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The Influence of Marital Status and Spousal Employment on Retirement Behavior in Germany and Spain

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Abstract

This paper analyzes the impact of marital status and spousal employment on the timing of retirement in Germany and Spain. Retirement behavior is examined by means of event-history models, with a competing-risks framework being used to distinguish between voluntary and involuntary work-exit transitions. To take account of the role of social policies, we adopt a comparative approach. Data are drawn from a 2006 special retirement module implemented analogously in national labor force surveys. The results show that spousal labor market participation plays a large role in work-exit transitions, even when retirement is involuntary. This finding questions the widespread belief that coreirement is exclusively due to preference for joint retirement shared among spouses. Moreover, widows and widowers tend to retire prematurely in Germany, whereas no such effect could be found in Spain. These findings are explained by reference to specific economic incentives arising from national pension legislation.

Keywords: Retirement, Family, Divorce, Widowhood, Life course, Survival analysis

Introduction

Gary Becker (1993) established the idea that individual employment decisions depend on family context. Traditionally, women's employment choices were often dictated by their partners' earnings (Esping-Andersen, 2009: 24). Consistent with the notion of "coupled careers", spousal interaction effects today arguably run both ways (Bernasco, Graaf, & Ultee, 1998; Blossfeld & Drobnič, 2001). According to the life course perspective, partner characteristics moreover have an impact on the age of withdrawal from work. There is robust evidence that synchronous retirement between the spouses is often the outcome of joint retirement planning (Drobnič, 2002; Ho & Raymo, 2009; Kim & Moen, 2002; O'Rand & Farkas, 2002; M. E. Szinovacz, 2002).

The possible influence of marital dissolution has received much less attention in retirement research. Despite the growing share of older workers who are divorced many studies exclusively examine couples, specifically dual-earner couples. While there is wealth of research on the employment effects of divorce in midlife (Kalmijn, 2005; Raeymaeckers, Dewilde, Snoeckx, & Mortelmans, 2008; Van Damme, Kalmijn, & Uunk, 2009), less is known about its influence on retirement patterns, especially in Germany and Spain. In particular, there has been limited comparative research on the topic. For the United States, Morgan (1999) has shown that being divorced is related to later planned retirement and lower expected income compared with widowed and in particular married women.

Similarly, little is known of the relationship between widowhood and labor force withdrawal. Unlike the substantial body of research on the effects of widowhood on income (Vartanian & McNamara, 2002), psychological well-being (Lee & DeMaris, 2007) or social participation (Utz, Carr, Nesse, & Wortman, 2002), there is limited extant research on the implications of divorce for the labor market. Carr and Pudrovska (2012) pointed out that older widows in the US who try to reenter the labor force may lack the experience to secure a good

job, or may face age discrimination. This disadvantage is more pronounced for women belonging to minority groups: about 40% of black and Hispanic women aged 65 and older who live alone are poor, compared with just 3% of older married white men.

This paper analyzes the impact of marital status and spousal employment on retirement behavior. On the one hand, it extends on previous research on the interdependence of spouses' retirement decisions and the implications of divorce and widowhood for the pace of labor market withdrawal. On the other, acknowledging the importance of involuntary retirement highlighted in the literature (Van Solinge & Henkens, 2007), our study enters largely uncharted territory by incorporating an agency dimension into the analysis of coupled work-exit transitions. Moreover, we examine whether, due to diverging social policies, the impact of divorce and partner loss on work-exit decisions varies across societal contexts. Data are drawn from two national labor force surveys, the German *Mikrozensus* and the Spanish *Encuesta de la Población Activa* (EPA), from 2006. By comparing Germany and Spain, we aim to contribute to the ongoing debate on welfare regime typologies and the appropriate position of Southern European countries therein (Tesch-Roemer & von Kondratowitz, 2006). Whereas Germany is the paradigm case for the conservative regime, Spain is usually assigned to the Mediterranean cluster. Arguably, one of the distinctive features of the “fragmented” regime (Ferrera, 1996) is that family plays a more prominent role in the Mediterranean countries than in the rest of continental Europe (Albertini & Kohli, 2013). In comparing the way in which marital status and spousal employment affect retirement behavior in both countries, the present study puts this notion to an empirical test.

Background: Marital status and retirement timing

Previous research has considered a rich variety of determinants of retirement age at both the macro and micro level (Blossfeld, Buchholz, & Kurz, 2011; Damman, Henkens, & Kalmijn,

2011; Ekerdt, 2010). Moreover, “a small but growing literature acknowledges the interconnectedness of couples in term of retirement planning and the theoretical importance of household decision making” (Griffin, Loh, & Hesketh, 2012: 210). With the rise of dual-income families, the number of households experiencing two retirements is also increasing. However, despite advances in research, “we have only limited knowledge about how family circumstances affect labour supply at older ages” (Johnson, 2009: 140).

The “linked lives” principle postulates an influence of family and household circumstances on the timing of biographical events (Elder, 1995). In theoretical terms, family circumstances may (a) reshape individual work-leisure preferences or (b) alter the economic preconditions of the retirement decision because of changed income prospects. The latter will further depend on (c) the institutional framework in place.

Retirement preferences and spousal employment

The mutual dependence of spouses’ retirement decisions is a recurring finding in the literature (Kim & Moen, 2002; M. E. Szinovacz, 2002). In reviewing previous research from the United States, Ho and Raymo (2009: 156) reported that “between 20% and 30% of dual-worker couples retire jointly.” The synchronization of his and her retirement is accordingly driven by mutual expectations regarding time use. In particular, spouses often share a preference for joint retirement (O’Rand & Farkas, 2002; M. E. Szinovacz, 2002), although asynchronous retirement may be economically more advantageous due to smoothed household income streams. Using economic jargon, the “complementarities in leisure” effect seems to dominate the “added worker” effect (which stipulates that married workers increase their own labor supply to compensate for the income loss incurred due to spousal retirement) (Heisig, forthcoming). By disrupting accustomed partnership roles, retirement of one spouse can have important psychological consequences for the other. For example, it has been shown that men carry a higher risk of suffering from symptoms of depression when their wives retire

later than themselves (Kim & Moen, 2002; M. Szinovacz & Davey, 2004). To the extent that husbands anticipate these adverse consequences, it is plausible that they either postpone their own retirement, or try to convince their (often younger) wives to retire as well (Henkens & Van Solinge, 2002).

According to the *joint lunches hypothesis*, married workers with a retired spouse retire earlier than married workers whose spouse is still working (hypothesis 1). Although the available evidence is not unequivocal (Henkens, 1999; Henkens & Van Solinge, 2002; Ho & Raymo, 2009), several studies find that women more frequently adapt their retirement timing to household circumstances than men (Drobnič, 2002; M. Szinovacz & DeViney, 2000). If this gender asymmetry holds, the retirement decisions of wives should depend more strongly on their husbands' situation than vice versa (hypothesis 2).

Despite some effort in this direction (M. E. Szinovacz, 2002), we currently do not know the extent to which shared expectations really are causal determinants of joint retirement (Ho & Raymo, 2009). This study shall empirically test this linkage between preferences and behavior that is often taken for granted in existing research. From this argumentation follows the hypothesis that spousal retirement leads to earlier exit from work if, and only if, the individual worker has room for decision-making on the timing of his or her retirement (hypothesis 3). On the contrary, if the worker is highly constrained in his or her retirement options, we do not expect to find an effect of spouses' employment status. Retirement events that are induced by job loss or poor health should not be altered by spouses' employment status.

Changes in marital status and economic retirement incentives

Family circumstances can also have an impact on household finances and economic retirement incentives. Put simply, the Becker equilibrium model posits that women's labor force participation is low when husbands' earnings are high. In many countries, a gender-

unequal division of labor has been stabilized by the welfare state putting a premium on the male-breadwinner model (Orloff, 1993). In this vein, gender differences in retirement timing can be explained by reference to the fiscal system that imposes lower marginal tax rates on single-earner couples or that favors “unequal one-and-a-half patterns” (Pascall & Lewis, 2004: 387).

Another way in which household processes may modify work incentives is through changes in marital status (Tamborini, Iams, & Whitman, 2009), and particularly through divorce or death of the spouse. Divorce can have a variety of effects on the financial situation of workers approaching retirement. For women, the short-term economic consequences are negative as they typically suffer a reduction in household income (Andreß, Borgloh, Bröckel, Giesselmann, & Hummelsheim, 2006; Poortman, 2000). To compensate for income losses related to divorce, many women increase their labor supply (McKeever & Wolfinger, 2001). Within this logic, divorce should likewise lead to postponed retirement among women. Moreover, if the former wife has been inactive during most years of the marriage, eligibility for a public pension before statutory retirement age (typically at age 65) is out of reach. Divorced women should thus exit the labor market later than married women (hypothesis 4). Some formerly inactive women may even have to re-enter paid work after divorce to palliate the detrimental effects of marital disruption on old-age income (DeViney & Crew Solomon, 1996).

The impact of divorce on retirement cannot be expected to be the same for men and women, because the financial implications of divorce are far less severe for men than for women. Men’s income position may even improve following divorce, as children usually move on to live with the mother (Andreß, Borgloh, Bröckel, Giesselmann, & Hummelsheim,

2006; Poortman, 2000).¹ Therefore, we hypothesize that divorce does not affect men's retirement behavior (hypothesis 5). A further competing hypothesis is that due to adverse health effects (Brockmann & Klein, 2004) divorce leads to earlier exit from work for both men and women (hypothesis 6).

Widowhood, as divorce, has among its immediate consequences the loss of an earner in the household. This income loss may alter work incentives for the surviving spouse. If anything, we would thus expect widowhood to have a decelerating effect on retirement (hypothesis 7). However, widowed persons typically receive survivor pensions in compensation, which in Germany and Spain are proportional to the pension entitlements of the deceased. In some cases, widowhood also entails positive financial bequests. Therefore, the adverse income effects of marital dissolution are less severe for those who are widowed as opposed to those who divorce (Wilmoth & Koso, 2002). Nevertheless, widowed women carry a high risk of experiencing poverty in old age (Smeeding & Sandström, 2005; Vartanian & McNamara, 2002).

As Pai and Barret (2007: 437) note, the impact of widowhood on labor force participation has remained largely unexplored. Early tentative evidence suggests that widows may increase labor market participation following the loss of the spouse (L. Morgan, 1981). Williamson and McNamara (2003) find no significant effect of experiencing widowhood among White women, but report an increase in the probability of working for Black women widowed at age 55. The authors explain this racial difference with Black women's limited access to survivor pensions. In a sample of US couples, Szinovacz and DeViney (2000) find that previously widowed wives are more prone to early retirement, while among husbands, previous widower status is related with later retirement. Sefton et al. (2011) show that in the UK inactivity is frequent among widowed women aged 20–59 years who stay single.

¹ Nevertheless, there is also evidence of negative consequences for divorced men, specifically in terms of increased risks of unemployment and disability (Kalmijn 2005).

Institutional effects

The economic consequences of divorce (Uunk 2004) as well as individual responses in the form of increased labor supply among divorced women (Raemaekers et al. 2008) have been shown to be conditional on welfare state arrangements. Therefore, to derive specific expectations regarding the influence of divorce on retirement patterns, it is necessary to consider the policies in place in the countries under analysis.

Germany and Spain both operate Bismarckian pay-as-you-go pension systems; social security contributions are proportional to wages and cover all employees (except civil servants in Germany). Despite EU legislation against age discrimination, mandatory retirement provisions persist in collective bargaining agreements in Germany, whereas in Spain such clauses have been nullified for most occupations. Gradual retirement does not play an important role in either country – the so-called part-time retirement scheme (*Altersteilzeit*) has been popular in Germany but in practice it was most commonly used as a state-subsidized early retirement pathway.

Since 1976 the German public pension system includes pension-share regulations in the case of divorce, which cushion the long-term consequences of the male breadwinner model (Fasang, Aisenbrey, & Schoemann, 2009). Divorced persons are compensated for unequal pension accrual of the two spouses during the time of the marriage (*Versorgungsausgleich*). Accrued entitlements are summed up and divided equally among the former spouses. With pension-sharing regulations in place, divorce therefore alters individual pension entitlements which, in this case, are redistributed in favor of the (ex) spouse with the lower income. If the divorcee's entitlements are still insufficient, pension adequacy may be a motive for continued work.

Not legalized until 1981, divorce in Spain has been initially limited to a select group of highly educated women, although there is evidence of a declining educational gradient

(Bernardi & Martínez Pastor, 2011). Little is known about the economic consequences of divorce in Spain. In terms of public policies, there is no bonus to the old-age pension benefits of divorced women (or men) such as exist in Germany. Rather, economic compensation in Spain most commonly takes place in the form of alimonies, although non-payment is notorious.² Therefore, work incentives for divorced women should be even more substantial than for their German counter-parts. Compared to married workers, we thus expect divorced women in Spain to retire relatively later than divorced women in Germany (hypothesis 8).

Turning to widowhood, the German system of social security establishes specific rules for survivor pensions that have theoretical implications for retirement. According to pension legislation (§97 SGB VI), a survivor pension recipient's other incomes are partly subject to deduction. Specifically, 40% of the amount of additional income that exceeds the applicable allowance (690 EUR per month in 2006) is deducted from the survivor pension benefit. Because old-age pension benefits are typically lower than the last wage, the income loss normally connected with retirement is decreased substantially for widows and widowers. The financial incentives to continue working are therefore low, especially if the deceased spouse had accumulated a larger pension entitlement. This is more relevant for women than for men, not only because women are widowed more often but also because women receive higher survivor pensions than men (but lower old-age pensions) (cf. Hagen, Himmelreicher, & Hoffmann, 2007). As a consequence, and contrary to hypothesis 7, we expect German widows and widowers to enter retirement earlier than a comparable married worker (hypothesis 9). Such a legal constraint is not in place in Spain, where survivor pensions are generally compatible with income from labor or the receipt of an old-age pension. We thus expect the generic hypothesis 7 to hold in Spain.

² To protect children from economic hardship, in 2007 the government was urged to set up a guarantee fund for divorced parents whose former spouses do not comply with court orders.

Research Design

Data

Our primary data source are the 2006 editions of the Spanish Labor Force Survey (*Encuesta de la Población Activa*) (EPA) and the German *Mikrozensus* (MZ). Both surveys feed into the Eurostat-administered *European Union Labour Force Survey* (EU-LFS). Within this framework, a special module on retirement issues was implemented in the year 2006 in 28 national European labor force surveys. Only persons aged 50–69 years were eligible who were either in the labor force in the reference week or had been (self-)employed at age 50. Unfortunately, the EU-LFS data set itself was not a suitable basis for this study due to data anonymization, as the central variable age is only made available in quinquennial age groups. Nevertheless, the common EU-LFS methodology makes the results from both national surveys directly comparable.

Modeling strategy

The study uses an event-history framework. For estimates of the Kaplan-Meier survivor function, the full age range between 50 and 69 years is used. Because of missing information (see below for details), the multivariate models are conducted exclusively for the age interval between 58 and 65 years. Specifically, we carried out a series of piecewise-constant exponential models, which by virtue of its flexibility is the most commonly employed survival-analytical model in retirement research. The sample size is of 6,352 individuals for Spain and 4,419 for Germany. Retirement is defined as permanent exit from the labor market; retirement age is measured in years and refers to the year in which the last job ended. Work-exit events correspond to persons who self-classify as “retired” or “disabled or permanently sick” or that were otherwise subjectively inactive and do not intend to return to work. In

accordance with the conventional definition of retirement, the sample population does not include persons who have been economically inactive after age 50.

Independent variables

Family situation is measured by a time-varying categorical variable that combines marital status and the employment status of the spouse. The recent employment history of the spouse is taken directly from his or her personal data file.

Social class is an important determining factor of retirement timing (Radl, 2013a); it is measured using the European Socio-economic Classification (ESeC) (Rose & Harrison, 2007), a further development of the well-known Erikson-Goldthorpe schema. Class membership for retirees refers to the characteristics of the last job. However, information on previous jobs is only available if retirement took place within the last eight years prior to the interview. To prevent sample selection bias, the multivariate models are therefore estimated only for the interval between 58 and 65 years of age, both inclusive. This age window captures 70 percent of observed retirement events, for which full information is available, while preserving a balanced sample of retrospective life histories.

The labor market participation of older workers also depends on economic sector (Blossfeld, Buchholz, & Kurz, 2011); it is operationalised on the basis of the CNAE-93 code for Spain and the classification WZ-2003 for Germany. The model furthermore controls for public sector employment, which has also been shown to affect retirement ages (Bernardi & Garrido, 2006). The number of years worked refers to all periods of paid employment.

Competing risks framework

The timing of retirement as well as its predictors is closely connected to the pathway leading up to the transition (Radl, 2013a). In particular, choice-based household-level interactions are expected to affect voluntary retirement decisions but not involuntary work-

exit transitions. A competing-risks framework is hence adopted to distinguish the way in which marital status and spousal employment are associated with different transitions modalities.

In the data at hand, pathways into retirement can be identified via two survey questions: first, the socio-economic situation after leaving the last job – assessed retrospectively for all retirees – taps into the dynamics of sequential retirement processes; second, respondents who state that they have moved from work into “retirement or early retirement” are additionally asked about their “main reason for retirement”. Through this survey question, the subjective voluntariness of labor market withdrawal can be addressed. Involuntary retirement then includes (a) retirement due to employment constraints, i.e. individuals who were unemployed following their last employment as well as those who point to job loss or problems at work as the main reason for retirement; and (b) health-related retirement, i.e. retirees who report having passed through disability or long-term sickness or indicate disability or long-term sickness as the main reason for retirement. Voluntary retirement is hence defined *ex negativo* as a residual category that comprises all forms of non-involuntary work exit. In sum, rather than measuring involuntary retirement by means of an explicit survey question about the degree of voluntariness, like other similar studies (Dorn & Sousa-Poza, 2010; Van Solinge & Henkens, 2007), instead we rely on a combination of survey items that allow for a more “objective” measurement of involuntary retirement.

Results

Descriptive results

To gain an overview of retirement processes in the two countries under analysis, figure 1 shows Kaplan-Meier estimates of the survivor function by gender. There are pronounced drops in the survival curves in both countries at age 60 and, most importantly, at age 65, the

statutory pension age in Germany and Spain in the year 2006. The average retirement age is lower in Germany than in Spain. In terms of gender differences, it becomes obvious that women in Germany retire earlier than men. Many female retirement transitions occur at age 60 because this cohort is still qualified for the special old-age pension of women (phased out until 2012). In Spain, where no special pension exists for women, there is hardly any difference between the retirement timing of men and women. This pattern can furthermore be explained by a marked selection process, which leads many Spanish women with low levels of education to abandon the labor market already before age 50 (Garrido & Chuliá, 2005), leaving mostly women with strong labor market attachment in the older work force (Radl, 2013b).

[Insert Figure 1 about here]

Table 1 shows case numbers and weighted relative proportions for the two exit modalities among retirees who leave the labor market within the relevant age interval of 58 to 65 years. Voluntary retirement is the more frequent work-exit modality for either sex in both countries. In Germany and Spain alike, the share of involuntary retirement transitions is about one third. Although overall unemployment is high in Spain, strong employment protection effectively protects the majority of older workers from being laid off (Bernardi & Garrido, 2006). Whereas involuntary retirement is relatively more prevalent among men in Germany, the gender gradient is reversed in Spain.

[Insert Table 1 about here]

Survival analysis

Results from four piecewise-constant exponential models are reported in table 2. The first set of estimates shows that family situation plays an important role among older German workers: as expected, married women whose husbands are retired exhibit a much higher retirement propensity than married women with working husbands. German men also appear to be responsive to the employment status of their wives, although the magnitude of the latter effect seems smaller than the former (20.8% vs. 40%). In Spain, too, we detect significant partner effects in both men's and women's retirement behavior. The presence of retired spouses spurs the pace of retirement significantly for either sex. Surprisingly, here the effect turns out to be smaller for women than for men: the reported hazard ratios indicate a 53.2% increase of retirement probabilities for men but only a 22.7% increase for women (for whom the effect is also only significant at the 10% level). Among men, the presence of an inactive wife leads to a somewhat earlier exit as well.

In sum, the findings thus far support hypothesis 1, which claims significant spousal interaction effects, although the results are ambiguous with respect to the supposed gender-gradient herein (hypothesis 2). Further models involving interaction effects between gender and family situation (not shown) did not yield any interactions that were significant at the 5% level.

According to the first model divorced women in Germany retire later than do married women with a working spouse. In accordance with hypothesis 4, this difference may be attributed to the economic costs of divorce, which produce an incentive to stay on the job until a later age. As argued in hypothesis 5, this effect is present for women but not for men. Contrary to prior expectations (hypothesis 8), however, divorce yields no significant effect on women's retirement behavior in Spain.

The results further demonstrate that widowed men and women in Germany apparently retire relatively early. In line with hypothesis 9 (and contrary to hypothesis 7), the increased propensity to retire can be readily interpreted as the consequence of adverse retirement incentives resulting from the partial deduction of further incomes from survivor pensions. Hence, workers who lose their spouses retire prematurely to avoid implicit income losses. Note that survivor pensions are an important source of income among elderly women. In 2007, 40 percent of German women over 65 (excluding former self-employed, farmers, or civil servants) receive a deferred pension (Bieber et al. 2009: 10). In contrast with hypothesis 7, no pacing effect of widowhood could be found among men or women in Spain.

[Insert Table 2 about here]

Competing risks: pathways into retirement

According to the conventional preference-based argumentation, spousal interaction influences the timing of retirement only among workers who leave the labor market voluntarily. Conversely, partner characteristics should not affect involuntary retirement events. Likewise, the respective incentive-driven effects of widowhood and divorce should exert leverage when older workers have choice over their retirement timing but not when employment exit is induced by unemployment or disability. To test the validity of these claims (hypothesis 3) and to tap into the mechanisms involved, a set of competing risks models is estimated, using the dichotomous pathway typology described above. Table 3 summarizes the results from eight piecewise-constant exponential models (one for each of the two risk types, for men and women in Germany and Spain, respectively). All models control for social class and public sector.

The competing risks framework shows that both German and Spanish workers whose spouse is retired show an increased propensity to exit the labor market voluntarily when compared to married persons with a working spouse. In Spain the estimated spousal effects appear to be substantially stronger than in Germany. Furthermore, the competing risks framework confirms that among Spanish men (and maybe among German women) having an inactive spouse likewise accelerates retirement transitions via the voluntary exit pathway. At the same time, the consistent finding that their wives' employment situation significantly influences men even under conditions of severely limited agency freedom calls into question the notion that retirement preferences are the only mechanism that drive the well-known accelerating effect of retired spouses on the timing of labor force withdrawal.

Within the voluntary exit modality, divorce and widowhood again yield statistically meaningful effects on women in Germany, although the latter coefficient is only significant at the 10% level. Indeed, divorced women in Germany appear to retire late, exhibiting a transition rate that is 40% lower than at baseline. Surprisingly, no impact of divorce could be found on female workers in Spain. As to the possible health-related retirement-accelerating effect of divorce (hypothesis 6), no significant influence of divorce was found for involuntary work-exit transitions for either country. Partner loss does not seem to matter for the timing of involuntary labor-force exit either.

For widowed men in Germany the risk-specific analysis shows that they have a much elevated hazard ratio for voluntary retirement, confirming the results from the aggregate analyses. As noted above (hypothesis 9), the reason is likely buried in social insurance legislation: incompatibility rules between survivor pensions and additional incomes imply that widowers (and widows) face high implicit tax rates on income exceeding a relatively low level of allowance. This effect is stronger for men than for women (51.5% vs. 22.1%) despite the fact that the survivor pensions obtained by husbands on behalf of their deceased wives are

lower on average than vice versa. Since no such effect could be detected in Spain, institutional characteristics seem of crucial relevance here.

[Insert Table 3 about here]

The presented evidence is subject to various limitations. Firstly, because of sample size restrictions, highly differentiated analyses like the former competing-risk models inevitably face the problem of limited cell sizes for specific sub-groups, making findings sensitive to sampling error. Secondly, the labor force surveys used here did not include full retrospective information on marital history. Thirdly, only a limited number of control variables could be included, thereby raising the possibility of omitted variable bias. Therefore, in order to assess the robustness of the findings, Table A.1 in the appendix shows comparable results from a set of analogous competing-risk models for Germany and Spain using a different data set, the first wave of the Survey of Health, Ageing and Retirement in Europe (SHARE), which allows for the inclusion of a richer set of control variables (cf. Radl, 2013a). The comparison between both data sources shows both similarities and differences. On the one hand, the supplementary analysis confirms two of our main findings for Germany, namely the prevalence of involuntary coretirement and the early voluntary retirement of widows. On the other, the findings from SHARE for divorced women in Germany are strikingly inconsistent with those from the MZ. In fact, the pattern seems to be the exact opposite, with female divorcees exiting the labor force earlier than older married women, even when facing employment constraints. This inconsistency (which remained in additional analyses using SHARE without additional control variables) questions the validity of the above result. Because there are multiple data-related methodological differences between the two sets of analyses (survey year, sample, age range, measurement, model specification), we are unable

to identify the reasons for the divergence of findings, which calls for further research on the influence of marital status, and especially divorce, on retirement behavior.

Discussion

Retirement does not occur in a social vacuum. Rather, retirement decisions and adaptations are influenced by family and social contexts and in turn affect the quantity and quality of interactions with kin and friends (M. E. Szinovacz, 2012). In short, retirement is a process in which family plays a pivotal role (Matthews & Fisher, 2012). Against this backdrop, this paper has analyzed the roles of marital status and spousal employment in retirement behavior in Germany and Spain. While spouses' joint retirement planning arguably shapes work-leisure preferences, the loss of a partner through divorce or death influences the workers' retirement choices in financial terms, as these events change old-age income prospects, and hence the economic incentives to retire. The study found that even German men (who are often considered to hold traditional gender norms) are sensitive to the situation of their wives. In any case, the responsiveness of Spanish men to their wives' employment situation appears larger than that of their German counterparts. Since female labor market participation is much higher among younger cohorts in Spain, the strong influence of the wife's employment situation on her husband's retirement may help achieve the policy goal of extending working lives in the future.

The results furthermore show that the degree of voluntariness of labor force withdrawal is a central intervening variable moderating the impact of partner characteristics on retirement timing. In coherence with expectations, partner loss only made a difference when retirement was voluntary. Similarly, married older workers make their well-known preference for joint retirement count in discretionary retirement decisions. However, if retirement was involuntary spouses' employment situation was also found to play a role, at least among men. Since

household characteristics should theoretically matter only to the extent that older workers are able to exert control over the timing of their work-exit transition, this finding suggests that synchronized retirement between spouses in retirement may not exclusively be driven by the way retirement preferences are shaped by the household context. Possibly, homogamy in education, regional job market conditions, and similar exposure to employment risks lead to spouses sharing unobserved characteristics that are associated with job loss (Henkens, Kraaykamp, & Siegers, 1993). Alternatively, both partners may retire early because of health problems occurring as a consequence of shared unhealthy lifestyle (e.g. smoking, food habits). Another potential explanation is that even in seemingly involuntary labor force withdrawals workers exert some influence on their retirement age. For example, not all health problems make immediate retirement unavoidable, and claiming a disability pension – compared to the alternatives a financially attractive pathway into (early) retirement in Germany (Börsch-Supan, 2011) – requires that the insured person actively submits an application. Similarly, the instrumentalization of the unemployment pathway into early retirement has been a well-known feature of the German welfare state (Schmähl, 2003). In this sense, the voluntary/involuntary dichotomy is an overly coarse measure of agency freedom that limits the scope of the present study. Future research should aim at incorporating finer measures that capture a greater variety of individual “degrees of control” in work-exit transitions.

The effects of widowhood and divorce appear to hinge on institutional filters. Only in Germany were widowed men and women found to exhibit a strong propensity to withdraw from work early. This tendency possibly arises from existing incompatibilities between labor income and the receipt of a survivor pension. Specifically, a plausible explanation is that German social security legislation prompts widows and widowers to leave the labor market prematurely. If future research confirms the pull effect of widowhood in Germany discovered

here, it may be worthwhile for policy-makers to reconsider existing legislation with a view to eliminate undesired work disincentives within the pension system.

Parts of the presented empirical evidence suggested that divorced women seem to work until a relatively late age in Germany. However, this particular finding did not prove robust and, to our knowledge, has also not been previously reported by existing studies.³ Given the growing share of divorced among the older workforce, further research is needed to ascertain whether divorced women in Germany potentially are a vulnerable group in the context of ongoing pension reforms lifting the statutory retirement age.

Contrary to prior expectations, no significant impact of divorce on retirement ages could be found for Spain. This result may be influenced by the fact that women who are economically active beyond age 50 are still the minority among the current generation of older workers in Spain. Self-selection could prevent divorce effects from being detected (Radl, 2013b). Partner loss appears to influence labor force withdrawal to a lesser degree than in Germany.

This study is limited in various ways. For instance, we only were able to include a small number of control variables in the comparative analysis, and the labor force surveys that were our primary data base did not contain complete information on marital histories. Therefore we replicated parts of the analysis using alternative data (SHARE). Although by this token some of our key findings found additional support, the robustness check also revealed various inconsistencies for reasons which we are unable to ascertain. Further research is required to solidify the nexus between family forms and retirement timing under different welfare arrangements.

Another limitation of the present study is that it did not consider care obligations as another family circumstance that may have an impact on retirement decisions, especially

³ For example, Fasang et al. (2009) did not find significant effects of divorce on retirement timing. This divergence may however be due to the income-based definition of retirement used by the authors.

among women (Dentinger & Clarkberg, 2002). Frailty of an elderly family member can prompt the retirement of senior workers if professional care is unavailable, unaffordable or unwanted. An interesting question for future research would be whether, because of income constraints, care obligations might complicate the joint retirement of the spouses.

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Tables and figures

Table 1 Retirement Pathways of Persons Retiring at Age 58–65, by Country and Sex

Pathway	GERMANY			SPAIN		
	Women	Men	Total	Women	Men	Total
	number of cases <i>estimated weighted proportion</i>					
Voluntary Retirement	704 74.1%	693 60.3%	1,397 66.5%	495 61.7%	1,256 68.3%	1,751 66.4%
Involuntary Retirement	246 25.9%	458 39.7%	704 33.5%	278 38.3%	863 31.7%	841 33.6%
Total	950 100%	1,151 100%	2,101 100%	773 100%	1,819 100%	2,592 100%

Source: Mikrozensus 2006, EPA 2006; own calculations.

Table 2 Piecewise Constant Exponential Model, Employment Exit in Germany and Spain

ALL TRANSITIONS	GERMANY				SPAIN			
	Women		Men		Women		Men	
	Hazard ratio	Std. error	Hazard ratio	Std. error	Hazard ratio	Std. error	Hazard ratio	Std. error
Family Situation - Ref.: Married, Spouse Employed								
Married, Spouse Retired	1.400***	(.103)	1.208***	(.078)	1.227*	(.145)	1.532***	(.174)
Married, Spouse Inactive	1.191	(.126)	0.955	(.080)	0.957	(.235)	1.182**	(.090)
Divorced	.662***	(.075)	0.922	(.112)	1.000	(.227)	0.883	(.264)
Widowed	1.178*	(.101)	1.311**	(.173)	0.943	(.132)	1.106	(.188)
Unmarried	1.163	(.131)	0.958	(.123)	0.984	(.152)	1.159	(.156)
Public Sector	.700***	(.069)	.694***	(.084)	1.226	(.215)	1.481**	(.247)
Class (ESeC) - Ref.: Routine Workers								
Higher Salariat	1.043	(.156)	0.849	(.085)	.133***	(.082)	.429***	(.071)
Lower Salariat	1.081	(.106)	1.078	(.101)	1.165	(.202)	0.852	(.117)
Intermediate Occupations	1.309***	(.115)	1.097	(.112)	0.772	(.161)	0.931	(.110)
Self-employed	.533***	(.077)	.412***	(.044)	.705***	(.078)	.607***	(.047)
Lower Sales & Service	1.199*	(.119)	1.266*	(.178)	1.070	(.148)	1.351**	(.170)
Skilled Manual	1.648***	(.221)	1.302***	(.116)	1.422	(.381)	1.089	(.101)
Sector - Ref.: Traditional Manufacturing								
Agriculture	.513***	(.096)	0.89	(.136)	.524***	(.114)	.756*	(.109)
Heavy Industry	0.869	(.170)	1.047	(.098)	0.874	(.470)	1.661***	(.254)
Other Manufacturing (Food, Infrastructure)	0.909	(.085)	.845*	(.075)	.571**	(.162)	1.072	(.174)
Construction	1.155	(.199)	0.969	(.119)	0.488	(.254)	.729**	(.109)
Trade, Transport, Hotels and Catering	1.923***	(.293)	1.246	(.176)	.437***	(.100)	0.808	(.118)
Inter-company Services	.770*	(.108)	.610***	(.084)	.479***	(.124)	0.702	(.153)
Social Services	0.81	(.111)	.654***	(.096)	.354***	(.095)	.541***	(.114)
Consumer Services	.716***	(.073)	.534***	(.065)	.394***	(.088)	.712**	(.120)
Subjects	1,940		2,479		1,960		4,392	
Events	1,194		1,432		884		1,914	

Source: Mikrozensus 2006, EPA 2006; own calculations

Note: * p<0.1, ** p<0.05, *** p<0.01; Models for Germany control for New Länder; Baseline hazard not shown.

Table 3 Competing Risks Models, Employment Exit in Germany and Spain

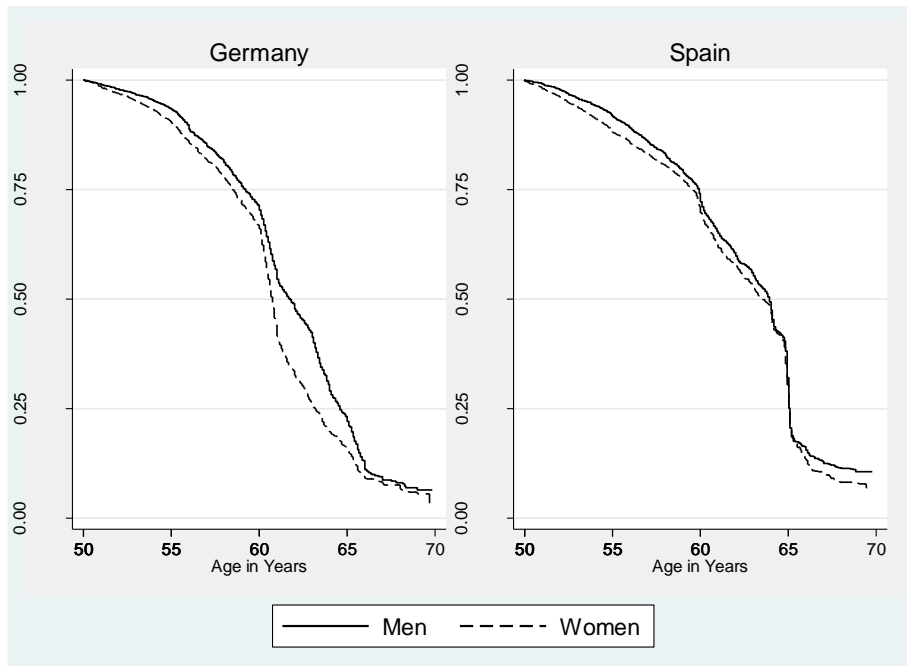
			Married Spouse Retired	Married Spouse Inactive	Divorced	Widowed	Unmarried
			<i>(Reference: Married, Spouse Employed)</i>				
GERMANY							
Voluntary Retirement	Women	Exp(β)	1.495***	1.275*	.600***	1.221*	1.356**
		SE	(.148)	(.177)	(.088)	(.134)	(.209)
	Men	Exp(β)	1.199*	0.970	0.762	1.517**	0.835
		SE	(.111)	(.110)	(.110)	(.278)	(.154)
Involuntary Retirement	Women	Exp(β)	1.116	0.848	0.917	1.039	0.984
		SE	(.195)	(.224)	(.219)	(.193)	(.273)
	Men	Exp(β)	1.320**	0.919	0.805	1.228	1.028
		SE	(.152)	(.142)	(.176)	(.275)	(.226)
SPAIN							
Voluntary Retirement	Women	Exp(β)	1.602***	.809	1.291	1.054	1.202
		SE	(.277)	(.288)	(.423)	(.221)	(.252)
	Men	Exp(β)	1.811***	1.434***	.763	1.039	1.112
		SE	(.270)	(.136)	(.299)	(.211)	(.210)
Involuntary Retirement	Women	Exp(β)	.931	.910	.859	.780	.933
		SE	(.180)	(.326)	(.282)	(.173)	(.266)
	Men	Exp(β)	1.422*	.977	1.060	1.097	1.130
		SE	(.292)	(.130)	(.406)	(.350)	(.263)

Source: Mikrozensus 2006 (N=4,419), EPA 2006 (N=6,352); own calculations

Note: Models control for social class and public sector employment.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. SE=Standard error; Exp(β)=Hazard ratio.

Figure 1 Kaplan-Meier Survival Curves of Retirement, by Country and Gender



Source: Mikrozensus 2006, EPA 2006; own calculations.

Appendix

Table A.1 Competing Risks Models, Employment Exit in Germany and Spain using Multiple Data Sets

			Married Spouse Retired	Married Spouse Inactive	Divorced	Widowed	Unmarried					
			<i>(Reference: Married, Spouse Employed)</i>									
			MZ/EPA ¹	SHARE ²	MZ/EPA ¹	SHARE ²	MZ/EPA ¹	SHARE ²	MZ/EPA ¹	SHARE ²	MZ/EPA ¹	SHARE ²
GERMANY												
Voluntary Retirement	Women	Exp(β)	1.495***	1.964***	1.275*	.499	.600***	1.554**	1.221*	1.496*	1.356**	1.431
		SE	(.148)	(.324)	(.177)	(.414)	(.088)	(.320)	(.134)	-0.309	(.209)	-0.369
	Men	Exp(β)	1.199*	1.811***	0.970	1.180	0.762	.834	1.517**	1.428	0.835	1.176
		SE	(.111)	(.293)	(.110)	(.205)	(.110)	(.359)	(.278)	(.566)	(.154)	(.227)
Involuntary Retirement	Women	Exp(β)	1.116	2.181***	0.848	2.914	0.917	1.751*	1.039	1.326	0.984	1.922
		SE	(.195)	(.585)	(.224)	(2.039)	(.219)	(.568)	(.193)	-0.608	(.273)	(.832)
	Men	Exp(β)	1.320**	1.522*	0.919	1.156	0.805	2.407***	1.228	2.670**	1.028	0.789
		SE	(.152)	(.331)	(.142)	(.249)	(.176)	(.800)	(.275)	(1.167)	(.226)	(.275)
SPAIN												
Voluntary Retirement	Women	Exp(β)	1.602***	1.674	.809	.417	1.291	.606	1.054	0.862	1.202	1.348
		SE	(.277)	(.993)	(.288)	(.431)	(.423)	(.444)	(.221)	-0.526	(.252)	(.952)
	Men	Exp(β)	1.811***	2.077**	1.434***	1.776***	.763	1.205	1.039	1.952*	1.112	1.055
		SE	(.270)	(.595)	(.136)	(.395)	(.299)	(1.163)	(.211)	(.714)	(.210)	(.227)
Involuntary Retirement	Women	Exp(β)	.931	0.454	.910	4.029**	.859	.959	.780	0.556	.933	.943
		SE	(.180)	(.276)	(.326)	(2.486)	(.282)	(.562)	(.173)	-0.393	(.266)	(.559)
	Men	Exp(β)	1.422*	1.071	.977	0.818	1.060	1.636	1.097	1.108	1.130	1.622
		SE	(.292)	(-.554)	(.130)	(.287)	(.406)	(1.364)	(.350)	(.794)	(.263)	(.755)

Sources: Mikrozensus (MZ) 2006 (N=4,419), Encuesta de la Población Activa (EPA) 2006 (N=6,352), Survey of Health, Ageing and Retirement in Europe (SHARE) 2004 (N= DE: 1,497 + ES: 771).

¹Models control for social class and public sector employment; observation window: 58-65 years. See table 3.

²Models control for social class, years of education, job tenure, firm size, number of grandchildren; observation window: 50-70 years.

For further methodological details see the study by Radl (2013a), which uses the same data and model specifications but examines a larger number of Western European countries.

Note: * p<0.1, ** p<0.05, *** p<0.01. SE=Standard error; Exp(β)=Hazard ratio.