

<https://doi.org/10.53656/str2024-6s-5-stu>

A STUDY OF THE IMPLEMENTATION OF PENSION SCHEMES IN INDUSTRIAL ENTERPRISES IN THE UNITED KINGDOM, FRANCE AND GERMANY

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Abstract. This study examines the design and implementation of pension schemes in industrial enterprises in the UK, France, and Germany. The focus is on scheme funding, contribution rates, tax benefits, and incentives for stakeholders. The study is motivated by the early historical development of pension insurance in these countries and their social policies in modern conditions. Recommendations are made for adapting these schemes to Bulgaria, taking into account internal and external factors affecting enterprises.

Keywords: Pension schemes; Pension insurance; Assurance; Social security; Industrial enterprises.

JEL: H55, H75, J32

1. Introduction

Pension schemes serve a critical role in providing financial stability for employees after retirement, especially in industrial enterprises where workforce longevity and retention are key concerns. As populations age and life expectancy increases, the need for well-structured pension systems becomes more urgent. For large employers, offering pension plans not only supports employee welfare but also enhances job satisfaction, retention, and motivation.

Pension systems differ widely across countries due to variations in economic conditions, political structures, and cultural attitudes. In the United Kingdom, France, and Germany, pension schemes have evolved from simple retirement savings programs to more complex arrangements involving contributions from both employers and employees, along with government oversight. These systems, established over many decades, reflect the unique socio-economic dynamics of each country. Studying the early historical development of these pension schemes offers valuable insights into their current effectiveness and sustainability.

The main purpose of this study is to explore how pension schemes are implemented in industrial enterprises in the UK, France, and Germany, focusing on key factors such as funding models, contribution rates, tax incentives, and stakeholder involvement. Each of these countries provides a distinct approach to pension management within industrial enterprises, and by analyzing their methods, this research aims to draw out lessons that could inform pension system reforms in Bulgaria. Bulgaria is currently grappling with challenges such as an aging population, insufficient savings for retirement, and low participation in pension schemes, making the need for pension reform increasingly pressing.

Additionally, the study examines the impact of financial literacy on employee participation in pension schemes. Research indicates that employees with a higher understanding of pension systems, tax benefits, and long-term savings potential are more likely to contribute actively to these schemes. In Bulgaria, where financial literacy rates are relatively low compared to other EU countries, this lack of awareness can hinder the success of pension reform efforts.

Thus, the objective of this research is to evaluate the pension schemes used in industrial enterprises in the UK, France, and Germany, identifying strengths and weaknesses that could inform recommendations for Bulgaria. The study will consider both external and internal factors influencing the creation of pension funds, including socio-economic conditions, regulatory frameworks, and employer-employee dynamics. By drawing on international best practices, this research aims to offer practical recommendations for improving the pension system in Bulgaria, ensuring greater financial security for its workforce in the long term.

2. Literature Review

Pension insurance or assurance has historically played a crucial role in ensuring financial security for employees, especially in industrial enterprises. Early pension systems, such as those in Europe, were developed in response to industrialization and the socio-economic changes it brought. Pavlov (2011, p. 29) highlights that these systems initially covered a limited section of the population, but over time, their scope broadened due to societal needs, industrial growth, and evolving public policies. Pension insurance, in this context, has become a key pillar in the social welfare policies of many nations, ensuring that employees receive income post-retirement and protecting them from risks such as old age, death, and disability.

2.1. Pension Systems in the United Kingdom

In the United Kingdom, pension reforms have focused on expanding access and ensuring long-term financial security for employees. The introduction of automatic enrollment in 2012 marked a significant shift in pension policy, requiring employers to automatically enroll eligible employees into a workplace pension scheme. This has resulted in a substantial increase in participation, with 88% of eligible employees enrolled in a pension scheme by 2020 (The Pensions Regulator, 2020).

The system's mandatory employer contributions, along with government tax relief, have incentivized greater savings among employees, while removing the traditional "opt-in" barrier for many workers. This reform has been cited as a model of how government policy can effectively drive higher participation in pension schemes.

2.2. Pension Systems in France

France's pension system underwent significant reforms with the introduction of the *Plan d'Épargne Retraite* (PER¹) in 2019. This system consolidates existing pension savings vehicles into a single framework, offering both mandatory and voluntary participation options (French Public Service Administration, 2019). The PER allows flexibility in contributions, enabling employees to benefit from tax incentives while providing employers the option to match contributions. This flexibility is particularly important in France, where the tax treatment of pension contributions serves as a major incentive for employee participation. Additionally, the ability to access funds for specific purposes, such as purchasing a primary residence, adds an element of adaptability to the system, making it more attractive to a broader range of employees.

The literature also suggests that the success of pension reforms in France is closely linked to financial literacy. Research by Lusardi and Mitchell (Lusardi & Mitchell 2014) has shown that employees with a better understanding of tax relief and long-term savings benefits are more likely to contribute actively to pension schemes. In the context of the PER, this implies that financial education can play a key role in encouraging participation and improving retirement outcomes.

2.3. Pension Systems in Germany

Germany has one of the oldest and most established employer-sponsored pension systems in Europe. Employees can defer a portion of their gross wages into pension funds, and employers are legally required to contribute a minimum of 15% of employees' salaries to these funds (Ott, 2022). This combination of mandatory employer contributions and deferred taxation has made the German pension system highly effective in ensuring long-term financial security for workers. The system also allows for flexibility in terms of investment choices, enabling employees to choose between defined benefit and defined contribution schemes depending on their risk tolerance and retirement goals.

Research indicates that Germany's system of employer-matched contributions significantly enhances employee participation in pension schemes. According to the OECD (2019)², countries with mandatory employer contributions, such as Germany, tend to have higher pension coverage rates and more robust retirement savings. This is attributed to the dual incentive structure, where both employers and employees contribute to the pension fund, ensuring a steady accumulation of retirement savings over time.

2.4. The Role of Financial Literacy

One of the critical factors that determine the success of pension schemes across all countries is the level of financial literacy. Lusardi and Mitchell (Lusardi &

Mitchell 2014) argue that individuals with higher levels of financial knowledge are more likely to participate in pension schemes and make larger contributions. This is particularly relevant in France and Germany, where financial literacy is relatively high, and pension participation rates are correspondingly robust.

In contrast, countries with lower levels of financial literacy, such as Bulgaria, often struggle with low participation rates in pension schemes. Enhancing financial literacy through targeted education programs can increase awareness of the benefits of saving for retirement and encourage greater participation. As pension systems become more complex, employees must understand not only the tax advantages but also the long-term growth potential of their savings.

2.5. Sustainability and ESG in Pension Systems

Another important trend in pension fund management is the growing emphasis on sustainability and Environmental, Social, and Governance (ESG) factors. Stefanova (Stefanova 2022) notes that pension systems incorporating ESG criteria tend to perform better over the long term, both in terms of financial returns and social outcomes. Pension funds that prioritize ESG investments contribute to broader societal goals such as reducing carbon emissions and promoting ethical corporate behavior. This is becoming increasingly important in Europe, where regulatory frameworks are encouraging pension funds to adopt sustainable investment strategies in line with national and EU-level policies.

2.6. Implications for Bulgaria

For Bulgaria, which is in the process of reforming its pension system, the experiences of the UK, France, and Germany offer valuable lessons. One of the primary challenges in Bulgaria is low participation in pension schemes, largely due to low financial literacy and limited employer engagement. Adopting measures such as automatic enrollment, mandatory employer contributions, and enhanced financial education could significantly improve participation rates and ensure better retirement security for the population.

The literature suggests that pension reforms in Bulgaria should focus on creating flexible, tax-advantaged pension schemes that cater to the diverse needs of the workforce. Additionally, promoting financial literacy through public education campaigns could help increase awareness of the benefits of pension savings and encourage greater participation. Drawing on the best practices from the UK, France, and Germany, Bulgaria can develop a more sustainable and effective pension system that provides long-term financial security for its citizens.

3. Research Methods

This research employs a comparative analysis methodology to examine the pension schemes implemented in industrial enterprises across the United Kingdom, France, and Germany. The aim is to identify effective practices and potential areas for reform that could be adapted to the Bulgarian context.

3.1. Data Collection

Data were gathered from various sources, including:

- Regulatory Frameworks: National laws and regulations governing pension schemes in each country were reviewed to understand the legal requirements for pension funds.

- Academic Literature: Peer-reviewed journal articles, books, and reports from reputable organizations such as the OECD were analyzed to gather insights into best practices in pension management and the impact of different pension systems.

- Industry Reports: Reports from pension funds, financial institutions, and government bodies provided practical information on how pension schemes operate in real-world scenarios.

3.2. Analytical Framework

The analysis focused on several key aspects of pension schemes:

- Funding Models: The study compared how pension schemes are funded in each country, including the proportion of contributions made by employers and employees.

- Contribution Rates: The minimum required contribution rates were examined to evaluate the adequacy of savings for retirement.

- Tax Incentives: The impact of tax relief on contributions and withdrawals was assessed to understand its effectiveness in encouraging savings.

- Participation Rates: Employee participation rates in pension schemes were analyzed to gauge the success of various strategies, such as automatic enrollment and financial education.

3.3. Comparative Analysis

A comparative approach was employed to identify similarities and differences in pension systems across the three countries. This involved evaluating the effectiveness of each system in terms of:

- Coverage and participation rates

- Financial security for retirees

- Employer and employee incentives

The findings were then contextualized within the Bulgarian pension landscape to formulate actionable recommendations for reform.

4. Results

4.1. Factors affecting the implementation of a pension fund in the industrial enterprise

Both on a macro level and on a micro level – in the industrial enterprise itself, there are factors that influence the motives for creating and organizing a specific pension scheme. For the enterprise, the factors can generally be divided into internal and external, as both have their own specificities that influence the decisions and organization of the pension scheme provided by the employer.

4.1.1. External factors

– Economic factors – since the enterprise itself is an economic unit, it cannot help but be influenced by economic factors. In relation to pension schemes in particular, tax benefits have a strong influence and, more specifically, to what extent they could motivate both the employer and the employees to invest in such an investment.

At the moment, tax breaks in Bulgaria cannot be defined as motivating, as their amount has not been updated in accordance with changes in economic indicators (they are discussed in more detail in the third chapter).

– Political factors also have an impact – for example, in many countries, in the last 3 – 5 years, changes have been made to the legal framework that fully or conditionally oblige employers to create pension funds in enterprises. In Bulgaria, this is not yet mandatory, but taking into account the trends on a global scale, one can expect the formalization of the mandatory nature.

Political decisions can also be taken that do not directly oblige employers to create pension funds in enterprises, but instead impose some kind of economic incentives or coercions to encourage their creation. For example, current corporate sustainability requirements and their associated ratings may force companies to set up company pension funds to increase their good employer rating in the context of looking after the well-being of their employees. A higher rating will also increase the overall valuation of the company's shares and vice versa – with a low rating, the enterprise may be excluded from some investors (Stefanova, 2022).

– Demographic factors are invariably a major factor when it comes to pension schemes – the age structure of the population predetermines the age structure of the company's employees. The presence of migration processes in some settlements significantly complicates the situation. Given the long-term nature of capital schemes that rely on return of funds and accumulation of returns over the years, demographic factors can greatly influence decision-making and of course, their expected performance.

– Socio-cultural factors – this refers to the influence of cultural and environmental factors on the decision to create a pension scheme in the enterprise. In different cultures and companies, there are many different traditions in this area – if in the USA such initiatives are something normal and with long-standing traditions, then in Bulgaria the employer is not expected to show such care. Also, the investment culture in some countries is at a very high level and employees generally invest part of their income in various assets. Their employers also reward certain groups of employees with company stock and other assets. In other countries, including Bulgaria, the overall investment culture is low and such initiatives are not popular in employer practice.

When talking about investment culture, attention should also be paid to financial literacy, because when it is high among the population, it realizes the importance of

retirement savings and is not only motivated to set aside part of its income for its future financial well-being, but and pressure the employer to do the same.

4.1.2. Internal factors

– *Number and structure of personnel* – The number and structure of personnel in the enterprise have a direct bearing on the benefits, creation and effectiveness of the pension model in it. They have a direct impact on the choice of pension scheme, investment strategy, etc.

The number of staff gives an idea first of all whether and how effective the creation of such a fund will be. If a pension fund were created in an enterprise with up to 20 employees, the costs of fees and commissions on it would call into question its effectiveness. If the number of employees is small, the fees and commissions for the administration of the fund would absorb all the invested capital. In this case, it is advisable to use a ready-made pension plan or fund, which is a universal market product of a given pension service provider. If the number of employees is large, the decision-making will depend on the performed situational analysis and the judgment in which specific funds to invest the capital, so as to meet the needs of all or individual groups of employees.

The age and gender structure of the workforce is also relevant for retirement age planning and the pension model. The age of members in an employer pension fund will vary. While some employees may be very close to retirement, others may have just started their careers and have many years until they retire. These members may have very different expectations about how they would like their funds to be invested.

For example, older members generally prefer to hold more stable investments that expose accumulated capital to less volatility, while younger members most often prefer to hold riskier investments that are expected to provide higher returns in the long term. In an enterprise where the majority of employees are under 30, the investment time horizon would allow a higher overall return, while in an age structure with a preponderance of people over 55, the overall return would be much lower. which directly affects the investment strategy. Financial and economic condition of the enterprise – of course, it matters here whether and to what extent the employer can invest in the pension fund in the enterprise (PRU³). Also, how sustainable this initiative will be over time – whether long-term commitments can be met or the financial situation is unstable and there are risks of discontinuing operations, shrinking costs of investment in personnel, etc.

– *Budget for social initiatives* – what is the company's budget for social initiatives and what part of it would be allocated to pension contributions by the employer. Here it is important what will be the amount of the monthly payment into the fund by the employer and whether it will be sufficiently motivating for the employees.

– *Sustainability policy* – to what extent the company has developed its sustainability policy and to what extent it prioritizes goals such as: human rights,

workplace safety; care for financial well-being; poverty prevention etc. Depending on how far the enterprise has progressed in this policy will also depend on the extent to which priorities have been clarified, including in relation to employees.

– *Competitive conditions* – in the presence of high competition in the industry – especially in terms of attracting and retaining staff, the employer will be more motivated to offer additional care options to its employees, including and retirement savings. Some studies show that in modern conditions employees are recognized as the most valuable resource guaranteeing the competitiveness of organizations, their growth and sustainable development. Retaining qualified specialists in these conditions is a key management task, which will make them more flexible and adaptable (Dimov, Borisova 2021).

– *Investment culture and financial literacy of employees* – they will have an impact on the pension fund in the enterprise from the point of view of their personal interest and motivation to participate. If the culture and literacy of employees is high, they will have interest, initiative, preferences and suggestions. They will appreciate initiative and be willing to invest personal funds. If employees are not familiar with the investment options of pension funds, they will not be able to see their benefits and will not have significant interest and concrete proposals.

– *Ability of the enterprise to change* – in the literature the opinion is confirmed that in modern market conditions, the only constant that industrial enterprises can count on is the continuous change of strategy). According to D. Dimov, in order to be competitive, enterprises must constantly offer new goods and services to the market and create innovations. To achieve this goal, it is necessary for them to be open to new products and services, new methods of work, new technologies and to be able to perceive and use their advantages. Promotion of innovation activity should become a basic element of the policy of modern enterprises (Dimov, Taneva 2008).

Depending on the extent to which the enterprise has adopted this approach to change and innovation, its initiative for changes related to the introduction of new initiatives such as the pension fund will also depend. If people are proactive, follow current international and local trends in the industry and are proactive towards change, the easier the process of implementing such an initiative will be.

The factors presented here do not exhaust the entire environment of influence, but synthesize the basic, basic and enterprise-wide factors. For each individual enterprise, factors other than those listed here will be available to suit the particular situation of the individual employer. It is for this reason that, in the proposed methodology for analysis in the second chapter, the performance of a situational analysis is included with priority importance.

As a conclusion, I can add that regardless of the differences in individual industrial enterprises, one of the most important factors that enterprises will have to consider in their investment strategy is regulations related to sustainability, due to their mandatory nature for institutional investors. Therefore, I consider it expedient

to examine them in detail, in the context of the investment strategy of pension funds in enterprises.

4.2. Application of pension schemes in industrial enterprises.

4.2.1. United Kingdom

Legislative changes took place in the UK in October 2018, requiring all employers to set up a pension fund for their employees. They should provide a company pension scheme as part of their employment policy to help employees save for their retirement. A process called "auto-enrolment" has been created, which means that every hired employee is automatically enrolled in the system. The conditions under which the automatic recording mechanism is triggered are:

- Working in UK;
- Age between 22 and retirement age in the year of appointment;
- Annual income in excess of £10,000 or its update in the year of appointment;
- The individual has not yet chosen another company pension scheme that the enterprise may offer.

When the employee changes the employer, the law allows the transfer of the funds accumulated in the pension fund parties to the fund of the new employer.

The regulatory framework requires both parties – employer and employee to participate in the fund's payments, with specific minimum thresholds set. Of course, both the employer and the employees can make larger payments, according to possibilities and arrangements. With the update of the minimum contribution rate from 06 April 2019, employees must contribute a minimum of 5% of their salary to the fund and the employer 3%, making a total of 8% of the monthly remuneration (UK Pension Regulator 2023⁴).

Table 1. Minimum monthly contributions to the UK Enterprise Pension Fund

Effective date	Minimum employer contribution	Employee contribution	Total minimum contribution
Until April 5, 2019	2%	3%	5%
From April 6, 2019	3%	5%	8%

Source: UK The Pension Regulator (2023)

Contributions made by employees are usually deducted from their monthly salary. The government is also adding tax relief to pension payments. The rules can change and the impact of taxation (and any tax relief) depends on different circumstances. The official website of the regulator provides the sample parameters of the effect of accumulation and tax relief in the employer's pension fund.

For example, over a period of 20 years the employee decided to contribute £100 per month, his tax relief would be £20, i.e. in practice it will bring in a neat £80. If the employer also contributes £100 per month, this makes an investment pot of

£48,000, of which the employer has contributed £24,000, the government £4,800 and the employee £19,200 (UK Pension Regulator, 2023). The employer also receives tax relief for amounts contributed above the minimum required by law. Planned in this way, the system motivates employees to demand and seek the best pension schemes from employers because they secure a very large proportion of their pension savings in capital schemes. The motivation is there because for every unit saved in the fund, the employee receives more than double payment from the employer and the government. The more funds the employee contributes, the more funds the employer and the government must contribute in the form of tax relief (within statutory limits).

Employers are given the right to choose one of two ways of managing them: either under a trust, where the trustees look after the pension scheme in accordance with the scheme's rules, or (which is the more common practice) by signing a contract with an external pension service provider. If they choose the first option, companies are required to sign a contract for the monitoring and control of the scheme, including a value for money check. Trustee companies such as Prudential Corporate Pensions Trustee Limited (PCPTL) have been established in the market for this purpose. Pension service providers are required to establish an independent governance committee (IGC). Like trustees, the IGC has a duty to monitor the scheme, including checking that it offers adequate value for the investment made (Workplace pensions PRU, 2022).

The employer is also given the choice to raise and distribute the funds in one of three schemes: defined contribution, defined income or mixed/hybrid. For each of the types, clear explanatory notes and guides with their advantages, disadvantages, management and administration have been created on the official website of the regulator. For the purposes of defined contribution capital schemes, a special Code of Practice for the Management and Administration of Professional Trust Based Cash Benefit Schemes (Code of practice 13⁵) has been developed.

The UK Government is undertaking a major information campaign to support all three parties (employers, employees and suppliers) in the process of setting up and integrating the pension fund into businesses. For this purpose, an official website has been created, where each of the parties can find the necessary information by sections, questions, etc. Dozens of manuals, manuals and supporting materials have been developed and uploaded to the site to facilitate the entire journey – from the idea, through the creation to the closing of the pension fund (UK Pension Regulator, 2023). Ready forms, brochures, letters, etc., which clearly show how all the documentation should look, are also available for all countries. All references to legal acts that affect one or another area in the entire process of the pension fund's functioning have also been published. In this way, the reform goes smoothly and without problems, with automated processes and understanding of the importance of all stakeholders.

4.2.2. France

With the changes in legislation adopted on April 11, 2019 and effective from October 1 of the same year, employers in France are partially obliged to create a pension fund in the enterprise. New retirement savings schemes are being created in the company called PER (Retirement Savings Plan), which are of two types:

- The “collective” PER (nicknamed PERECO or PERCOL) is offered by the company to all its employees, payments of which are optional;
- The “mandatory” PER (nicknamed PERO) is created by the company, and its mandatory membership can be reserved for certain categories of employees.

The collective (PERCOL) option is an optional scheme for employees that allows the accumulation of savings for retirement. It can only be created in a company where there is already an employer-created savings plan. Therefore, it is a supplemental savings plan specifically for retirement. It is powered by payments made by the employee, which may (but need not) be matched by the company.

Mandatory Company PER is a company retirement savings plan to which the company can subscribe certain categories or all of its employees. It is financed by mandatory contributions paid by the company, which can be co-financed by the employee if desired. Accumulated savings are paid out in the form of an annuity at the time of retirement.

Membership in this system is mandatory for employee beneficiaries. The category of employees enjoying the right to subscribe to a mandatory company pension plan must be determined on the basis of objective criteria.

The mandatory company pension plan can be created:

- by decision of the executive director;
- or ratification of an agreement by the majority of employees;
- or collective labor agreement (PER, 2023).

The company may choose to consolidate the optional collective savings plan and the compulsory collective savings plan into one plan.

Unless otherwise expressly stated in the contract, the management of the amounts paid into PER is carried out on the principle of custodial management. This means that when the investment is long-term, i.e. the number of years remaining until retirement is relatively high, savings can be invested in riskier and more profitable assets. As retirement age approaches, savings are gradually shifted to less risky assets.

If employees meet the requirements for the mandatory PER for the company, it must inform them of their membership in the plan. They should also be provided with a by-law informing them of the existence of the plan and its contents.

Each year, the investment manager must provide the following information:

- Evolution of savings
- Financial results of investments
- Amount of taxes deducted

- Planned transfer conditions (PER, 2023).

The financing of the mandatory savings pension plan can be done with the following payments:

- Mandatory payments by the employer;
- Voluntary payments by employees;
- Amounts of profit distribution, if the company has prepared such a plan for the benefit of the employees;
- Amounts from transfers to other employer retirement savings plans;
- Exceptionally, amounts corresponding to unused days off, within the limit of 10 per year (PER 2023).

Amounts that are contributed to the mandatory company PER are blocked until retirement. However, they can be withdrawn earlier, especially in the following cases:

- Injuries (of the employee, his children, spouse/ or official partner);
- Death of spouse or partner;
- Expiration of rights to unemployment benefits;
- Over-indebtedness (in this case, the committee on over-indebtedness must write to the organization managing PER);
- Termination of self-employment after a court decision for liquidation;
- Purchase of primary residence (excluding the amounts of mandatory employer payments) (PER 2023).

The rights arising from the mandatory payments by the employer are liquidated only in the form of a lifetime annuity. Rights arising from other payments (voluntary payments by the employee, profit sharing, etc.) can be liquidated in an annuity, in capital, in part annuity and in capital. Capital withdrawals can be split. It is interesting to note here that prior to the changes in the legislation, this plan was funded only by employer contributions under the defined benefit scheme and employees could avail of the amounts only provided that on the date of their retirement, they work in the company.

Entry tax. Voluntary and mandatory PER payments in a given year are deducted from taxable income for that year. This deduction must not exceed the total ceiling set for each member of the tax household. This ceiling is equal to the higher of the following 2 amounts:

- 10% of income for 2022, net of social contributions and professional expenses, with a maximum deduction of EUR 35,194;
- or EUR 4114 if this amount is higher (PER, 2023).

If the employee's voluntary contributions are not deducted from taxable income, upon liquidation of the plan, it will be taxed only on the capital gains.

Payments into the PER of amounts and rights arising from employee savings (profit sharing, participation, personal contributions, etc.) are exempt from general income tax. The exit tax depends on the nature of the payments that feed the PER and the method of liquidation of savings (annuity or capital).

Upon the death of the owner, the saved amounts are returned to his heirs or beneficiaries specified in the contract, in the form of capital or an annuity. If it is an open-ended plan in the form of a securities account, the savings are integrated into the inheritance. If the plan is linked to a group insurance contract, the savings must be paid back to the beneficiaries they named in the contract, according to the rules of the contract. In the event of death after the age of 70, the part of the sums paid under the insurance contract that exceeds EUR 30,500 is subject to inheritance tax.

4.2.3. Germany

The country has a long tradition of employer-sponsored pension insurance. Already more than 100 years ago, the first large companies began to save assets for employees, from which they later receive a pension.

Today, employees can defer contributions from their gross wages and put them into a pension scheme that the employer takes out for them. This offers them the opportunity to save on taxes and social security contributions on employer pension schemes. During the savings phase, contributions are invested in the pension fund tax-free. In effect, the payment of tax is simply deferred until reaching retirement age, but allows for the additional benefit of tax savings. This option is not available in the case of private pension provision, for example through a unit saving plan. It should be saved from the taxed net salary without the bonuses from the employer.

The employer's pension scheme in Germany is defined as the accumulation of a supplementary pension from contributions made by the employer, the employee or jointly by both parties. This is the main scheme for additional pension insurance for employees in the country, where at the end of 2020, about 20 million employees had the right to an employer's pension (Ott 2022).

Currently, this is the most attractive retirement savings option for employees as they get an immediate tax advantage as contributions are made from their gross salary. From 2019, employers are obliged to make contributions to the company's pension fund, in an amount corresponding to a minimum of 15% of the employee's contribution. With the legal changes, up to €520 per month (i.e. €6,240 per year) of the gross salary can be earmarked for workplace pension through the so-called "Direktversicherung bAV" for supplementary pension insurance under an occupational scheme. The direct pension plan (Direktversicherung bAV) as the most important implementation method is part of the second pillar of the German pension system in Germany (Ott, 2022).

The basic pension coverage in these plans includes:

- Life pension for length of service and age;
- Protection in case of damage;
- Survivors Pension.

The choice of what type of pension plans can be used is often up to the employer. Therefore, whether pension insurance in the fund is attractive enough for employees also depends on the exact form of the company pension scheme of the employer and

what is the size of his participation in the financing of the contributions - whether he contributes the minimum of 15% or offers 50% to 100% on the contributed by the employee amount.

4.3. Key Findings

– *Participation Rates*: Automatic enrollment in the UK has been successful, while France’s PER demonstrates that flexibility in contributions can also drive participation.

– *Employer Contributions*: Mandatory employer contributions in Germany have proven effective in ensuring employee savings.

– *Financial Literacy*: Higher financial literacy correlates with greater participation in pension schemes, underscoring the need for educational initiatives.

5. Discussion

5.1. Advantages and Disadvantages of Pension Schemes

The pension schemes implemented in the United Kingdom, France, and Germany have distinct features that make them effective in their respective contexts. However, they also present challenges, particularly when considering the adaptability of such systems to other countries, such as Bulgaria.

Advantages:

– *Increased Participation*: One of the most significant advantages observed in the UK is the impact of automatic enrollment, which has dramatically increased participation rates. By making enrollment in a pension scheme the default option for employees, the UK government has ensured that more workers are saving for their retirement without the need for active decision-making. This is particularly important in overcoming inertia and addressing the issue of under-saving among employees.

– *Tax Incentives*: In both the UK and France, generous tax relief on contributions has been crucial in encouraging higher savings rates. In France, the *Plan d’Epargne Retraite* (PER) offers tax-deductible contributions, incentivizing employees to save more. Tax incentives play a significant role in making pension schemes more attractive, especially for employees in higher tax brackets who can benefit the most from these reliefs.

– *Flexibility and Adaptability*: The French PER allows both mandatory and voluntary contributions, providing flexibility to workers across various income levels and employment statuses. This adaptability is critical in addressing the diverse needs of the workforce, which is particularly useful for sectors with high employee turnover or part-time employment.

– *Employer Engagement*: Germany’s pension model, with its mandatory 15% employer contributions, highlights the importance of employer involvement in ensuring the financial security of retirees. Employer contributions have been shown to significantly enhance the pension savings of employees, ensuring a more stable and predictable retirement income.

Disadvantages:

– **Insufficient Contributions:** Although the UK's automatic enrollment has been successful in increasing participation, the minimum contribution rates (5% employee, 3% employer) may not be sufficient for long-term financial security, particularly for lower-income workers. Several studies suggest that these contribution levels, while a positive start, may need to be increased to provide adequate retirement income.

– **Complexity in France:** While the flexibility of France's PER system is an advantage, it also introduces complexity, which can deter some employees from participating. The variety of investment options, withdrawal conditions, and tax treatments can be confusing, particularly for employees with lower financial literacy. Simplification of the system could improve participation.

– **Burden on Smaller Employers in Germany:** Germany's requirement for mandatory employer contributions is effective in ensuring employee savings but can pose a financial burden for smaller enterprises, particularly in industries with lower profit margins. Some businesses may struggle to meet these obligations, which could have knock-on effects on employment and wages.

5.2. Recommendations for Bulgaria

Drawing from the experiences of the UK, France, and Germany, several key recommendations can be made for improving Bulgaria's pension system. Bulgaria faces unique challenges, such as lower financial literacy, low participation rates in pension schemes, and a fragmented pension landscape. To address these issues, Bulgaria can adopt best practices from the three countries studied, adapting them to its socio-economic context.

– Adopt Automatic Enrollment

The success of automatic enrollment in the UK provides a compelling case for Bulgaria to adopt a similar system. Currently, participation in voluntary pension schemes in Bulgaria is low, primarily due to the opt-in nature of the system. By switching to automatic enrollment, where employees are automatically enrolled in a pension plan unless they opt out, Bulgaria can significantly increase participation rates, especially among younger workers and those in lower-income brackets who may not actively consider retirement savings.

The UK's experience shows that making pension saving the default option helps overcome inertia and behavioral biases that lead to under-saving. For Bulgaria, automatic enrollment could ensure broader coverage, especially in the private sector, where participation in pension schemes tends to be lower.

– Increase Employer Contributions

Mandatory employer contributions, as seen in Germany, could be introduced in Bulgaria to enhance retirement savings. One of the main reasons for the success of Germany's pension system is the significant role played by employers. Requiring employers to contribute a minimum percentage of their employees' salaries would

provide a more reliable and stable source of retirement savings, reducing the financial burden on employees alone.

Bulgaria could start by introducing a gradual mandatory employer contribution, beginning with a lower percentage (e.g., 3 – 5%) to ease the transition for businesses, particularly small and medium-sized enterprises (SMEs). As the system matures, the contribution rate could be increased to match the levels seen in Germany.

This approach ensures that the responsibility for securing adequate retirement income is shared between employers and employees, fostering a more sustainable pension system.

– Introduce Flexible Contribution Options

France’s PER system provides a model of flexibility that Bulgaria could adapt to suit its workforce. Offering both mandatory and voluntary contributions allows employees to tailor their savings according to their financial capacity. For instance, higher-income employees might choose to contribute more to benefit from tax relief, while lower-income workers may opt for minimum contributions until their financial situation improves.

Moreover, offering flexibility in when and how employees can access their pension savings – such as early withdrawal options for specific life events like buying a home—could make pension schemes more appealing to workers who are hesitant to lock away funds for decades.

– Enhance Financial Literacy

Financial literacy is a critical factor in the success of pension reforms. Studies from France and Germany show that employees who understand the benefits of pension schemes are more likely to participate and contribute meaningfully. In Bulgaria, financial literacy is relatively low, which contributes to the lack of engagement with pension savings.

Bulgaria could implement national financial education campaigns, targeting both employees and employers, to raise awareness about the importance of saving for retirement. These campaigns could be run in collaboration with financial institutions, pension providers, and government agencies. Offering online tools and resources that simplify pension concepts, explain the tax benefits, and illustrate long-term savings growth could help demystify the process and encourage participation.

– Provide Tax Incentives

Tax incentives have been a key factor in the success of pension schemes in the UK and France. In Bulgaria, offering more generous tax relief on pension contributions could provide a strong incentive for both employees and employers to engage with pension schemes. Tax relief could be structured to benefit lower- and middle-income workers more significantly, ensuring that the system is equitable.

Bulgaria could also explore introducing tax-exempt or tax-deferred growth on pension investments, allowing employees to accumulate savings without immediate

tax burdens. This would encourage long-term savings and make pension schemes more attractive.

– Sustainability and ESG Focus

Incorporating Environmental, Social, and Governance (ESG) criteria into pension fund management, as seen in Germany, could align Bulgaria's pension system with broader sustainability goals. Pension funds that prioritize ESG investments tend to perform better over the long term while also promoting socially responsible corporate behavior. By encouraging pension funds to invest in sustainable industries, Bulgaria could ensure that its pension system not only provides financial security but also contributes to environmental and social well-being.

Conclusion

Workplace pension funds have a number of *benefits for employees*:

– Accumulation opportunities. Employees can look forward to retirement income by investing in funds offered by companies. In addition to life insurance contracts and the like, the employee can diversify and control his income from savings.

– Tax benefits. The amounts that the employee contributes to the pension fund are fully or partially exempt from taxes (depending on the legislation of the specific country). This provides additional value in retirement savings.

– The employer's contribution. This financial assistance from the company makes it possible to supplement the employee payments made to the pension fund. In some countries it is equal to the amount of the employee's contribution, in others it is a lower percentage. Individual businesses also have their own mechanisms and policies that determine the specific amount of contributions they make to employee lots. Regardless of the specific amount, these amounts are a savings bonus towards their retirement.

– Protection of the employee's family in the event of adverse events such as death, disability, etc. similar. In such a development, the employee's family inherits the accumulated savings in his pension fund account.

Benefits for the employer:

– Tax benefits. The amounts that the employer contributes to the pension fund benefit from a very favorable fiscal and social framework. In some countries, contributions are fully deductible from taxable income and are exempt from social security contributions up to a certain ceiling. In France, there is also a practice that allows the contribution paid by the employer to be deducted from the taxable profit.

– Offering a retirement savings plan is a way for an employer to make the company more attractive to employees at a lower cost.

– This initiative helps to retain and motivate employees, provided its existence and functioning is well communicated. These are significant benefits that should

be presented as such: helping employees save for retirement on a tax-advantaged basis; the employer financially supports their financial well-being for the future; receive a type of deferred compensation that, for the same net amount received by the employee, costs you less than a salary or bonus.

The examined employer retirement savings schemes in industrial enterprises in the UK, France and Germany have the same principle: they allow the employee to gradually build up savings within the company he works for to benefit from when he retires. The employee usually does not have access to these savings before retirement, but in different countries the legislation (and also the individual employer) has decided this issue with specific conditions and exceptions, when they occur, the employee can access the funds even earlier.

It is interesting to observe that in the United Kingdom and France the establishment of a pension fund in the company is mandatory, and in Germany the employer is obliged to provide such a commitment to his employees if they wish. Also, if the employee invests funds in the fund, the employer is obliged to make contributions within legally established percentages.

The analysis of pension systems in the UK, France, and Germany offers several lessons for Bulgaria as it looks to reform its own pension landscape. Automatic enrollment, as demonstrated in the UK, could significantly increase participation rates in Bulgaria. Additionally, mandatory employer contributions, similar to those in Germany, could ensure more reliable retirement savings for employees. Flexibility in contributions and withdrawal options, as seen in France, would make pension schemes more adaptable to the diverse needs of the workforce.

Financial literacy remains a critical factor, and improving awareness through education campaigns could enhance engagement with pension schemes. Furthermore, introducing generous tax incentives and encouraging sustainable investment strategies through pension funds would align Bulgaria's pension reforms with both economic and social goals.

By adopting these recommendations, Bulgaria can create a more robust and sustainable pension system that provides long-term financial security for its workforce. This will require concerted efforts from the government, employers, financial institutions, and employees to ensure that the system is both equitable and effective in addressing the retirement needs of its citizens.

NOTES

1. PER, Official site of the French Public Service Administration. <https://www.service-public.fr/particuliers/vosdroits/F34982>.
2. OECD. (2019). *Pensions at a Glance 2019: OECD and G20 Indicators*. Paris: OECD Publishing.

3. PRU Workplace pensions, 2022. Available at: <https://www.mandg.com/pru/customer/en-gb/guides/pensions-retirement/workplace-pensions>.
4. UK Pension Regulator, 2023. Available at: <https://www.thepensionsregulator.gov.uk/en/business-advisers/setting-up-a-scheme>
5. Code of practice 13: Governance and administration of occupational trust based schemes providing money purchase benefits ('the DC code'). Available at: <https://www.thepensionsregulator.gov.uk/en/business-advisers/dc-benefits-management#8c60fc1505764824b77bbb5a8f446b04>.

REFERENCES

- DIMOV, D. & BORISOVA, S., 2021. *Assessing personnel and the benefits of using competency models*. In: XIX International Scientific Conference "Management and Engineering'21", pp. 346 – 352, Bulgaria, Sozopol.
- DIMOV, D. & TANEVA, N., 2008. *Innovation Enterprises - an Essential Requirement for the Bulgarian Economy Competitiveness*. In: 5-th International Scientific Conference "Business and Management'2008", pp. 606 – 612, Lithuania.
- MILEV, J., 2014. *Pension insurance management*. Sofia.
- OTT, P., 2022. *Company pension scheme in Germany*. Available at: <https://crcie.com/insurance/pension/company-pension-scheme/>.
- LUSARDI, A. & MITCHELL, O., 2014. The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, vol. 52, no. 1, pp. 5 – 44. DOI: 10.1257/jel.52.1.5.
- PAVLOV, N., 2011. *Insurance schemes*. Sofia: Faber.
- STEFANOVA, M., 2022. *Accounting for the sustainability of enterprises. Environmental, Social and Governance (ESG) aspects of their business*. Sofia: Ciela.

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