



## Employment After Retirement

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# EMPLOYMENT AFTER RETIREMENT

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## Abstract

*This study looks at retirement employment in France and Germany. We examine work hours after retirement to examine the retention of older workers, drawing on the initiatives taken by the pension systems in Germany and France to promote employment beyond retirement. The findings will focus on the elements that support work beyond retirement. We examine the impact of job environment and training accessibility. The factors impacting employment after retirement are evaluated using OLS modeling in Stata and employment data from the SHARE survey. The results proved that both nations ought to support elder workers' training. In order to encourage retired workers to stay in the workforce, Germany's labor system should guarantee that the work completed is acknowledged. The French labor system ought to track retired employees' job satisfaction in order to promote employment after retirement.*

## 1 Introduction

Demographic changes have a big impact on the labor market; in Europe, the population is aging quickly and living longer, which means that the proportion of older people is rising. The wealthiest people desire to work and feel relevant to their families and society, which has transformed the way people live. Due to inadequate pensions, the underprivileged are frequently compelled to continue working long after they retire. Some older people choose to start their own companies and explore different professional paths.

Reducing preconceptions against older people and matching their abilities to job requirements could be a solution, as could including training for older workers into the employment model (Radović-Marković, M., 2013).

When comparing Germany's employment rate for older workers to that of France in 1990, it is remarkable to observe the significant growth in employment of older workers in Germany over the previous 20 years. In 1990, the employment rates of older workers in both countries were almost equal. The goal of the comparative study is to look at the variables affecting retired individuals' employment after retirement in Germany and France. The main goal of the study is to identify the variables that support the retention of retired employees (OECD, 2019).

## 2 Method

The Radović-Marković study suggests that educating older individuals should be part of the employment model in order to promote retention because it increases the number of skilled workers and stimulates entrepreneurship and creative thinking. This tactic encourages fair job possibilities for all people, regardless of age or gender. Sufficient working conditions must be offered in order to sustain employment following retirement for extended periods of time (Radović-Marković, M., 2013).

According to the economic theory of labor supply, people make decisions about how much time they spend working and having fun based on the trade-off between these two factors. Non-financial benefits of employment include autonomy, support, and acknowledgment in the workplace, all of which contribute to job satisfaction. It improves productivity, job retention, and job happiness, which raises earnings in post-retirement employment, particularly for individuals with control over their position (Van Solinge, H., & Henkens, K., 2013).

### 2.1 Data

The SHARE survey is the source of the data used to examine employment in Germany and France after retirement. A research infrastructure spanning 11 European nations, the Survey of Health, Ageing and Retirement in Europe (SHARE) looks at how health, social, economic, and environmental policies affect individuals 50 years of age and older in terms of their social networks, socioeconomic standing, and general health (Börsch-Supan, A., 2022).

For France and Germany, the results of the employment and pension surveys are examined

between 2004 and 2020. The study focuses on employed and retired individuals after filtering data for Germany and France. For the variables chosen and shown in Table 1, there are no missing values. After filters, there are 370 observations in the final sample, all of which have no missing values.

The total number of hours worked per week is measured using hours, while the other variables use the Likert scale. The Likert scale codes are displayed in Table 2.

*Table 1. Variables*

<i>Variable</i>	<i>Code</i>	<i>Definition</i>
Work Hours	WORK	Total hours usually working per week
Satisfaction	SATF	Worker satisfaction with job performed
Freedom	FRDM	No freedom to decide how to perform work
Support	SPRT	Support received in difficult situations at work
Recognition	RCGN	Recognition received for job performed
Salary	SLRY	Salary or earnings are adequate for job performed
Opportunity of Trainings	OPRT	Opportunity to develop new skills at work

*Table 2. Likert scale codes*

<i>Code</i>	<i>Measure</i>
0	Strongly disagree
1	Disagree
2	Don't know
3	Agree
4	Strongly agree

The following hypotheses will analyze employment after retirement in terms of training provided to older workers and job environment.

*Hypothesis 1.* Employment after retirement tends to increase when opportunities to learn new skills and attend training are provided.

*Hypothesis 2.* Employment after retirement tends to increase when the right job environment is provided.

## 2.2 Regression

To analyze the retainment of older workers and test the hypotheses, OLS regression is estimated to understand the relationship between work of retired people and the dependent variables i.e. Satisfaction, Freedom, Opportunity, Support, Recognition and Salary. The empirical model will aim to analyze how retainment of older workers can be encouraged, and how it is affected by the dependent variables (France vs. Germany), by regressing total of hours worked per week against the dependent variables. The OLS model is chosen as it remains robust against small deviations and provides coefficients that are simple to interpret. The limitations of the model are controlled as all outliers were removed.

In the model, hour of work is used as a dependent variable while remaining variables are taken as independent variables for France and Germany separately, as presented below:

$$\text{Germany: } WORK_i = \beta_0 + \beta_1 SATF_i + \beta_2 FRDM_i + \beta_3 SPRT_i + \beta_4 RCGN_i + \beta_5 SLRY_i + \beta_6 OPRT_i + \epsilon_i (1)$$

$$\text{France: } WORK_i = \beta_0 + \beta_1 SATF_i + \beta_2 FRDM_i + \beta_3 SPRT_i + \beta_4 RCGN_i + \beta_5 SLRY_i + \beta_6 OPRT_i + \epsilon_i (2)$$

## 3 Results

The regression is performed, and the results are presented in Table 3. The model robustness is tested using Ramsey RESET test and Breusch-Pagan test before analyzing the results.

*Table 3. Regression Results*

	(1)	(2)

	<i>Germany</i>	<i>France</i>
SATF	-1.220	1.675
	(-0.91)	(1.08)
FRDM	1.030	-0.077
	(1.41)	(-0.09)
SPRT	1.272*	0.305
	(1.78)	(0.41)
RCGN	-1.025	-2.236**
	(-1.16)	(-2.36)
SLRY	-0.114	0.503
	(-0.14)	(0.54)
OPRT	1.926***	2.210***
	(3.09)	(2.84)
_CONS	15.629***	15.878***
	(3.23)	(2.75)
N	199	162
R2	0.089	0.090
Adj. R2	0.06	0.06

*Notes:* Values given are unstandardized coefficients with standard error in parentheses.

Ramsey RESET test, Germany:  $F(3, 189) = 1.08$ ,  $\text{Prob} > F = 0.3577$ ; France:  $F(3, 152) = 0.82$ ,  $\text{Prob} > F = 0.4849$ . Breusch-Pagan test, Germany:  $\chi^2(1) = 6.70$ ,  $\text{Prob} > \chi^2 = 0.0097$ ; France:  $\chi^2(1) = 0.03$ ,  $\text{Prob} > \chi^2 = 0.8553$

\*, \*\*, \*\*\* indicates the significance level at 1%, 5% and 10% respectively.

Ramsey RESET test is used to analyze the model fit to the data. The p-value does not allow to reject the hypothesis for both Germany and France models, as evidenced by Germany:  $F(3, 189) = 1.08$ ,  $\text{Prob} > F = 0.3577$ ; France:  $F(3, 152) = 0.82$ ,  $\text{Prob} > F = 0.4849$ . The model is thus correctly specified, there are no omitted variables.

Breusch-Pagan test is used to check heteroscedasticity, unequal variance among the error terms. The p-value does not allow to reject the hypothesis for both Germany and France models, as evidenced by Germany:  $\chi^2(1) = 6.70$ ,  $\text{Prob} > \chi^2 = 0.0097$ ; France:  $\chi^2(1) = 0.03$ ,  $\text{Prob} > \chi^2 = 0.855$ . The first model, OLS regression, is thus correctly specified and robust. The results presented in Table 3 below will be analyzed.

The opportunity to learn new skills is significant and positive for both Germany and France. The results confirm that attending trainings and developing skills lead to an increase in work hours per week for Employment after retirement. The Hypothesis 1. is not rejected in terms of retainment of older workers and the results agree with literature. Therefore, employment after retirement tends to increase when opportunities to attend trainings and learn new skills are provided in Germany and France. As Radović-Marković, M. states, the opportunity to attend trainings for older worker allow them fulfill the jobs' requirements (Radović-Marković, M., 2013). The coefficient is higher in France than in Germany, so the opportunity to attend trainings can increase more the total hours of work per week in France compared to Germany.

In Germany, the non-financial support is significant and positive, meaning the support from co-workers, family and friends lead to an increase in the total hours of employment after retirement. Nevertheless, the other factors are negative and not significant, the satisfied employee would work less after retirement, and even with less freedom to make decisions on how to do the job; the employee would work more hours. The employee who receives recognition and adequate salary for the work performed after retirement would work less hours. This could be explained by the employee looking for financial support after retirement and with an increase in salary/ adequate recognition would need to perform less hours at work. The coefficients are not significant, so inferences cannot be made on the whole population but the results are not intuitive, this could be explained by the sample size and the survey possible accuracy problems.

The Hypothesis 2. is not rejected in terms of retainment of older workers, and the non-financial support is found to impact positively the employment after retirement in Germany. Therefore, employment after retirement tends to increase when the right job environment is provided in terms of non-financial support.

In France, the recognition for work performed is significant and negative, the employee who receives recognition for the work performed after retirement work less hours. This could be explained by the employee increased salary per hour after recognition. The employee would not need to perform as much at work anymore after the recognition, decreasing the hours of work. The other coefficients are not significant, so inferences cannot be made on the whole population but the results are intuitive unlike in Germany. Satisfied workers could work more hours after retirement, with more freedom to make decisions on how to perform the work they would work more hours, with non-financial support from co-workers, family or friends they would work more hours, finally with an adequate salary for the job performed, they would work more hours after

retirement.

The Hypothesis 2. is rejected in terms of retainment of older workers, as no factors were found to encourage employment after retirement in France.

## 4 Discussion

France and Germany have strong pension systems, but differ in terms of eligibility, contributions, and benefits. France allows earlier retirement and higher employer contributions, while Germany has equal contributions for both parties. Both countries have implemented measures to encourage employment after retirement, such as flexible retirement ages, partial payouts, and incentives for delaying retirement. This approach benefits employers by providing flexible access to qualified workers and allowing older workers to explore new hobbies or career options (OECD, 2019).

The employment model should include trainings for older workers to encourage hiring and retainment, as well as adequate work conditions (Radović-Marković, M., 2013). The economic theory of labor supply can affect employment after retirement in various ways, such as salary increases, leisure time values, and availability of bridge work options. Job satisfaction, job autonomy, support, recognition, and adequate salary also contribute to employment after retirement (Wang, M., & Shultz, K. S., 2009). The right job environment for older workers' retainment may vary across countries. The study used employment data from the SHARE survey and investigated hypotheses using OLS regression and binary logistic regression.

The results confirmed that Hypothesis 1. is not rejected in terms of retainment of older workers in Germany and France. Therefore, employment after retirement tends to increase when opportunities to attend trainings and learn new skills are provided in Germany and France.

The Hypothesis 2. is not rejected in terms of retainment of older workers, and the non-financial support is found to impact positively the employment after retirement in Germany. While the Hypothesis 2. is rejected in terms of retainment of older workers, as no factors were found to encourage employment after retirement in France.

In addition to the measures of the pensions systems placed to encourage employment after retirement, Germany should encourage the trainings of older workers as well as skills' development to encourage the retainment of older workers. Germany work system should ensure the job performed is recognized to ensure the hiring of older workers.

While France should encourage the trainings of older workers as well as skills' development to encourage the retainment of older workers. These measures should be implemented in addition to the measures of the pensions systems placed to encourage employment after retirement. The government should also ensure that employees are satisfied with their job. France work system should monitor the job satisfaction of older workers to encourage the hiring of older workers.

## References

- [1] Börsch-Supan, A. (2022). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 1. Release version: 8.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w1.800
- [2] Börsch-Supan, A. (2022). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 2. Release version: 8.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w2.800
- [3] Börsch-Supan, A. (2022). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 3 – SHARELIFE. Release version: 8.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w3.800
- [4] Börsch-Supan, A. (2022). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 4. Release version: 8.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w4.800
- [5] Börsch-Supan, A. (2022). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 5. Release version: 8.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w5.800
- [6] Börsch-Supan, A. (2022). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 6. Release version: 8.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w6.800
- [7] Börsch-Supan, A. (2022). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 7. Release version: 8.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w7.800
- [8] Börsch-Supan, A. (2022). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 8. Release version: 8.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w8.800
- [9] Radović-Marković, M. (2013, August 10). An aging workforce: Employment opportunities and obstacles. Cadmus - Vol 1 - Issue 6. Retrieved November 11, 2022, from <http://cadmus.newwelfare.org/2013/08/10/an-aging-workforce-employment-opportunities-and-obstacles/2/>
- [10] OECD (2019), Pensions at a Glance 2019: OECD and G20 Indicators, OECD Publishing, Paris, <https://doi.org/10.1787/b6d3dcfc-en>
- [11] Van Solinge, H., & Henkens, K. (2013). Work-related factors as predictors in the retirement decision-making process of older workers in the Netherlands. Ageing and Society, 34(9), 1551–1574. <https://doi.org/10.1017/s0144686x13000330>
- [12] Wang, M., & Shultz, K. S. (2009). Employee retirement: A review and recommendations for future investigation. *Journal of Management*, 36(1), 172–206. <https://doi.org/10.1177/0149206309347957>