6 Years Occupational Strengthening Pensions Act (OSPA) in Germany: Evidence from Current Employee Surveys

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Abstract: - The aim of this study is to examine the effects of the Occupational Strengthening Pensions Act (OSPA), introduced more than six years ago, on the demand for occupational pension provision (OPP) from the perspective of employees subject to social insurance contributions in Germany. The study incorporates theoretical perspectives on the prevalence of OPP from existing studies at the level of individual households and firms. Data were collected via an online questionnaire from 236 people in Germany who are subject to social security contributions. After receiving the completed questionnaires, they were analyzed and evaluated using IBM SPSS Statistics. Descriptive and inferential statistical methods were used to analyze the survey data. In particular, correlation and regression analyses were carried out to test the proposed hypotheses. The results of the study show a significant correlation between age, income, and the desire for information, as well as the reasons for not having a workplace pension and for having a mandatory workplace pension. These results provide valuable insights into the extent to which OPP is widespread in Germany. In addition, the study provides recommendations on how to increase interest in and take-up of OPP. The results of this study provide employers and policymakers with a basis for achieving the OSPA's goal of increasing the prevalence of OPP. It also contributes to the existing literature on possible improvements to OPP and the question of introducing compulsory OPP in Germany. The study also highlights the mediating role of leadership style in the relationship between organizational culture and organizational performance.

Key-Words: - Occupational Strengthening Pensions Act (OSPA), Betriebsrentenstärkungsgesetz, Demand for Occupational Pensions, Savings Behaviour, Employer Subsidy, Tax Savings Social Security Savings, Company Size, Distribution Rate of Occupational Pensions.

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1 Introduction

In 2001, the Retirement Savings Act introduced a private, state-subsidized old-age provision in the form of the Riester pension. The introduction of the Retirement Income Act three years later aimed at modifying the basic tax conditions of the statutory pension insurance. In this context, the three-layer model replaced the previous three-pillar model, [1]. Just two years later, the Act on the Adjustment of the Standard Age Limit was passed to reflect demographic developments and to strengthen the basic financing of the statutory pension insurance, [2]. The core of this law was the introduction of a standard age limit of 67 years, which will be implemented with a gradual increase from 65 years to 67 years, [3].

Two years later, in 2014, the maternity pension was introduced with the aim of improving the recognition of child-raising periods and the pension at 63 for those insured for many years, [4]. After the adoption of the 2014 pension package, no further significant pension reforms followed until the German government passed the Occupational Strengthening Pensions Act (OSPA) (Betriebsrentenstärkungsgesetz - BRSG) in summer 2017, which came into force on 1 January 2018, [5], reforming part of the second tier of the German pension system.

Considering that OPP looks back on a history of more than 150 years and was introduced before statutory pension insurance, statutory regulation did not take place until 19 December 1974, 104 years

later, [6]. Initially, OPP consisted of four implementation channels. By the mid-1990s, almost every third employees in the private sector had made provision for old age in the form of an OPP. However, the demand for OPP stagnated in the course of the 1990s. Good 28 years later, a legal entitlement to OPP was established by the 2001 pension reform on 1 January 2002. From this point on, every person in an employment relationship was entitled to OPP. The aim of the mandatory right to OPP was to counteract the stagnation in OPP. However, the health reform of 2003, in which it was decided through the Act on the Modernization of Statutory Health Insurance, that the full health and long-term care insurance contribution must now be paid on OPP, made OPP less attractive again from the perspective of employees, [3]. As already mentioned, the OSPA ultimately came into force on 01.01.2018. To improve readability, the OSPA will no longer be written out in full in the remainder of this research paper. Instead, the abbreviation OSPA will be used. A milestone was set with the introduction of the OSPA. The OSPA pursues the political goal of increasing the spread of OPP through greater demand in order to secure the standard of living in old age, [7]. The OSPA creates a special incentive to take out OPP, e.g. through the mandatory passing on of social insurance savings by the employer, [1].

2 Literature Review

There are numerous academic publications dealing with pension reforms, [8], [9], [10]. In particular, there is a large body of literature dealing with OPP prior to the introduction of OPP. [11], discusses the possible reasons for the low level of occupational pensions in Germany. [12], analyses the newly introduced German occupational pension system. It establishes a link between the pension benefits of the beneficiaries, the mortality rate of the pension recipients and the development of the financial markets. The study offers insights from the perspective of a pension beneficiary and compares the pension with other savings schemes. Their findings suggest that occupational pension schemes could be a useful complement to the first and third pillars of the pension system and offer some comparative advantages over traditional defined benefit and defined contribution plans. [13], provides a good overview of the prevalence of OPP in the period 1984-1999 in its 2001 Company pension schemes Report. The study examines the position of such plans in the context of the overall pension system and provides an outlook for the future, particularly in light of the new legislation. [14], looks at OPP after the introduction of the OSPA. The report shows that after one year of the OSPA, no meaningful interim results can be reported. In their position paper, [15], analyse the decisions of companies to offer occupational pension schemes. Tax benefits and length of service are cited as possible reasons for taking out an OPP, [15]. [7], provides a clear illustration in his article on OPP. In his work, the author provides a good overview of the model-theoretical consideration of OPP and summarises the results as part of a benefit analysis, [7]. [16], analyses company pension schemes in Germany and Austria. In addition to the factor of company size, the structural factors that influence the demand for company pension schemes are also analysed.

This study shows that the market penetration of OPP is stagnating among middle and upper-management employees, while it has increased only minimally among other employees.

The first section of the literature review briefly presents the existing data sets on OPP at the individual and household level and the second section briefly presents the data sets on OPP at the company level in Germany.

2.1 Data Sets on OPP at the Individual and Household Level

Employer and Agency Survey (EAS)

The data come from, [17] and [18], own survey of providers. The latest survey dates from 2019. The survey of companies and providers of OPP analyses in particular the dimensions of existing entitlements and contribution amounts. It is broken down by gender and type of OPP, [17], [18]. The question of how many people have at least one OPP contract is difficult to answer because the survey covers both male and female members. For this reason, the average number of contracts per capita is calculated and the amount of pension entitlements is adjusted by this factor. These data make it possible to construct a time series that can provide additional information on different developments in OPP. Changes in the demand for OPP in the various implementation channels can be well documented and are therefore useful for a first analysis of the effects of the OSPA, [17], [18].

Dissemination of Old-Age Provision

Among other things, the studies record the contracts for which savings are currently being made and the level of the individual's savings rate. A special feature of this survey is that it records

whether an information letter is available. If such an information letter is available, respondents are asked to indicate their total savings contributions. In addition to personal contributions, employer contributions are also recorded and respondents are asked about pension entitlements and the actual capital stock, [18]. Although many assets are not recorded in detail, it is at least possible to get an initial picture of how OPP is used. Another important feature of these surveys is the clear distinction between OPP for employees in the private and public sectors.

Old Age Security in Germany

The study was first conducted in 1986 on behalf of the Federal Ministry of Labour and Social Affairs. It has been conducted every four years since 1995. Independent samples are also surveyed repeatedly in this study. At the beginning of the study, people aged between 55 and 80 were interviewed, and from 2019, people aged between 60 and 85 will also be asked about their income in old age for the first time, [19]. In contrast to the studies described so far, the results of the studies on old-age provision in Germany do not provide new insights into future gaps in provision, but rather into the current level of provision of the respondents in the 55-80 and 60-85 age cohorts. For respondents who are still working, on the other hand, the focus is on whether they will receive OPP benefits in retirement. The study thus captures the concentrated pension patterns that change over time, [19].

Life Courses, Aging and Well-Being

The research project Life Course, Aging and Well-Being uses the statistical matching approach with SOEP and modified SAPA data, which allows for further refinement of the matching. The project compares the life courses of baby boomers with those of older birth cohorts and analyses the effects of less stable family relationships and changing employment histories on the accumulation of pension rights, [20].

Survey of Health Ageing and Retirement in Europe

The survey of health ageing and retirement in Europe panel study, led by the Munich Centre for the Economics of Ageing (MEA), covers a population of people aged 50 and over. The study surveys people from 26 European countries, Switzerland and Israel on issues related to retirement planning. A special feature of this study is that it documents the payout phases of OPP and individual OPP. The study is also able to record the dynamics, the type of payout, and the year in which the pension was first drawn. In addition, people who are not currently receiving a pension are asked about any future entitlement to an OPP, the length of time they have been saving, the average amount saved, and the possible future amount of the OPP, [21], [22], [23].

Savings and Retirement Provision in Germany

The saving and retirement planning in Germany" study, also conducted by the MEA, surveys a broader section of the population. This study was first conducted in 2001 as part of a preliminary survey, then in 2003/04, annually from 2005 to 2011, and most recently in 2013. The aim of this panel study was to document dynamic changes in savings behavior over time. The explicit questionnaire differed slightly from survey to survey. The number of contracts, the monthly savings contributions, and the current balance were asked in almost all surveys. In the case of spouses, no distinction was made as to who made the contributions. The 2007 survey also asked whether the answers were taken from current documents or whether they were only estimates. In theory, these surveys could also be used to make statements about the composition of savings contributions to OPP. In other words, what proportion of the total contribution was made by the employee, and what proportion was made by the employer, [24].

Socio-Economic Panel

This survey was first carried out in 1984. The German Socio-Economic Panel currently surveys around 30,000 people from around 22,000 households each year. So far, about 22,000 households have been asked about their behavior with regard to OPP. The surveys of the last two years focused in particular on the acquired OPP rights and the type of financing, [19]. A regular survey on the status of OPP can also help to increase the learning curve and ensure that respondents provide more detailed information.

Private Households and their Finances

The panel study "Private Households and their Finances", provides an additional database on the financial structure of households with at least one adult household member aged 18 or over. The second and third surveys were conducted in 2014 and 2017 respectively and collected information on household assets, the number of OPP contracts, and other information on contributions and expected pensions or lump-sum payments. Respondents are also asked about the evolution of the replacement

rate of old-age pensions in relation to their net income, [25], [26].

2.2 Data Sets on OPP at the Company Level

Structure of Earnings Survey

[27] and [28], is also responsible for the structure of the earnings survey. It was first conducted in 1951 and has been conducted regularly every four years since 2002. The special feature of this survey is its accuracy due to the availability of information on OPP from the pay slips of the respondents. The survey covers a sample of about 60,000 companies and about one million documented employment relationships, although it focuses only on deferred compensation, [28].

The literature review identified further 36 smaller studies by insurers or associations on the prevalence of OPP in companies of different sizes and in different sectors. Employees, on the other hand, were surveyed 15 times, mainly on pension provision in general. In general, OPP providers were surveyed five times. In some cases, similar target groups were found to be surveyed. The employer surveys vary according to the size of the enterprise. Overall, the surveys can be divided into seven employer and six employee surveys, although the number and order of enterprise sizes vary.

3 Methodology

The literature review shows that even before the introduction of the OSPA, many studies had confirmed the need for OPP. Employee surveys were conducted to validate and, where necessary, supplement these findings. A questionnaire was developed and pre-tested. A pre-test is always necessary for written surveys and is intended to provide information on the comprehensibility of the questionnaire and the meaning of the cover letter or similar elements, [29]. Participants were selected using a random selection procedure. When completing the questionnaire, the participants had to pay attention to several criteria such as comprehensibility, clarity, acceptability of the questions, and graphic design. This was communicated to them in advance. Minor changes were made to the questionnaire as a result of the pre-test. The data was collected via an online survey in the DATAtab portal and took place from 21 January 2024 to 22 February 2024. The target group for the survey was employees subject to social security contributions from various employment sectors in Germany. Membership of the target group was ensured by the socio-demographic survey. At the beginning of the survey, participants were informed about data protection regulations. The second category asked about communication, the third about the existence of an OPP, the fourth about the reasons for or against an OPP and additional benefits, the fifth about the financing of the OPP, the sixth about improvement measures, and the final seventh categoryabout socio-demographic characteristics. Participants were interviewed in German and the results were then translated into English. Outside of the categories, there was a final open-ended question in which respondents could express their opinions in 1-3 keywords. Contact with respondents was made through personal networks, LinkedIn, Instagram, contacting people in self-organized associations, and Survey Circle. Once the completed questionnaires were received, they were analyzed and evaluated using IBM SPSS Statistics. In particular, correlation and regression analyses were carried out. The use of quantitative methods was possible because the surveys were standardized. It did not seem possible to generalize the results as the number of respondents was relatively small compared to the number of employees in Germany.

4 Data

The data was analyzed in terms of correlation, regression, and interaction using 236 data sets. The empirical examination of the data sets received and found to be valid was divided into three sections: correlation analysis, the chi-square independence test the t-test for mean differences in independent samples, and the descriptive statistics.

Spearman's rank correlation coefficient

The rank correlation analyses the undirected linear relationship between two variables. Undirected means that there is no dependent or independent variable. Therefore, no causal statements can be made. Spearman's rank correlation coefficient is based on Pearson's product-moment correlation coefficient r. However, this requires an interval scale level of the correlated variables. Spearman's rank correlation coefficient avoids this problem by using the ranks of the cases in relation to these variables instead of the values of the variables. Therefore, the correlating variables in Spearman's rank correlation coefficient only need to be ordinally scaled, [30].

For the observations of the characteristic, the ranks must first be assigned for each component, [31]. If two or more observations have the same characteristic, a so-called tie exists. The mean value

of the ranks to be assigned is then taken as the rank of the individual observations, [32]. Spearman's rank correlation coefficient compares the respective ranks. As no distances are defined due to the ordinal scale level, Spearman's rank correlation coefficient is based only on the difference in the ranks. If there are no ties, the rank correlation coefficient is defined as, [32]:

$$R = 1 - \frac{6\sum_{i=1}^{n} d_i^2}{n(n^2-1)} \quad (1)$$

The range of values for the correlations (R) is between minus one and plus one, with two identical rankings. In the case of positive correlations, high values of one variable are associated with high values of the second variable. Conversely, in the case of positive correlations, low values of one variable are associated with low values of the second variable. In this case, the high values of one variable are associated with the low values of the other variable. Statements about the direction of the correlation can therefore be derived from the sign of the correlations, [30].

The following applies to hypothesis tests:

Hypothesis 0 is rejected if p < (smaller) 0,05 and therefore hypothesis 1 is assumed.

Hypothesis 0 will be retained, if p > or = 0,05.

Effect sizes are calculated in order to assess the significance of a result. Spearman's correlation coefficient is a measure of the effect size. Categorization can be used to determine the extent of the correlation found, [33].

|R| = 0.1 corresponds to a weak effect

|R| = 0.30 corresponds to a medium effect

|R| = 0.5 corresponds to a strong effect

5 Results

5.1 Descriptive Analysis

A total of 236 datasets were generated. The datasets were completed by 90 women, 145 men, and one person of mixed origin. The 30-39 age group was the largest age group in the survey with 43.2% (102 records), followed by the 18-29 age group with 24.2% (57 records) and the 40-49 age group with 20.3% (48 records). The 50-59 age group was represented by 7.6% (18 records). The group aged 60 and over was the least represented. Their share was 4.7% (11 records). Of the respondents, 49.6% were single (117 records), 42.4% married (100 records), 5.5% divorced (13 records), 1.3% in a consensual union (3 records), 0.8% separated and 0.4% widowed (1 record). Just over half of the respondents (50.8%, 120 records) did not have an academic degree. 44.8% (105 records) had an academic degree and 4.7% (11 records) had no qualifications. Just under a third, 31.4% (74 records) of the respondents had a gross monthly income of more than 5001 euro. Just over a fifth, 19.1% (45 records), said they had a gross monthly income of between 1000 and 2000 euro. 14.4% (34 records) had a gross monthly income between 4001 and 5000 Euros, 13.1% (31 records) between 3001 and 4000 Euros and 11% (26 records) between 2001 and 3000 Euros. A further 11% (26 records) did not report their gross monthly income. 76.7% (181 records) of the respondents were employed full-time and 23.3% (55 records) were employed part-time at the time of the survey. Of the respondents, 51.7% (122 records) worked in an organizationorganization with more than 250 employees at the time of the survey. 21.6% (51 records) worked in an organization with 0-49 employees and 20.8% (40 records) in an organization with 50-249 employees. 5.9% (14 records) said they did not know how many people were employed in the organization. Small enterprises have up to 49 employees, medium-sized enterprises have 50-249 employees and large enterprises have more than 249 employees, [31]. 66.5% (157 records) of respondents gave their own assessment of the future of OPP. 5% said they thought the future was good. For further information, Table 1, Table 2, Table 3, Table 4, Table 5, Table 6 and Table 7 of the descriptive statistics follow in the remainder of this chapter.

Table 1. Gender participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Masculine	145	61,4	61,4	61,4
	Female	90	38,1	38,1	99,6
	Miscellaneous	1	,4	,4	100,0
	Total	236	100,0	100,0	

Table 2. Age cohort participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-29	57	24,2	24,2	24,2
	30-39	102	43,2	43,2	67,4
	40-49	48	20,3	20,3	87,7
	50-59	18	7,6	7,6	95,3
	60+	11	4,7	4,7	100,0
	Total	236	100,0	100,0	

Table 3. Marital status of participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	117	49,6	49,6	49,6
	Married	100	42,4	42,4	91,9
	Registered life partnership	3	1,3	1,3	93,2
	Living separately	2	,8	,8	94,1
	Divorced	13	5,5	5,5	99,6
	Widowed	1	,4	,4	100,0
	Total	236	100,0	100,0	

Table 4. Academic degree participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not specified	11	4,7	4,7	4,7
	No	120	50,8	50,8	55,5
	Yes	105	44,5	44,5	100,0
	Total	236	100,0	100,0	

Table 5. Gross income cohort participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-99	26	11,0	11,0	11,0
	1000 - 2000 €	45	19,1	19,1	30,1
	2001 - €3000	26	11,0	11,0	41,1
	3001 - 4000 €	31	13,1	13,1	54,2
	4001 - 5000 €	34	14,4	14,4	68,6
	More than €5001	74	31,4	31,4	100,0
	Total	236	100,0	100,0	

Table 6. Type om employement participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full time	181	76,7	76,7	76,7
	Part-time	55	23,3	23,3	100,0
	Total	236	100,0	100,0	

Table 7. Employees by Company Size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-49	51	21,6	23,0	23,0
	50-249	49	20,8	22,1	45,0
	Over 250	122	51,7	55,0	100,0
	Total	222	94,1	100,0	
Missing	I don't know	14	5,9		
Total		236	100,0		

5.2 Inferential Statistical Analysis

Hypothesis testing was used to draw inferences about the population from the sample data and to test whether certain assumptions about the population were correct.

Hypothesis 0 = "Age" and " How would you prefer to be adequately informed about company pension schemes? Already during onboarding" have no statistically significant correlation.

Hypothesis 1 = "Age" and " How would you prefer to be adequately informed about company pension schemes? Already during onboarding" have a statistically significant correlation.

The SPSS output is shown in the following Table 8.

Table 8. Correlation between age and desire for information on OPP

Correlations

			Please provide your exact age in years.	How would you prefer to be adequately informed about company pension schemes? Already during onboarding
Spearman's rho	Please provide your exact age in years.	Correlation Coefficient	1,000	-,201*
		Sig. (2-tailed)	.	,017
		N	234	140
	How would you prefer to be adequately informed about company pension schemes? Already during onboarding	Correlation Coefficient	-,201*	1,000
		Sig. (2-tailed)	,017	.
		N	140	140

*. Correlation is significant at the 0.05 level (2-tailed).

The table shows the correlation between "Age" and "How would you prefer to be adequately informed about company pension schemes? Already during onboarding" -0,201amounts. The p-value is 0,017. Therefore, hypothesis 0 is rejected and hypothesis 1 is accepted.

Conclusion: "Age" and "How would you prefer to be adequately informed about company pension schemes? Already during onboarding" have a statistically significant, negative correlation. According to, [33], this is a weak effect (R=-0,201, p=0,017, n=140).

Refer to the hypotheses formulated:

Hypothesis 0= "Age" and "In your opinion, what are the reasons against taking out a company pension scheme? I don't trust the state" have no statistically significant correlation.

Hypothesis 1= "Age" and "What reasons do you think speak against taking out a company pension scheme? I have no trust in the state" have a statistically significant correlation.

The SPSS output is shown in Table 9.

Table 9. Correlation between age and trust in the state

Correlations

			Please provide your exact age in years.	In your opinion, what reasons speak against taking out a company pension plan? I don't trust the state
Spearman's rho	Please provide your exact age in years.	Correlation Coefficient	1,000	,199*
		Sig. (2-tailed)	.	,038
		N	234	109
	In your opinion, what reasons speak against taking out a company pension plan? I don't trust the state	Correlation Coefficient	,199*	1,000
		Sig. (2-tailed)	,038	.
		N	109	110

*. Correlation is significant at the 0.05 level (2-tailed).

The table shows that the correlation between "Age" and "In your opinion, what reasons speak against taking out a company pension plan? I don't trust the state" is 0,199. The p-value is 0,038. Therefore, hypothesis 0 is rejected and hypothesis 1 is accepted.

Conclusion: "Age" and " In your opinion, what reasons speak against taking out a company pension plan? I don't trust the state" have a statistically significant, positive correlation. According to, [33], this is a weak effect (R=0,199, p=0,038, n=109).

Refer to the hypotheses formulated:

Hypothesis 0= "Monthly gross income" and " In your opinion, what reasons speak against taking out a company pension plan? I don't have any money available“ have no statistically significant correlation.

Hypothesis 1= "Monthly gross income" and "In your opinion, what reasons speak against taking out a company pension plan? I don't have any money available“ have a statistically significant correlation. The SPSS output is shown in Table 10.

Table 10. Correlation between monthly gross income and no money for OPP

Correlations

			Which of the following monthly gross income cohorts do you belong to?	In your opinion, what reasons speak against taking out a company pension plan? I don't have any money available
Spearman's rho	Which of the following monthly gross income cohorts do you belong to?	Correlation Coefficient	1,000	-,549**
		Sig. (2-tailed)	.	,000
		N	210	99
	In your opinion, what reasons speak against taking out a company pension plan? I don't have any money available	Correlation Coefficient	-,549**	1,000
		Sig. (2-tailed)	,000	.
		N	99	110

**. Correlation is significant at the 0.01 level (2-tailed).

The table shows that the correlation between "monthly gross income " and " In your opinion, what reasons speak against taking out a company pension plan? I don't have any money available " is -0,549. The p-value is 0,000. Therefore, hypothesis 0 is rejected and hypothesis 1 is accepted.

Conclusion: "Gross monthly income" and " In your opinion, what are the reasons against taking out a company pension scheme? I have no money available" have a statistically significant, negative correlation (R= -0,549, p=0,000, n=99). According to, [33], this is a strong effect.

Refer to the hypotheses formulated:

Hypothesis 0= "Monthly gross income" and " In your opinion, what reasons speak against taking out a company pension plan? My employer doesn't offer this“ have no statistically significant correlation.

Hypothesis 1= "Monthly gross income" and " In your opinion, what reasons speak against taking out a company pension plan? My employer doesn't offer this“ have a statistically significant correlation. The SPSS output is shown in the Table 11.

Table 11. Correlation between monthly gross income and offered by the employer

Correlations

			Which of the following monthly gross income cohorts do you belong to?	In your opinion, what reasons speak against taking out a company pension plan? My employer doesn't offer this
Spearman's rho	Which of the following monthly gross income cohorts do you belong to?	Correlation Coefficient	1,000	-,205*
		Sig. (2-tailed)	.	,042
		N	210	99
	In your opinion, what reasons speak against taking out a company pension plan? My employer doesn't offer this	Correlation Coefficient	-,205*	1,000
		Sig. (2-tailed)	,042	.
		N	99	110

*. Correlation is significant at the 0.05 level (2-tailed).

The table shows that the correlation between "monthly gross income " and " In your opinion, what reasons speak against taking out a company pension plan? My employer doesn't offer this" is -0,205. The p-value is 0,042. Therefore, hypothesis 0 is rejected and hypothesis 1 is accepted.

Conclusion: "Monthly gross income" and "In your opinion, what reasons speak against taking out a company pension plan? My employer doesn't offer this" have a statistically significant and negative correlation (R= -0,205, p=0,042, n=99). According to, [33], this is a weak effect.

Refer to the hypotheses formulated:

Hypothesis 0= "Monthly gross income" and " In your opinion, what reasons speak against taking out a company pension plan? I haven't dealt with the topic yet“ have no statistically significant correlation.

Hypothesis 1= "Monthly gross income" and " In your opinion, what reasons speak against taking out a company pension plan? I haven't dealt with the topic yet“ have a statistically significant correlation. The SPSS output is shown in Table 12.

Table 12. Correlation between monthly gross income and dealt with the topic OPP

Correlations

			Which of the following monthly gross income cohorts do you belong to?	In your opinion, what reasons speak against taking out a company pension plan? I haven't dealt with the topic yet
Spearman's rho	Which of the following monthly gross income cohorts do you belong to?	Correlation Coefficient	1,000	-,395**
		Sig. (2-tailed)	.	,000
		N	210	99
	In your opinion, what reasons speak against taking out a company pension plan? I haven't dealt with the topic yet	Correlation Coefficient	-,395**	1,000
		Sig. (2-tailed)	,000	.
		N	99	110

**. Correlation is significant at the 0.01 level (2-tailed).

The table shows that the correlation between "monthly gross income " and " In your opinion, what reasons speak against taking out a company pension plan? I haven't dealt with the topic yet " is -0,395. The p-value is 0,000. Therefore, hypothesis 0 is rejected and hypothesis 1 is accepted.

Conclusion: "Gross monthly income" and " In your opinion, what reasons speak against taking out a company pension scheme? I haven't dealt with the topic yet" have a statistically significant, negative correlation (R= -0,395, p=0,000, n=99). According to, [33], this is a medium effect.

Refer to the hypotheses formulated:

Hypothesis 0 = "Monthly gross income" and " Do you think mandatory company pension schemes make sense? I think a mandatory company pension scheme makes sense.“ have no statistically significant correlation.

Hypothesis 1 = "Monthly gross income" and "Do you think mandatory company pension schemes make sense? I think a mandatory company pension scheme makes sense.“ have a statistically significant correlation.

The SPSS output is shown in Table 13.

Table 13. Correlation between compulsory company pension scheme and income

Correlations

			Do you think mandatory company pension schemes make sense? I think a mandatory company pension scheme makes sense.	Which of the following monthly gross income cohorts do you belong to?
Spearman's rho	Do you think mandatory company pension schemes make sense? I think a mandatory company pension scheme makes sense.	Correlation Coefficient	1,000	-,047
		Sig. (2-tailed)	.	,498
		N	236	210
	Which of the following monthly gross income cohorts do you belong to?	Correlation Coefficient	-,047	1,000
		Sig. (2-tailed)	,498	.
		N	210	210

The table shows that the correlation between "monthly gross income " and "Do you think mandatory pension schemes make sense? I think a mandatory company pension scheme makes sense" is -0,047. The p-value is 0,498. Therefore, hypothesis 0 is not rejected, but retained.

Conclusion: "Gross monthly income" and " Do you think a mandatory company pension scheme makes sense? I think a mandatory company pension scheme makes sense." have no statistically significant correlation (R=-0,047, p=0,498, n=210). The Levene test has proven that it can be assumed that variance homogeneity exists, that the significance is 0,981 and therefore > 0,05.
Therefore, the hypotheses 0 and 1 for the t-test for equality of means were formulated in the further course:

Hypothesis 0: There is no significant mean difference between the female and male respondents when answering the item: "How satisfied are you with your company pension plan?

Hypothesis 1: There is a significant mean difference between the female and male respondents when answering the item: "How satisfied are you with your company pension plan?
This p-value is p= 0,244 and therefore > 0,05.

Hypothesis 0 is therefore not rejected but retained. There is therefore no significant mean difference between the female and male respondents when

answering the item: "How satisfied are you with your company pension plan?".

The SPSS output is shown in Table 14.

Table 14. Independent samples test for differences in satisfaction with company pension schemes between the sexes

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
How satisfied are you with your company pension plan?	Equal variances assumed	,001	,981	1,172	124
	Equal variances not assumed			1,203	101,519

			95% Confidence Interval of the Difference	
Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
,244	,179	,153	-,123	,481
,232	,179	,149	-,116	,474

6 Discussion

The empirical analysis of the employee surveys showed that people aged between 18 and 40 in particular wanted to be informed about the company pension scheme during the induction process. The proportion of the over-40s stated that they did not want to be informed about the company pension scheme during the induction process. There is a statistically significant negative correlation between age and how respondents would prefer to be informed about the company pension scheme. According to, [33], this is a weak effect (R= -0,201, p=0,017, n=140).

It was also shown that the variable's age and reasons for not having an OPP, such as not trusting the state, have a statistically significant positive correlation. The 20-40 age group was the most likely to cite mistrust of the state as a reason. According to, [33], this is a weak effect (R=0,199, p=0,038, n=109).

Statistical significance was also found between the variables of gross monthly income and the reasons for not having an OPP. A large number of respondents with a gross monthly income of more than €5,001 stated that this was not due to their financial means. Respondents in the income group between €1,000 and €2,000 gross per month were more likely to cite financial resources as the reason. There is a statistically significant negative correlation between gross monthly income and available monthly resources (R=-0,549, p=0,000, n=99). According to, [33], this is a strong effect.

A further empirical examination of the variables of gross monthly income and the reasons for not having a company pension, in this case, the employer not offering a company pension, has shown that the correlations between the two variables examined are statistically significant and have a negative correlation (R=-0,205, p=0,042, n=99). According to, [33], this is a weak effect.

The fact that the variables of gross monthly income and the reasons why respondents have not yet addressed the issue of OPP, and therefore do not yet have a contract, could be empirically proven. These variables have a statistically significant negative correlation (R= -0,395, p=0,000, n=99). According to [33], this is a medium effect.

The correlations between gross monthly income and the existence of a mandatory OPP are not statistically significant (R=-0,047, p=0,498, n=210), which was also empirically proven.

The t-test for mean differences for independent samples showed that men and women are approximately equally satisfied with their company pension scheme. There is therefore no significant mean difference between the female and male respondents.

Participants in the employee surveys were selected by the study director according to their employment status to ensure that the sample of participants reflected the population of all employees in the Federal Republic of Germany on 22 February 2024. The sample was representative and the results can be and generalized to the whole population.

7 Conclusion

In summary, the data situation on OPP in Germany is very heterogeneous. For further reforms of OPP in Germany, existing data gaps should therefore first be closed by including additional variables in existing data sets. In addition, the data situation should be improved by providing administrative data from employers and contributors and linking them with survey data. Finally, researchers should be given easier access to existing data sources. In this way, the determinants of supply and demand for OPP can be estimated and possible social policy measures can be identified in good time. As the demand for OPP has stagnated in recent years, it is necessary to examine whether and to what extent the law on strengthening OPP will promote the further spread of OPP. In addition, given the

constantly changing economic environment, it is necessary to analyze what other factors might be responsible for the stagnation of the penetration rate and how these might be remedied or compensated for by changes.

The authors also recommend that the OSPA conduct a gendered analysis of the impact on demand for OPP, as the inclusion of gender in research and statistics is important to ensure a fair and diverse perspective. It is important to note that gender includes not only binary categories such as female and male, but also other gender identities. Gender-specific indicators, such as type of employment and/or marital status, are necessary to identify gender-specific trends and needs. An analysis of the datasets analyzed in this article would follow the recommendation that questionnaires should be designed in a gender-sensitive way. This differentiation would have the advantage that the gender analyses could be used to develop and evaluate gender-equitable policies.

The results of this article have shown that OPP is an issue that sometimes causes uncertainty among employees. In Germany, OPPs have a number of weaknesses and are not keeping pace with labor market developments and demographic change. This could become an increasing problem as the level of benefits in the state pension system falls. The question therefore arises as to how OPP can fill these gaps. In view of these facts, it is advisable to analyze international pension systems in order to gain initial insights for a better design of the German occupational pension system for the future. For the purposes of this study, countries should be selected that face similar future problems, have statutory pension systems similar to Germany's, and whose demographic trends are worrying.

The aim of this study was to determine the impact of the OSPA on the demand for OPP. To this end, employee surveys were conducted. It was shown that respondents want to be informed about the possibilities of a company pension scheme as early as the induction phase. It was also shown that the respondents did not trust the company pension scheme because they did not trust the state. Financial reasons and the reluctance of the employer to offer a company pension are also reasons why some of the respondents do not have a company pension contract.

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