Zhivko Minkov

Political risks and prospects for the strategic development of the funded pension pillars in Bulgaria

Abstract

This article illustrates and analyses the main problems and political challenges faced by the system of funded pension pillars in Bulgaria. It is motivated by the specific direction in which the pension debate has resumed in the country in the aftermath of the crisis, as well as by recent reform attempts that contravene the multi-pillar design and the complementary balance between the solidarity and funded approaches of meeting retirement risk, on which the new pension model has been developed after 1999. The main goal of the article is to put under critical analysis and evaluation the development and the leading problems of the funded pension pillars system in Bulgaria and to discuss possible reform steps and directions for its future evolution. The article concludes that adequate solutions must be found if the current crisis of trust and legitimacy of the pension model in the country is to be resolved; and that only then can the different pillars of the system have a chance of generating the sorts of pensions required if Bulgarians are to have a decent living standard in retirement.

Keywords: *funded pension pillars, pension model in Bulgaria, reform of funded pension pillars*

Introduction

The global financial crisis of 2008, which transformed into economic stagnation in the ensuing period, has led to a resumption of the pension debate in Europe. In 2008, pension funds in the countries of the Organisation for Economic Cooperation and Development (OECD) lost about 20 per cent of their assets (Antolin and Stewart, 2009: 2). This has led to the current debate being focused on the problems of funded pension schemes, which are expected to provide in the future adequate incomes in retirement for European citizens. Parallel to the main problems (a whole complex of issues related to the functioning, assessment and regulation of funded pension schemes), it also demonstrated the need for this issue to become an integral part of the study of and research into European pension systems. Along with this, however, the reforms carried out after 2008 in some European countries have shown the vulnerability of some of the reformed European pension models arising from political pressure and the certain dangers of hasty and wrong political decisions.

The main focus of this article is the political risks facing the development of the pension model in Bulgaria and, in particular, its funded pillars. Interest in this issue is prompted primarily by the specific direction in which the pension debate in Bulgaria has been reactivated, as well as by recent reform attempts that contradict the design of the multi-pillar system and the complementary balance between the solidarity and funded approaches of meeting retirement risk on which the new pension model has been developed after 1999. It would hardly be an exaggeration to state that the current political environment in the country generates hazards in respect of the taking of populist and hasty decisions that would have negative medium- and long-term consequences for the pension model. Furthermore, such a reform approach may lead to a blockage of the overall process of development and evolution of funded pension pillars in Bulgaria and paralyse the implementation of a number of urgently-needed changes to optimise their activity in view of the accumulated international experience and expertise in this field.

Based on this, the main goal of this article is to scrutinise and evaluate the development and the essential problems of funded pillars in the Bulgarian pension model and to search for the possible directions of their future development.

The analysis is structured into four sections. The first section has the main task of setting out the principal goals, objectives and specific characteristics of the second and third pension pillars in Bulgaria. The second section aims to illustrate the development of the funded pension pillar system in the country in the period between 2002 and 2015, and is based on a number of key indicators such as the rate of investment return, the number of insured people, etc. The third section is devoted to a delineation of some of the significant issues in the development of funded pillars in Bulgaria and to an assessment of the political responses made to address them which have emerged in recent years. The fourth section is somewhat heuristic in nature, since it structures a hypothetical prospect of development as one possible option of the evolution and consolidation of the pension model in the country.

Basic characteristics of the funded pension pillar system in Bulgaria

The introduction of funded pillars in Bulgaria is part of the overall change of the pension system undertaken in the period 1999 to 2002 (Noncheva and Satscheva, 2003: 1-160). In general, the reform in Bulgaria is, to a significant degree, an adapted version of the three-pillar pension model of the World Bank developed in the 1990s. Its main characteristics are not very different from the pension reforms undertaken in other countries of central and eastern Europe. The new Bulgarian pension model is founded on three pillars. The first is a modified pay-as-you-go pillar (mandatory pension insurance), binding for all employees and based on the solidarity principle. The second pillar (supplementary mandatory pension insurance) was recently introduced by the reforms of 1999-2002 and the third pillar (voluntary pension insurance) are funded pension schemes on a defined contribution basis.

Additional obligatory pension insurance is realised through the accumulation of individual accounts in two varieties of pension funds – universal pension funds (UPF) and professional pension funds (PPF). All those in the first category of labour who were born after 1959 must contribute to UPF until all working in the second and the first categories of labour are obliged to contribute to PPF. The amount of the contribution to UPF currently stands at five per cent (this will be increased to seven per cent in 2017). PPF contributions amount to twelve per cent for those in the first category of labour and seven per cent for those working in the second. Contributions to the mandatory second pillar provide the right to a so-called second pension, which is lifetime and hereditary (UPF) and fixed-term and hereditary (for PPF); and its amount depends on the amount accumulated in the individual account and the investment return achieved by the respective pension fund.

The third pillar is based on the principle of voluntary participation and is accessible to every citizen, aged 16, whether or not they are employed. Voluntary pension insurance is carried out via contributions to voluntary pension funds (VPF) and, after 2007, additionally in funds for voluntary pension insurance under occupational schemes (VPFOS). The amount of the contribution is determined by law only at its minimum value (10 per cent of the minimum monthly salary). Despite the voluntary nature, participation in the third pillar is subject to special tax incentives provided both for employees and employers who provide for their employees.[1] Contributions to VPF and VPFOS form supplementary pension rights, the amount of which depends on the amount and duration of the contributions as well as on the investment return achieved by the respective pension funds and the fees that they deduct for their investment services. The additional pension can be paid monthly until the accumulated individual account is depleted or may be paid as a single lump sum (all the assets of the ensured are inherited in the event of death).

The second and third pension pillars in Bulgaria, as well as the majority of functioning funded pension schemes in central and east European countries, are based, in many respects, on the experience accumulated in previous decades rooted in the operation and regulation of pension funds in other countries. Furthermore, they comply with a number of the specific factors and conditions (the degree of development of financial markets, the maturity of the financial system, the prevailing level of insurance culture, etc.) applying within these countries. The result has been that, in comparative international perspective, the Bulgarian funded pillars are characterised by a relatively conservative modelled regulation of the opportunities for investing activities and a desire to strive for a reduction of the risk borne by their participants. In the period after 2006, these regulations evolved towards a certain liberalisation, but the very philosophy of the initially-envisaged design of the two pillars, and particularly of the second, is aimed at an attempt to ensure a high protection of the interests of participants. The essence of this is expressed in the presence of a set of prohibitions on the use of certain investment instruments, quantitative restrictions on investing activities, a required minimum investment return guarantee (as regards the second pillar) and legally-established maximum fees that pension funds must comply with in their activities.

The ban on using certain investment instruments includes securities traded on non-regulated markets; foreign securities that are not included in the index; most derivatives (excluding hedging transactions); and securities that are not fully paid. There is a ban on trading in securities issued by a pension insurance company which

1 Up to 10 per cent of the total amount of insurance payments are exempt from tax. If employers make contributions for their employees, they are entitled to deduct that percentage of the monthly taxable income of the insured employee.

manages the fund itself, or by related parties, as well as in securities issued by the custodian bank or an investment firm of the fund or persons related to them (Димитров, 2015: 12).

The quantitative restrictions regarding the second pillar (UPF and PPF) set maximum limits on the following instruments: the right to invest directly in shares up to a total of 20 per cent of fund assets; a limit of 15 per cent of assets targeted for participation in collective investment schemes; no more than 5 per cent of assets being invested in securities issued by a company; and a right to invest up to 15 per cent of assets abroad. In addition, in the period 2002 to 2006, there was a mandatory requirement to invest 50 per cent of assets in securities either issued by the state or guaranteed by the state.

The regulation of VPF and VPFOS is, while similar, a little more liberal: the restriction on the maximum level of investment abroad is 20 per cent; the maximum amount of investment in company securities is 10 per cent; and, up to 2006, when this requirement was waived, the statutory minimum amount of assets which had to be invested in government securities or securities guaranteed by the state was 30 per cent.

The minimum investment return guarantee set in pension fund regulation only applies to the second pillar (UPF and PPF). It is determined by the controlling body, the Financial Supervision Commission (FSC), at the end of each quarter. The guarantee is based on the investment return during the last two years (in the UPF, based on the return on investment within the UPF; for a PPF, based on the return on investment across all PPFs) and amounts to 60 per cent of the average return on investment of the UPF or PPF for that period, or three percentage points less than the average if this is lower. The general rule on functioning, which is considered a strong motivating feature prompting proper investment management and security, is that, where achieving a lower investment return than the set average return for the past two years, the insurance company managing a certain pension fund is required, within ten days, to cover the difference from its reserves.[2]

The legally-determined maximum level of fees set certain parameters to the capabilities of pension funds to generate profits based on making fee-based deductions for different types of services. Generally, the law determines the existence of two different fee regimes for the two funded pillars. The regulations for the second pillar set three types of fees: a deduction on each contribution to the individual accounts of participants in the fund (in 2016, this is 4.5 per cent); fees levied on investments (up to 0.9 per cent of the net assets of the fund for 2016); and a flat fee (of BGN 10), paid by the insured person, for transferring the funds in an individual account to another pension fund or to the system of compulsory pension insurance. The opportunities for income in VPF and VPFOS are the following types of fees: a fee for opening

2 The insurance companies that manage pension funds are obliged to set up a reserve fund for this purpose. In the reverse case, i.e. when achieving a level of profitability higher than the average return by 40 per cent or more, or higher by three percentage points than the average (depending on which amount is higher), the insurance company that manages the respective fund is obliged to transfer the additional resources to its reserve fund.

an individual account (BGN 10); deductions on any contributions (up to 7 per cent); investment fees (up to 10 per cent of the income generated by the investment of assets); and fees for transferring assets, for withdrawals (total or partial) of the accumulated funds and for requesting information more than once per year.

This presentation of the main features of the Bulgarian funded pillars allows us to draw some important conclusions. Firstly, it has to be stressed that, unlike some countries in Latin America, the so-called second and third pillars in Bulgaria do not aim to replace the existing first pillar in the medium-term, only to ensure that, via the future diversification of instruments and approaches, the risk of ageing may be met. Their role and function are linked to a predefined requirement that may best be expressed as supplementing the level of pensioners' future income. This is best illustrated by the relative share of retirement income that may be attributed to each in the new pension model. In concrete terms (after the transitional periods expire and the new pension system is consolidated), the expected total cumulative replacement ratio is between 70 and 80 per cent of disposable income before retirement (net factor). At least according to the parameters of the reforms of 1999-2002, the first pillar is expected to generate about 40 per cent of disposable income before retirement; the second pillar, about 20 per cent; and the third pillar, between ten and twenty per cent (Holzmann and Guven, 2009: 78-80).

Along with this complementary nature, it should be noted that there is a difference between the two funded pillars when it comes to their relative weight and the role they play in relation to retirement income. The second pillar envisages an increasing role for future retirement income. Directed mainly to this are the hopes that funds will generate sufficient resources not only to provide adequate pensions for future generations but also the possibility that they will go beyond a basic level of pension. Owing to its voluntary nature, and despite also having such a potential in principle, the third pillar does not imply the possession of a universal and decisive impact regarding future retirement income.

The second main feature of the funded pillars in Bulgaria is their early stage of development but that they are fully based on the defined contribution principle, in which the risks of the loss of savings and of the results of investment activities being poor are carried entirely by the insured. Due to that, the activity of pension funds is linked to a comprehensive and strict regulatory framework (ban on certain investment instruments, quantitative restrictions, return guarantees and a maximum fee regime), which aims to protect the insured and stimulate good governance of their assets.

Characteristic of the initial design of the funded pillars is the selective application of some of the best practices of global experience in the regulation and management of pension funds, while certain others are skipped. An example of this is the adopted approach of minimising administrative costs through the setting up a single operator which enrols the insured and collects their contributions and then distributes these to the respective pension funds (the second pillar). On the other hand, the type and especially the amount of some of the fees that may be imposed by the funds for their services are not based on solid foundations, although they are clearly defined in the legal framework. Furthermore, despite being introduced relatively recently, the initial design of the Bulgarian funded pillars lacks wider application opportunities for investment management and the development of investment portfolios of pension funds according to life-cycle principles, i.e. so-called multi-funds.

Ultimately, at least in this initial version, the overall design of funded pillars in Bulgaria relies on an approach which is largely conservative in its nature and which limits optimal risk-taking in relation to funds' investment activity.

Development and results of funded pension pillars in Bulgaria

The characteristics already outlined in the previous section, i.e. a complementary, yet significant role related to pensioner income and the relatively conservative regulation of the possibilities for investment activities, set the initial conditions and the parameters for expectations to be both certain and realistic. Moreover, any attempt at assessment inevitably has to take into account several important factors of influence, like: the initial phase of development (the so-called stage of asset accumulation), on which the funded pillars are currently positioned; the degree of development of the investment and fund market in Bulgaria; the dynamics of economic development in the country and the world in this period; the specifics of the labour market and levels of earnings; and the level of insurance awareness and investment culture of the population. Taking into consideration the aggregate effect of these factors and conditions creates a safe and realistic basis for an objective assessment of the development and activity of funded pillars in the pension system. Furthermore, it gives a relatively good chance to draw a dividing line between the influence of the objective conditions and opportunities, and certain weaknesses, lack of adequacy of the existing regulations and the possible mismanagement of investments by pension funds. These, in their overall impact, form the results of the activities of pension funds to date.

The development of funded pillars in Bulgaria after 2002 can be assessed as relatively successful. This finds expression in the steady increase in their scope (the number of participants) as well as the accumulated and managed assets they command.

Table 1 – Dynamics of the number of insured persons in supplementary pension insurance by types of pension funds, 2002-2016

	UPF	PPF	VPF	VPFOS	Total
2002	1 164 428	155 196	484 791	-	1 804 415
2003	1 613 875	164 943	516 148	-	1 844 966
2004	2 004 776	176 175	535 416	-	2 716 839
2005	2 239 512	182 476	549 851	-	2 971 839
2006	2 442 701	192 843	565 782	-	3 201 326
2007	2 640 652	207 357	592 805	-	3 440 814
2008	2 813 914	221 255	604 408	4 259	3 643 836
2009	2 934 924	226 929	598 336	4 769	3 764 958

	UPF	PPF	VPF	VPFOS	Total
2010	3 045 691	234 280	597 968	4 894	3 882 833
2011	3 144 808	247 333	595 287	5 078	3 992 506
2012	3 239 401	256 268	591 014	5 819	4 092 502
2013	3 330 031	262 051	589 861	6 222	4 187 985
2014	3 421 669	269 486	593 542	6 402	4 291 099
2015	3 504 316	278 062	597 683	6 802	4 386 863
2016*	3 536 261	282 456	598 832	7 036	4 416 185

Source: According to FSC: http://www.fsc.bg/bg/pazari/osiguritelen-pazar/statistika/statistika-i-analizi/ (retrieved 16 August 2016).

* Data refers to the first half of 2016.

Between 2002 and 2016, the total number of insured people in mandatory supplementary pension insurance (UPF and PPF) has been growing steadily. The UPF dynamics unfold between 1.2m insured people in 2002 to 3.5m in the first half of 2016. In view of the specific nature of the PPF, the dynamics here are less pronounced – rising from 155 000 to 280 000 (Table 1).

That the rapid increase in people involved in the second pension pillar, despite a period in which there was a significant rise in unemployment during 2008-09, is able to retain its positive value is the result primarily of the binding character of the system for all employees born after 31 December 1959. It is logical that, in every subsequent year, the absolute number and the proportion of all employees of people participating in the universal and professional pension funds should increase. This is a result of the sustainable withdrawal from the labour market during those 14 years of the generations born before 1959, whereas those born after 1959, including new entrants to the labour market, are obliged to participate in the second pension pillar. This natural process leads to the point at which, in mid-2016, the total number of insured people in compulsory pension insurance (UPF and PPF) amounts to some 86.7 per cent of the population of the country of working age.

The situation is, however, different with the third pillar. The result of its voluntary nature is that the dynamics of the increase in the number of people involved in the third pillar is far less pronounced. Across the entire period from 2002 to 2016, the total number of participants in the third pillar rose from 485 000 people in 2002 to a peak of 604 000 in 2008 but, in the first half of 2016, amounts to no more than 598 000. If we add to the data the voluntary pension funds under occupational schemes, which started functioning in 2007 and, in mid-2016, cover approximately 7 000 insured parties, the total scope of the third pillar does not exceed more than 610 000 people. These estimates illustrate the level of participation in the third pillar which, in 2016, amounts to about 13.8 per cent of Bulgaria's population of working age and about 8.4 per cent of the total population of the country (НСИ, 2015: 1-5).[3] In fact, participation in the third pension pillar may be defined as a limited phenomenon among the Bulgarian population which in a relatively extended period of about fourteen years, shows no significant signs of expansion and the involvement of wider layers of citizens.

An explanation of this trend cannot be attributed to the action of a single factor. In all cases, the voluntary nature of the third pillar plays its role but that in itself speaks of an underdeveloped culture of saving and/or a lack of trust in the institutions of voluntary pension insurance. At the same time, it is no less likely to refer to the overall level and structure of income in the country which, together with the levels of unemployment, make the spending of additional resources on insurance against the risk of ageing impossible for some Bulgarian citizens.

Along with the increase in the number of insured people, the funded pillars of the country have sustainably increased their assets under management. The total volume of the second and third pillar increased from BGN 332.5m in 2002 to BGN 9.3bn in 2015 and to BGN 9.8bn in the first half of 2016 (Table 2). Measured as a share of GDP, this is estimated at 10.8 per cent for 2015 (Eurostat, 2015).[4]

Table 2 – Dynamics of the net assets of supplementary pension insurance, 2002-2016 (BGN, 000)

	UPF	PPF	VPF	VPFOS	Total
2002	41 750	95 241	195 519	-	332 510
2003	114 058	143 817	252 669	-	510 544
2004	261 125	200 832	325 457	-	787 414
2005	440 844	253 312	417 966	-	1 112 122
2006	707 898	314 292	495 222	-	1 517 412
2007	1 228 362	411 369	678 621	-	2 318 352
2008	1 449 737	367 226	481 737	454	2 299 154
2009	2 178 591	449 425	526 388	1 766	3 156 170
2010	2 908 152	517 309	558 943	2 934	3 987 338
2011	3 532 906	471 129	564 724	3 984	4 572 743
2012	4 487 129	568 928	620 379	5 434	5 681 870
2013	5 467 464	659 910	674 602	7 160	6 809 136

3 According to the 2014 census in Bulgaria. These calculations are made on the basis of a total population of the country amounting to 7.2m people, of which 4.4m are of working age. See: NSI *Population and demographic processes in 2014 (final data)*, pp. 1-5, http://www.nsi.bg/sites/default/files/files/pressreleases/Population2014_2Y19BGI.pdf.

4 According to Eurostat data for 2015, GDP amounted to BGN 86.4bn, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=naida_10_gdp&lang=en.

	UPF	PPF	VPF	VPFOS	Total
2014	6 638 014	760 085	757 608	8 842	8 164 549
2015	7 658 024	832 851	837 050	10 057	9 337 982
2016*	8 090 097	865 590	843 453	10 603	9 809 743

Source: According to FSC: http://www.fsc.bg/bg/pazari/osiguritelen-pazar/statistika/statistika-i-analizi/ (retrieved 16 August 2016).

* Data refers to the first half of 2016

Clearly, the most significant share of the increase in assets under management taken by UPF and PPF is for the former, i.e. for UPF it amounts to an increase of more than 67 times in the period 2003 to 2015 whereas, in the same period, PPF registered an increase in assets of 5.7 times. In comparison, the rate of increase of assets under management within the VPF and VPFOS occupational funds is 4.2 times in the period 2002 to 2015 as regards the former and 19.4 times between 2008 and 2015 as regards the latter.

Another important element to be assessed is the dynamics of the average monthly contribution per insured party. The size of the average monthly contribution to UPF has increased ten times – from BGN 4.46 to BGN 49.37 (Table 3). This is due partly to the gradual increase in the contribution rate for the compulsory supplementary pension, from 2 per cent to 5 per cent, but it is also a result of the process of growth in average gross earnings that, in the period 2002 to 2014, increased by a factor of three.

The dynamics are similar, although more moderate, as regards average monthly contribution in PPF, i.e. from BGN 18.60 in 2002 to BGN 81.97 in 2015, which is an increase of about five times. In VPF, the increase is from BGN 11.38 in 2002 to BGN 102.05 in 2015, or 8.9 times.

Table 3 – Dynamics of average monthly contributions per insured person, 2002 to 2016 (BGN)

	UPF	PPF	VPF	VPFOS
2002	4.46	18.60		-
2003	4.25	23.56	11.38	-
2004	10.58	40.38	64.05	-
2005	15.43	46.77	44.60	-
2006	18.59	54.41	48.82	-
2007	26.46	59.53	96.76	-
2008	31.84	67.80	67.65	-
2009	34.73	70.92	45.02	29.81
2010	37.19	75.77	53.53	29.75

	UPF	PPF	VPF	VPFOS
2011	34.63	73.50	46.99	29.76
2012	38.00	74.41	55.39	31.69
2013	41.60	82.69	53.80	34.63
2014	39.84	77.27	94.96	30.16
2015	44.98	81.97	102.05	31.53
2016*	49.37	92.24	64.40	30.84

Source: According to FSC: http://www.fsc.bg/bg/pazari/osiguritelen-pazar/statistika/statistika-i-analizi/ (retrieved 16 August 2016).

* Data refers to the first half of 2016

It is apparent that the data cannot be interpreted unambiguously. Above all, it illustrates the dynamics of the increase in the nominal value of the average monthly contribution and, here, the actual purchasing power of incomes has not been taken into consideration. Moreover, in terms of UPF and PPF, the established amount of the monthly contribution is a fixed percentage of salary within the parameters of so-called social security income.

In terms of VPF and VPFOS, however, there are richer opportunities at least for circumstantial conclusions. Due to the voluntary character of the third pillar, the amount of the average monthly contribution depends largely on the affluence and judgment of those who are insured. Cross-referencing the amount of the average monthly contribution to the level of the average gross monthly salary determines the profile of the participants and the impact of the economic situation on the capabilities and propensity to save among Bulgarian citizens. Thus in 2007, the year that forms the end of the period of sustainable, but rapid, economic growth of the country, the amount of the average monthly contribution to VPF was BGN 96.76, which amounts to about 22 per cent of the average gross monthly salary (BGN 430). Clearly, the main contingent of Bulgarian citizens participating in the third pillar were people who had a better position in the labour market and an income exceeding the average for the country, allowing them to allocate resources to additional retirement saving. The impact of the financial and economic crisis on the processes of the labour market in the period after 2007 resulted in a contraction of the average monthly contribution to VPF; in 2008, their share of the average gross monthly salary dropped to 12 per cent, reaching its absolute decline in 2009 with an average contribution of BGN 45.02 from an average monthly salary of BGN 609, or 7 per cent. The ensuing period shows some stabilisation in this ratio, i.e. during 2014 and 2015 it amounted to about 11 per cent.

It is natural and logical to witness also a sustainable increase in the average amount of accumulated funds per person in the second and the third pension pillars in the period between 2002 and 2015. Thus the UPF indicator changes from BGN 35 in 2002 to BGN 2 185 in 2015 while, for the PPF, the dynamic is from BGN 610 in

2002 to BGN 3 146 in 2015. In relation to VPF, the growth is from BGN 490 in 2003 to BGN 1 410 in 2015 (Table 4).

Table 4 – Dynamics of the average accumulated funds per person insured in UPF, PPF, VPF and VPFOS, 2002-2016 (BGN)

	UPF	PPF	VPF	VPFOS
2002	35.00	610.00		-
2003	70.67	871.92	489.53	-
2004	130.25	1,139.96	607.86	-
2005	196.85	1,388.19	760.14	-
2006	289.80	1,629.78	875.29	-
2007	465.17	1,984.00	1,144.76	-
2008	515.20	1,659.74	797.04	-
2009	742.30	1,980.47	879.75	370.71
2010	954.84	2,208.43	934.74	599.51
2011	1,123.41	2,085.52	948.66	784.56
2012	1,385.17	2,373.38	1,049.69	933.84
2013	1,641.87	2,679.20	1,143.66	1,150.76
2014	1,939.99	2,985.94	1,276.42	1,381.13
2015	2,185.31	3,145.65	1,400.49	1,478.54
2016*	2,287.52	3,212.04	1,408.50	1,506.96

Source: According to FSC: http://www.fsc.bg/bg/pazari/osiguritelen-pazar/statistika/statistika-i-analizi/ (retrieved 16 August 2016).

* Data refers to the first half of 2016.

The retrieval of these quantitative indicators for funded pillars in Bulgaria gives the indication of a relatively stable period of fourteen years of development. However, in terms of future pension income and the pledged significant role for the funded pillars in relation to this, a main factor in our assessment should be the results of investment activity and the resulting returns. It should be noted that the current track of their profitability covers a relatively short period that still accounts for only a part of the time span necessary to accumulate the funds for future pensions. Information can nevertheless currently be established on the rate of investment return of pension funds in Bulgaria from the data displayed and published according to certain methods by the supervisory authority in the country, i.e. the Financial Supervision Commission. This allows us to trace mainly the nominal rate of return on investment and is based on the so-called time-weighted method.

A number of analyses in the field have noted that the dynamics in the rate of return on investment of pension funds in the country across the entire period between 2002 and 2016 are characterised by passage through a cycle and a half, typical of modern financial market development (Христов, 2015: 11). Between 2002 and 2007, Table 5 shows that the levels of investment return of UPF, PPF and VPF show high values; as regards UPF and PPF in this period, they range between a low of 7.35 per cent (for UPF) and 8.33 per cent (for PPF) in 2006, and a high of 15.38 per cent (for UPF) and 15.75 per cent (for PPF) in 2007. The highest rate of investment return was achieved by VPF (16.55 per cent in 2007), whereas the lowest rate in this period occurred in 2006 (6.83 per cent).

In comparative context, the nominal rate of investment return of Bulgarian pension funds between 2002 and 2007 may be assessed as moderate to high. Above all, this is due to the combination of the conservative and limited investment in the country portfolio and the much better development (in international comparison) of the Bulgarian financial and investment market at this time. Thus, over the entire period, the nominal rate of investment return of Bulgarian pension funds is commensurate with the level in countries such as Estonia, Latvia and Lithuania, but far lower than in Poland and Hungary, for example (Bielawska *et al*. 2015: 28-29).

The period from 2008 to 2014 reflects the onset of the financial crisis and its subsequent impact. In 2008, pension funds in Bulgaria reported a loss of between one-fifth and one-quarter of their assets. The most significant was the loss reported by VPF (-24.71 per cent), followed by PPF (-23.13 per cent) and UPF (-20.15 per cent). In international comparative context, the losses of Bulgarian pension funds in the crisis year are among the most significant. Despite not reaching the levels in countries such as Ireland (-35 per cent) and the USA (-24 per cent), they were far ahead of the losses suffered by pension funds in most European countries such as Germany, Hungary, Finland, Poland, Austria, Luxembourg, etc. where the falls in 2008 were between -2 to -3 per cent and -19 per cent (OECD, 2010: 3). The subsequent years until 2015 were a period of relative recovery, which does not mean that Bulgarian pension funds managed to attain nominal rates of return on investment of the level prior to 2008. Thus, after 2008 the nominal rate of return on investment of Bulgarian pension funds moved within a range of about 7.5 per cent: at their peaks, in 2009 and 2012: UPF: 7.91 per cent; PPF: 7.85 per cent; VPF: 7.60 per cent; and VPFOS: 6.03 per cent (2009); and UPF: 7.47 per cent; PPF: 7.08 per cent; VPF: 8.05 per cent; and VPFOS: 5.21 per cent (in 2012); and almost negative returns, in 2011: UPF: -0.41 per cent; PPF: 0.50 per cent; VPF: -0.33 per cent; and VPFOS: 0.16 per cent. Putting the levels of the nominal rate of return on investment of the Bulgarian funds in comparative context shows that their performance in this period is far removed from the best. Thus, between 2008 and 2015, the nominal rate of return on investment of the Bulgarian pension funds moved around the low to average values of funds in OECD countries. In comparison to other central and east European countries, the investment returns in Bulgaria were comparable to those in countries such as Estonia and Slovakia, but far lower and marked by years of negative returns compared to countries such as Hungary, Poland and Romania (Bielawska *et al*. 2015: 28-29).

Table 5 – Nominal rate of investment return of pension funds in Bulgaria, 2002-2014 (per cent)

	Inflation	UPF		PPF		VPF	VPFOS
		Nominal ROI	Real ROI	Nominal ROI	Real ROI	Nominal ROI	Nominal ROI
2002	-1.30	10.58	12.03	10.78	6.71	9.44	-
2003	5.64	10.99	5.07	11.01	5.09	10.78	-
2004	3.98	11.81	7.53	11.84	7.57	10.45	-
2005	6.45	7.59	1.07	8.33	1.76	9.00	-
2006	6.49	7.35	0.81	8.45	1.84	6.83	-
2007	12.48	15.38	2.58	15.75	2.74	16.55	-
2008	7.76	-20.15	-25.89	-23.13	-28.7	-24.71	-
2009	0.56	7.91	7.31	7.85	7.25	7.60	6.03
2010	4.53	4.99	0.44	5.16	0.60	5.48	4.30
2011	2.75	-0.41	-3.08	0.50	-2.19	-0.33	0.16
2012	4.25	7.47	3.09	7.08	2.72	8.05	5.21
2013	-1.59	4.73	6.42	5.30	7.00	6.35	6.52
2014	-0.88	6.13	7.07	5.89	6.83	6.64	7.33
2015	-0.1	1.47		1.78		1.68	0.67

Source: According to FSC: http://www.fsc.bg/bg/pazari/osiguritelen-pazar/statistika/statistika-i-analizi/

* Data on inflation and the actual returns of UPF and PPF are taken from the Report on the financial situation of pension insurance companies and the universal and professional pension funds managed by them and implementation of the regulatory framework of the ad hoc parliamentary committee of the 43rd National Assembly,

http://parliament.bg/bg/parliamentarycommittees/members/2395/reports/ID/5349

Of paramount importance, however, in assessing the financial performance of the pension funds is the real rate of return achieved and the extent to which they therefore managed not only to defend the purchasing power of savings over a given period but actually to increase these. Assessment is, according to this general guidance criterion, far more moderate and poses a number of substantive issues. In particular, data on the dynamics of average annual inflation between 2002 and 2014 shows that, despite a high nominal rate of return on investment between 2002 and 2008, much of it was actually wasted by the high rate of inflation. The subsequent period until 2015 was characterised both by lower levels of nominal returns and lower levels of inflation. The real rate of return for the period, however, shows large fluctuations, for UPF: between 7.31 in 2009 and -3.08 in 2011; and for PPF: between 7.25 in 2009 and -2.19 in 2011.

It was an assessment of the financial performance of the second pillar that became one of the leading contradictions within the pension debate that had a negative impact in the country and undermined trust in the funded pillars. In 2014, pension funds had by law to publish data on their rates of return, including the real return over a longer time period (2004 to 2014). On the basis of the submitted data, the FSC announced its calculations of the real rate of investment return for UPF and PPF for 2004-2014. It turned out that the data disagreed with the calculations and estimates made by the pension funds. Thus, the real rate of investment return of UPF in 2004-2014, as calculated by the FSC, had a negative value of -1.70 per cent, or -0.16 per cent per annum. For PPF in the same period, the FSC estimated the real rate of investment return to be -2.49 per cent, or -0.24 per cent per annum (Временна парламентарна комисия към 43-то НС, 2015).[5]

In turn, the Bulgarian Association of Supplementary Pension Security Companies (BASPSC) and the Bulgarian Association of Asset Management Companies (BAAMC) presented their calculations which showed different results (a return of 0.49 per cent per annum and 5.1 per cent across the period 2004 to 2014 for UPF) by using a different methodology and accounting for the entire period in which the funds in the second pillar carried out investment activity. In fact, the two parties agreed that, when reporting the period 2002-2014, the actual income of the UPF and PPF had different dimensions. Thus, according to the FSC, the UPF achieved a real rate of return of 1.46 per cent per annum; while PPF achieved 0.98 per cent per annum. The calculations of BAAMC for the same period show that the real rate of return on investment of UPF amounted to 0.46 per cent per annum. Along with this data, some independent studies show that, according to the monetary weighted method of calculating the real investment returns of the pension funds from the two pillars for 2002-2014 amounted to 0.51 per cent per annum for the UPF; 0.46 per cent per annum for the PPF; and -1.08 per cent per annum for the VPF. According to the latter method, the real rate of return per annum on investment on the ten-year period between 2004 and 2014 was 0.51 per cent for UPF; -0.02 per cent for PPF; and -1.59 per cent for VPF (Христов, 2015: 10-11).

This study does not aim to analyse these divergent data, nor does it set the task of comparing one method of calculating against another. Of utmost importance, however, are at least two conclusions related more to the efficiency and the reliability of the current system for monitoring, evaluating and controlling pension funds in the country. Primarily, the conclusion may be drawn that there are significant gaps and a lack of co-ordination. In this case, this has led to a very embarrassing situation in which the official supervisory authority, the FSC, cannot justify and ensure that the methodology used in the country provides reliable information on the functioning of the pension funds. Reaching such a situation induces a strongly negative effect on trust and the legitimacy of the pension system in the country, part of the reason for which is the level of awareness and expertise held by the supervisory authority. Fur-

5 *Report on the financial situation of pension insurance companies and the universal and professional pension funds managed by them and implementation of the regulatory framework* of the *ad hoc* parliamentary committee of the 43rd National Assembly, http://parliament.bg/bg/parliamentarycommittees/members/2395/reports/ID/5349.

thermore, despite the controversy regarding their financial performance, the data in general signals the existence of a series of systemic problems in the development of funded pillars that gives rise to serious concerns.

Major issues and the policy responses to address them

The development of the funded pensions pillar in Bulgaria up to the end of 2014 was not marked by significant reforms. The only change was carried out in 2006 and was connected with the country's upcoming full membership of the EU.[6] The actual changes dating from 2006, however, exceeded the necessary ones due to the prospective membership of the EU and included an additional set of steps to liberalise the conditions for the investment activities of pension funds.

First, they introduced the possibility of the existence, functioning, supervision and control of pensions insurance under occupational schemes (Марева, 2012: 60). In addition, some of the major quantitative restrictions on investment activities were cancelled.[7] The result was that, after 2006, the pension funds in the country saw much broader opportunities to optimise the structure of their investment portfolios (Milev and Nenovsky, 2012: 75-76), subsequently reaching their highest rates of return in the period 2002 to 2015. The financial crisis of 2008 interrupted this development. Similar to events in all other European countries, the significant losses accumulated by the pension funds drew public attention towards the funded pillars. The international debate (Campbell and Viceira 2001; Antolin 2007, 2008; Ebbinghaus 2015; Ashcroft, Paklina and Stewart 2009) found its reflection in Bulgaria in subsequent years as well. In particular, it led to the realisation and formulation of several broad groups of issues that concern practically every dimension of the existing regulations and the pension funds themselves.

The initial reason for this was the significant losses of assets in 2008 and the relatively low levels of nominal returns in the period until 2015. In addition, the dispute between the FSC and the pension fund associations and operators at the end of 2014, concerning the assessment of the real rate of return for 2002-2014 and 2004-2014, highlighted the discrepancies in the results and alerted people to the existence of a series of systemic issues in the pension fund sphere. Based on this, and as a result of debates regarding the launch of several reform plans, it became evident that the regulation and functioning of funded pillars in the country had issues related both to asset accumulation and the investment phase, as well as for the upcoming future phase of pension payments. In brief, these may be summarised in the following points.

6 Stemming from the need to harmonise national legislation with the *acquis*; specifically, the transposition of three EU directives on the functioning of social security systems and, more specifically, the pension sphere – Directive 86/378 EEC, Directive 98/49 EC and Directive 2003/41 EC.

7 After 2006, the requirement that pension funds from the second pillar invest at least 50 per cent of their assets in government bonds was abolished. Moreover, investing in euro-denominated instruments issued by governments of the member states or EU companies is treated as investment instruments in Bulgarian *leva*. The changes include an easing of the quantitative restrictions on investing in corporate stocks and bonds.

Regardless of the differences in the calculations for the period 2002 to 2015, the pension funds in the country achieved a real rate of return on investments that, at best, managed to maintain the purchasing power of the savings of the insured. In terms of the objectives and expectations for the voluntary pension funds (from the second pillar), such a financial result did not give reason to believe that they could provide levels of second pension which might replace the envisaged part of income at the time of retirement.

The levels of the real rate of investment return indicate, in practice, that the mechanism of a minimum investment return guarantee does not adequately fulfil its two main functions, i.e. to protect and guarantee the savings of the insured; and to create incentives for the optimal management of the investment portfolio of the pension funds. Actually, the methodology for determining the minimum investment return guarantee is not associated with the ability to retain the funds invested by the insured because it is defined only against the average return achieved by a certain type of fund for the previous period. In fact, on this basis, similar to what has happened several times in the history of the FSC, the minimum investment return guarantee fixed in this way was negative, but it was claimed to have been achieved by the pension funds. The result was thus that the operators of the pension funds did not have to compensate for any difference compared to the average rate of return, to the point at which not only were the invested funds insured parties not preserved but, in fact, they were diminished.

In no lesser degree, and especially in expert circles, the issue of the adequacy of the existing regulations regarding the investment activities of pension funds, in the context of the lack of the possibility of linking the life-cycles of the insured to the way in which their funds are invested, has been discussed. Together with the conservative regulation, the funded pillars in Bulgaria are largely unable to implement a life-cycle investment approach due to the lack of ability to create and manage so-called multi-funds. The absence of such an opportunity in investment activity in general has its negative consequences as regards optimising investment portfolios, but the damage from its absence became especially evident during the crisis. In a situation of offering only a single portfolio for all generations of insured people, the pension funds faced the intractable dilemma of choosing the right investment approach. They had to choose between the most aggressive investment approach to seek to achieve the highest possible return on investment and/or fast compensation for losses; or to search for a conservative and low-risk approach to retain substantially the savings of the generations approaching retirement.

Another aspect that stood out in the expert and public debate has shown that the regime, especially the cumulative amount of the various fees charged by the pension funds, is one of the most significant factors that influence the foreseeable reduction not only of the amounts accrued in individual accounts but of the amount of savings at the time of retirement.[8]

8 After introducing statutory maximum levels for the different fees that pension funds in the second and third pillars were entitled to deduct, there were no changes until 2015. As a rule, all pension funds took the opportunity to maximise the possible deductions in respect of the

Along with these significant issues related to the accumulation phase, an important and unresolved question concerning the upcoming phase of pension payment was also highlighted. This is the unresolved problem with longevity risk that puts at risk the lifetime character of the second pension and, at the same time, creates the possible situation for pension funds to suffer losses in the future.

Awareness of these issues surrounding the funded pillars in Bulgaria led to political activity and the attempt to address and resolve them. However, the dynamics of the policy responses in this regard were different in one sense from the reaction of other countries in central and eastern Europe. The majority of these responded to the issues as early as the peak of the crisis and introduced certain reforms in the period 2008 to 2009.[9] In contrast, the main actions of Bulgarian governments between 2008 and 2010 were concentrated primarily on the issues raised by the first pension pillar and the attempt to push through and agree necessary reforms such as increasing the age of retirement, shrinking the opportunities for early retirement, the introduction of additional penalties for early retirement, etc.

For the first time in 2010, the topic of the funded pillars in Bulgaria became the target of deliberate political activity. Due to existing issues with the early retirement of employees in the first and second category of labour and their right to fixed-term pensions, the government at that point made an unsuccessful attempt to launch a project to attach PPF to the first pillar. However, the crucial dynamics in terms of the accumulated issues within the funded pillars evolved after 2013 in the form of two major reform projects.

The first was launched by the government in 2014 and turned surprisingly quickly into an actual reform. According to the motivation of the draft submitted by the government, the two main objectives being pursued were to guarantee adequate pensions for future retirees and to cap the financial deficit in the first pension pillar. In fact, the reform introduced the opportunity for all those insured in the second pillar (UPF) to transfer to the first pillar. Moreover, the funds from their individual UPF accounts were to be transferred to the state fund (i.e. the Silver Fund) to ensure the sustainability of the public pensions system, where the funds were retained without being invested. From the moment of transfer to the first pillar, the insured pays con-

two fees that form a large part of their income, i.e. the 5 per cent deduction from contributions to the UPF and PPF, and 7 per cent to VPF and VPFOS; and the investment fee deduction of 1 per cent per annum from the net assets of the fund (for UPF and PPF), and of 10 per cent of the fund's return (for VPF and VPFOS). Within the debate, evidence was presented that, in the long run over an average of forty years, these fees would reduce the amount in an individual account by about 20 per cent. At the same time, the existing system of fees set in the country does not follow the general global trend of fee reduction.

9 For example, in 2008 Hungary undertook partial nationalisation of the second pillar, deciding to transfer all the funds provided by insured people older than 51 to the first (public) pillar. In 2008, Slovakia transformed the second pension pillar from mandatory to voluntary and introduced the possibility of those insured in the second pillar up to 2008 to transfer their funds to the first (public) pension pillar. In turn, countries like Lithuania, Latvia, Estonia, Poland and Romania took action temporarily to reduce or freeze the amount of contributions allocated to the mandatory funded pillars and, in parallel, increased the retirement age.

tributions which are increased by the size of the previous UPF contribution. Those continuing in the UPF are given the right to decide whether to transfer to the first pillar five years before retirement. Those employed after 2014 fall under a new scheme. Their contributions are automatically transferred to the first pillar, while insured parties have the right to decide within one year whether to continue to be insured only in the first pillar or to choose to be insured also via UPF for a second pension. The introduction of the right of choice includes those insured in PPF, as this provided a one-off right of transfer from PPF to the first pillar.

The second reform, which currently remains a draft, was launched in late 2015 and also came as a significant surprise to many stakeholders and experts. The proposed changes are made by the Ministry of Finance and offer a particular approach to resolving the longevity problem. The proposal envisages the setting-up of a special joint account or pool, to which the funds from the individual accounts of insured parties in the second pillar will be transferred after retirement. The objective of the pool is to share the risk among insured persons and simultaneously protect them from investment risk, guaranteeing them the amount of their pension. The draft provides that, after the transfer of the individual account to the pool, the insured loses the right over such funds, with this replaced by a right to receive a second pension of a guaranteed lifelong nature and size, independent of the length of the period it will be received or of the investment performance of the pension funds. To enable this however, the project envisages the near-total cancellation of fund inheritance rights in the case of death. As regards PPF pensions, the draft envisages that these be term-based, of a guaranteed amount until the insured person receives pension rights from the UPF; the right of the inheritance of funds in the event of death is secured. The project further envisages the introduction of a mechanism guaranteeing a lifelong pension in regard to the so-called third pension, acquired by virtue of participation in VPF and VPFOS. The approach here is different, however. The right to receive a lump sum of the accumulated amount in the individual accounts is continued, but if the insured prefers to receive the third pension in the form of a lifetime pension, a transfer of the funds into a pool is envisaged.

Along with these changes, the project contains a number of other proposals regarding the regulation of the funded pillars, i.e. measures to facilitate transfers from one pension fund to another; the introduction of changes to the licensing regime for pension companies; the option to choose the company from which to receive a pension; etc.

An important aspect behind these issues is a proposed liberalisation of the bans and quantitative restrictions on the investment activities of the funds. The project provides an opportunity for pension funds to invest in more instruments, i.e. stocks and bonds in initial public offerings on the stock exchange and bonds from international financial institutions. Moreover, it envisages more stringent rules and restrictions on the control and enforcement of the investment action ban in cases of conflicts of interest.

Similar to the reform at the end of 2014, the project has met with strong resistance among organisations in the industry and most experts. Indeed, it is necessary to note that the main objections are not against the fundamental need for reform or against all the proposed changes. However, the objections focus around two essential points, namely doubts over the efficacy of some of the key steps in resolving the existing issues and a concern over the approach and its impact on the development prospects of the pension model in Bulgaria. I believe that each of these two arguments deserves to be rationalised and analysed.

In terms of the philosophy involved and the long-term development strategy of the Bulgarian pensions model, the right to choose introduced in 2014 (of participation in the second pillar or only in the first pillar) raises a number of justified doubts about whether this can really be an adequate solution to the issue of the lack of protection of insured parties in the second pillar. Primarily, the mechanism introduced does not reduce the risks of those who are insured but simply changes the nature of the risk to which they are exposed, i.e. it replaces investment risk with the risks of demographic factors and political decisions. The actual position tied to this option is the promise that the insured, with full contributions in the first pillar, will receive the full amount of their pension from it and will thus be protected from investment risk in the second pillar. The outcome for the insured person, however, is questionable.

Predominantly, the replacement of the risk bears no guarantee of a higher and more secure pension because the amount of the pension depends mainly on the financial circumstances in the first, pay-as-you-go pillar. In addition, the amount of the future pension will fall under the influence of political decisions not only made in the present but in the future as well; there is no guarantee that later generations, especially in view of the demographic situation in the country, would be in favour of those who are insured. An example might be the existence of the maximum pension mechanism paid by the first pillar that, at least for the time being, seems to be being kept in the medium-term. The only relatively safe side of this measure is the opportunity for greater revenue and some financial consolidation of the first pension pillar in the short-term which, however, leads to the transfer and even increase of the issues related to the financial deficit in the future (ИПИ, 2015: 7). In no way, however, does it address the issues of security and protection of those insured in the second pillar and nor does it guarantee the adequacy of future retirement benefits.

Along with this, there should be some account made of the easily-foreseeable losses from the introduced mechanism. In particular, this lies in the potential consequence of depriving pension funds of the second pillar of investment resources. In addition, once transferred to the first pillar, the funds in individual accounts are directed to the so-called Silver Fund, which lacks the profile of a classic pension fund with structured investment activity. The funds can hardly be expected to bear an adequate rate of return.

In its essence, this reform does not resolve the problems to which it claims to be directed; it does, however, question the foundations of the Bulgarian pension model rooted as they are in a philosophy of combining and complementing the solidarity and capital principles to meet the risk of ageing. The result of the introduced right of choice is a restructuring of the relationship between the first and the second pillars which, instead of complementing each other, will become competitors for the same resources. Perhaps the most negative side in this situation is that such a development does not lead to the opening of opportunities to accumulate more significant resources to meet the risk of ageing and undermines the chances of achieving adequate levels of pensions.

In certain respects, the draft reforms of 2015 deserve a different assessment. The proposal of creating a pool to address longevity risk in the pay-out phase is one of the possible approaches applied in different varieties in many countries (Turner *et al*. 2014). The project proposed by the Ministry of Finance aims at sharing longevity risk between insured parties by creating such a pool. In this case, there can be no doubt that the proposed option is a possible solution to the problem. However, in some of its main points the project raises some ambiguities. It should be questioned whether this decision seeks again a gradual replacement of the underlying principles of funded pillars in Bulgaria.

Furthermore, the reform draft contains at least two elements that suggest a requirement for far broader discussion and public support. First, the transfer of all funds from individual accounts to a pool, and the ownership replacement of these resources with a politically-guaranteed right, resembles nationalisation. The question remains whether this change necessarily should encompass the transfer of all the funds in individual accounts to the pool or whether it is possible to define a certain percentage (far lower) to be directed into the pool to protect the system and the insured against longevity risk. Unfortunately, the Ministry has not provided any appraisals, or even estimates, of the actual extent of the longevity risk (with at least its predictable or expected financial dimensions), which leaves the question open. In the presence of such data, alternative approaches might be reflected upon – a new approach to the biometric tables; use of the retirement age mechanism; a special longevity risk fee on accumulated funds in individual accounts that could be calculated according to certain biometric and other metrics for each generation; different types of insurance; bonds and other market solutions; etc.

The second important point is that, besides the actual withdrawal of rights on savings, the project introduces a significant element of solidarity and a political factor in their management in the concept of the pool. The potential impact of one of the project's motives, which goes beyond the desire to share longevity risk, should not be under-estimated, i.e. to ensure the life-long nature of the second pension, and it is committed to protect insured parties from investment risk by guaranteeing the amount of the pension via the pool mechanism (Министерство на финансит, 2015: 5). Does the project intend to link the pool with the duty to guarantee certain levels of pensions, i.e. does it envisage the second pillar being transformed into a *de facto* hybrid type of funded scheme which, along with the sharing of longevity risk, should include the characteristics of a funded defined benefit pension scheme? Hardly anyone would disagree that there is a pressing need for measures to ensure the actual protection of insured parties against investment risk and the other risks associated with funded schemes of the defined contribution type. In the proposed draft reforms, however, the only possible way of achieving such protection implies the actual redistribution of the funds within the pool so as to ensure the level of the second pension. This, in itself, does not protect the savings of insured parties from investment risk during the accumulation phase but relies on the distribution among the insured of this risk *post factum* through the redistribution of their retirement savings.

In addition, such a change does lead to a strengthening of the role of political decisions (i.e. political risk) in determining the levels of the second pension and inevitably threatens one of the foundations of the insurance principle: the relationship between the level of contributions and pension income. Last, but not least, the transformation of the intention to reallocate savings for old age in this way, or at least creating the opportunities for this, very clearly requires much more in-depth debates and, most importantly, it must command broad political and civic support.

In view of all this, it is not surprising that the second draft reform was faced with significant objections and was barely supported by stakeholders and in expert circles. It is not accidental that a decision is currently pending of the Constitutional Court, which must rule on the constitutional conformity of the 'right to choose' engendered by the 2014 reform.

The issues of the Bulgarian funded pillars outlined above, as well as a review of the attempts to resolve them that emerged after 2008, allows us to draw certain conclusions.

Firstly, it is obvious that the overall design (the applicable regulations, rules, procedures, etc.) of the Bulgarian funded pillars contains a number of issues and ambiguities. These may be found both in the current phase of accumulation and investment, and in terms of the subsequent, in the medium-term, perspective of the pension payment phase. One of the leading and complex issues that has become apparent since 2008 is the lack of adequate and sufficient protection of insured parties against the investment risk faced entirely by them.

The second issue, which must not be under-estimated, though it is delayed in time, is the existing confusion about who is to face the survival risk in the second phase of pension payment and how this is going to happen. At the same time, the actions taken so far to address the issue have failed to bring adequate solutions and which, in a number of their dimensions, rely on logic that contradicts and acts destructively on the funded segment of the Bulgarian pension model. The result is that both the public debate and political activity in this respect may cause an exacerbation of the contradictions without leading to a formulation of the necessary reforms that would help and improve the functioning of funded pillars in the country.

Necessary reforms and prospects for the funded pension pillar system in Bulgaria

After formulating the main issues being faced by the funded pillars in Bulgaria and commenting on the projects which have been proposed to resolve them, it is logical to look at the possible prospects for their development. Such a task has definitively to start from the understanding that funded pillars in Bulgaria are currently at a crossroads. There is no doubt that a critical mass of unsettled issues has already accumulated, and that there is a need for a number of important changes in the overall framework of the regulations, methodologies and mechanisms of control over the activity of the pension funds as well as in their actual management and investment of assets. The main consideration is that, if these issues do not find an adequate response, they will lead to a new series of attempts to renationalise the risk of ageing that will have more reasonable arguments capable of generating the necessary political support. In fact, precisely because of the lack of adequate and timely strategy and reform policy in this area, Bulgaria is at the moment experiencing the most significant crisis of legitimacy of, and lack of trust in, the new pension model.

Therefore, any attempt to outline possible directions for the development of funded pillars in the country inevitably involves the understanding that, currently, these should be considered from at least two perspectives. The first of these contains certain steps that should be interpreted as urgent measures required to avert the crisis and restore confidence in the pension funds, and/or the changes which would improve the functioning of funded pillars that need to be made in the next few years. The second one includes certain actions aimed at their long-term development as an important part of the overall pension model. A more thorough delineation of these two perspectives would help to outline a comprehensive programme of the measures and strategic steps that could lead to the construction of a new, more efficient level of functioning of funded pillars in the country.

Taking into account the main issues faced by the funded pension pillars which were explored in the previous section, the reform steps which must be taken over the next year or two are as follows.

Minimum investment return guarantee

Firstly, a new approach to determining the minimum investment return guarantee must be introduced. At the same time, this mechanism needs to be converted into one which actually protects savings as an adequate functioning guarantee but which also provides an incentive for the optimal management of investments by the pension funds. A leading consideration in the implementation of this step should be the orientation and the close link between the minimum investment return guarantee and the achievement of certain objectives, such as protecting the purchasing power of retirement savings and stimulating the management of the pension funds to optimise their investment portfolios and maximise the rate of investment return.

That suggests the implementation of an approach, far more complex and comprehensive than the current one, which draws on a combination of sample components including the level of inflation, the growth of gross national product, the rate of return on government bonds; orientation towards some strategically-defined (benchmark) level of return, etc. (Dimitrov 2015: 80-88). In addition, it is necessary to foresee the possibility of, and a methodology for, setting a minimum investment return guarantee mechanism subsequent to the introduction of multi-funds to the second pension pillar in the country.

Calculating the rate of return

Secondly, an adequate methodology, supported by all stakeholders, needs to be developed for calculating the rate of investment return on pension funds. The presentation of this information in nominal values, based on time-weighted methods, should be complemented with a methodology for reporting as well as the mandatory publication of the estimates of the rate of return. The calculation of this figure needs to be based on a monetary-weighted method that delivers accessible and clear information of the rate of return, in real terms, of the investment of individual accounts over a certain period. This should allow for comparison and the rendering of an account of the impact on contributions of the various types of investment fees and charges imposed by the funds.

Introduction of multi-funds

Thirdly, there needs to be an expansion of the capacity for flexibility and optimisation of investment portfolios which can be achieved via the introduction of multi-funds. The introduction of such a step has already been discussed in Bulgaria but the draft bill, proposed in 2008, has not been applied in practice. Experience gained by other countries in recent years shows that the ability to select a portfolio, different in its investment profile and degree of investment risk, within a pension fund allows not only a higher degree of optimisation but also of protection for the different generations of insured people. At present, Bulgarian pension funds (from the second pillar) actually offer one version of an investment portfolio to all generations of the insured, largely disregarding the logic of making savings appropriate to different phases of the life-cycle. The crisis of 2008 showed in particular that the availability of different portfolios, according to the degree of investment risk, distributes more adequately between different generations the level of risk of future pensions (Bagliano *et al.* 2009).

Fourthly, changes need to be made to the existing regulations (the ban on investment, quantitative restrictions and fees) in order to provide for the actual functioning of multi-funds. The very principle of multi-funds suggests that insured parties can choose different portfolios in respect of their allocation based on investment tools and the level of investment risk. This implies the existence of a differentiated regime of regulations and mechanisms to control pension funds which vary in their degrees of investment risk.

Future prospects

In addition to these changes, required in the short- to medium-term, the future functioning and development of funded pillars in Bulgaria involves formulating and following some longer-term and, in a sense, strategic measures. They stem from the overall character of the pension model in the country and from the extremely high importance that the two funded pillars will assume, after consolidation, in meeting the ageing risk and delivering a high level of pensioners' income in the future. In their content, the implementation of the reform steps outlined above would potentially create the conditions for achieving better outcomes for the two funded pillars but, most importantly, ones that would be closer to the desired level. Along with this, however, there are many other factors that must inevitably fall into the focus of political attention and action in order to provide sufficiently favourable conditions for the functioning of pension funds in Bulgaria.

One of them which, even at the moment, has its, unfortunately, negative impact in this regard is the condition of the financial market in the country and its low level of development. Seen in broader perspective, not only does it limit the opportunities for better rates of return on investment and flexibility in the investment activities of the pension funds (especially in view of their relatively conservative portfolios) but also deprives the national economy of a much more efficient use of a significant investment resource. The series of crashes in the Bulgarian Stock Exchange since 2008, and its vegetative state in the subsequent period, are, however, only part of the reason for this. In fact, even before 2008 the development of the financial market in Bulgaria saw a number of issues go largely unresolved. A thorough and in-depth description of these issues goes beyond the scope of this study. What is important for it, however, is that the financial market in the country undoubtedly needs a targeted policy for its development and support.

In a sense, the questionable financial results of pension funds in recent years are not the result solely or even primarily from bad investment management but are due to complex causes: for example, the quantitative 20 per cent cap on investment by second pillar funds in riskier instruments (shares); and, in particular, the lack of sufficient quality instruments in which to invest in the Bulgarian financial market (cash and capital). In this respect, a long-term and sustainable approach needs undoubtedly to be built to the development of these markets, i.e. the introduction of new tools, the provision of support and encouragement for companies to list on the exchange, etc., as well as delivering opportunities to compensate for, or do something about, the lack of such instruments through wider opportunities on the international market.

The last aspect to be briefly discussed has a certain heuristic character, but I think it brings a degree of validity and relevance in view of the opportunities for strategic thinking for, and development of, the pension model in the country. From a purely strategic perspective it, would be wise to develop a debate around extending the scope and the role of the third pension pillar. At least in my opinion, arguments about the need for such activity are as follows: according to both policy and expectation, the first and the second pension pillar in the country should generate a net replacement rate for future retirement benefits of about 60 per cent. It is inevitable to assume that, given the demographic situation and other influential factors, the first pillar will find it much harder to cope with the promise of meeting a 40 per cent net replacement rate. Moreover, reaching a 60 per cent net replacement rate suggests an extremely successful development of the second pension pillar. Even if we accept this ideal case and assume that much of the country's citizens are indeed enrolled, it remains an open question whether, at the current level of labour income, the amount of savings possible will be sufficient for an adequate level of pension or whether it will mean a sharp drop in living standards and even a life in retirement lived at risk of poverty and social exclusion for a large part of future pensioners. Seen from this perspective, the availability of additional savings for old age becomes crucial.

Under the current pension model in the country, such a possibility is provided, in general, by the third pillar. Taking into account its voluntary nature, the expansion of participation requires us to follow a complex and multi-dimensional strategy. Such a strategy would be able to be grounded in the experience gained in other countries and in country-specific options. With no claim to be exhaustive and more in the way of advancing a topic for future discussions, it might contain the following elements: the introduction of additional indirect incentives for mass participation in VPF and VPFOS through further tax relief for employees and employers; the introduction of direct public incentives and/or public subsidies for participation in the third pension pillar, including low-income employees (differentiated subsidies tailored to the income scale); extensive information updates and a comprehensive advertising campaign, including the engagement and involvement of trade unions and employee organisations.

Naturally, such a strategy would, in the first place, presuppose that the core issues faced by funded pillars in the country had found adequate solutions and that the current crisis of trust and legitimacy of the pension model in the country had been resolved.

References

English:

Antolin, Pablo (2007) *Longevity Risk and Private Pensions* OECD Working Papers on Insurance and Private Pensions No. 3, OECD Publishing: Paris.

Antolin, Pablo (2008) *Pension Fund Performance* OECD Working Papers on Insurance and Private Pensions No. 20, OECD Publishing: Paris.

Antolin, Pablo and F. Stewart (2009) *Private Pensions and Policy Responses to the Financial and Economic Crisis* OECD Working Paper on Insurance and Private Pensions No. 36, OECD Publishing: Paris.

Ashcroft, John, N. Paklina and F. Stewart (2009) *Governance and Performance Measurement of Pension Supervisory Authorities* IOPS Working Paper, No. 10, IOPS.

Bagliano, Fabio, C, Fugazza and G. Nicodano (2009) *Pension Funds, Life-Cycle Asset Allocation and Performance Evaluation*, Universita di Torino and CeRP, Torino.

Bielawska, Kamila, A. Chłoń-Domińczak and D. Stańko (2015) *Retreat from mandatory pension funds in countries of the Eastern and Central Europe in result of financial and fiscal crisis: Causes, effects and recommendations for fiscal rules* Warsaw.

Campbell, John Y. and L. Viceira (2001) *Strategic asset allocation: Portfolio choice for long-term investors* Oxford University Press.

Dimitrov, Stanislav (2015) 'Minimum investment return guarantee mechanism for capital pension funds – the case in Bulgaria' in (collective monography) *The economy of Bulgaria and the European Union – contemporary challenges and solution approaches* UNWE: Sofia, pp. 80-88.

Ebbinghaus, Bernhard (2015) 'The Privatization and Marketization of Pensions in Europe: A Double Transformation Facing the Crisis' *European Policy Analysis* 1(1): 56-73, PSO.

Holzmann, Robert and U. Guven (2009) *Adequacy of Retirement Income after Pension Reforms in Central, Eastern and Southern Europe. Eight Country Studies* World Bank: Washington DC.

Milev, Jeko and N. Nenovsky (2012) ‘Capital pension schemes in Bulgaria, Hungary and Slovakia under the impact of the ongoing financial crisis’ *East-West Journal of Economics and Business* XV(1 & 2): 71-88.

Noncheva, Teodora and D. Satscheva (2003) ‘Country Study Bulgaria/Länderstudie Bulgarien’ in *Social Protection in the Candidate Countries. Country Studies Bulgaria, Hungary, Romania, Slovenia* Gesellschaft für Versicherungswissenschaft und Gestaltung e. V. (GVG), Akademische Verlagsgesellschaft Aka GmbH, Berlin.

OECD (2010) *Pension Market In Focus* Issue 7, OECD.

Turner, John (2014) Hybrid pensions: Risk sharing arrangements for pension plan sponsors and *participants* Society of Actuaries, Pension Policy Centre.

Eurostat (2016) http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=naida_10_gdp&lang=en 27 September 2016.

Bulgarian:

Димитров, Станислав (2015) 'Погрешната битка за капиталовите фондове' *Застраховател* бр.3 и бр.4: 1-16, София.

Временната парламентарна комисия към 43 НС на РБ (2015) *Доклада за проучване на финансовото състояние на пенсионноосигурителните дружества и управляваните от тях универсални и професионални пенсионни фондове и прилагането на регулаторната рамка* на Временната парламентарна комисия към 43 НС, http://parliament.bg/bg/parliamentarycommittees/members/2395/reports/ID/5349, (27 септември 2016).

Институт за пазарна икономика (2015) *Планираните промени в пенсионното дело: оценка на потенциалните ефекти* КС 2 Ltd. и ИПИ: София.

Марева, Николина (2012) 'Развитие на допълнителното пенсионно осигуряване в България, предизвикателства и възможности' *Ново знание* бр.1: 58-64, ВУАРР: Пловдив.

Министерство на финансите на РБ (2015) *Мотиви към проект на закон за изменение и допълнение на Кодекса за социално осигуряване* МФ на РБ: София.

НСИ (2014) Население и демографски процеси през 2014 г. (окончателни данни), НСИ: София, http://www.nsi.bg/sites/default/files/files/pressreleases/Population2014_2Y19BGI.pdf, (27 септември 2016)

Христов, Любомир (2015) *Доходност на осигурените в пенсионни фондове в България: 2002 – 2014 г.* ИДФК: София.