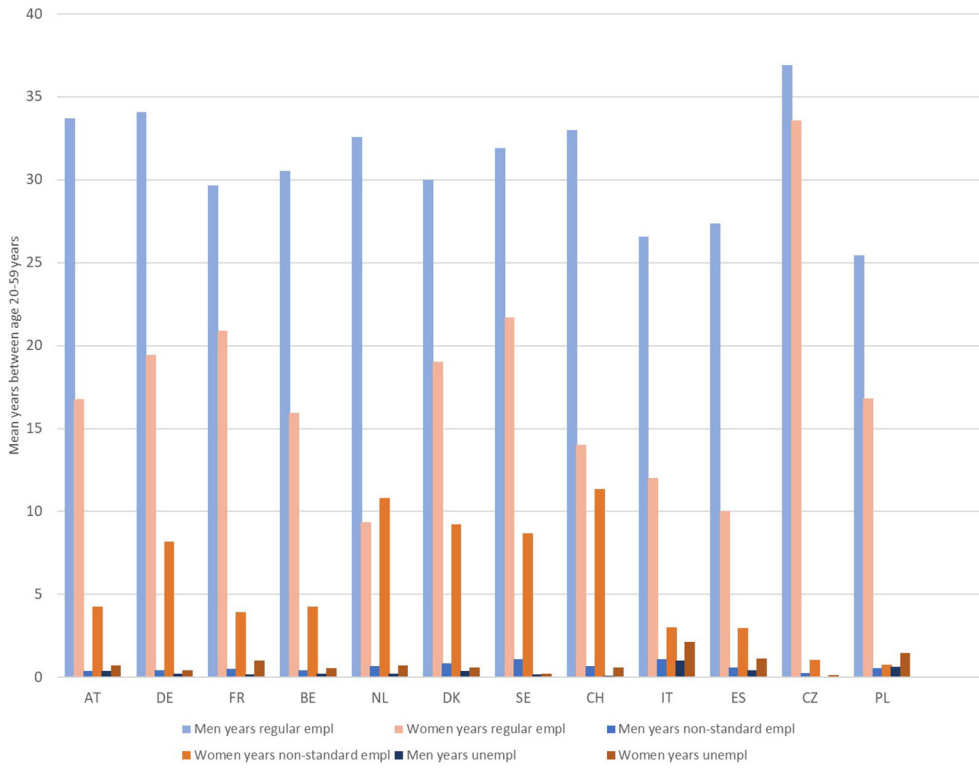


FIGURE 1 Weighted means of years in employment statuses according to gender and country. Values included in Appendix Table A2. Own calculations using SHARE waves 3–5. [Colour figure can be viewed at wileyonlinelibrary.com]

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TABLE 1 Coefficients from regressions of individual and household income with country fixed effects for women and men 60+

		Women		Men	
		Log. individual income	Log. household income	Log. individual income	Log. household income
Model 1	Years regular	0.031***	0.011***	0.009***	0.006***
	employment age 20–59	(0.002)	(0.001)	(0.001)	(0.001)
	Years non-standard	0.026***	0.007***	−0.014**	0.002
	employment age 20–59	(0.003)	(0.002)	(0.005)	(0.004)
Model 2	Occupational status	0.020***	0.007***	0.008***	0.008***
	(mean ISEI)[a]	(0.002)	(0.001)	(0.001)	(0.001)
Model 3	Years unemployed	−0.038***	−0.023***	0.005	−0.002
	since age 20–59	(0.005)	(0.003)	(0.008)	(0.007)
Model 4	Years regular	0.016***	0.004+	0.007**	0.006**
	employment age 20–49	(0.003)	(0.002)	(0.002)	(0.002)
	Years regular	0.011	0.011*	0.014*	0.001
	employment age 50–59[b]	(0.008)	(0.005)	(0.005)	(0.004)

Note: Robust standard errors in parentheses. Full regression results included in Appendix Tables A3 and A4. Control Variables: marital status, age, years of education, homeownership. *Source*: Own calculations using SHARE waves 3–5.
[a]Additionally controlling for years regular employment age 20–59.
[b]Additionally controlling for occupational status (mean ISEI) age 20–59.
***$p < .001$. **$p < .01$. *$p < .05$. +$p < .1$.

variables individual and household income for each additional year in a specific employment or marital status. For example, a positive coefficient of 0.03 indicates an increase by 0.03 units of logarithmized income for each additional year in a certain job or family status. In the sample, logarithmized individual incomes have a mean of 9.04 and a standard deviation of 0.02, and equivalized net household incomes have a mean of 9.45 and a standard deviation of 0.01. Recalculated in percentage, a coefficient of 0.03 units represents a yearly increase by 3.05%.

For women, the relationship with years of employment and income is significantly positive for both, individual and household income (Model 1 in Table 1). With each additional year in regular employment, the logarithmized individual income rises by 3.1% ($p = .002$) and the logarithmized household income by 1.1% ($p = .001$). Years in non-standard employment are also positively related to individual and household income, albeit have a slightly lower impact. For regular employment in men's life courses exists also a positive relationship with old age individual and household income, albeit related to lower income improvements than for women: with each additional year in regular employment, men's old age individual income rises by 0.9% ($p = .001$) and the household income by 0.6% ($p = .001$). Contrary to women, non-standard employment is negatively related to men's individual income with a significant reduction by 1.4% ($p = .005$) for each additional year in non-standard employment. As for years of regular employment, occupational status is positively related to men's and women's individual income and household income (Model 2 in Table 1). Again, the strongest relationship exists for women's individual income, while effects for women's household income, men's individual and household income are less than only half that strong. Years of unemployment are significantly negative related to women's old age individual and household income, while no significant effects for men exist (Model 3 in Table 2). With each additional year unemployed, women's individual income is reduced by 3.8% ($p = .005$) and household income by 2.3% ($p = .003$). The insignificant effects for men are most likely due to the low numbers of reported unemployment of men as described in the previous section. Regular employment in the late career phase is positively related to men's individual and women's household income after controlling for years of regular employment before age 50 (Model 4 in Table 1). For women, the relation of working beyond age 50 with individual income becomes insignificant after controlling for employment before age 50; thus,

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TABLE 2 Coefficients from regressions of financial well-being on marital history for women 60+

		Women		Men	
		Log. individual income	Log. household income	Log. individual income	Log. household income
Model 1	Number of children	−0.063***	−0.031**	−0.020	−0.040***
		(0.018)	(0.011)	(0.013)	(0.010)
Model 2	Number of children[a]	−0.014	−0.019+	−0.021	−0.040***
		(0.018)	(0.011)	(0.013)	(0.010)
Model 3	Share of employed	0.011***	0.002***	0.001	0.002***
	and child<16 (%)[b,c]	(0.001)	(0.000)	(0.002)	(0.000)
Model 4	Years married	−0.011***	0.002	0.005**	0.002+
	since age 20 (%)[a]	(0.002)	(0.001)	(0.002)	(0.001)
Model 5	Years divorced	0.006*	−0.001	−0.004	0.002
	since age 20 (%)[a]	(0.003)	(0.002)	(0.002)	(0.002)
Model 6	Years single parent	0.017***	−0.001	−0.008*	−0.002
	since age 20 (%)[a,c]	(0.005)	(0.003)	(0.003)	(0.003)
Model 7	Years single parent	0.010	−0.002	−0.006	−0.007*
	since age 20 (%)[a,c,d]	(0.006)	(0.004)	(0.004)	(0.004)

Note: Robust standard errors in parentheses. Full regression results included in Appendix Tables A5 and A6. Control Variables: marital status, age, years of education, homeownership. Source: Own calculations using SHARE waves 3–5.
[a]Additionally controlling for Years employed since age 20 (%).
[b]Additionally controlling for number of children.
[c]Including only respondents with children.
[d]Additionally controlling for Years divorced since age 20 (%).
***$p < .001$. **$p < .01$. *$p < .05$. +$p < .1$.

women's late career employment is selective depending on the previous career. For men, in contrast, late career employment even counts more for later individual income: men's old age individual income rises by 0.7% ($p = .002$) for each additional year in regular employment between age 20 and 49 and by 1.4% ($p = .005$) for each additional year in regular employment between age 50 and 59.

The results for the relationship of employment history and old age income provide only partial support for the hypotheses. Hypothesis 1, which stated that a deviation from the pattern of continuous regular employment will be harmful for old age income, is largely supported for women and men; however, gender differences exist in how exactly this relationship is shaped. The results indicate that low-status jobs and non-employment are a general risk for women's and men's old age income, while non-standard employment represents a risk only for men. The partly stronger effects for women may stem from the higher heterogeneity of women's work histories, that is, for them each additional year on the labour market really makes a difference, while men's careers of the birth cohorts included in this study are more homogenous. In Hypothesis 2, I assumed that non- or non-standard employment at the end of the career will be less harmful for the old age income than non- or non-standard employment in earlier career stages. The results are mixed. Regarding women's individual income exists a selection effect: their employment in the late career is dependent on earlier stages. For men's individual income, late career employment is even of higher relevance than earlier stages. This might again stem from the high homogeneity of men's careers in the sample. For them, continuing regular employment beyond age 50 makes a difference, while women's careers already diverge in earlier life stages.

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Regarding the fertility and marital history of men and women the following picture emerges. The higher the number of children, the lower is a women's individual and household income in old age with a significant decrease by 6.5% (p = .018) in individual income and by 3.1% (p = .011) in household income for each child (Model 1 in Table 2). However, after controlling for years employed this effect becomes insignificant for individual income showing that the negative income consequences of motherhood stem from their reduced labor market participation compared to their childless counterparts. Yet, for household income, the negative relationship with number of children remains significant on a 0.1-level (Model 2 in Table 2). For men, having children is negatively related to household, but not to individual income in later life, and this relationship remains significant after controlling for years employed, with a decrease by 4.1% (p = .010) in household income for each child. So, for men like for women, a higher number of children is related to a greater burden on household income, which transmits to later life when children have become older. The variable indicating a "double burden" of employment and child care turns out to be positively related to mothers' individual and household income and fathers' household income (Model 3 in Table 2).

The two indicators for the marital history show a converse pattern for men and women (Models 4 and 5 in Table 2). The longer a woman has been married, the lower is her individual retirement income with a decrease by 1.1% (p = .005) for each additional year married, while the link to household income is positive, albeit not significant. The contrary applies to years divorced: the longer a woman has been divorced without re-marriage, the higher is her retirement income, while the link to household income is negative, albeit not significant. For men, each year being married is associated to an increase in old age individual income by 0.5% (p = .002), and also an increase in household income by 0.2% (p = .001). For men, years divorced are negatively related to old age individual income and positively related to old age household income, albeit both relationships not being significant. Single parenthood is associated to significant reductions in old age individual income of men and women (Models 6 and 7 in Table 2). After controlling for years divorced, the coefficients of individual income become insignificant, while for men single parenthood is significant negatively associated with household income after controlling for divorce.

The relationship of family history and old age income reflects the divergent roles of men in women in marriage and the family. For women, being solely responsible for income maintenance over the life course is associated with gains in later individual income, while men profit from marriage. Having children represents an income risk for both men and women, however, while the negative relation with individual income is explained by lower labour market engagement of mothers, household income of both men and women is the higher the less children they have. Therefore, the empirical results show a mixed picture for Hypotheses 3 and 4, which stated that life course risks will be more relevant for women's individual income, and for men's household income, and that family history factors will be more important for women. Indeed, the effect strength of family history factors is higher for women, but men also face risks for their old age income from factors as having many children or single parenthood. These factors related to the family history represent a higher risk for men's household income, which supports Hypothesis 3.

4.3 | Country differences

For the analysis of country differences in the link of life course characteristics and old age income, I focus on years in regular employment and number of children and their relationship with individual income. Figures 2 and 3 show the predicted level of logarithmized individual income based on regression models in Appendix Tables A7 and A8 according to years in regular employment and number of children separated for countries and genders. Panels 1 and 4 in each Figure include the Bismarckian countries Austria, Germany, France, and Belgium; Panels 2 and 5 the Beveridge systems Sweden, the Netherlands, Denmark, and Switzerland; and Panels 3 and 6 the Southern and Eastern European countries Spain, Italy, Czech Republic, and Poland.

The relationship of years of regular employment and old age income differs between countries not only in terms of the intercept, which represents the income levels, but also in terms of the slope, which reflects the steepness of the relationship of employment years and income in a specific country. Especially steep slopes can be found in

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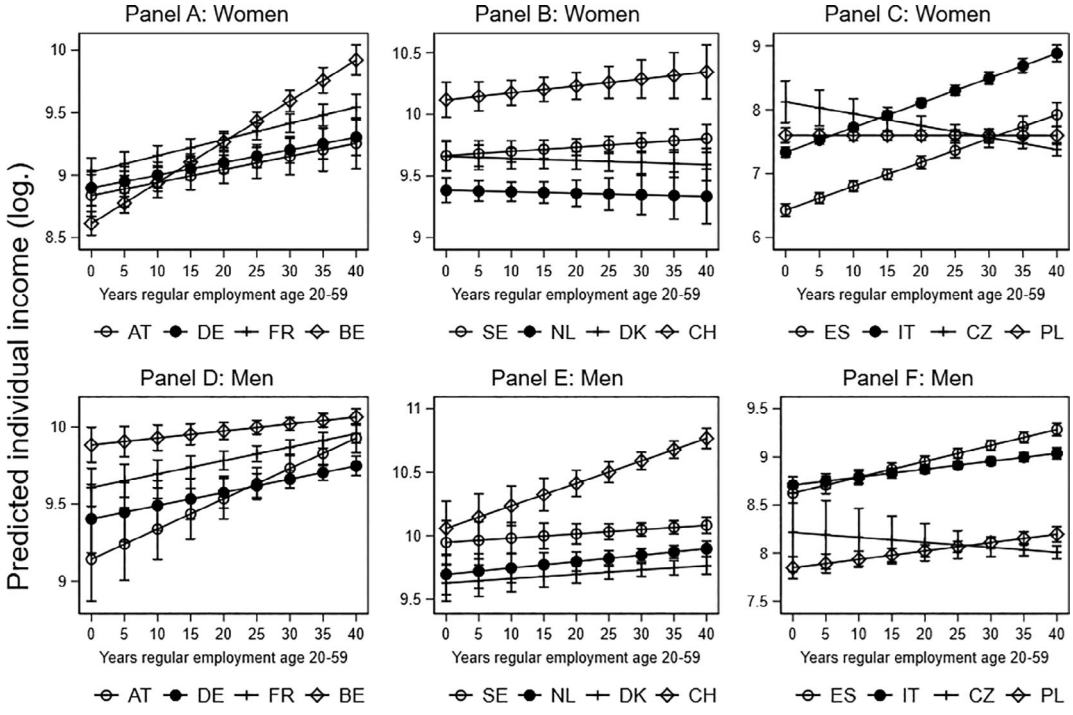


FIGURE 2 Relationship of years in regular employment and old age individual income (log.), country and gender separated. Scales of *y*-axes vary to increase visibility. Based on regression models in Appendix Table A7. Own calculations using SHARE waves 3–5.

Belgium, Spain, and Italy for women (Panels 1 and 3 of Figure 2), and in Austria, Switzerland, Spain, and Italy for men (Panels 4–6 of Figure 2), indicating a strong link of employment and old age income in these countries for the respective gender. In contrast, the slopes are rather flat in Denmark, the Netherlands, Sweden, Czech Republic, and Poland for both genders (Panels 2, 3, 5, and 6 of Figure 2). Consequently, cases with a strong relationship of employment and old age income include countries with Bismarckian and Beveridge pension systems, and especially Southern Europe with Bismarckian-lite systems. In contrast, countries with a universal pension scheme as Denmark, the Netherlands, and still Sweden, as well as the formerly Socialist countries are characterized by a weak link of working life achievements and old age income. Reasons for these patterns may include the low level of redistribution, which is the case for Switzerland and Austria, or generally lean benefit levels combined with a high inequality in employment histories as in Italy and Spain. Countries on the other side of the spectrum inhibit either a more redistributive pension system (Denmark, Netherlands, Sweden), highly homogenous and gender-equal working lives as in the post-Socialist countries, or a combination of both.

Figure 3 shows the predicted levels of individual income according to number of children separated by gender and country based on regression models in Appendix Table A8. For men, in many countries exists a positive relationship with higher predicted incomes the more children they have, especially in Spain and the Czech Republic. In most countries, the slope is rather flat indicating that number of children and old age income are not related, for example, in France, Sweden, the Netherlands, and Poland. Men's incomes slightly decrease with number of children in Germany, Austria, Switzerland, and to a large extent in Italy (Panels 4–6 of Figure 3). For women, similar negative relationships of number of children and old age income exist in in Belgium, Spain, and again, especially in Italy.

To sum up, in line with Hypothesis 5, the results of the cross-national analysis show that the relationship of years in regular employment and number of children with old age income is weaker in countries with an unconditional basic pension scheme than in other countries. Furthermore, the strongest reproduction of working life

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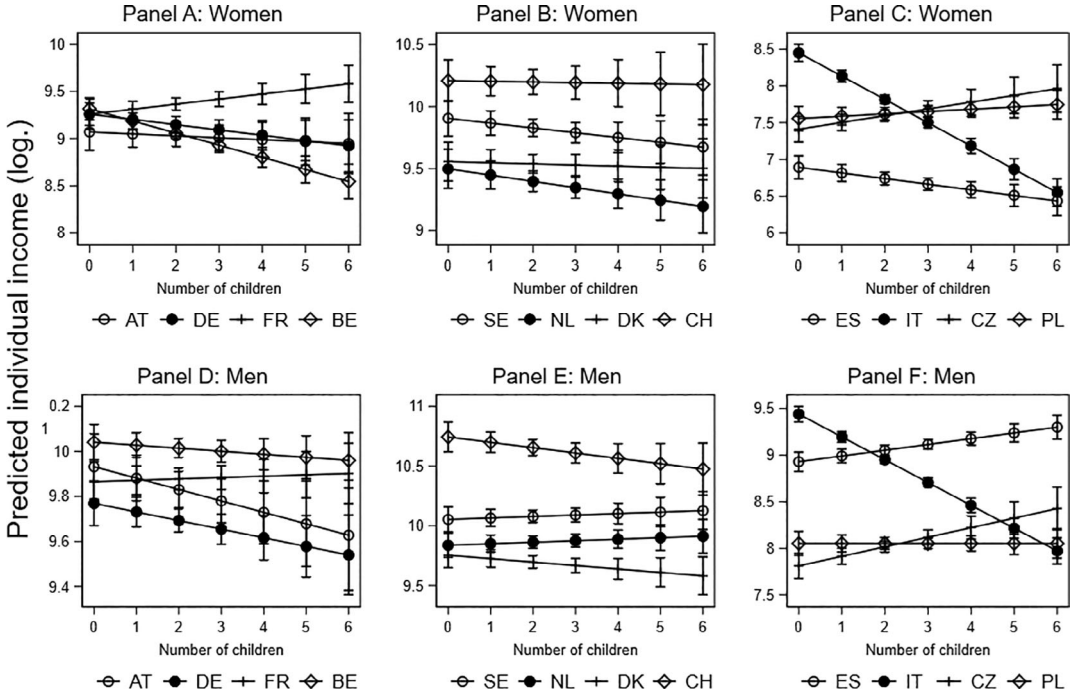


FIGURE 3 Relationship of number of children and old age individual income (log.), country and gender separated. Scales of *y*-axes vary to increase visibility. Based on regression models in Appendix Table A8. Own calculations using SHARE waves 3–5.

inequality in old age appears to take place in the two Southern European countries in the sample with Bismarckian-lite pension systems and high inequality in working life.

5 | CONCLUSION

The results of the analysis of the relationship of individuals' employment and family history with their individual and household income in old age show an ambivalent picture. Some characteristics of men's and women's employment and family histories represent general risks for old age individual and household income, while the effects of others tend to differ between countries. Regular employment and occupational status for both genders as well as non-standard employment for men and unemployment for women appear as most important determinants of the retirement income. For women, non-standard employment is positively associated to later income. The insignificance of unemployment for men's old age income might depend on the way unemployment periods are recorded in the life course questionnaire. As SHARELIFE only considers unemployment periods of more than six month, the total extent of unemployment may be under-reported, and therefore, the results have to be treated with caution. With respect to the family history, the results show clear gender differences: marriage duration is negatively related to women's old age individual income, while positively related to men's. Women profit from reconciling paid work and child care, while a higher number of children is associated to lower household incomes for both genders.

The analysis of country differences shows a greater variation for the employment compared to the fertility history. First of all, a generally redistributive design of the pension system, as it exists or existed in Denmark, Sweden, and the Netherlands, appears to be the best way to balance differences in employment participation and working

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forms over the life course. Also, having children and the number of children is not associated with women's and men's old age individual income in these three countries. Furthermore, countries, which are characterized by a high and homogenous labour market participation of both genders over the life course, also stand out with a weak relationship of the previous employment and fertility history with old age income.

The roles of pension privatization and of pension care entitlements are more ambivalent. In line with previous results, a high relevance of occupational pensions as it exists in Denmark, Sweden, and the Netherlands goes along with a mitigation of income differences. However, this effect cannot be disentangled from the impact of basic pension schemes in these countries. In Switzerland, where the first-tier pensions are more restricted and labour market participation is highly gendered, the high relevance of private pensions goes along with an intensification of the link of employment risks and old age income. These results hint at inequalities within the working population with regard to the participation in occupational pension schemes and demonstrate that the distributional effects of pension privatization deserve further empirical research. Pension care entitlements seem to be of minor importance for the compensation of life course risks as countries, where these benefits are generous, as well as countries without these benefits, show a flat relationship of fertility history and old age income (e.g., France, Netherlands, Sweden). Also, countries in which having children represents a disadvantage for old age income, are among those with low (e.g., Italy) and generous pension care entitlements (e.g., Belgium).

To sum up, viewing the results of the analysis in country comparison hints at two ways to mitigate life course-related risks for old age income: either a high equality on the labour market in terms of a continuous participation in regular employment of both genders and all social groups or a non-contributory universal first pension tier with generous benefits that truly balances previous labour market inequalities. Consequently, the higher inequality in employment between genders and social groups, the more redistributive the national pension systems needs to be in order to prevent income shortfall in old age.

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ENDNOTE

[1] The classification of pension care entitlements refers to past arrangements that apply to the birth cohorts included in the study sample, yet might have undergone reforms. In Germany and Switzerland, pension care entitlements have been expanded and are more generous for future retirees. For more information see Möhring (2018).

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APPENDIX A.

TABLE A1 Sample statistics (not weighted)

	Women		Men			
	Mean	*SD*	Mean	*SD*	Min	Max
Log. individual income	8.64	0.03	9.48	0.02	0.02	13.84
Log. equiv. household income	9.36	0.02	9.56	0.02	0.01	13.83
Years regular employment age 20–59	17.54	15.25	30.56	12.14	0	40
Years non-standard employment age 20–59	5.45	10.03	0.64	3.23	0	40
Years unemployment age 20–59	0.85	4.63	0.36	2.11	0	40
Occupational status (mean ISEI)	33.53	18.94	38.70	15.19	0	70
Years regular employment age 20–49	13.92	11.98	23.83	9.18	0	30
Years regular employment age 50–59	3.62	4.29	6.74	4.10	0	10
Number of children	2.22	1.36	2.26	1.30	0	6
Share of employed of child <16 (%)	61.86	40.48	97.77	10.76	0	100
Years married age 20–59	30.11	12.08	29.30	10.88	0	40
Years divorced age 20–59	2.85	8.28	2.16	7.04	0	40
Years single parent age 20–59	1.90	5.29	1.61	5.24	0	40
Current marital status: Married	0.50	0.50	0.72	0.45	0	1
Remarried	0.08	0.28	0.10	0.30	0	1
Divorced	0.08	0.26	0.04	0.21	0	1
Widowed	0.29	0.45	0.10	0.30	0	1
Never married	0.05	0.21	0.04	0.20	0	1
Age	72.43	7.47	72.60	7.14	60	91
Years of education	9.97	4.05	10.76	4.58	0	25
Owner	0.67	0.47	0.75	0.43	0	1

Note: Own calculations using SHARE waves 3–5.

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TABLE A2 Means and standard deviations of employment history variables in country comparison (weighted)

	Years regular empl. age 20–59		Years non-standard empl. age 20–59		Years unemployment age 20–59		Occupational status (mean ISEI)		Years regular empl. age 20–49		Years regular empl. age 50–59	
	Mean	*SD*	Mean	*SD*	Mean	*SD*	Mean	*SD*	Mean	*SD*	Mean	*SD*
Men												
AT	33.72	9.86	0.37	2.53	0.41	2.29	38.02	12.80	26.46	7.41	7.26	3.63
DE	34.06	7.96	0.42	1.76	0.23	0.99	41.13	10.71	26.38	5.73	7.68	3.50
SE	31.89	10.45	1.08	4.20	0.18	0.91	44.77	15.70	24.12	7.70	7.77	3.81
NL	32.55	10.36	0.68	3.50	0.21	1.16	44.27	15.00	25.48	7.64	7.08	4.01
ES	27.35	15.05	0.60	3.33	0.42	2.82	31.95	12.39	21.16	11.50	6.19	4.47
IT	26.57	13.71	1.12	5.26	1.01	3.34	32.24	13.97	21.42	10.93	5.14	4.16
FR	29.67	12.70	0.50	2.89	0.19	1.61	39.34	17.25	23.39	9.49	6.28	4.14
DK	29.97	11.51	0.87	3.08	0.38	1.94	40.02	14.21	22.80	8.48	7.17	4.07
CH	32.98	10.84	0.70	3.44	0.10	0.72	43.98	12.02	25.02	7.91	7.97	3.70
BE	30.53	11.78	0.45	2.25	0.21	1.14	38.83	17.99	24.14	9.04	6.39	3.92
CZ	36.92	4.97	0.26	2.55	0.04	0.29	42.56	14.69	28.31	3.35	8.61	2.78
PL	25.43	14.26	0.55	3.02	0.63	3.20	33.06	13.72	21.06	11.50	4.38	4.18
Women												
AT	16.78	14.92	4.26	8.59	0.74	4.35	30.32	16.25	13.79	12.03	2.98	3.78
DE	19.44	14.51	8.18	10.90	0.45	2.23	37.56	12.39	15.38	11.27	4.06	4.48
SE	21.68	13.79	8.70	11.46	0.24	1.90	45.36	14.28	15.96	10.38	5.73	4.64
NL	9.33	11.51	10.80	11.39	0.71	3.91	38.00	20.23	7.68	9.00	1.65	3.53
ES	10.02	14.30	2.98	8.70	1.14	5.57	18.61	18.00	7.90	11.06	2.11	3.86
IT	12.01	14.62	3.01	8.73	2.12	7.85	21.67	19.62	9.79	11.60	2.22	3.81
FR	20.88	15.83	3.93	8.67	1.04	5.47	36.91	19.68	16.18	12.21	4.70	4.51
DK	19.01	13.78	9.22	11.54	0.59	2.95	39.07	12.61	14.17	10.41	4.83	4.65
CH	14.03	13.41	11.36	11.64	0.58	3.22	38.88	13.20	11.27	10.34	2.76	4.14
BE	15.95	15.30	4.27	9.27	0.57	3.64	29.84	20.93	13.12	12.30	2.83	3.99
CZ	33.58	7.20	1.07	4.72	0.12	0.60	43.48	13.45	26.96	5.55	6.63	2.78
PL	16.81	14.92	0.78	3.66	1.46	5.85	28.53	16.30	14.14	12.54	2.68	3.48

Note: Own calculations using SHARE waves 3–5.

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TABLE A3 Regression results for the relationship of women's employment history and old age income, country fixed effects models

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.
Years regular	0.031***	0.011***	0.015***	0.006***						
Employment age 20–59	(0.002)	(0.001)	(0.002)	(0.001)						
Years non-standard	0.026***	0.007***								
Employment age 20–59	(0.003)	(0.002)								
Occupational status			0.020***	0.007***	0.022***	0.007***	0.020***	0.007***		
(Mean ISEI over career)			(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)		
Years unemployed									−0.038***	−0.023***
Age 20–59									(0.005)	(0.003)
Years regular employed							0.016***	0.004+		
Age 20–49							(0.003)	(0.002)		
Years regular employed					0.035***	0.017***	0.011	0.011*		
Age 50–59					(0.006)	(0.004)	(0.008)	(0.005)		
Marital status (RC: Married)										
Remarried	0.601***	−0.227***	0.579***	−0.233***	0.593***	−0.231***	0.580***	−0.234***	0.655***	−0.206***
	(0.092)	(0.056)	(0.091)	(0.056)	(0.091)	(0.056)	(0.091)	(0.056)	(0.093)	(0.056)
Divorced	0.507***	−0.344***	0.457***	−0.360***	0.470***	−0.359***	0.459***	−0.362***	0.609***	−0.307***
	(0.099)	(0.060)	(0.099)	(0.060)	(0.099)	(0.060)	(0.099)	(0.060)	(0.100)	(0.060)
Widowed	0.996***	−0.297***	0.997***	−0.296***	0.997***	−0.297***	0.997***	−0.297***	1.000***	−0.296***
	(0.063)	(0.038)	(0.063)	(0.038)	(0.063)	(0.038)	(0.063)	(0.038)	(0.064)	(0.038)
Never married	0.885***	−0.241**	0.840***	−0.255***	0.905***	−0.240***	0.840***	−0.255***	1.152***	−0.146*
	(0.120)	(0.073)	(0.120)	(0.073)	(0.120)	(0.073)	(0.120)	(0.073)	(0.120)	(0.072)
Age	0.011**	0.000	0.009*	−0.000	0.008*	−0.001	0.009*	−0.000	0.002	−0.003
	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)
Years of education	0.045***	0.035***	0.014+	0.024***	0.013+	0.024***	0.015+	0.024***	0.063***	0.041***
	(0.007)	(0.004)	(0.008)	(0.005)	(0.008)	(0.005)	(0.008)	(0.005)	(0.007)	(0.004)

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TABLE A3 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indiv.	**Househ.**	**Indiv.**	**Househ.**	**Indiv.**	**Househ.**	**Indiv.**	**Househ.**	**Indiv.**	**Househ.**
Owner (RC: Tenant)	0.150**	0.126***	0.120*	0.116**	0.117*	0.115**	0.120*	0.116**	0.149*	0.124***
	(0.058)	(0.035)	(0.058)	(0.035)	(0.058)	(0.035)	(0.058)	(0.035)	(0.059)	(0.035)
	+ Country dummies									
Constant	6.532***	9.074***	6.807***	9.136***	6.943***	9.186***	6.796***	9.152***	7.690***	9.457***
	(0.330)	(0.201)	(0.322)	(0.197)	(0.322)	(0.196)	(0.323)	(0.197)	(0.325)	(0.195)
N	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135

Note: Robust standard errors in parentheses. Source: own calculations using SHARE waves 3–5.
***$p < .001$. **$p < .01$. *$p < .05$. $^{+}p < .1$.

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TABLE A4 Regression results for the relationship of men's employment history and old age income, country fixed effects models

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.
Years regular	0.009***	0.006***	0.009***	0.005***						
Employment age 20–59	(0.001)	(0.001)	(0.001)	(0.001)						
Years non-standard	−0.014**	0.002								
Employment age 20–59	(0.005)	(0.004)								
Occupational status			0.008***	0.008***	0.007***	0.008***	0.007***	0.008***		
(mean ISEI over career)			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		
Years unemployed									0.005	−0.002
Age 20–59									(0.008)	(0.007)
Years regular employed							0.007**	0.006**		
Age 20–49							(0.002)	(0.002)		
Years regular employed					0.023***	0.009**	0.014*	0.001		
Age 50–59					(0.004)	(0.004)	(0.005)	(0.004)		
Marital status (RC: Married)										
Remarried	−0.084	−0.006	−0.092	−0.013	−0.090	−0.011	−0.092	−0.013	−0.072	0.002
	(0.058)	(0.047)	(0.058)	(0.047)	(0.058)	(0.047)	(0.058)	(0.047)	(0.058)	(0.047)
Divorced	−0.172*	−0.135*	−0.177*	−0.142*	−0.172*	−0.141*	−0.175*	−0.144*	−0.177*	−0.139*
	(0.083)	(0.068)	(0.083)	(0.068)	(0.083)	(0.068)	(0.083)	(0.068)	(0.084)	(0.068)
Widowed	0.078	−0.101*	0.087	−0.093^{+}	0.090	−0.091^{+}	0.088	−0.094^{+}	0.085	−0.098*
	(0.059)	(0.049)	(0.059)	(0.049)	(0.059)	(0.049)	(0.059)	(0.049)	(0.060)	(0.049)
Never married	−0.220**	−0.212**	−0.212*	−0.198**	−0.219*	−0.205**	−0.212*	−0.198**	−0.257**	−0.228**
	(0.085)	(0.070)	(0.085)	(0.069)	(0.085)	(0.069)	(0.085)	(0.069)	(0.086)	(0.070)
Age	−0.001	−0.002	−0.001	−0.002	−0.003	−0.003	−0.002	−0.002	−0.003	−0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Years of education	0.038***	0.038***	0.025***	0.025***	0.023***	0.025***	0.024***	0.026***	0.037***	0.038***
	(0.004)	(0.003)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)	(0.004)	(0.004)	(0.003)

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TABLE A4 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Owner (RC: Tenant)	0.182***	0.171***	0.172***	0.161***	0.170***	0.159***	0.172***	0.161***	0.181***	0.170***
	(0.041)	(0.034)	(0.041)	(0.033)	(0.041)	(0.033)	(0.041)	(0.033)	(0.041)	(0.034)
	+ Country dummies									
Constant	9.015***	9.191***	8.890***	9.117***	9.153***	9.279***	8.939***	9.078***	9.393***	9.454***
	(0.223)	(0.182)	(0.222)	(0.181)	(0.214)	(0.175)	(0.227)	(0.185)	(0.214)	(0.174)
N	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777

Note: Robust standard errors in parentheses. Source: own calculations using SHARE waves 3–5.
***$p < .001$. **$p < .01$. *$p < .05$. $^{+}p < .1$.

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TABLE A5 Regression results for the relationship of women's family history and old age income, country fixed effects models

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.
Number of	−0.063**	−0.034**	−0.009	−0.021+	−0.017	−0.029*						
Children	(0.020)	(0.012)	(0.019)	(0.012)	(0.022)	(0.013)						
Years employed			0.034***	0.008***			0.034***	0.009***	0.036***	0.008***		
Age 20–59			(0.002)	(0.001)			(0.002)	(0.001)	(0.002)	(0.001)		
Share employed					0.011***	0.002***						
Of child <16 (%)					(0.001)	(0.000)						
Years married							−0.011***	0.002				
Age 20–59							(0.002)	(0.001)				
Years divorced									0.006*	−0.001	0.008+	0.001
Age 20–59									(0.003)	(0.002)	(0.004)	(0.002)
Years single											0.010	−0.002
Parent age 20–59											(0.006)	(0.004)
Marital status (RC: Married)												
Remarried	0.671***	−0.197***	0.625***	−0.209***	0.629***	−0.218***						
	(0.093)	(0.056)	(0.091)	(0.056)	(0.099)	(0.060)						
Divorced	0.604***	−0.310***	0.535***	−0.327***	0.559***	−0.305***						
	(0.100)	(0.060)	(0.098)	(0.060)	(0.105)	(0.064)						
Widowed	1.009***	−0.291***	1.004***	−0.292***	1.025***	−0.289***						
	(0.064)	(0.039)	(0.063)	(0.038)	(0.068)	(0.041)						
Never married	1.040***	−0.206**	0.899***	−0.241**	0.714**	−0.247						
	(0.126)	(0.076)	(0.123)	(0.076)	(0.249)	(0.150)						
Age	0.003	−0.002	0.010**	−0.001	0.012**	0.001	0.029***	−0.006**	0.030***	−0.006**	0.026***	−0.006**
	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)
Years of	0.061***	0.040***	0.047***	0.036***	0.050***	0.038***	0.044***	0.037***	0.046***	0.037***	0.065***	0.043***
Education	(0.007)	(0.004)	(0.007)	(0.004)	(0.008)	(0.005)	(0.007)	(0.004)	(0.007)	(0.004)	(0.008)	(0.005)

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TABLE A5 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Owner	0.152*	0.126***	0.147*	0.125***	0.178**	0.136***	0.008	0.186***	−0.013	0.188***	0.018	0.195***
(RC: Tenant)	(0.059)	(0.035)	(0.058)	(0.035)	(0.063)	(0.038)	(0.058)	(0.035)	(0.058)	(0.035)	(0.064)	(0.037)
Constant	7.793***	9.509***	6.413***	9.170***	6.466***	9.109***	5.785***	9.260***	5.317***	9.337***	6.279***	9.481***
	(0.330)	(0.198)	(0.331)	(0.203)	(0.362)	(0.218)	(0.331)	(0.200)	(0.326)	(0.197)	(0.354)	(0.205)
N	6,135	6,135	6,135	6,135	5,527	5,527	6,135	6,135	6,135	6,135	5,527	5,527

Note: Standard errors in parentheses. Source: own calculations using SHARE waves 3–5.
***p < .001. **p < .01. *p < .05. ^{+}p < .1.

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TABLE A6 Regression results for the relationship of men's family history and old age income, country fixed effects models

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.	Indiv.	Househ.
Number of	−0.023^{+}	−0.044***	−0.023^{+}	−0.044***	−0.025	−0.029*						
Children	(0.014)	(0.011)	(0.014)	(0.011)	(0.016)	(0.013)						
Years employed			0.001	−0.001			0.001	−0.001	0.002	−0.000		
Age 20–59			(0.003)	(0.003)			(0.003)	(0.003)	(0.003)	(0.003)		
Share employed					0.001	0.002***						
Of child <16 (%)					(0.002)	(0.000)						
Years married							0.005**	0.002^{+}				
Age 20–59							(0.002)	(0.001)				
Years divorced									−0.004	0.002	−0.002	0.006*
Age 20–59									(0.002)	(0.002)	(0.004)	(0.003)
Years single											−0.006	−0.007*
Parent age 20–59											(0.004)	(0.004)
Marital status (RC: Married)												
Remarried	−0.063	0.021	−0.062	0.021	−0.044	−0.218***						
	(0.059)	(0.048)	(0.059)	(0.048)	(0.062)	(0.060)						
Divorced	−0.180*	−0.147*	−0.179*	−0.148*	−0.154^{+}	−0.305***						
	(0.084)	(0.068)	(0.084)	(0.068)	(0.089)	(0.064)						
Widowed	0.081	−0.106*	0.081	−0.106*	0.123^{+}	−0.289***						
	(0.060)	(0.049)	(0.060)	(0.049)	(0.064)	(0.041)						
Never married	−0.299***	−0.315***	−0.297***	−0.318***	−0.814***	−0.247						
	(0.090)	(0.073)	(0.090)	(0.073)	(0.243)	(0.150)						
Age	−0.002	−0.002	−0.002	−0.002	−0.002	0.001	−0.001	−0.003	−0.001	−0.002	−0.002	−0.002
	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)
Years of	0.037***	0.038***	0.037***	0.037***	0.039***	0.038***	0.038***	0.039***	0.038***	0.039***	0.039***	0.039***
Education	(0.004)	(0.003)	(0.004)	(0.003)	(0.005)	(0.005)	(0.004)	(0.003)	(0.004)	(0.003)	(0.005)	(0.004)

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TABLE A6 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Indiv.	**Househ.**	**Indiv.**	**Househ.**	**Indiv.**	**Househ.**	**Indiv.**	**Househ.**	**Indiv.**	**Househ.**	**Indiv.**	**Househ.**
Owner	0.180***	0.168***	0.180***	0.169***	0.197***	0.136***	0.182***	0.185***	0.190***	0.194***	0.182***	0.190***
(RC: Tenant)	(0.041)	(0.034)	(0.041)	(0.034)	(0.045)	(0.038)	(0.041)	(0.033)	(0.041)	(0.033)	(0.043)	(0.036)
Constant	9.431***	9.518***	9.403***	9.559***	9.276***	9.109***	9.087***	9.394***	9.207***	9.404***	9.322***	9.337***
	(0.215)	(0.175)	(0.247)	(0.201)	(0.290)	(0.218)	(0.241)	(0.197)	(0.242)	(0.197)	(0.225)	(0.184)
N	5,777	5,777	5,777	5,777	5,267	5,267	5,777	5,777	5,777	5,777	5,267	5,267

Note: Standard errors in parentheses. Source: own calculations using SHARE waves 3–5.
***$p < .001$. **$p < .01$. *$p < .05$. $^{+}p < .1$.

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TABLE A7 Regression results for the relationship of women's and men's years in regular employment and old age individual income, Country Fixed Effects models with country slopes

	(1)	(2)
	Women	**Men**
Years regular employment	0.010	0.020*
Age 20–59	(0.008)	(0.009)
Country (RC: AT)		
DE	0.062	0.261
	(0.250)	(0.402)
SE	0.784***	0.800*
	(0.237)	(0.368)
NL	0.503*	0.548
	(0.222)	(0.360)
ES	−2.176***	−0.416
	(0.221)	(0.334)
IT	−1.270***	−0.333
	(0.211)	(0.327)
FR	0.189	0.465
	(0.228)	(0.342)
DK	0.778***	0.480
	(0.234)	(0.352)
CH	1.237***	0.911*
	(0.250)	(0.395)
BE	−0.223	0.741*
	(0.217)	(0.337)
CZ	−0.483	−0.825
	(0.420)	(0.561)
PL	−1.004***	−1.191***
	(0.231)	(0.338)
Country × years regular employment (RC: AT)*		
DE*	−0.000	−0.011
	(0.011)	(0.011)
SE*	−0.007	−0.016
	(0.010)	(0.011)
NL*	−0.012	−0.015
	(0.011)	(0.010)
ES*	0.027*	−0.003
	(0.010)	(0.010)
IT*	0.028**	−0.011
	(0.010)	(0.009)
FR*	0.003	−0.011
	(0.010)	(0.010)
DK*	−0.012	−0.016

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TABLE A7 (Continued)

	(1) Women	(2) Men
	(0.010)	(0.010)
CH*	−0.005	−0.002
	(0.012)	(0.011)
BE*	0.022*	−0.015
	(0.010)	(0.010)
CZ*	−0.029*	−0.025
	(0.014)	(0.015)
PL*	−0.011	−0.011
	(0.010)	(0.010)
Occupational status	0.018***	0.007***
(Mean ISEI over career)	(0.002)	(0.001)
Constant	6.844***	8.527***
	(0.345)	(0.372)
N	6,135	5,777

Note: Standard errors in parentheses. Source: own calculations using SHARE waves 3–5.
***$p < .001$. **$p < .01$. *$p < .05$. $^{+}p < .1$.

TABLE A8 Regression results for the relationship of women's and men's number of children and old age individual income, country fixed effects models with country slopes

	(1) Women	(2) Men
Number of children	−0.020	−0.051
	(0.088)	(0.067)
Country (RC: AT)		
DE	0.191	−0.163
	(0.292)	(0.200)
SE	0.912**	0.144
	(0.278)	(0.203)
NL	0.503	−0.072
	(0.287)	(0.201)
ES	−1.934***	−0.905***
	(0.287)	(0.201)
IT	−0.377	−0.393*
	(0.261)	(0.190)
FR	0.188	−0.067
	(0.261)	(0.194)
DK	0.561	−0.155
	(0.287)	(0.203)
CH	1.214***	0.834***

(Continues)

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TABLE A8 (Continued)

	(1)	(2)
	Women	**Men**
	(0.294)	(0.218)
BE	0.246	0.109
	(0.260)	(0.187)
CZ	−1.415***	−2.022***
	(0.300)	(0.225)
PL	−1.269***	−1.781***
	(0.293)	(0.220)
Country × number of children (RC: AT)*		
DE*	−0.036	0.012
	(0.116)	(0.082)
SE*	−0.019	0.063
	(0.109)	(0.081)
NL*	−0.030	0.063
	(0.108)	(0.079)
ES*	−0.056	0.112
	(0.105)	(0.077)
IT*	−0.296**	−0.194*
	(0.101)	(0.077)
FR*	0.074	0.057
	(0.102)	(0.077)
DK*	0.011	0.022
	(0.111)	(0.081)
CH*	0.015	0.006
	(0.121)	(0.089)
BE*	−0.108	0.037
	(0.101)	(0.075)
CZ*	0.112	0.153
	(0.125)	(0.094)
PL*	0.052	0.051
	(0.107)	(0.083)
Constant	7.549***	9.504***
	(0.373)	(0.254)
N	6,135	5,777

Note: Standard errors in parentheses. Source: own calculations using SHARE waves 3–5.
***$p < .001$. **$p < .01$. *$p < .05$. $^{+}p < .1$.

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