

Dariusz Stańko

Organisation for Economic Co-operation and Development (OECD),
International Organisation of Pension Supervisors (IOPS)¹

*Defined contribution pensions:
challenges for members and policy makers*

Summary

The increasing role of defined contribution (DC) pension arrangements means that more and more individuals are facing various retirement risks. Moreover, DC arrangements are not free of significant flaws. The aim of this paper is to discuss the main challenges that are faced by DC pension members and policy makers and to briefly present possible solutions to these problems.

Key words: defined contribution (DC), pension plans, pension funds, policy issues

¹ Financial Affairs Division, Directorate for Financial and Enterprise Affairs, OECD, 2 rue André Pascal, 75775 Paris, CEDEX 16, France; author's email address: dariusz.stanko@oecd.org. The views expressed herein are those of the author and do not necessarily reflect those of the OECD, IOPS, or the governments of OECD or IOPS Members. The author is solely responsible for any errors.

Introduction

During recent decades, occupational pension plans worldwide have observed a significant increase of DC pension schemes or similar solutions (e.g. cash balance plans) whereas the role of DB schemes has been diminishing. The OECD (OECD 2017, p. 23) observes that the assets of DB arrangements in the OECD countries during the period between 2000 and 2015 were growing slower than in the case of the DC plans (with the exception of Canada²) and the number of members in DB plans decreased (with exception for Switzerland, Canada and the United States).

The change towards DC arrangements has been driven by growing costs faced by employers due to increased longevity and regulatory requirements (e.g. additional funding and changes in accounting). Employers found it difficult to continue providing their workers with guaranteed indexed pension benefits under the DB.

However, the increasing role of DC pension plans or funds does not mean that such pension arrangements are immune from drawbacks and potential risks. The aim of this paper is to discuss the key challenges faced by DC pension fund members and by policy makers. This analysis is performed mainly on the basis of desk research (literature review). The paper also uses some findings from the discussion and research conducted by the International Organisation of Pension Supervisors (IOPS) — in particular with regard to the questions on how to present results to the DC plan members and how to obtain the coherent retirement income framework (Stańko 2015). The article starts with three generic DC pension problems related to: 1) investing and decision-taking by members of DC pension systems, 2) uncertainty and perception of investment results by members, and 3) short-termism and agency problems found in investment industry in general. Subsequently, two specific areas that are mostly relevant to the Chilean-style pension systems are discussed: 4) oligopolistic market structure and 5) disconnection between the phases of investing for retirement and receiving retirement income. The article concludes with a brief description of potential solutions that may eliminate or alleviate some of the discussed DC pension challenges.

Key policy making and supervisory problems encountered in DC systems Decisions and risks faced by DC pension plan members

In DB systems, it was the responsibility of the employer (sponsor) to provide pension plan members with the promised stream of retirement income, In DC arrangements it is the plan members who bear, depending on particular arrangements, all or most of retirement-related risks. Members have to take various difficult decisions that relate to the retirement savings process. Depending on the particular pension plan/system, members

² However, one should bear in mind that hybrid pensions, such as, for example, the recently developing target benefit plans, are classified in Canada as DB pensions.

have to take all or some of such crucial decisions as: How much should they save? (i.e. choose contribution rate level or whether to contribute voluntarily); How should they save? (i.e. decide on investment policy and level of risk taken); How long should they save? (i.e. decide when to retire); Which pension provider choose? Which retirement product to choose? (i.e. decide whether it should be life annuity, pension withdrawal or lump sum, etc.). Such decisions are difficult as they relate to complicated financial issues, bounded rationality, asymmetry of information, uncertainty and irrevocability (“you only retire once”). Here, the members cannot use rules of thumb because these retirement decisions are not related to their daily experience and their effects very often materialize in time with a substantial delay.

The ultimate outcome of long-term saving for retirement under the DC framework depends on several key factors that can be classified into two main categories. The first group relates to factors that can be controlled either by individuals themselves or by policy makers, regulators, employers or providers. These variables include (OECD 2012a, p. 160): the contribution rate, the length of saving period, the moment of retiring, the investment strategy as well as the structure of the pay-out (i.e. the way the assets are going to be paid out at retirement).

Variables in the second group are of an uncertain character and therefore beyond the control of the decision taker (table 1). These include: the return on investments, labor market risk (such as spells of employment inactivity, uncertain real wage career growth path, interest rates and longevity risks, the bankruptcy of provider, and inflation). Other highly relevant uncontrollable variables are: the timing of contributions (where not contributing at the beginning of the working life results in less capital invested in the longer horizon) and the timing of returns (where negative rate of return incurred over a small balance at the beginning is less painful than the same percentage loss that occurs near retirement age).

Some of these risks are inherent to (nearly) all second pillar plans, such as the bankruptcy risk, the labor market risk and, partially, the inflation risk. DC plans may even offer better solutions than the DB plans. For example, it is easier to organize varying contribution rates or transfers between the funds under the DC framework.

Table 1. Retirement risks faced by DC (or hybrid) pension scheme member

Risk	Description	Most relevant to
Investment (market) risk	Risks that portfolio's value will fall due to adverse price movements of financial instruments: equity risk, fixed-income risk (interest rate risk).	Mainly the accumulation phase, less concern during decumulation phase unless postretirement portfolio is exposed to risky assets. Possibly to hedge by professional asset managers.
Labor market risk	Risk that an individual will not be able (partially or entirely) to contribute to the pension fund due to health problems, unemployment, life events (childbirth, caretaking of family). Also, risk that individual's salary will increase at lower pace than expected.	Accumulation phase. A risk difficult to hedge and highly related to individual's socio-economic status.
Interest rate risk	Risk that interest rates will be low during the conversion of accumulated retirement savings to a stream of retirement income. This will result in the income being lower than expected.	Decumulation phase. Risk difficult to hedge due to its exogenous character, unless efficient swap markets and/or deferred annuity markets exist.
Longevity risk	Risk of outliving retirement savings if length of the individual's lifespan turns out longer than assumed or risk of not using all retirement savings if actual lifespan turns out to be shorter than assumed. Risk that the length of expected lifespan for a cohort will turn out to be longer than projected by annuity providers (macro-level).	Decumulation phase. Risk (relatively) easy to hedge by purchasing a life annuity product from a provider. Decumulation phase. A risk practically impossible to hedge by individual life annuity provider due to its systematic character.
Bankruptcy risk	Risk that a pension scheme or retirement product provider will become insolvent.	Accumulation and decumulation phase. More important during decumulation phase if ultimate pension resources were converted into a stream of income.
Inflation risk	Risk that the real value of assets or purchasing power of stream of income will decline due to increased cost of living (rising prices).	Mainly decumulation phase, especially of concern if non-indexed retirement products are purchased. Can be an issue in accumulation phase if low real returns are prevailing.

Source: author.

The final DC pension pot is the result of both accumulating contributions and accomplishing investment gains. The main factors that contribute to the unpredictability of the outcome are (Berstein et al. 2010, pp. 31–32): the accumulated volatility of the chosen investment strategy, the accumulated volatility of the labor income, and the cost associated with obtaining one monetary unit of pension.

The labor risk may profoundly affect the value of pension contributions and their density (i.e. the share of contributing periods in the whole working career; Valdes-Prieto 2008, p. 8). Individuals might be exposed to spells of unemployment where both its length and distribution during the life cycle will adversely influence the amount of money that will ultimately be saved at the end of the working career³. The discontinuities in the contributing process can also occur due to disability, illness, childbirth or the need to take care of family members (Walker 2009, p. 60). Labor income is also shaped by individuals' decisions related to their actual labor supply (amount of work hours and length of working career). Labor income has, in turn, an impact on their spending, saving and investment decisions as well as on the amount of benefits they will be able to acquire within the public pension system.

Not only are wages uncertain but also the household's family situation. Family status related to marriage/divorce, the time of arrival/departure of children and spouse death also has an uncertain character and influences the economic and labor market situation of the parents, especially mothers. It can also have an impact on the type and value of social security and pension benefits available to a household (Hubener et al. 2013, p. 1). Therefore, the saver's labor market risk is combined by her household health and family statuses. These, as well as other socio-economic features of a contributor (occupation, educational level), have an impact on the real wage career growth path (OECD 2012a, p. 164).

Regarding financial market uncertainty, the investment (and reinvestment) risk has the biggest role during the accumulation period. It is less important in the decumulation phase unless the investment portfolio is allocated aggressively. At retirement the savers who want to convert their assets into a life-long stream of payments are exposed to the interest rates risk (also labelled as "annuity risk") because the price of an annuity unit depends inversely on the level of real interest rates. Hedging this risk may be difficult due to the long-time horizon of saving for retirement and scarcity of available instruments such as long-term discount treasury bonds, strips or TIPS in financial market and deferred or staggered annuities in insurance market (Zwecher 2010; Stańko 2013). The life annuity price can change also due to demographic reasons. Savers may need to pay higher price for a unit of annuity at the moment of retirement not only because their expected lifespan on retirement has already lengthened in comparison to preceding cohorts but also because the life annuity companies might find it more and more difficult to forecast the further longevity improvements over the horizon the savers will be receiving their benefits. The

³ Unemployment or disability that occurs at an earlier stage of working career can have more devastating effect on final retirement outcome as the worker misses opportunity to benefit from a stronger effect of compounded rate of interest.

annuity providers might also have problems with finding appropriate financial instruments to hedge against this longevity risk. The risk of inflation seems to dominate during the decumulation stage where the real value of lifetime stream of retirement income can erode significantly over time⁴.

A risk of particular concern to regulators in some systems is the possible bankruptcy of the provider (both at accumulation and decumulation stages). This risk can be directly related to the market risks or the operational risk and should be properly monitored or managed by appropriate segregation of assets.

Problems with presenting uncertain results to DC pension plan members

As a result, the final value of accumulated savings in DC pension plans can vary significantly. Even if the pension pot turns out to be in line with the expectations, there is still a risk that accumulated savings will not be able to purchase a stream of lifetime income at the expected level. Within the DC framework, pension fund members are motivated to save and earn a good return to accumulate the assets necessary for funding their future consumption on retirement. However, they are given no guarantees with regard to the amount of assets that will enable them to achieve the desired level of a reliable stream of inflation-protected income.

Savers find it difficult to comprehend the information about current outcomes presented as rates of returns. This difficulty relates closely to the widely known fact that individuals tend to have low financial literacy in general and limited knowledge of pensions in particular. Moreover, the reporting horizons tend to be short and the investment results volatile. In many DC pension systems fund members are required to take complex decision with regard to investment strategy of their portfolios. In such cases, the performance of member's accounts is just the result of their own decisions. This creates a challenge of how to communicate the concept of the investment risk inherit in DC pension systems to the members (Antolin, Fuentes 2012; EIOPA 2013a). Additionally, because savers do not understand the nature of investment for retirement, they often have unreasonably high expectations with regard to their future pension benefits.

Short-term fluctuation of savings during the accumulation phase may contribute to the lack of certainty amongst members who do not understand the concepts of long-term risk. Compounded with low contribution rates in some voluntary pension systems this can result in low participation rates in DC pension schemes (Lord Hutton of Furnes 2012, p. 43).

Members tend to better understand absolute measures such as the projected final value of their account (Chłoń-Domińczak et al. 2013). That is why the Chilean supervisor informs members, via on-line pension simulator and personal account statements, about the level of the expected pension benefits. However, this notion, even if informs future

⁴ For example, even with a modest inflation rate at 2% a year, the real value of retirement benefit after 20 years will drop by half.

retirees about the value of their benefits in real terms, does not usually take into account labor or interest rate risks.

Thus, OECD argues that “for a full picture, life expectancy, retirement age and indexation of pensions must also be taken into account.” (OECD 2011, p. 132). These variables determine not only the initial value of pension benefits, but also how long it will be paid and how its value will evolve over time. OECD introduces a concept of pension wealth, defined as a measure of the stock (net or gross of taxes) of future flows of pension benefits that takes account of all the factors mentioned above. Pension wealth can be also understood as “the lump sum needed to buy an annuity giving the same flow of pension payments as that promised by mandatory retirement-income schemes.” (OECD 2011, p. 132).

Pension wealth is the stock concept which can be re-calculated to obtain the value of a lifetime stream of retirement income. This concept seems to be easier to understand by public at large⁵ as it reflects the daily experience of most of the people receiving a regular stream of income during the working career. It also shows what the level of their future retirement income will be irrespective of their individual longevity. Retirement income could also be, as explained in the case of replacement rates, adjusted for household composition.

Calculation of the retirement income a member of a funded pension scheme can expect needs to take into account several of the key variables discussed earlier. They are not pre-determined and thus should be viewed as stochastic variables. From its very definition, the retirement income is therefore an expected yet not guaranteed concept. The value of retirement income would be obtained from dividing the value⁶ of accumulated, or projected, retirement savings by the price of a life-time annuity (be it deferred one or immediate). Such an annuity may or may not be protected against inflation risk.

There is a substantial risk that similarly to target replacement rates, such retirement income, even if declared as a desired yet not certain outcome, may be perceived by the public as guaranteed. That creates the need to present the expected results together with the risk of not achieving them and show bad scenario outcomes.

Short-termism of pension investment and agency problems

The supervision of DC schemes has been concentrating on the investment activity of pension funds and operational risks (Randle, Rudolph 2014). In most countries, the on-going performance of pension funds is assessed against short-term benchmarks which are not related to the long-term ultimate objective of pension fund members

⁵ This conjecture is somehow corroborated by the focus study on Polish DC pension funds' members undertaken in 2011. Once confronted with the information on investment performance the respondents found most of technical and relative measures difficult to understand. They demanded instead to be provided with the value of pension or accumulated account they are likely to achieve as a result of the investment process (Chłoń-Domińczak et al. 2013, annex).

⁶ Expressed as expected (mean) value; the most likely (median) value; or as a range of most probably outcomes (with assumed probability, for instance 95%).

and which do not take into account the risks during the decumulation period. While designing performance evaluation systems and asset allocation are usually not domains of supervisors, such a situation influences the way they execute their prudential duties.

When analyzing the DC framework from the perspective of asset managers there are also some important issues. The common problem in delegated money management in DC systems, as indicated by authors cited below, is that the asset managers may not choose an optimal portfolio that would maximize the welfare of fund members. Such a requirement is also not usually prescribed by law. For example, the designers of the Chilean-style funded pension systems hoped that the market competition would be the main force that would align the interests of managers with the interests of their clients. However, pension fund members have difficulties in taking complex financial decisions (e.g. what level of contributions should they save, what asset allocation should they follow, what pension fund manager and retirement product to choose, etc.; Blake 2006, pp. 221–243) and they do not react practically to the information on prices of asset management services.

The market structure can act as another contributing factor to investment distortions. The assumption about asset managers' competitiveness turned out to be incorrect as the recent research in this area (Basak, Makarov 2014) shows that "the model of managers with competing portfolios tends to skew asset allocations toward short-term portfolios" (Castañeda, Rudolph 2011; Opazo et al. 2010). They concentrate on achieving an adequately high position in short-term ranking and not incurring the cost of guarantees (c.f. the case of relative performance guarantees; Kawiński et al. 2012, pp. 592–593).

The second problem is that portfolio restrictions motivate managers towards overly conservative asset allocation policies. Alternatively, policies can be too risky if managers stick to the upper limits of risky assets to improve their short-term investment results. Stewart (Stewart 2014, pp. 4–5) points out several regulatory and agency issues that combine to reinforce the short-term focus on pension providers: diverse interests of managers and members (principal-agent problem) caused by the performance evaluation and fee frameworks, as well as accounting and solvency regulations (that may incentivize managers to follow short-term and liquid investments) or the performance evaluation system (with conservative investment rewarded in the same, or almost the same, manner as in the case of risky investments).

Sometimes these very conservative investment limits are the direct result of financial constraints faced by countries that set up their mandatory pension systems by diverting part of the social security contributions from PAYG to the funded pillar. Such pension reforms created the so-called transition costs that public finance has to meet in the medium-term because a part of pension contributions, previously used for financing retirees, is put aside in pension funds. As a result, governments are prone to giving incentive to mandatory pension funds to buy the state Treasury Bonds necessary to finance this transition pension debt.

The herding behavior observed in many pension markets may therefore be the result of several factors: use of peer-group benchmark, existence of investment/capital

guarantees, or general short-termism prevailing amongst the managers due to investment limits, accounting rules or market limitations (poor liquidity and/or scarcity of particular financial products). Herding results in the similarity of investment portfolios that may converge towards the sub-optimal asset allocations (Castañeda, Rudolph 2011, p. 32).

Recent developments in financial theory suggest using a life-cycle approach to construct the investment portfolios. Life cycle funds are an attempt to provide pension fund members with long-term investment perspective and to adjust asset allocation policy to their risk tolerance that (usually) declines over the time. Nonetheless, the disadvantage of life cycle funds is that they base their asset allocation on only age or time until retirement and do not take into account many other factors that have influence on the ability of a saver to realize their retirement goals⁷. But the toughest problem is that “those funds determine asset allocations irrespective of whether the members are on track to realize their retirement goals” (Lord Hutton of Furness 2012, p. 43).

The oligopolistic market structure

Oligopolistic nature of pension markets has been observed in mandatory funded pillars with individual pension accounts in some of the countries in Latin America and Central and Eastern Europe. High regulatory, marketing and consumer service costs give room for economy of scales and create entry barriers to new pension providers. Effectively, there are few players (pension providers) operating in these markets. This leads in natural way to market’s oligopolistic configuration and weak competitiveness.

Problems of supply have also their counterparts in the demand size. The literature noted that such individuals are not equipped very well for making difficult financial choices and tend to be very passive with regard to choosing products and providers. Vast majority of pension fund members do not react to the information about investment returns and prices (fees) charged by pension providers). This inertia is reinforced due to pension markets’ mandatory character and limited number of providers. As a result, pension managing companies treat their members as “captive clients” (i.e. those who do not have much choice) and do not provide an offer competitive in terms of fees, investment results and pension service. Also, resources tend to be used inefficiently in such markets. Impavido et al. (Impavido et al. 2010, p. 2) in their excellent study on DC market industrial organization note that pension managing companies in such markets have disproportionate market power and therefore they can charge higher fees that exceed average costs. Pension managers tend to spend enormous money on sales agents that try to persuade clients to change pension providers⁸. These “marketing wars” do not improve the welfare of members and also undermine the long-term creditability of such systems.

⁷ Such as gender, state benefits, future contributions, projected changes in interest rates and in longevity.

⁸ For the case of Polish pension market see Kawiński and Stańko (2009) discussing possible ways to regulate sales agents’ activity, and Stańko (2010) analysing the transfers of OFE clients between the providers.

Disconnection of accumulation and decumulation processes

Another important problem observed in many funded pension pillars is the actual discontinuity between the accumulation and decumulation stages (Impavido et al. 2010). Pension funds managers focus on delivering current returns, but not on the final value of retirement income. In numerous countries the pay-out markets are either still to begin their operations or are very limited. Even in developed markets, there is “very little integration between the accumulation and decumulation stages” (Blake et al. 2008, p. 1) and pension fund managers invest the contributions of pension fund members taking into account their risk aversion but not the standard of living their members desire at the decumulation stage. Blake et al. (ibidem, p. 2) conclude that “fund managers have no target fund to accumulate”, i.e. the structure of the pre-retirement portfolio does not correspond to the ultimate retirement products the members will want or will have to use.

Other issues

Obviously, the DC pension arrangements come across many other issues that may call for solution. These could be costs, higher than in the case of DB plans, due to the fact that more often than not DC arrangements base on individual retirement accounts. This makes the systems more costly due to the fact that some resources must be devoted to marketing, advertisement and servicing of pension plan/fund members to facilitate their decision making. Also, from social policy perspective, DC solutions often do not involve risk-sharing mechanisms. The “what you receive is what you get” rule is very transparent however for low-income individuals or those who had been affected by social risks results in inadequate pension benefits which may call for the state intervention (such as redistribution mechanisms).

Conclusions: potential measures to address DC-related challenges

Policy makers as well as pension supervisors should focus on finding solutions to challenges outlined in the paper. As a matter of fact, the International Organisation of Pension Supervisors has already conducted a study (Paklina 2016) which analyses how supervisors may contribute to the consumer protection in pension markets, with a focus on DC arrangements. This area is also subject of work of the OECD on the design of DC plans (OECD 2012b) and their regulation (OECD 2016).

With regard to facilitating decision-taking process of DC pension plan members, the main tools are financial education and information disclosure. Financial education should preferably be targeted and properly timed (e.g. Paklina 2016, pp. 45–46). Information presented to pension scheme members should be transparent, relatively simple and should have behavioral purpose, i.e. should make the recipients aware why they receive this information and what are they expected to do (EIOPA 2013b, p. 40, 43, 47). One of good practice is to provide the information in layered format (ibidem, pp. 30–32; Paklina 2016,

p. 24–40) — where the first layer contains the most essential information so that not to overwhelm the individuals with too much data. This may relate to information about providers, their investment returns and costs. Recently, a lot of attention is devoted to developing pension benefit statements and other types of key information documents that provide the information in simple and succinct way. Pension plan members can also benefit from various types of pension calculators and pension projections (Antolin, Fuentes 2012; Paklina 2016, pp. 33–37). The advantage of the latter is that pension fund members can visualize the risk and uncertainty more easily, as well as better understand the potential effects of their decisions. By using interactive projection tools they can also verify their expectations with regard to future value of retirement benefits and get more accustomed to taking retirement decisions.

Obviously, financial education and information disclosure are not exhaustive and should not work in isolation. Individuals may still find it difficult to decide even when offered information of reduced complexity. Therefore, the most efficient way of handling this problem seem to be default mechanisms, i.e. arrangements that will be given to an individual if he or she does not take active decision. Default options can be designed for decisions on contribution rate, participating in a pension scheme (default opt-in which is used in auto enrolment processes), investment policy, the investment provider (e.g. the state provider or the cheapest market operator) and retirement product (e.g. life annuity). It seems particularly useful to introduce the life cycle funds discussed in the paper as default solutions for DC members (Impavido et al. 2010, p. 5). The design of such funds should be given appropriate consideration, including behavioral aspects (NEST 2010).

Another group of solutions aimed at improving the choices by DC pension scheme members are various comparison platforms for pension providers (their fees) or pension products (their features and prices) as already introduced in Chile and Hong Kong, China (Paklina 2016, p. 33).

Pension supervisors have an important role in checking the quality of pension services and products (with the power in some jurisdictions to analyze them before entering the market or banning them if found inappropriate), information disclosure and market conduct.

More long-term oriented investment as well as better connection between accumulation and decumulation phases can be obtained by introducing target annuitization funds as postulated by Impavido et al. (Impavido et al. 2010, chapter 4) and Stewart (Stewart 2014). Such funds have a target maturity date and investment portfolio whose construction is driven by a consumption target (expressed as cash, replacement rate or desired level of retirement income) at retirement. Such solution can help also to address the disconnection between accumulation and decumulation phases present in majority of DC arrangements. Staňko (Staňko 2015) presents a concept of target retirement income that also tries to address this issue. One of practical examples described in the paper is the Danish ATP fund which basically hedges annuitization risk by gradual purchases of the future retirement income streams (*ibidem*).

In case of the oligopolistic DC market structure, policy makers may consider introducing centralized institutions that could deal with administration of accounts (therefore lowering costs) whereas investment function could be entrusted to wider range of asset managers. This solution, present in Sweden, additionally benefits from lower costs of asset management (as the centralized institution has better negotiating power than individuals to obtain discounts for such services) and reduction of marketing costs (as with anonymous clients pension providers may focus on asset management function only). Recently, Chile and Peru have experimented with introducing auction mechanisms for asset management of young individuals entering the labor market; this mechanisms aims at lowering asset management costs and encouraging new managing companies to enter the pension market. Centralization may, at least in theory, relate also to investment function itself — however this could create some governance issues.

Marketing wars related to pension fund switches between providers can be addressed by introducing administrative barriers or banning this activity (Stańko 2010). Mexican regulator has recently introduced an information booklet that shows whether the perspective pension administrator has a better or worse pension returns net of fees. It also made modifications to the remuneration system of sales agents — switches of accounts with less than 30 months in the current pension fund will only be remunerated with 20% of the normal switch fee (Paklina 2016, p. 29, 14).

Apart from some market designed solutions mentioned above, to lower the costs, policy makers may also consider introducing standardization of fees that can be charged to the members, setting up rules for non-discriminatory fee policies, introducing maximum levels of fees (caps), forbidding bundled sales, reducing or banning sales activity, switching to passive asset allocation strategies.

Defined contribution pensions will definitely be a subject of continuous debate. One needs to remember that even though there are some general good practices that may be used, but any detailed solutions will be inevitably country specific. It seems that one of potential avenues that might be further explored by policy makers is to accommodate best features of DC and DB to create some sort of hybrid solutions (e.g. Dutch defined ambitions or Canadian target benefit plans) that satisfy the needs of pension members and providers (Stańko 2015).

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Streszczenie

Wzrastająca rola konstrukcji emerytalnych o zdefiniowanej składce (DC) oznacza, że coraz więcej osób jest narażonych na różne ryzyka emerytalne. Co więcej, rozwiązania typu DC nie są wolne od istotnych wad. Celem artykułu jest przedyskutowanie podstawowych wyzwań, przed jakimi stoją członkowie takich planów emerytalnych oraz decyzji, a także krótkie przedstawienie możliwych rozwiązań.

Słowa kluczowe: zdefiniowana składka (DC), plany emerytalne, fundusze emerytalne, polityka emerytalna