Summary

Purpose – The aim of the paper is to assess changes in the functioning of open pension funds (OFE-s) in the context of Poland’s fiscal situation. These changes are beneficial from the point of view of the current condition of the public finance sector, however in the longer term they may have a negative impact on Poland’s fiscal situation.

Research method – The authors analysed and processed data and information available from Eurostat, the Central Statistical Office, publications from the Ministry of Finance, the stooq.pl portal listing quotes on the financial market and publications in which the authors estimated hidden debt in Poland. Based on the analysis undertaken, conclusions relating to the studied problem were formulated.

Results – The changes initiated in 2011 and consisting in limiting the significance of the capital pillar of the social security system in Poland (OFE-s), and subsequently planned in 2020, the final liquidation of open pension funds has a positive effect on the current condition of the public finance sector in Poland limiting the borrowing needs of the state, the deficit and registered public debt. The changes weaken Poland’s fiscal position as they contribute to a significant increase in hidden debt recorded on individual accounts and sub-accounts at the Social Insurance Institution.

Originality /value – It was proved that in the years 2013-2019 the indexation rate (measured by the geometric mean) of funds on pension sub-accounts at the Social Insurance Institution was 36.7% higher than the profitability of 10-year treasury bonds, thus generating additional hidden debt. The analysis also indicated the possible negative long-term consequences for Poland’s fiscal situation resulting from the final liquidation of open pension funds.

Keywords: Open Pension Funds, pension system, fiscal situation, social insurances, Poland

JEL Classification: H55, J26, K31
1. Introduction

In 1999 one of the most fundamental economic reforms, namely the social security reform was implemented in Poland. One of the main objectives of the reforms was to prevent the collapse of public finance as the existing functioning pay-as-you-go system was both exposed to adverse demographic trends and particularly dependent on the state of the labour market. A new pension system was based on the principle of defined contribution which implies complete equivalence of contributions and benefits. In this system, the value of future pensions is dependent on the value of contributions and their indexation level (the pay-as-you-go pillar – the Social Insurance Institution) and on the rate of return from the invested contributions (OFE) [Kłos, 2011, p. 2]. The system aims at encouraging citizens to be professionally active as long as possible because the value of the future pension depends on the capital raised on the insured person’s individual account and on the average life expectancy [Russel, 2016, p. 186]. At the same time, this system resulted in the disclosure of pension debt and this debt was gradually included in the official public debt [Rutecka, 2014, p. 7]. Additionally, it became necessary to supplement (from the state budget) the deficiencies resulting from the requirement to make pension payments whilst at the same time transfer one third of the contribution to the open pension funds (OFE).

The aim of this paper is to assess the changes in the functioning of OFE in the context of Poland’s fiscal situation. These changes appear to be beneficial from the perspective of the current condition of the public finance sector, but in the longer term, they may have negative impact on Poland’s fiscal situation. The first section of the paper presents the definitions and methods of measuring fiscal stability and its impact on deficit and public debt, including hidden debt. The second part of the article includes the presentation of changes in the functioning of OFE during the period 2011-2014 and their influence on the fiscal situation of Poland. This section also includes an attempt to demonstrate the possible negative consequences resulting from the solutions resulting from the regulations on the basis of which it is planned to liquidate OFE in 2020.

2. The definitions and approaches of measuring fiscal stability and its influence on deficit and public debt

The concepts of “fiscal stability” and “debt stability” are frequently used interchangeably. On the one hand, this fact results from English terminology where such phenomena are defined using the concept of sustainability, which means stability or balance. Nevertheless, in the case of fiscal (budget) policy, the concept of sustaining means the zero balance of the state budget (sector balance). On the other hand, fiscal stability relates to the idea of sustainable development. Its essential factor is taking such action in fiscal policy (in terms of budget revenue and expenditure) that does not cause risk to the possibility of meeting needs by further generations, i.e.
they will not make it necessary to increase expenditure on public debt service [Stanek, 2015, pp. 210-211]. In other words, fiscal stability is such a characteristic of fiscal policy which guarantees that a particular country will be able to meet its obligations without making adjustments in terms of revenues and expenditure [Paźcek-Jarmulska, 2016, pp. 48-49]. Therefore, long-term debt stability is almost identical with the stability of the fiscal policy it is determined by. Debt stability is in the easiest method of measurement by observing its relation to GDP.

The fiscal policy conducted in Poland is determined by the fiscal rules related to debt (including the debt of LTU) and the stabilisation rule. Unfortunately, these limitations (which constitute a certain corset for political decisions) are gradually ignored by pushing some public expenditure outside the sector. Such a situation may be illustrated by comparing the way public debt is measured using the Polish method and the EU method (chart 1). Various activities possessing the nature of creative accounting have occurred since 2009.

The differences between the methods used to calculate the adequate value of public liabilities are not the sole reason that it is difficult to find the real changes of public debt. Not all forms of public debt are classified within the Treasury debt or the government debt (EDP). Furthermore, public debt may be “pushed” into the private sector, among others, by transferring the loss-making state activity to the companies of state treasury or to municipal companies).

**CHART 1**

National public debt EDP in relation to GDP (the situation at year end)

![Graph showing national public debt EDP in relation to GDP (the situation at year end)]

Source: [Dług publiczny. Raport …, 2019, p. 92].

It means that the total debt ratio (the relation between debt and GDP specified in the Constitution of the Republic of Poland (or more precisely in the act on public finance), which was presented by the Ministry of Finance or the National Bank, ought to be considered solely as the indicative measure [www 2]. In the existing practice the value of public debt has been calculated on an accrual basis (i.e. when the liabilities are created) instead when the debt is regulated (on a cash basis). In other words, the commitments of the State Treasury towards Poles are not taken into account, for example in the form of the future pensions as they are recorded on
a cash basis – they will be included in the budget in the same year they will be paid [www 1]. Therefore, hidden public debt means the financial state liability that is not included in its budgetary reporting. It is formed when the current value of the future benefits for the presently living generations is higher than the value of the current payment of the funding bodies, especially owing to the functioning of the personal protection system and (as it is frequently indicated in literature) in the health care system [Gołębiewski, Kozłowski, 2011, p. 26].

TABLE 1

<table>
<thead>
<tr>
<th>Author</th>
<th>The date of the estimate</th>
<th>The value of the hidden debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>P. Dobrowolski, Sobieski Institute</td>
<td>2009</td>
<td>at least 170% of GDP</td>
</tr>
<tr>
<td>G. Gołębiewski, Ł. Kozłowski, SGH</td>
<td>2010</td>
<td>176.04% of GDP</td>
</tr>
<tr>
<td>J. Jabłonowski, NBP</td>
<td>2011</td>
<td>182% of GDP</td>
</tr>
<tr>
<td>A. Łaszek, SGH, FOR</td>
<td>2013</td>
<td>193% of GDP</td>
</tr>
<tr>
<td>The Central Statistical Office</td>
<td>2015</td>
<td>276% of GDP</td>
</tr>
</tbody>
</table>

Source: own elaboration based on: [www 1; Gołębiewski, Kozłowski, 2011, pp. 25-48].

3. Changes in the functioning of OFE and their impact on the fiscal situation of Poland

After more than a decade, the functioning of a new pension system in Poland changed considerably in 2011. A significant fact is that the main reason of modifications in the pension system (which came into force on 1 May 2011) was the difficult situation in public finance (similar to the situation in 1998) [Russel, 2012, p. 110]. Since the implementation of the pension reforms in Poland, the value of the contribution to the open pension funds amounted to 7.3% of its assessment basis. Based on the act of 25 March 2011 [Act, 2011] regarding the modification of certain acts connected with the functioning of the social security system it was reduced to a level of 2.3% of its assessment basis and such value was supposed to be valid between May 2011 to December 2012. It was anticipated that it would gradually increase from 2.8% in 2013 to 3.5% starting from 2017. At the same time, under this act the Social Insurance Institution was obliged to register the sums by which there were reduced contributions, which is presently transferred to OFE, on a specially created sub-account. Afterwards, the rule was adopted so contributions registered on an individual sub-account in the Social Insurance Institution in each year will be valorised by the value that has the identical value as the average annual dynamics of the gross domestic product in at current prices for the last 5 years preceding the valorisation deadline, whereas for the individuals who acquired rights during the year, the valorisation of contributions will take place on a quarterly basis.
The modification is beneficial from the perspective of the budget deficit value and the value of transparent public debt, but it has negative influence on the long-term fiscal situation as the adopted way of amortising funds on the Social Insurance Institution sub-account (chart 2) contributes to the generation of increased pension liabilities to future pensioners.

CHART 2

The indicators of the annual indexation of pension contributions entered in the sub-account operated by the Social Insurance Institution announced in the years 2013-2019

Source: own elaboration based on: [Komunikat Prezesa Głównego Urzędu Statystycznego w sprawie..., 2013-2019].

It should be noted that the valorisation of contributions on sub-accounts at the Social Insurance Institution is considerably higher than the profitability of long-term treasury bonds (chart 3). The geometric mean calculated based on the aforementioned data shows that in the period 2013-2019 the rate of the valorisation of contributions was 36.7% higher than the profitability of 10-year treasury bonds. Such regularity is in line with the forecasts of the Ministry of Finance in 2011 included in the explanatory memorandum to the government project of the act on the modification of certain acts connected with the functioning of the social security system [Uzasadnienie do rządowego projektu ustawy..., 2011], which indicates that “the moving average (in the last five years) of the nominal growth of GDP will be higher or equal to the average profitability of bonds”, while the alignment will take place as late as 2030. Therefore, during the reduction of the rate of contribution to OFE attention was drawn to the fact that the increase of obligations, which results from the manner of sub-account valorisation, will be higher than the cost resulting from the issue of securities.
Further changes (more radical ones) in the pension scheme were adopted at the end of 2013. According to the new rules, on 3 February 2014 there was a transfer of more than a half of the funds (51.5%) to the Social Insurance Institution that were invested by open pension funds mainly in treasury bonds. Consequently, from the account of each future pensioner in OFE more than 50% of deposited funds disappeared and were later “added” to the sub-account operated by the Social Insurance Institution. However, in OFE there remained funds that had been invested in shares or corporate bonds. What was changed as well was the value of the contribution transferred to OFE – it was determined at the constant level of 2.92% of the assessment basis. However, it appears that one of the key changes was the introduction of the principle of voluntary basis, i.e. all the present members of OFE had 4 months (from 1 April 2014 to 31 July 2014) to specify whether they were still willing to transfer part of their pension contribution to OFE – the lack of decision was synonymous with transferring all the contribution in the amount of 19.52% to the Social Insurance Institution [Gołębiowski, Russel, 2014, p. 201], whereas the possible change of the decision would be possible once in four years. Furthermore, the amended provisions introduced the principle of gradual transfer of the capital deposited on individual accounts to the Social Insurance Institution in the 10-year period before a certain person reaches the retirement age (the so-called safety zipper) and the obligation to transfer the entire pension contribution to the Social Insurance Institution within a period of 10 years prior to reaching the retirement age.

The transfer of assets from OFE to the Social Insurance Institution worth approx. 153 bln PLN enabled the reduction of public debt service costs by approx.
0.6% GDP in the years 2014-2015 and considerably reduced the state’s borrowing needs in the years 2016-2018 [Lewandowski et al., 2014, p. 26]. At least the same financial effect was achieved due to the implementation of the voluntary basis of transferring further contributions to OFE. As the act adopted the solution where the default option was the transfer of the total contribution to the Social Insurance Institution, only approx. 2.5 mln people decided to continue saving in OFE. The current state of public finance (and the value of the public finance sector deficit) was positively affected by the introduction of the “zipper” as it reduced the amount of necessary subsidy to FUS. As a result, in the years 2015-2018 it was possible to considerably reduce the value of the public finance sector deficit as well as the relation between the implicit public debt and GDP (charts 4, 5).

**CHART 4**

The balance value for the sector of government and self-government institutions in Poland in the years 2008-2018 compared to the maximum limit specified in the Maastricht Treaty (in % GDP)

![Chart 4](chart4.png)

Source: own elaboration based on: [www 3].

The changes in the functioning of OFE made in 2014 resulted in a considerable reduction in the scale of debt of the sector of government and self-government institutions to GDP from 55.7% in 2013 to 50.4% GDP in 2014, i.e. public debt was reduced by as much as 5.3 percentage points. It happened mainly due to the redemption of treasury bonds possessed by OFE. However, in the years 2015-2016 the debt of the sector of government and self-government institutions in relation to GDP began to increase again and in the subsequent years there can be observed the downward tendency, mainly as the consequence of very good economic situation (chart 5).
While the changes in OFE had a positive influence on the current situation of the public finance sector, in the long-term perspective it appears that they will have negative impact on the fiscal situation of Poland because of the adopted manner of valorisation of provisions on ZUS sub-accounts the pension liabilities will increase quickly enough. Although the realisation of these liabilities is temporarily suspended, in accordance with the estimates of the Institute for Structural Research until 2050 the accumulated expenditure from the sub-account will amount to 374.6 bln PLN, where 149.9 bln PLN constitutes the additional cost induced by the transfer of assets from OFE to the Social Insurance Institution [Lewandowski et al., 2014, p. 13].

In 2020 it is planned to ultimately liquidate open pension funds, whereas detailed solutions are included in the government draft of a bill concerning the amendment of certain acts due to the transfer of funds from open pension funds to individual retirement accounts (the Seym Paper No. 114)\(^2\). It should be noted that the suggested solutions may negatively affect the fiscal situation of Poland, especially in the long-term perspective. The government assumed that it will take 15% of any conversion fee for the transfer of the funds deposited in OFE to the individual retirement accounts (IKE), while the funds for this purpose will supply the national budget only in the years 2020-2021. In fact, it means “in advance” because it was assumed that the withdrawals from IKE which were realised upon reaching the pension age, will not be taxable. The government estimates which were presented dur-

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\(^2\) Till 5 March 2020 the legislative process related to this project had not been completed (the law passed by Seym on 13\(^{th}\) February 2020 was submitted to the Senate).
ing the assessment/evaluation of the regulation effects (while assuming that 80% of OFE members will choose the transfer of funds to IKE) indicate that one-off proceeds to the budget under the transformation fee in 2020 will amount to 12.6 bln PLN, whereas in 2021 5.4 bln PLN. Additionally, the high (15%) transformation fee, which is fair only from the perspective of individuals before retirement (however, such individuals have scarce funds in OFE owing to the functioning zipper mechanism) may encourage the transfer of funds to the Social Insurance Institution, and thus increase pension liabilities. Such an encouraging factor may be the high index of pension contributions’ valorisation, which in the years 2013-2018 oscillated from 102.06% for 2014 up to 109.2% for 2018 [www 6], while the geometric mean of this indicator value in the analysed period amounted to 106.01%. Additionally, it may be assumed that by implementing the solution (a default option is the transfer of funds from OFE to IKE) the funds deposited in OFE will be transferred to the Social Insurance Institution by individuals that know more of the way the pension system functions, have higher education and life expectancy higher than average, which additionally may cause greater financial imbalance of FUS, and thus negatively affect the fiscal situation of Poland in the long-term perspective.

4. Conclusions

The analysis presented in this paper enabled the formulation of the following conclusions:

– the changes in the functioning of open pension funds (which occurred in the years 2011-2014) contributed to decreasing the deficit of public finance sector and resulted in reducing the increase rate of the national public debt,

– the adopted rules regarding the valorisation of funds on the sub-account operated by lead to the situation where the increase of hidden pension debt will be greater than the remitted part of debt increased by hypothetical interest, which negatively affects the short-term stability fiscal of Poland; additionally, it should be noted that already in 2015 the hidden debt in Poland, which was estimated by GUS, constituted 276% GDP, i.e. it was a few times higher than the implicit public debt,

– the final liquidation of OFE planned for the year 2020 has positive effects on the public finance sector in the short-term perspective (among others by means of one-off budget revenues related to the transformation fee); however, in the longer time perspective it is likely to generate additional risks for the fiscal situation of Poland -the lack of tax at the moment of withdrawing funds from IKE, the possible scenario (in accordance with which funds will be transferred to the Social Insurance Institution by the individuals characterised by considerably longer than average life expectancy) is that it will be necessary to provide life annuities from the social security system for a considerably longer time period than it would result from the tables
Winding up of open pension funds (OFE-s) in the context...

In summary, it should be noted that the changes connected firstly with reducing the importance of the fully-funded pillar of the social insurance system and later on with its final liquidation in 2020 had a positive effect on the current condition of the public finance sector in Poland as it reduced the lending needs of the state, deficit and the registered public debt. However, they weaken the fiscal situation of Poland because they contribute to considerable increase of hidden debt on individual accounts and sub-accounts in ZUS. Additionally, the adopted manner of the indexation of financial resources on sub-accounts leads to the situation where the total debt (implicit debt increased by hidden pension obligations) will still rise, increasing thus the fiscal pressure on the future generations which, as the forecasts indicate, will be considerably less numerous.

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