Men's Transition to Retirement: Does the Wife Matter?*

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Abstract

This article examines the retirement timing of unmarried and married elderly men in (West) Germany. Data are drawn from the German Socio Economic Panel Study. An event history analysis is conducted using a piece-wise constant hazard model with time-varying covariates. The results indicate that in spite of similarities in the retirement age of the two groups, some factors influencing the retirement decision vary according to marital status and the wife's employment characteristics. In particular, the results suggest that husbands in dual-earner households (both partners employed at the age of 50) tend to make retirement decisions more autonomously from the household economic situation than husbands whose wives are not in the labor force.

JEL Classification: J 26, C 41

1. Introduction

Much of the literature on retirement in Germany treats retirement as a purely individual transition, made within the current pension system, firm-specific rules, and other institutional regulations and labor market conditions. Household characteristics and the interdependencies of household/family members have most often been ignored. However, because the proportion of married women approaching old age with substantial work histories is growing, it will be increasingly necessary to assess how pension systems and other retirement policies affect retirement outcomes, including the question of whether policy measures that affect the retirement decisions of one family member can indirectly influence the retirement of the remaining spouse.

The existing and rapidly growing evidence clearly suggests that retirement is a family affair, affecting both the retiree and his or her spouse (Szinovacz et al., 1992). A number of studies on the retirement timing patterns explicitly fo-

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cus on the question of whether working couples show a tendency to synchronize their retirement dates. They indeed find that spouses prefer to retire jointly. These results have been found in countries with a variety of institutional frameworks, such as Austria (Zweimüller et al., 1996), Denmark (An et al., 1999), Germany (Allmendiger, 1990; Blau/Riphahn, 1999; Drobnič/Schneider, 2000; Pischner/Wagner, 1992; Wagner, 1996), the Netherlands (Henkens, 1999), and the United States (Blau, 1998; Clark et al., 1980; Gustman/Steinmeier, 2000; Henretta/O'Rand, 1983; Henretta et al., 1993; Hurd, 1990; Johnson/Favreault, 2001; O'Rand et al., 1992; O'Rand/Farkas, 2002).

Thus, within the parameters given by a country-specific pension system, retirement decision seems to be much less an individual decision than has been generally assumed. The household context plays an important role when it comes to decision-making about retirement, not only among dual-earner couples, but also among single-earner couples (Henkens/van Solinge, 2002).

In this paper, I examine retirement decisions of men in (West) Germany in a longitudinal perspective, comparing differences in the determinants of retirement timing for unmarried and married men. To assess the impact of the wife's employment behavior over the life course on the husband's transition to retirement, I extend my work in Drobnič (2002) by dividing married men into a sub-sample of men whose wives were not employed at the age of 50, and "working spouses" where both partners were employed at age 50. This distinction is assumed to capture the life-long differences between households in which married women specialized in household production, and those in which women pursued paid employment over the life course and into later life, which is a rather atypical arrangement in older cohorts of married couples in Germany. I hypothesize that household income has a positive but diminishing effect on how early a man retires, and further, that since men with working wives have higher household income, that they are in an income range where income has little effect on retirement age. In contrast to the vast majority of studies on individual determinants of retirement, that usually only take into account the characteristics of individuals close to the time of retirement, I follow the individuals over time from the age of 50. My approach also differs from that of other papers in that I do not specifically test whether and how the change in employment status of one spouse affects the retirement probability of the other spouse (see Blau/Riphahn, 1999; Drobnič/Schneider, 2000).

2. Data and Methods

2.1 The Definition of "Retirement"

The transition into retirement is not always clear-cut. Not all older people pass directly from employment to retirement; the pathway might be made up

of one or more intervening statuses of not working, such as unemployment, discouragement, long-term sickness or invalidity, and homemaking/caring. Another possible pathway to retirement is to reduce working hours gradually from a full-time job to a part-time, occasional or otherwise "lighter" job, until a complete cessation of work occurs. Therefore, there is no unambiguous definition of retirement that would encompass all possible pathways.

In previous studies of retirement behavior, a variety of different definitions were used. "Retirement" can mean being in receipt of an old-age pension, regardless of current employment or non-working status. Another indicator can be a sudden and pronounced decline in the individual's number of working hours, or a drop of working hours under a certain level. In this study, I use a self-reported retirement status as an indicator of the retirement transition. Data from the German Socio Economic Panel (GSOEP) contain a very detailed set of information on a person's present and past labor force status in which "retirement" is a separate category. Thus, a person in this analysis is retired when he first declares himself retired, and is not full-time employed or unemployed.

2.2 Analytic Framework

Retirement is modeled within an event history framework, where the retirement decision is treated as a dynamic discrete choice. The dependent variable in the analysis is the transition rate into retirement, estimated using the piecewise constant exponential model (Blossfeld/Rohwer, 1995; Rohwer/Pötter, 1998). With this flexible hazard rate specification, no restriction is imposed on the data; instead, we allow data to show how the hazard behaves as a function of duration. Since spells begin when the respondent turns 50, age and duration are the same. By defining split points on the time axis, $\tau_1 < \tau_2 < \tau_3 < \ldots < \tau_m$, one divides spells in age intervals, and the baseline hazard picks up retirement spikes at particular ages. Age intervals employed in the analysis are: 50-54, 55-57, 58-59, 60-61, 62-63, 64 and older. With the age intervals I,

$$I_l = \{t | \tau_l \le t < \tau_{l+1}\}$$
 $l = 50 - 54, 55 - 57, 58 - 59, 60 - 61, 62 - 63, 64 + 100, 600 - 61, 62 - 63, 64 + 100, 600 - 61, 62 - 63, 64 + 100, 600 - 61, 62 - 63, 64 + 100, 600 - 61, 62 - 63, 64 + 100, 600 - 61, 62 - 63, 64 + 100, 600 - 61, 62 - 63, 64 + 100, 600 - 61, 62 - 63, 64 + 100, 600 - 61, 62 - 63, 64 + 100, 600 - 61, 6$

the transition rate from origin state j to destination state k is

$$r_{ik}(t) = \exp\{\alpha_t^{(jk)} + \beta^{(jk)} X^{(jk)}\} \quad \text{if } t \in I_I$$

The rate is to be interpreted as the probability of the transition from the origin state j (not retired) to destination state k (retired) conditional on surviving to t. For the transition (j,k), $\alpha_l^{(jk)}$ is a constant coefficient associated with the lth age interval. $X^{(jk)}$ is a (row) vector of covariates (that may be either fixed

over time or time-varying), and $\beta^{(jk)}$ is an associated vector of coefficients assumed not to vary across age intervals.

2.3 Survey Data

The data set used in this study is based on 13 waves of the German Socio Economic Panel (GSOEP). The GSOEP is a longitudinal survey of households and individual members of these households, initially interviewed in 1984. In each subsequent wave, it provides information on the household structure, individual characteristics of household members, family status, as well as on labor market variables, such as work characteristics, industry affiliation, or income. In addition, employment history from the age of 15 to the time of the first interview (or age 65) can be reconstructed using the respondents' biographical information. In this analysis, only individuals in former West Germany are included – even for the years after the reunification – to avoid the effects of different employment and retirement regulations as well as pension systems in former East Germany.

For each person, the observation window starts at the age of 50 and ends with a self-reported retirement event or right censoring in the month in which a respondent reports being retired for the first time, and is not full-time employed or unemployed. To be able to include time-varying covariates, the retirement process is modeled only after 1983, but the information on the length of the "retirement episode" is taken into account in the estimation procedure if the episode started earlier. Right censoring can occur because of sample attrition, survey end, or a change in marital status before the retirement event.

The sample includes spells of 193 unmarried men, 995 married men with non-working wives, and 545 men with working wives. This last group satisfies the following criteria: the man is at least 50 years old, married to a "known" spouse in the GSOEP, both the husband and the wife were employed (full-time or part-time) at age 50 and none of the partners retired before 1984. The marital status may also change during the retirement episode, for example, if an older married man divorces or becomes a widower. In such a case, the observation in the "married" sub-sample is censored and person "moves" into the unmarried sub-sample.

2.4 Explanatory Variables

For the time between the age of 50 and retirement, or until the last panel observation, I control for changes related to respondents' employment status, such as employment sector and occupational characteristics, various aspects of their health status, selected socio-demographic traits, their household's financial situation, such as household's income, respondent's labor income as share of household's total income, and home ownership, and their family/

household characteristics, such as the household's size and care-giving demands in the household.

Employment status during the observation window (since age 50) is measured by the following indicators: full-time employed, part-time employed, unemployed, and inactive. These are time-varying covariates, and changes in employment status are recorded on a monthly basis. Occupational characteristics are measured by the following time-varying covariates: self-employed, indicating that a person has a self-employed status; white collar worker; blue collar worker; civil servant; and employed in a firm with 200 or more workers versus a smaller firm. Education is measured in years of schooling, associated with a person's highest educational degree. The variable guest worker indicates that a person belongs to a household with a Turkish, Greek, Yugoslavian, Spanish or Italian household head.

Next, several indicators of a person's health status are included in the models: yearly information on sick leave, measured in days; the number of convalescent periods in the life course, disability status, and subjective satisfaction with health. All variables are time-varying. In case of missing values, sickleave, the number of convalescent periods, and disability status are set to 0. Thus, health indicators are a rather conservative measure of health conditions of an individual.

In addition to individual characteristics of respondents, a number of economic and social characteristics of households are taken into account. First, I employed data from the Cross-National Equivalent File GSOEP-PSID, which contains a number of generated income variables. The following ones were used: the logarithm of household's pre-government nominal income and its square, and the proportion of total household income earned by the respondent. Further, the household's size, home ownership, and the presence of a person in need of care in household are included in the analysis. All household-related variables are time-varying.

The means of the variables, in Table 1, reveal a number of interesting differences among the sample subsets. For example, a considerably higher proportion of men in the working spouses subset are self-employed than in the other groups of respondents. Married men are much more likely to be homeowners than unmarried men, but the proportion of homeowners among working spouses is not much higher than that among married couples in general. Further, the proportion of guest workers is higher among unmarried than married men. Unmarried men also have, on average, lower education and lower labor income than do married men. The average age at retirement (for those who have already retired) is similar: married men in both sub-samples retire at the age of 60.1, and unmarried at the age of 59.6. In spite of similarities in the timing, the question remains whether the same or different factors (that generate similar outcomes) come into play in the retirement decisions.

Table 1

Description of Samples

	Unmarried Men	Married Men (wife not employed at age 50)	Married Men (both spouses employed at age 50)	
	(N = 193)	(N = 995)	(N = 545)	
	Percentages	Percentages	Percentages	
Guest workers sample	35.8	30.7	26.1	
Self-employed (at least in one year)	9.3	10.3	15.8	
Civil servant (at least in one year)	6.2	10.4	8.8	
Large firm (at least in one year)	36.8	47.5	48.6	
Disabled status (at least in one year)	13.0	16.5	20.2	
Homeowner (at least in one year)	30.1	54.7	56.9	
Need of care in household (at least in one year)	6.7	9.1	7.0	
	mean (s.d.)	mean (s.d.)	mean (s.d.)	
Education: years of schooling	10.8 (2.6)	11.4 (3.0)	11.4 (2.8)	
Sick-leave, days per year, average	9.0 (17.6)	13.0 (24.1)	13.4 (20.3)	
Cumulative no. of convalescent periods	0.6 (1.0)	0.6 (1.0)	0.8 (1.1)	
Satisfaction with health, average	5.5 (2.1)	5.5 (2.0)	5.6 (2.0)	
Age at retirement (of those who retired)	59.6 (3.7)	60.1 (3.6)	60.1 (3.2)	
Household characteristics, average across observed years:				
 Household's yearly pre-government income (DM) 	47203 (30630)	76650 (46136)	87827 (48582)	
- Household's yearly labor income (DM)	43779 (27899)	69093 (40775)	79189 (42633)	
- Respondent's yearly labor income (DM)	37995 (22839)	50407 (34245)	47518 (26718)	
 Respondent's labor income as share of total household's income 	0.82 (0.25)	0.67 (0.25)	0.56 (0.20)	
- Household's size	1.5 (0.9)	3.2 (1.3)	2.9 (1.1)	

3. Results

The maximum likelihood estimates of the hazard rate for unmarried men. married men with non-employed wives, and married men in working couples are presented in Table 2. The results are reported as relative risks. A relative risk greater than 1 indicates that the group under consideration is more likely to experience the retirement event than the reference group. A relative risk between 0 and 1 indicates a risk lower than that of the reference group. All else equal, for example, the hazard rate of retirement for self-employed unmarried men is only 0.31 or 31 % of that of white-collar workers Thus, as expected, self-employed persons, who are covered by private pension arrangements, retire significantly later than white-collar workers, while civil servants have a high propensity to retire early. Married men with higher levels of education have a lower probability of moving into retirement than those with lower levels of education, a result already found by Antolin and Scarpetta (1998) with German data. Guest worker status does not differentiate between unmarried men but it tends to decrease the retirement rate for married men significantly. Health indicators are highly significant: poor health has a strong impact on the propensity to retire. Each day of sick leave in the previous year increases the risk of retirement by about 1%. Also, disability status doubles the likelihood of retirement for married men and has an even stronger effect on unmarried men.

Concerning the household and family variables, the following picture emerges: home ownership has no statistically significant effect, although the magnitude of the estimated coefficient suggests an impact on early retirement for unmarried men. Interestingly, if there is a person in need of care in an unmarried man's household, his propensity to retire is very low but no effect is found for married men. Household size only has an effect on married men with non-employed wives: the larger the household, the later they retire. Further, the more the husband's labor earnings contribute to the total household income, the more likely it is that he will postpone his retirement. Household pre-government income has a strong non-linear effect on propensity to retire for unmarried men as well as husbands of non-employed wives; the rate first increases with higher log income and then declines. It is interesting that the sign gets reversed at fairly low values so that the effect at the mean income is negative. In other words, the propensity to retire falls with increasing income, which is an unexpected result. I

In many respects, husbands in working couples display effects of independent variables on retirement timing that are similar to those of other married men. There are, however, two household-related effects that are not statisti-

¹ Parallel estimates for women as well as married men in general – regardless of the wife's employment status – are provided in Drobnič (2002).

Table 2
Estimated Relative Risks of Transition to Retirement

	Unmarried Men	Married Men (wife not employed at age 50)	Married Men (both spouses employed at age 50)
Age-specific baseline rate:			
Age 50-54	0.00**	0.00**	0.01**
55 – 57	0.01**	0.01**	0.03**
58 – 59	0.02**	0.02**	0.07**
60 - 61	0.07*	0.05**	0.15*
62 - 63	0.03**	0.10**	0.36
64–	0.16	0.17**	0.59
Individual characteristics:			
Self-employed ^a	0.31*	0.60*	0.39**
Blue-collar worker ^a	0.51*	0.94	1.02
Civil servant ^a	2.80	2.35**	2.55**
Firm size ≥ 200	0.71	1.24	1.22
Employed part-time ^b	6.61**	0.77	0.52
Unemployed ^b	1.20	1.92**	2.74**
Inactive ^b	2.39	2.60**	2.65**
Educational level	1.02	0.95*	0.89**
Guest worker	0.48	0.73	0.54**
Sick-leave (in days)	1.01**	1.00**	1.01**
No. of convalescent periods	1.39*	1.11	1.11
Disability status	4.28**	1.91**	2.09**
Satisfaction with health	0.98	0.96*	0.94*
Household characteristics:			
Household's size	1.28	0.85**	0.99
Home owner	1.74	1.01	1.25
Need of care in household	0.03**	1.27	1.09
Household pre-government income	1.61*	1.49**	1.14
Household pre-government income ²	0.94**	0.97**	0.98
Respondent's labor income as share of household's total income	0.46	0.49**	0.64
Log Likelihood (without covariates)	-374.9	-2028.9	-1444.4
Log Likelihood (final estimates)	-283.9	-1629.9	-1137.9
d.f.	25	25	25
No. of Retirement Events	61	328	234
No. of Persons	193	995	545

Note: Exponentiated coefficients are reported.

^{**} $p \le 0.01$, * $p \le 0.05$, a Reference = white-collar workers; B Reference = employed full-time.

cally significant for men in dual-worker couples, and which have coefficients with low magnitudes: household's size and income. It appears that these variables do not play a significant role in the retirement decisions of husbands in dual-worker couples. These men live in somewhat smaller households, have higher household income but lower personal labor income than married men with non-working wives (see Table 1), which might alter the effects of financial considerations in their retirement decisions.

4. Discussion

This study has two objectives: to examine how individual and householdrelated factors affect the retirement timing of unmarried and married men, and to verify whether the life course patterns of paid / unpaid labor in married couples affect husbands' retirement decisions. The findings indicate that while there are common characteristics, there are also systematic variations among subsamples. For example, self-employed status delays retirement while inactivity and acute health problems, as depicted by the length of sick-leave or disability status, lead to early retirement for all groups of respondents. There are, however, discernable differences as well: unmarried men and men with nonemployed wives strongly respond to financial incentives. A long-term responsibility for the economic well-being of the household seems to have an important impact on their retirement pathway. In particular, being a primary wage earner makes men less likely to withdraw from the labor force. Also, the level of household income plays a significant role although the effect is more complex than suggested by a simple assumption that higher incomes increase retirement rates by increasing the utility of leisure. In fact, the estimated coefficient is negative for meaningful ranges of the household income variable. An explanation may be that since the replacement rate in the German pension system increases with the age, this might be a particularly powerful incentive to postpone retirement for husbands in well-off households, who also contribute most to the household income. For husbands in dual-worker couples, household size and the amount of household income are not statistically significant. This suggests that a working wife and her contribution to the household's economic well-being in older age alters the considerations taken into account by the husband when deciding about retirement timing.

This analysis suggests that in spite of similarities in outcome – a similar retirement age on the average – there are discernable differences in factors that drive the retirement process depending on marital status and spouses' employment characteristics. The answer to the initial question of whether the wife matters is positive. Foremost, it matters whether a man is married or not. Next, it also matters whether the wife is employed in later life or not. There are two main factors that seem to be taken into consideration differentially by men

whose wife's employment status differs. First, it is commonly believed that the "leisure value" of retirement is increased when the other spouse is retired, too. Since non-employed wives are typically already present in the household, husbands with non-employed wives do not face the dilemma associated with "joint" or "synchronized" retirement timing. Second, the lifetime earnings of the working wives reduce the pressure on the husbands to be solely responsible for the family and household's economic well-being, which alleviates the necessity of incorporating financial constraints into their retirement decisions. There is no simple relationship between the level of household income and the retirement timing but this study suggests that husbands in dual-earner couples tend to make their retirement decision more autonomously from the household characteristics than husbands in couples with the traditional division of paid/unpaid labor.

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