REPORT

On the Developments in the Fully Funded Pension Insurance

MAPAS
Agency for Supervision of Fully Funded Pension Insurance

2016

Agency for Supervision of Fully Funded Pension Insurance
Republic of Macedonia

REPORT

On the developments in the fully funded pension insurance in 2016

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Contents

Foreword

Dear reader,

It is my honour and pleasure to present to you the achievements and results from the operation of the fully funded pension insurance in the Republic of Macedonia. I give you the eleventh Annual Report on the Developments in the Fully Funded Pension Insurance of the Agency for Supervision of Fully Funded Pension Insurance-MAPAS. It summarizes the experiences and wins from the everyday challenges in the eleven years of operation of the second pillar and seven years of operation of the third pillar.

According to the Law on Mandatory Fully Funded Pension Insurance, MAPAS is obligated to prepare and publish an annual report on the fully funded pension insurance in the Republic of Macedonia. Such report is prepared by the Research and Institutional Cooperation Sector and it is adopted by the Council of Experts of MAPAS. In the Report you shall find information and data on the features of the fully funded pension insurance, assessments on the compliance with legislation as well as other useful data, spread over seven chapters of the Report.

The Report starts with analysis of the global conditions and trends in the pension industry, especially in the fully funded components. Then, the report gives a general overview of the pension system, which after the reform is consisted of public and private components. Therefore, the system is a combination of generational solidarity and fully funded pension insurance, i.e. it has public and private components. This is followed by a brief explanation on the latest amendments in the relevant legislation on fully funded pension insurance. In 2016, the major interventions in the legislation were made in the secondary regulations governing the membership, marketing, sales agents exams, presenting offers etc. With these amendments we cancelled the obligation for notarization of the statement for transfers from one to another pension fund; we further regulated the allocation weight; also we amended the forms of the reports on pension savings in the part of the personal data of the member and in the part concerning the fees charged by the pension companies; we introduced an obligation for the pension companies to inform each new, allocated member, at least on their rights and obligations, and also we have further clarified the form which is used for presenting offers for projected future pensions, etc.

One part of the Report is dedicated to the financial operations of the Pension Companies. You will read that both pension companies ended the year with positive financial results.

Of course, the largest portion of the Report is dedicated to the analyses of the operations of the four pension funds (two mandatory and two voluntary), as presented in Chapters five and six.

In 2016, the membership in the second pillar increased for 5.4% (in respect to 2015) amounting to a total of 427,000 members, which is 75% of the total number of insured persons in the Pension and Disability Insurance Fund of Macedonia. The average age of the second pillar member is 35 years. In 2016, the second pillar received 5.8 billion denars in contributions, which, together with the accumulated assets, were invested in accordance with the legal provisions on investments. The value of the assets in the mandatory private pension funds on 31.12.2016 was 48 billion denars which is a 20% rise in respect to 31.12.2015, and is 7.95% of the GDP of the Republic of Macedonia. The investment portfolio of the mandatory pension funds is consisted of domestic investments in government securities (61%), deposits (8%) and shares (3%), as well as investments abroad, which include shares (5.5%) and participation units in investment funds (22%) and a very small part in government bonds (0.47%). The accounting units of both mandatory pension funds were rising constantly during 2016. In the 7-year period of their operations, from 2010 to 2016, the mandatory pension funds reached an average annual return of 6.30% in nominal value i.e. a real return of 4.70%. In 2016, the mandatory pension funds had realized around 340 payouts. In most of the cases, these payouts were for survivors' and disability pensions, where the assets of the members were transferred to the PDIF, from where the actual survivors and disability benefits are paid out to the members. Also, there were payouts as inheritance of deceased pension fund members, as well as lump sum payments to members who are not entitled to old-age pensions.

In 2016, the number of members in the third pillar increased by 6% in respect to 2015 and reached 23,000 members, out of which 65% are participants in occupational schemes and have occupational accounts. The members in the third pillar, on average basis are older than those in the second pillar, and their average age is 43 years. In 2016, 243 million denars were paid in the third pillar pension funds, which were invested together with the rest of the accumulated assets, thereby following the legally established investment limits. As of 31.12.2016, the value of the voluntary pension funds assets reached 998 million denars, which is 0.16% of the country's GDP. The investment portfolio of the voluntary pension funds is very similar to the one of the mandatory pension funds and it consists of investment in domestic government securities (49%), deposits (13%) and shares (8%), as well as in investments abroad which include shares (6%) and participation units in investment funds (22%). The accounting unit for both voluntary funds was continuously rising throughout 2016. In the 7-year period of their operations, from 2010 to 2016, the mandatory pension funds reach an average annual return in the range from 5.96% to 6.37%, i.e. a real return in the range from 4.36% to 4.77%. In 2016, the voluntary pension funds realized around 216 payouts most of them as lump sum payments for old age, and less for inheritance payments due to deaths of voluntary pension funds members. There were several multiple payouts of old-age pensions.

The last Chapter is dedicated to the marketing and sales agents of Pension Companies. The Law and the secondary regulations prescribe the terms and conditions under which Pension Companies may perform their marketing activities in order to provide for the protection of the interests of current and future pension fund members and to provide for fair and unbiased information for the citizens. In 2016, the Agency organized two examinations for sales agents, where 35% of the registered candidates passed the exam. Also, the Agency performed the regular activities of registration, renewal of registration and re-registration of sales agents. For some of the sales agents the status of agents was terminated in 2016.

Please allow me to stress that pension savings are long-term savings (having in mind that the average career of a person is between 30 and 40 years), and so the results of the Pension Funds should be considered with a long-term perspective. However, the developments in the pension industry should

be followed closely and on a continuous basis, and the measures should be undertaken for its improvement, in order to protect the interests of the pension funds members and to assure the pension benefits for old age.

The experience and the successes of the past ten years of the second pillar are additional motivation for the daily supervisory activities of MAPAS and, of course, they are a great challenge for improvement and enhancement of the second and third pillar operations. Guided by our mission, we shall continue with the daily supervision over the Pension Companies, Pension Funds and Custodians, we shall keep working on building the public awareness, on collaboration with other institutions from the industry and the financial world and when needed, we shall initiate measures for improvements of legislation in order to enhance the fully funded pension insurance and protect the interests of the pension funds members.

We believe that by reading this Report you shall be convinced of the results and the accomplished success and that also you shall find interesting and useful information on the operations of the second and third pillar in our country.

Chairman of the Council of Experts

Bulent Dervishi, PhD

MAPAS, mission and vision

The Agency for Supervision of Fully Funded Pension Insurance – MAPAS is a regulatory and supervisory body with a sole purpose to protect the interests of the members and the retired members of the pension funds and to enhance the development of the fully funded pension insurance. MAPAS was established in July 2002. MAPAS is a legal entity with public authorizations prescribed with the Law on Mandatory Fully Funded Pension Insurance and the Bylaws.

MAPAS is responsible for issuing, withdrawing and cancelling licenses to Pension Companies for managing Pension Funds, and for issuing, withdrawing and cancelling approvals for managing mandatory and voluntary pension funds. MAPAS supervises the operations of Pension Companies, Mandatory and Voluntary Pension Funds, Custodians and Foreign Assets Managers. Also, it promotes, organizes and enhances the development of the fully funded pension insurance in the Republic of Macedonia, collaboration with the Ministry of Labor and Social Policy. Its responsibility is to build the awareness of the public on the goals and principles of the pension companies and pension funds and on the benefits from participating in the private pension funds, including the benefits from participating in occupational schemes. It informs the members on their entitlements and obligations as private pension funds' members and on other features of the fully funded pension insurance. MAPAS passes acts in accordance wit6h the laws governing the fully funded pension insurance and initiates other regulations for the pension companies and pension funds. Also, it collaborates with relevant institutions in the country and abroad in order to provide efficient control over the fully funded pension insurance in the Republic of Macedonia.

The Agency is steered by the Council of Experts, consisted of four members and a Chairman:
Bulent Dervisi, PhD – Chairman
Mentor Jakupi – member, with professional engagement
Elizabeta Vidovikj– member, with professional engagement
Silvana Mojsovska, PhD- external member
Tome Nenovski, PhD - external member

Our Mission is to protect the interests of the current and retired members of the pension funds and to stimulate the development of the fully funded pension insurance towards safer retirement days.

Our vision is MAPAS to be recognized as independent, expert and transparent institution, which protects and enhances the pension system in the Republic of Macedonia.

Brief overview of the global conditions and trends in the pension industry with accent on the fully funded pension insurance

1

Generally, the pension insurance provides protection against the following risks: old age, disability and death. This is accomplished through periodical payouts (usually, monthly payouts) to the insured person, for their entire lifetime, or to their families. There are different methods of financing pensions (or so called accumulation phase) and there are different methods of calculating and paying the pension benefits (or the so called phase of de-accumulation of pension assets). These methods vary from country to country, mostly depending on the structure of the pension system, which actually depends on the social, economical and demographical circumstances of that country. Also, this is influenced by the popular culture and habits in terms of saving for old age, types of pensions and pension payouts. For this reason, and due to the increased rate of old population in the entire global population, the pension systems, everywhere in the world, are becoming more and more important, as warrantors for the safety of the population but also as pools of national savings[1].

In the last several decades, the pension systems have been undergoing various reforms. As a result, there are various designs of pension systems, which vary in their forms of financing or calculations of benefits and payout of benefits. However, they all have one thing in common – to provide for a sustainable pension system and income after retirement. The experience has demonstrated that there is no universal design for all pension systems of the world, because the countries use various combinations of elements to built effective pension systems, and those combinations depend on their economic and social characteristics.

Usually pension systems are multi-pillar systems. They are created like this in order to provide for diversification of risks that affect the pension system. The general framework is usually consisted of three pillars: basic pension (as a minimum protection for all employees or elderly people), mandatory additional savings (state or private fully funded financing) and voluntary additional saving (private fully funded financing that may include various types of contracts). The main challenge is how to combine all these components into a sustainable pension system on a long run, which will be sufficiently fair for all generations. In order to accomplish the goal of any pension system – insurance for old age– the system must be fiscally acceptable on a short-term and sustainable on a mid and long-term and finally provide for adequate pensions for old-age.

According to the analysis of the major reforms, approved and implemented in the last twenty years (between 1995 and 2015), the basic pay-as-you-go systems underwent several changes, in order to increase the financial and fiscal stability. One of the reforms is the increase of the contribution rate in the PAYGO systems (in France, Norway, Russia, Portugal etc). The other significant reform is the increase of the retirement age (in Germany, Spain, South Korea, France, Greece etc). So, most of the OECD members, by the middle of this century, will have increased the retirement age to at least 65 or 67 (for men and for women). Both measures are being introduced simultaneously in order to stimulate longer careers, which will induce higher pension benefits. Also, another trend is the adjustments of the formulas for promised pensions i.e. a gradual decrease of the pension benefits or changes in the indexations of pensions, for reduction of fiscal expenses (Brazil, Belgium, Italy, the Netherlands, Great Britain, etc.). These measures are introduced in parallel with the motivation for longer careers, which influences the increase of pensions. Of course, one of the significant endeavours is to extend the coverage of the pension system and to stimulate the regular payments of pension contributions.

In parallel with the abovementioned, the role of the private fully funded components is increasing, through the introduction of private pension funds or through activities and measures for improving their operations towards provision of adequate old age income. So, in 18 OECD countries, there are mandatory or partly mandatory private pension systems, while in 8 countries there are voluntary pension systems (organized individually or through occupational schemes) which have a significant coverage of the population. Reforms take different directions, so some countries decided to introduce defined contribution pension schemes, while others reduced or completely closed the privately managed DC components of their pension systems. The DC components dominate East Europe; while DB pension components still dominate those countries which have highly developed occupational pension schemes (like the United Kingdom and the Netherlands). In 2015, the pension assets of the pension schemes with defined benefits represented more than a half of the pension assets of 17 OECD counties and 21 non-OECD countries. Also, there are cases of transfers from DC to DB. On the other hand, there are countries which closed partially or entirely the privately managed DC components. The major challenge of any type of pension component (either DC or DB) is the correct handling of the volatile financial markets.

Generally, pension plans based on individual savings have positive impact on the pension systems towards provision of long-term stability and safety of entitlements. This is mostly due to them being structured as parts of the social security systems, which enables improved quality of life after retirement and coverage for other risks under employment. On the other hand, they contribute to the development of capital markets; they boost investments, stimulate new financial instruments and consolidate long-term investments. Nevertheless, the reforms should not end here, as there is need for further reinforcement of individual savings, through enhanced competition, promotion of efficient and flexible portfolio management and extension of coverage.

The role of the private pension systems is continuously increasing, from their coverage of the population to the size of their assets. The total amount of the private pension funds assets in the OECD countries, by the end of 2015, was 38 trillion USD. Out of which, 36.9 trillion USD are laced in 35 countries members of OECD and 1.3 trillion USD are in 45 countries, non-OECD members. Globally, the major moving force of the pension systems in the OECD countries are the pension funds with 26 trillion USD (or 68% of the total private pension assets), then follow the banks and the investment companies, which manage 7.7 trillion USD (or 20.2% of the

[1] *Used sources: OECD, EIOPA, World Bank, FIAP and IOPS and own analyses.*

total private pension assets), insurance companies with 4.3 trillion USD (or 11.3% of the total private pension assets) and reserves from employers with 0.2 trillion USD (or 0.6% of the total private pension assets). It is noteworthy that the private pension funds' assets in the OECD countries are growing continuously in the last years. Despite the drop in 2008, due to the financial crisis, the assets of the private pension funds in 2015, have outgrown the amount of the pension funds assets of ten years ago, and it is 25 trillion USD in the OECD members. The pension funds assets have an average growth of 4.3% for the period of five years (December 2010- December 2015) and around 4.4% for the period of ten years (December 2005 - December 2015).

The size of the private pension funds assets varies from country to country. Therefore, the comparison of the size of the private pension funds assets in relation to the size of the economy, expressed through the GDP gives a clearer picture on the relative importance of the private pension segment in the country. The percentage of pension assets in relation to the GDP, in the OECD countries is from 0.6% in Greece, to 206.9% in Denmark, or it is 49.5% as ordinary average and 123.6% as weighted average. In five OECD countries, this percentage is higher that the weighted average (Denmark, the Netherlands, Island, Canada and the US). Austria and Switzerland are under the weighted average, but the private pension funds assets still are higher than the GDP in both countries. On the other hand, 19 OECD – members have a percentage lower than 20%, out of which 13 countries have a percentage lower that 10%. In the selected countries, which are non-OECD members, the average of private pensions' assets, as percentage in GDP in 2015 was lower in respect to the OECD-members. The ordinary average is 16.8%, while the weighted average is 36,3%. Similar to the OECD-member countries, there is a vivid difference in the size of the value of assets of the private pension systems in the selected countries, which are non-OECD members. The percentage of pension assets in respect to the GDP is from 0.1% in Albania and Pakistan to 96.8% in South Africa. In 31 countries out of the selected 45 countries, which are non-OECD members this percentage remains under 20% of the GDP.

The real investment return, of the pension funds, net from management fees, in 2015 and in the past 5 and 10 years, was positive, for the majority of OECD members but also for the non-OECD members. Still the real net returns in 2015 were lower in respect to 2014 in all OECD countries, except Island. The real returns in 2015 moved in the range from -6.1% in Poland to 7.4% in Island. 27 OECD – member countries had positive real returns in 2015, while only four countries had negative real net returns (Mexico, USA, Turkey and Poland). In the non-OECD countries, the ordinary and the weighted average of the real net returns on investments were lower in 2015 compared to the returns in 2014. 21 countries of the selected 31 countries, which are non-OECD members reached positive real returns in 2015, with largest return in Serbia ((13,5%), while the relative returns were negative in 10 countries, including three of the biggest in terms of their pension assets (Russia, Brazil, Hong Kong (China)).

Considering that usually, the largest part of the pension assets are invested in bonds and shares, the abovementioned results on the returns are most probably due to the movements and developments in the bond and share markets. In 2015, more than 75% of the pension funds assets in 20 OECD countries and 24 non-OECD-countries are invested in bonds and shares. In six of the analyzed countries, the pension funds invested more than 50% of their assets in shares – directly or indirectly through investments funds (Australia, Hong Kong (China), Kosovo, Mauritius, Namibia and Poland). Then, the pension funds in Belgium, Malaysia, Pakistan and the US, invested 40% to 50% of their pension funds assets in shares. The pension funds in Asia, such as those in Hong Kong (China) mark negative real returns for 2015, as a result of the negative conditions on the Chinese capital markets

Also, it is important to point out that the number of pension funds in every country is different and it may vary from several to thousands. While in Central and East Europe, as well as in Latin America the number of pension funds per country is small, in the Anglo-Saxon countries there are much more pension funds in operation. Despite the growth of assets and the positive net real returns, the number of pension funds in several European countries, such as the Netherlands, Switzerland and the United Kingdom has reduced, probably due to competitive environment. The analysis on the potential connection between the number of pension funds and the real net return on investments, which was conducted in 20 countries, among which some of the largest financial markets (United Kingdom and USA), demonstrates that the countries with 30 to 149 pension funds are more like to achieve higher real net returns than those with more than 150 pension funds, for the period 2005-2015, under the condition that the real growth rate of the GDP, the size of the pension market, the assets the allocation of the pension funds and the development of the stock markets remain the same.

Considering that one of the basic ideas of the existence of the fully funded pension systems is to increase the pension savings through their investments, this year the focus of the discussions and analysis, again, was on the improvement of the investment results of the pension funds and also on the maintenance of the pension assets safety, through improvement and enhancement of the set regulation on the investment limits. In accordance with the research of IOPS and OECD, the set rules and regulations regarding the investments limits may differ depending on the types of plans (occupational, personal, mandatory, voluntary, DB, DC, etc.). At the end of 2015, most countries had quantitative limitations of the pension funds investments, though there are countries which do not impose specific investment limits for certain classes of assets, but in such a case, in part of the countries the pension funds managers should analyze and take into consideration the diversification when allocating the assets or they should avoid conflicts of interest between the employer and the creditor. The quantitative limits exist for most classes of assets, defined generally depending on the risk gradient of the asset class, as well as on the risk appetite of the pension fund.

In terms of the quantitative limits on the ownership securities, the limits are not as strict for the quoted shares in respect to those for unquoted ownership securities. Also, in terms of regulating the investments in bonds, generally it may

be observed that limits are less strict for government bonds, in respect to local, corporate or mortgage bonds. In most of the canvassed countries of the OECD and non-OECD, there are limits or total prohibitions on the investments in real estate, private pension funds or loans. Still, in most of the countries, the direct investments are prohibited, while the indirect investments in real estate, through bonds and shares, or through investment funds are allowed. Also, in some countries, besides the maximum limits there are minimum limits on the investment of pension funds in certain classes of assets, like minimum limits for investments in bonds issued for a specific purpose, or minimum investments in accordance with the various risk levels in multi-funds, such as minimum limits for investments in shares with riskier portfolios. The investment regulation also includes specific rules for investments abroad, even in some countries, which are non-OECD members, those investments are forbidden. The investment abroad might be allowed only for certain geographical areas, like OECD-countries, regulated markets of the EU or the EEA. In terms of limiting investments abroad, some countries have limits per type of classes of assets and limits on the total participation of the investments abroad. Also, some regulation foresee limits on the investments in the same issuer per type of assets as well as other regulation for quantitative limits on investments, connected with exposures to affiliated entities, exposure to foreign currency, derivatives and concentration. In the past years, most amendments to law related to regulating the pension funds investments bring facilitation and liberalization of limits, as well as allow for bigger discretion for pension funds. Some countries facilitated or completely removed the limits on the investments abroad; some lowered the restrictions on the investments in shares etc. Also, the countries shared their experiences and gave suggestions for alternative investments and measures for broadening the scope of financial investments in which pension assets may be invested. Namely, in the last years, some practical examples demonstrate that pension funds start to direct their investments from bonds and notes to shares, from traditional to nontraditional investments and to increase their investments abroad.

While the pension funds on the smaller pension markets favour shares, the pension funds on the bigger markets show increased interest in alternative classes of assets. Therefore, the OECD advises that defined contribution pension systems should pay more attention to the investment risk. Hence, the goal of the policy makers should be to improve the designs of the standard investment strategies, where the investment risks will decrease as the member approaches the retirement age. These life-cycle related investment strategies should be regulated carefully in order to provide the members with sufficient diversification and protection against market shocks. Thus, the burning issue in the pension area were the multi-funds, which are chosen automatically when the member does not choose a specific fund or portfolio.

Still in 2016, global discussions are again concentrated around the connection of the accumulation stage with the de-accumulation stage. In that respect, younger pension systems put special attention on the design of the payout stage and the types of payouts, while the more mature systems put their accent on the adequacy of pension benefit and the longevity risk. Contemporary payout designs include programmed withdrawals and lifetime annuities, or a combination of those, where the member makes the definite choice. Each of these products has their advantages, but also has their shortcomings and bear potential risks. Pension supervisors pay huge attention to this and always point out that it is very important that members get the correct information in order for them to make an informed decision when necessary. Pension funds that offer programmed withdrawals and insurance companies, which sell lifetime annuities, face the longevity risk of their members or insured persons. Therefore, the longevity risk and the mortality rate analysis are currently hot topics on a global level. One of the major challenges in managing the longevity risk is the difference in the life expectancy and the retirement age in various socio-economic groups, selected based on their background, income and profession. Namely, per the analysis, it is expected that people with higher socio-economic status have higher life expectancy in respect to those with lower status, and it is even expected, that such differences will only increase with time. The differences in the mortality rates have implications on the pension products and the public policy. Besides the fact that these differences increase the challenge for the pension and insurance companies, on their mitigation of the longevity risk, still they represent an opportunity for finding better adjusted solutions for retirement and for meeting the needs of various segments of the society. Special accent is put on the policy makers to be aware and provide rules that will actually regulate the pensions and the pension savings and thereby not to discriminate the lower socio-economic groups. Also, the policy makers should help in the successful longevity risk management i.e. in the facilitation of the measuring and mitigation of the longevity risk, by providing availability of accurate, timely and updated data on the mortality of the population in general, but also per socio-economic group. Such data should provide a benchmark that will be used by the stakeholders to set their own forecasts and which will also help in assessing the longevity risk. Then, the policy makers should encourage and facilitate the provision of new, adjusted products in order to meet the needs of various market segments, thereby providing adequate risk management.

One of the important features of the individually financed programs is that the members have the rights and the freedom to make decisions through the entire membership stage – from enrolment, to accumulation and payouts – which will influence their future retirement incomes. Therefore, much attention is put on the pension education. Namely, due to the reallocation of risks and responsibilities among occupational schemes organizers and the members, now members bear more risks and their decisions have direct influence on their potential pensions. Hence, potential members' and potential pensioners' awareness must be raised in order to understand the importance of the system in general, and, their personal role in it, as presented through their decisions. Members must know how to make the optimum choice in accordance with their needs for the future and the acceptable risk level, and in accordance with the economic, financial and social environment. Unfortunately, there is a general agreement on the insufficient and very limited financial and pension

culture of the average pension fund member, in the context of increased individual responsibility. The solution to these issues should be long-term; it should include systemic efforts by all authorities in charge of improving the pension education and culture. In that light, and especially after the financial crisis, large numbers of countries have focused on developing national strategies for financial education, including pension education and culture. The purpose is to strengthen the efficiency of the financial education through specially designed strategies that should provide for adjusted and effective solutions for the financial literature needed for the persons, including the most vulnerable and sensitive categories. These strategies are adopted either as independent or in combination with financial inclusion and/or access to consumers' protection. By now, around 45 countries with various average salaries have reached advanced levels of implementation of such national strategies, while a large group of countries are in the development stage of these strategies. Also, in the past year, one of the hottest topics of OECD and IOPS is the protection of the consumers of financial services by pension and financial education in general. The main goal of IOPS is to set the principles or good practices of the supervising activities, in the field of protection of the pension systems' consumers. Therefore, IOPS stresses out the key areas and the supervisory measures for strengthening the consumer protection in the private pensions sector - legal framework and supervisor authorizations, publications and transparency, financial education and awareness, responsible behaviour of pension companies and their agents, complaints, and indemnifications. Besides the differently set systems of regulation and supervision, pension supervisors have a very important role in the maintenance and enhancement of the consumer protection in the private pension sector. This is especially relevant and important for the systems where private pensions are the main source of income after retirement and where the insured person is facing a lot of choices in all the stages of the pension savings. The policy makers and the regulators also point out the importance of the consumer to get adequate financial advice before retirement and have stressed out the possibility of potential conflict of interest in giving financial advice before retirement. In that direction, it is necessary to provide measure for improvement of the financial counselling, to set standards that will provide for assurance that the persons who provide the financial counselling are competent and also to provide mechanisms for facilitation in the dissolution of potential disputes and troubles of the insured persons and consumers. Also, it is necessary to provide measures for risk mitigation from the conflict of interest by setting obligations for protection standards, requirements for publications and disclosures, as well as limits on the fees for giving financial advice. Pension supervisors join in the process of giving financial education for the current and for the future members in order to build the trust in the system, by encouraging the population to save more on a longer term, by giving advice for investments etc. The Netherlands organize "pension days" to raise the awareness on pensions of the employees but of the employers as well. Many countries have established ways of informing the population on the individual pension accounts for the public and for the private pensions (Denmark, Estonia, Holland, Sweden etc). In New Zealand there is a possibility to electronically compare funds based on risk, fees, past returns, offered services etc. Australia offers the possibility for free education which helps people to be informed before they make any financial or investment decisions etc.

According to OECD, private pension funds play a huge and progressing role in complementing the pension income coming from public sources in the OECD-countries and the world. Their importance in providing for adequate pension is rising by the decreased ability of the governments to finance the pension promises. In 2016, OECD, in coordination with the pension regulators of the OECD members and IOPS revised and adopted the expanded OECD Core Principles of Private Pension Regulation, which are replacing the old Core Principles of Occupational Pension Regulation. The expanded principles include the occupational schemes and individual plans, with DB and DC, and reflect the changes in the nature of the private pension systems, especially the extended coverage of the DB pension plans and the individual pension plans. The IOPS principles of supervision of private pension systems are also part of these principles. They aim at encouraging more efficient regulation and management with the private pension systems, and thereby at helping the countries to strengthen the private pension system and improve their additional role in the provision of adequate income after retirement. They also provide for a high level general benchmark and guidelines for designing and operation of the private pension systems.

The structure of the fully funded pension insurance in the Republic of Macedonia

2.1 Description of the pension system

2.2 The role of the fully funded pension insurance in the pension system

2.3 Institutional infrastructure of the fully funded pension insurance

2

2.1 Description of the pension system

The pension system in the Republic of Macedonia is part of the comprehensive social insurance and it has the following structure:

- Generational solidarity – based insurance (first pillar)
- Mandatory fully funded pension insurance (second pillar)
- Voluntary fully funded pension insurance (third pillar)

This structure is the product of a thorough reform of the pension system, which had been prepared for several years and its legal framework had been actually established in 2000. The pension system in the Republic of Macedonia is regulated with four laws and numerous secondary regulations. These regulations are: the Law on Pension and Disability Insurance, the Law on Mandatory Fully Funded Pension Insurance, the Law on Voluntary Fully Funded Pension Insurance, the Law on Payment of Pensions and Pension Benefits from the Fully Funded Pension Insurance and the secondary regulations that further regulate relevant areas of the pension system.

The Macedonian pension system has a long history of existence; it has a rather extensive coverage of the labour force and in the provision of pension benefits for the retirees. However, the social and economic turmoil at the beginning of the '90s left their mark on the pension system, causing financial difficulties for the system. These difficulties were caused by the unfavourable developments of the economy and the reduction of the active insured members participating in the system, reduced contribution collection and increased number of retired persons. This led to increased costs for the payout of pension benefits.

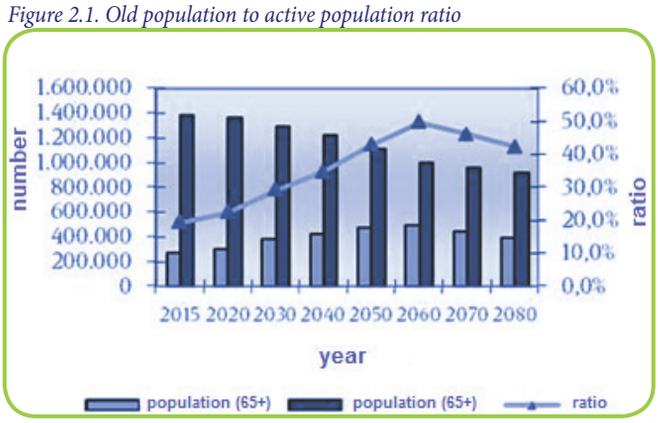
Also, demographics have strong influence over the pension system. It is already a global trend that due to improved living and medical conditions, people tend to live longer, however, the number of newly-born is constantly decreasing, leading to older population participating at a higher rate in the total population of the world.

The projections of the Actuarial Unit in the Pension and Disability Insurance Fund (PDIF) demonstrate that this trend shall persist in the future. One of the most common indicators for measuring the aging of the population is the ratio of old population (above 65 years of age) to the active population (at the age from 18 to 64). The Figure 2.1 shows both groups in numbers and in relation to each other.

It is expected that in 2060, the ratio of these two groups shall increase from the current 19.45% to 49.74% in 2060, while in 2080 it will decrease to 42.28%, which means that on a long-run one half of the population above the age of 18 years will be old population.

For the pension system, such demographic movements mean that the number of retired persons shall increase with the increasing number of years when such persons shall be pension beneficiaries as well. At the same time, this means that the number of insured persons shall decrease. The actuarial projections, which were prepared in the period of

Figure 2.1. Old population to active population ratio



Source: PDIF – Report on the pension system in the Republic of Macedonia with actuarial projections (short version – December 2015

contemplation of the pension reform, demonstrate that on a long run, such factors might have huge negative impact on the solvency of the PDIF and, without reforms the system might face a huge and increasing deficit over the years.

In order to be prepared for such changes, the pension and disability insurance in our country was thoroughly reformed, which resulted in the introduction of a three-pillar pension system. This system includes a combined financing of the future pension benefits and diversification of the economic and demographic risks, which should provide for a safer retirement income for the current and future generations of pensioners and a long-term stability of the pension system as a whole.

The first pillar is financed on a generational solidarity basis (PAYG), which means that the pension benefits for the current pensioners are paid out from the contributions of the current insured persons. This pillar is a defined benefit pillar, which means that it provides the benefits according to a predetermined formula. The first pillar pays out the following benefits: part of the old age pension, disability and survivors pension benefits, as well as the minimum pension benefit.

The second and the third pillars constitute the fully funded pension insurance, which capitalizes the paid in contributions on the insurers' accounts. These two pillars are defined contribution pillars, which means that the contribution is predefined, while the pension benefit is determined based on the accumulated amount on the insurer's account. The second

pillar pays out part of the old age pension. The third pillar provides financial protection from old age, disability and death of the insured person.

It is expected that the reform of the pension system and the introduction of the multi-pillar pension system, as a combination of public financing (generational solidarity) and private financing (fully funded), will bring long-term stability of the system and safety in the provision of pension and disability entitlements. This should be realized through the long-term gains for the individual members, for the pension system and for the economy as a whole. Such a reformed system brings higher safety to the individual participant, who will receive the pension benefit from more than one source, when retired, as it provides for risk diversification. At the same time, the reform provides for more transparency and information for the members of the pension funds. The reform should lead to a solvent pension system, increased savings and boost the investments and therefore the economic growth.

2.2 The role of the fully funded pension insurance in the pension system

The fully funded pension insurance is very different from the PAYGO insurance in these respects: treatment and recording of contributions and benefit payouts. In this insurance, each member has his individual account on which the assets are recorded and which provides the base for the future pension benefit, based on the amount of paid in contributions. The fully funded pension insurance is based on accumulation of assets from contributions on individual accounts, which are further invested and the return from the investments, decreased for management expenses, which is added to the assets accumulated on the individual account. Therefore, the future pension depends on the amount of accumulated assets and the life expectancy upon retirement. It is very important for this type of pension saving that it is a long-term saving; it develops gradually, where at the start, while the member is very young, the savings are small, but, in the future, when the member reaches retirement age, the savings are significantly higher.

This type of insurance is privately managed by licensed pension companies, which manage the pension funds and invest the paid in contributions. Thereby, it is guided by economic goals, which determine the investment strategy, creating the possibility for maximizing the entire return, in the best interest of the pension fund members. One of the main features of this type of insurance is the investment risk diversification (including international diversification).

Other important features of the fully funded pension insurance are: the right to personal choice and the initiative of the individual. Namely, all persons employed before January 1, 2003, were given the opportunity to join the second pillar and to choose the pension fund of their preference, while the newly employed were given the chance to choose the private pension fund in which they wanted to be members. The membership in the voluntary pension funds is also by choice of the individual or by participation in an occupational scheme, sponsored by the employer or by a citizens' association.

The portability of assets is another important feature of the fully funded pension insurance. All members of the mandatory or voluntary pension funds have the right to transfer from one to another pension fund, together with their savings. When a person is participating in an occupational scheme, he has the right to transfer his savings to another occupational scheme or to his individual account, in case of change of employer.

The fully funded pension insurance provides for high level of transparency, which is one of the most important characteristics and a novelty for the pension system, in general. The pension companies have the legal obligation to inform their members and the retired members in writing, at least once a year, for the balance of their accounts, by submitting the so called "green envelope". The green envelope contains data on the investments of the pension fund, the charged fees and the return of the pension fund.

2.3 *Institutional infrastructure of the fully funded pension insurance*

The three-pillar pension system is consisted of the following institutions:

• Ministry of Labour and Social Policy – responsible for creating and enforcing the policy governing the pension and disability insurance and for supervising of the legality of operations within this insurance.

• Agency for Supervision of Fully Funded Pension Insurance (MAPAS) – regulatory and supervisory body of the fully funded pension insurance.

• Pension Company – joint stock company founded by financial institutions with large capital and experience, whose sole activity is managing pension funds' assets. The reformed pension system offers the opportunity for establishing three types of pension companies:

o Mandatory Pension Company - manages only mandatory pension funds

o Voluntary Pension Company - manages only voluntay pension funds

o Joint Pension Company - manages mandatory and voluntary pension funds

• Custodian of pension fund assets – safely keeps pension funds' assets, on a separate account, apart from the assets of the Pension Company.

• Public Revenue Office (PRO) – PRO undertakes centralized contribution collection and submits to the PDIF total contributions for pension and disability insurance.

• Pension and Disability Insurance Fund of Macedonia (PDIF) – allocates the pension insurance contributions between the first and the second pillar and allocates the data on membership to the selected mandatory pension fund.

MAPAS is a regulatory and supervisory body, established to protect the interests of the current and retired pension funds' members, and to enhance public awareness about the characteristics of this type of insurance and to promote the development of the fully funded pension insurance. MAPAS initiates and passes regulations and acts, grants licenses to pension companies and approvals for pension fund management, performs off-site and on-site supervision of the pension companies, pension funds and custodians, organizes exams and registration of sales agents, performs pro-active controls over the activities of the pension companies etc. For its performance, MAPAS reports to the Parliament. MAPAS charges a fee from the pension companies, which is calculated as a percentage of the contributions paid in the pension funds. For 2016, this percentage was 0.8. MAPAS is a regulatory body that supervises the second biggest segment of the financial market – the pension funds –amounting to over 8% of the GDP and continually growing.

A pension company is a joint stock company, which is established and operates as per the Law on Companies and the Law on Mandatory Fully Funded Pension Insurance or the Law on Voluntary Fully Funded Pension Insurance. A Pension Company is established upon a granted license from MAPAS and it manages a pension fund upon prior approval for pension fund management. A mandatory pension company is established to manage only mandatory pension funds; a voluntary pension company is established to manage only voluntary pension funds, while a joint pension company is established to manage mandatory and voluntary pension funds. A joint pension company must have a share capital of at least 1.8 million Euro in denar counter-value; a mandatory pension company's share capital should be 1.5 million euro in denar counter-value, while a voluntary pension company's share capital should be 0.5 million Euro. In case of increased assets under management, the pension company is obligated to increase the share capital according to the Law. The sole activity of the pension company is pension fund management, its representation in front of third parties and other activities, which derive directly from the pension fund management. The main responsibilities of the pension company are: membership, assets management, risk management and risk mitigation, administration and record keeping, abiding by the laws and secondary regulations governing the fully funded pension insurance, regular reporting to members, public and MAPAS, payout of programmed withdrawals to the retired members etc. A pension company operates according to the rules of good corporate governance and it has a fiduciary duty to work only in the best interest of the members and the retired members of the pension fund under management. This fiduciary duty is rendered thorough high level of ethics and integrity and without any conflicts of interest. For performing these functions, the pension companies charge three types of fees (More details in Chapters 5.6 and 6.7)

A pension fund (mandatory or voluntary) is an open-end investment fund, which is established and operates according to the Law on Investment Funds if not otherwise regulated with the Laws on Mandatory or Voluntary Fully Funded Pension Insurance. A mandatory pension fund is consisted of contributions and assets of the members, assets of the retired members and returns on the invested contributions and assets, reduced for the fees charged from the mandatory pension fund. A voluntary pension fund is consisted of voluntary contributions paid in the name and on behalf of the members, assets of the members,

assets of the retired members and returns on the invested contributions and assets, reduced for the fees charged from the voluntary pension fund. The owners of the pension fund are its current and retired members, and their individual ownership entitlements are determined with the amounts of their accounts. The pension fund assets cannot be subject to claims, nor can they be subject to execution by the pension company's creditors.

In 2005, on the international public tender, MAPAS granted two licenses for establishment of pension companies. And in 2009, those same pension companies, which were established as mandatory pension companies, were granted licenses and approvals to manage voluntary pension funds in addition to the existing mandatory pension funds.

Thus, today we have two pension companies, which manage[2] one mandatory, and one voluntary pension fund each as seen on Figure 2.2.

Both pension companies have a mixed ownership of domestic (49% of the shares) and foreign (51% of the shares) shareholders, as shown on Figure 2.3

Pension fund assets are completely separated from the assets of the pension company managing that pension fund, and those assets are kept with a custodian bank. This segregation of assets is essential to the safety and control of the transactions with the pension funds' assets. Any commercial bank, meeting the statutory requirements and having a contract with the pension company, may be a custodian bank for the mandatory and the voluntary pension funds' assets. Each pension company has a selected custodian for the mandatory and for the voluntary pension fund under management, as shown on Figure 2.2. For their service, the custodians charge fees from the pension companies. These fees are calculated as percentage from the pension funds' assets, depending on the amount of assets and in accordance with the signed contracts for custody services.

In Table 1.1 are given the fees that were charged by the custodians in 2016.

Figure 2.2. Pension companies and pension funds in the Republic of Macedonia

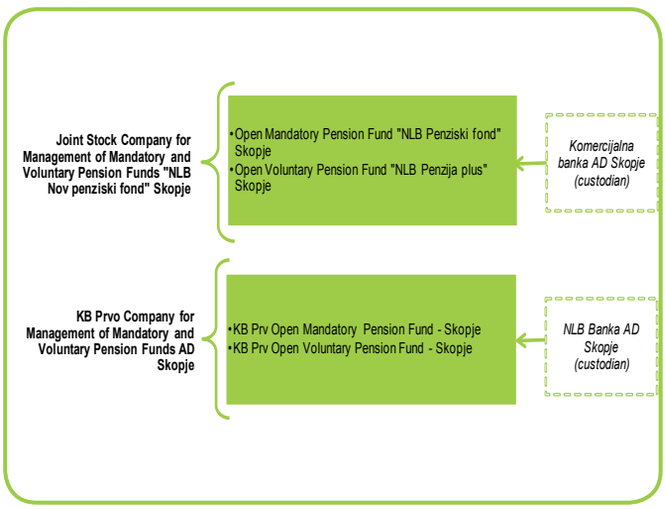
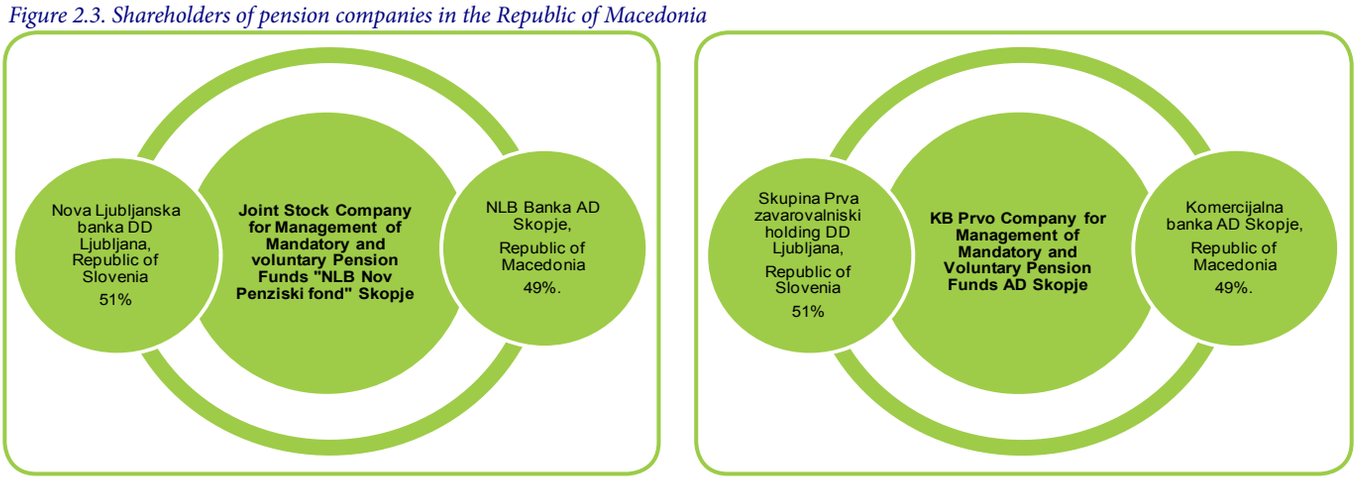


Figure 2.3. Shareholders of pension companies in the Republic of Macedonia



[2]*Herein after for the names of the Pension Companies, mandatory and voluntary pension funds the following abbreviations shall be used: NLB for Joint Stock Company for Management of Mandatory and Voluntary Pension Funds "NLB Nov penziski fond" Skopje, KB Prvo for KB Prvo Company for Management of Mandatory and Voluntary Pension Funds AD Skopje, NLBz for Open Mandatory Pension Fund - „NLB penziski fond" Skopje, KBPz za KB Prv Open Mandatory Pension Fund – Skopje, NLBd for Open Voluntary Pension Fund "NLB penzija plus" Skopje and KBPd for KB Prv Open Voluntary Pension Fund - Skopje*

Table 1.1 Fees charged by the custodians from the Pension Companies for safekeeping of the pension funds' assets

For Mandatory Pension Funds	Amount (annual)	For value of assets (in million denars)	Date of application
NLB Banka AD Skopje, as custodian of KBPz	0.081%	up to 100	2 July 2015
	0.076%	above 100 up to 200	
	0.070%	above 200 up to 300	
	0.066%	above 300 up to 400	
	0.059%	above 400 up to 500	
	0.055%	above 500 up to 600	
	0.053%	above 600	
	0.046%	above 700 up to 800	
	0.040%	above 800 up to 900	
	0.035%	above 900 up to 1000	
	0.033%	above 1000	
	0.092%	up to 100	
Komercijalna banka AD Skopje, as custodian of NLBz	0.087%	above 100 up to 200	12 July 2015 г
	0.081%	above 200 up to 300	
	0.077%	above 300 up to 400	
	0.070%	above 400 up to 500	
	0.066%	above 500 up to 600	
	0.064%	above 600	
	0.060%	above 500 up to 600	
	0.053%	above 600 up to 700	
	0.046%	above 700 up to 800	
	0.042%	above 800 up to 900	
	0.034%	above 900	
	0,034%	above 900	
For Voluntary Pension Funds	Amount (annual)	For value of assets (in million denars)	Date of application
NLB Banka AD Skopje, as custodian of KBPd	0.25%	up to 50	21 December 2009 .
	0.20%	above 50	
Komercijalna banka AD Skopje, as custodian of NLBd	0.25%	up to 50	15 July2009
	0.20%	above 50	

Amendments and additions to the legislation and secondary legislation regulating the fully funded pension insurance

3

In 2016, the Law on Mandatory Fully Funded Pension Insurance was amended once, as well as the Law on Payment of Pensions and Pension Benefits from the Fully Funded Pension Insurance. The Council of Experts in MAPAS passed 7 secondary regulations or amendments to existing secondary regulations for the fully funded pension insurance and 8 rulebooks or amendments to existing rulebooks which regulate the operations of MAPAS. Also, one correction of a rulebook was adopted in 2016.

The amendments to the Law on Mandatory Fully Funded Pension Insurance and the Law on Payment of Pensions and Pension Benefits from the Fully Funded Pension Insurance made in February 2016 aligned these Laws with the Law on General Administrative Procedure. .

During 2016, MAPAS amended existing and passed new secondary regulation, that regulate the mandatory and the voluntary fully funded pension insurance and the payout of pension benefits from this insurance. Those are:

1. Rulebook on Sales Agents (May 2016);
2. Amendments to the Rulebook on Mandatory Pension Fund Membership (May 2016);
3. Amendments to the Rulebook on Voluntary Pension Fund Membership (May 2016);
4. Rulebook on Amendments to the Rulebook on Presenting Offers for Projected Future Pensions (May 2016);
5. Rulebook on Amendments to the Rulebook on the procedure for electing members to the Management and Supervisory Boards of the Pension Company (July 2016) ;
6. Rulebook on Amendments to the Rulebook on Pension Funds Marketing (August 2016);
7. Amendments to the Rulebook on Mandatory Pension Fund Membership (October 2016);
8. Correction to the Amendments to the Rulebook on Mandatory Pension Fund Membership (October 2016).

The amendments to the Rulebooks were done in order to further regulate certain procedures. Namely, some of the changes were necessary to further regulate the Sales Agents exam, as per the amendments to the Law on Mandatory Fully Funded Pension Insurance. The amendment to the Rulebook on the Mandatory Pension Fund Membership regulate the calculation of the weight for allocation of the unallocated insured persons in the mandatory pension funds, who are employed for over 12 months, but under 36 month, in order to stimulate the operations of the pension company managing those funds. Then, other changes to this Rulebook regulate the transfer between pension funds, in accordance with the amendments to the Law, where the obligation that the statement needs to be verified by a notary public was canceled. Also, the amendments to the Rulebook on Voluntary Pension Fund Membership regulate the transfer between pension funds, in accordance with the amendments to the Law, where the obligation that the statement needs to be verified by a notary public was canceled. The amendments to the Rulebook on Presenting Offers for Projected Future Pensions refer to the description of the field for the monthly amount of the pension benefit in terms that now an explanation is introduced that the gross monthly pension benefit is presented, as second pillar pensions are subject to personal income tax, per the Law on Personal Income tax. Also, changes in the presentation form were made, where a statements is introduced as a confirmation on the presentation made to the member, and signed by the sales agent as well. With the amendments to the Rulebook on the procedure for electing members to the Management and Supervisory Boards of the Pension Company, the Council of Experts of MAPAS is given the possibility to decided whether to ask for an interview with a proposed candidate for a member of the Management or Supervisory Board, taking into consideration situations of approval of members who are re-elected or other similar situations. Also, the Rulebook on Pension Funds Marketing was amended where the pension company is obligated to notify each new allocated member on, at least, the rights and obligations from the membership in the mandatory pension fund. This amendment was done in order to improve the level of information of the mandatory pension fund members, especially those allocated by the PDIF. Also, the forms for the reports on the pension savings re amended in the parts referring to the personal data of the member and the fees charged by the pension companies.

In 2016, MAPAS prepared and passed the following instruction:

1. Instruction on filling in the reports on the pension savings (February 2016) and
2. Instruction on the procedure for allocation of insured persons (September 2016).

Financial data for the Pension Companies

4.1 Revenues and expenditures of pension companies for 2016

4.2 Financial results of the pension companies

4.3 Share capital, initial capital and own assets of pension companies

4.4 Indicators

4

4.1 Revenues and expenditures of pension companies for 2016

Pension companies prepare financial reports on their financial performance in accordance with the Law on Companies, the Rulebook on the Form and Contents of the Financial Reports of a Pension Company, the Rulebook on Accounting and, the effective international accounting standards. The data which underlie this chapter come from the unaudited annual financial reports for both pension companies as of 31.12.2016.

When performing their sole activity – managing pension funds – the Pension Companies get their finances from fees, charged in accordance with Law, from contributions, pension funds' assets and transfers. Also, Pension Companies gain financial revenues as a result of their investing of free assets in deposits and securities, which are allowed according to the Law on Voluntary Fully Funded Pension Insurance. The revenues of both pension companies for 2016 are given in the Table 4.1.

Table 4.1. Revenues of Pension Companies for 2016

in denars

Basis	NLB		KB prvo	
Revenues from managing a mandatory pension fund				
Contributions Fee	81,981,208	40.63%	90,840,499	40.24%
Assets Fee	96,510,533	47.83%	110,838,898	49.10%
Transfer Fee	925	0.00%	0	0.00%
Total revenue from managing a mandatory pension fund	178,492,666	88.45%	201,679,397	89.34%
Revenues from managing a voluntary pension fund				
Contributions Fee	2,903,937	1.44%	3,440,224	1.52%
Assets Fee	4,545,130	2.25%	4,074,104	1.80%
Transfer Fee	0	0.00%	0	0.00%
Total revenue from managing a mandatory pension fund	7,449,067	3.69%	7,514,328	3.33%
Financial revenues	15,139,744.00	7.50%	16,543,385.00	7.33%
Other revenues of the pension company	713,958.00	0.35%	13,962.00	0.01%
Total revenues	201,795,435	100.00%	225,751,072	100.00%

*Table 4.2. Expenditures of pension companies for 2016**

in denars

Basis	NLB		KB prvo	
Expenditures for managing a mandatory pension fund				
Sales agents	474,464	0.37%	621,339	0.49%
Marketing	8,918,938	6.89%	10,509,603	8.34%
Transactions	40,719	0.03%	33,823	0.03%
MAPAS	21,947,844	16.96%	24,292,776	19.27%
Custodian	14,202,075	10.97%	15,053,023	11.94%
Other expenditures for pension fund management	1,215,715	0.94%	1,157,266	0.92%
Total expenditures for managing a mandatory pension fund	46,799,755	3.15%	51,667,830	40.99%

Expenditures for managing a voluntary pension fund				
Sales agents	2,146,887	1.66%	154.099	0.12%
Marketing	944,700	0.73%	1.165.619	0.92%
Transactions	28,503	0.02%	493.550	0.39%
MAPAS	878,437	0.68%	1.065.706	0.85%
Custodian	952,191	0.74%	1.139.181	0.90%
Other expenditures for pension fund management	63,952	0.05%	89.746	0.07%
Total expenditures for managing a voluntary pension fund	5,014,670	3.87%	4.107.901	3,26%
Pension company management expenditures				
Wages and fees for employees	52,938,361	40.90%	34,732,618	27.56%
Non-material expenditures	13,401,874	10.35%	7,609,506	6.04%
Material expenditures	1,472,182	1.14%	1,570,562	1.25%
Depreciation	2,243,313	1.73%	3,316,558	2.63%
Financial expenditures	1,219,211	0.94%	1,563,845	1.24%
Other operational costs	6,048,240	4.67%	19,011,241	15.08%
Reservation of expenses and risks	304,399	0,24%	2,467,800	1.96%
Total expenditures for pension company management	77,627,580	59.97%	70,272,130	55.75%
Total expenditures	129,442,005	100.00%	126,047,861	100.00%

** Some data cannot be shown separately, In order to isolate some data, the pension company uses the number of members in the mandatory or voluntary pension fund as a weighted value.*

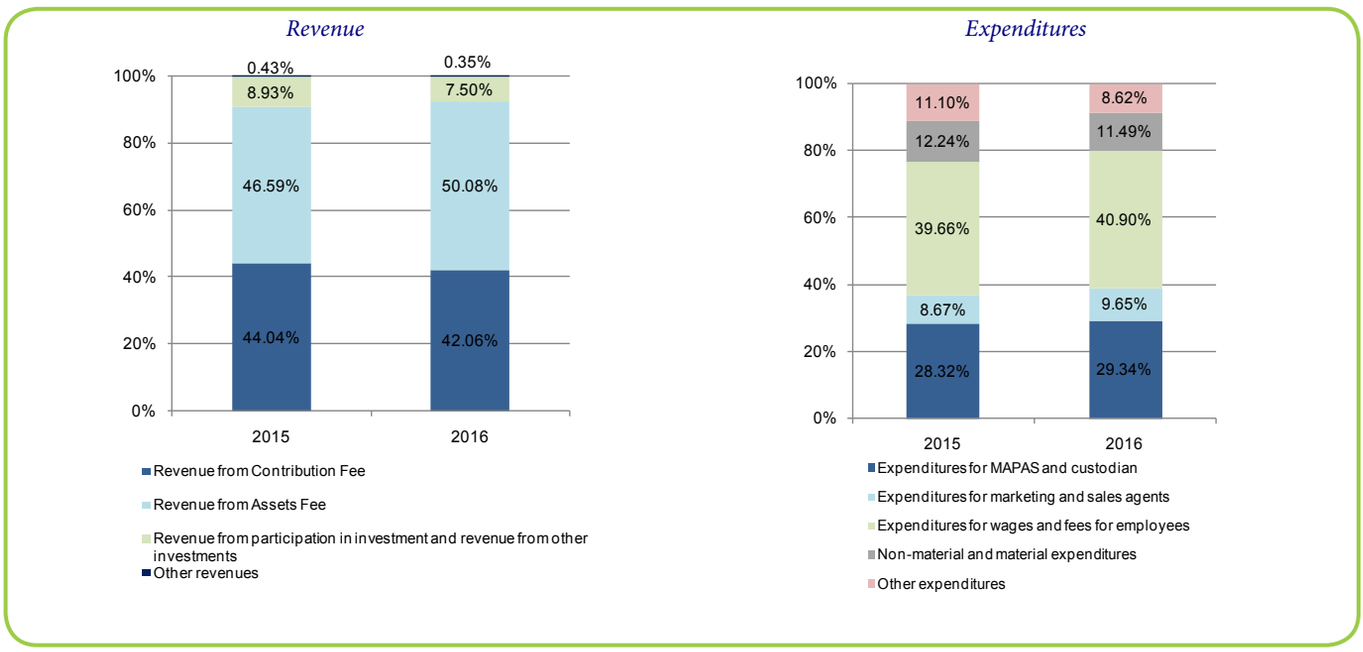
Naturally, Pension Companies have expenditures, which in general are dedicated to managing pension funds' assets, valuation of assets, membership, keeping of members' accounts, reporting to the members, payment of fees for MAPAS and the custodian and operational costs of pension companies. The expenditures are divided into three categories: expenditures for managing mandatory pension funds, for managing voluntary pension funds and for managing the Pension Company. The expenditures for both Pension Companies in 2016 are demonstrated in Table 4.2.

In 2016, both Pension Companies earned higher revenues in respect to 2015 for around 10% in NLB and KBP. The largest portion of the revenues of the pension companies came from fees from assets of mandatory and voluntary pension funds (around 50% in NLB and 51% in KB Prvo), followed by fees from contributions in mandatory and voluntary pension funds (around 42% for NLB and KB Prvo). In respect to the previous year, the percentage participation of the revenue from fees from contributions in the total revenue has decreased for approximately two percentage points in NLB and two percentage points in KB Prvo. While the participation of the revenues from fees from assets has increased for 3.5 percentage points for NLB and 3 percentage points for KB Prvo. The perceptual participation of financial revenues and other revenues of pension companies have slightly decreased in NLB and staid almost the same in KB Prvo.

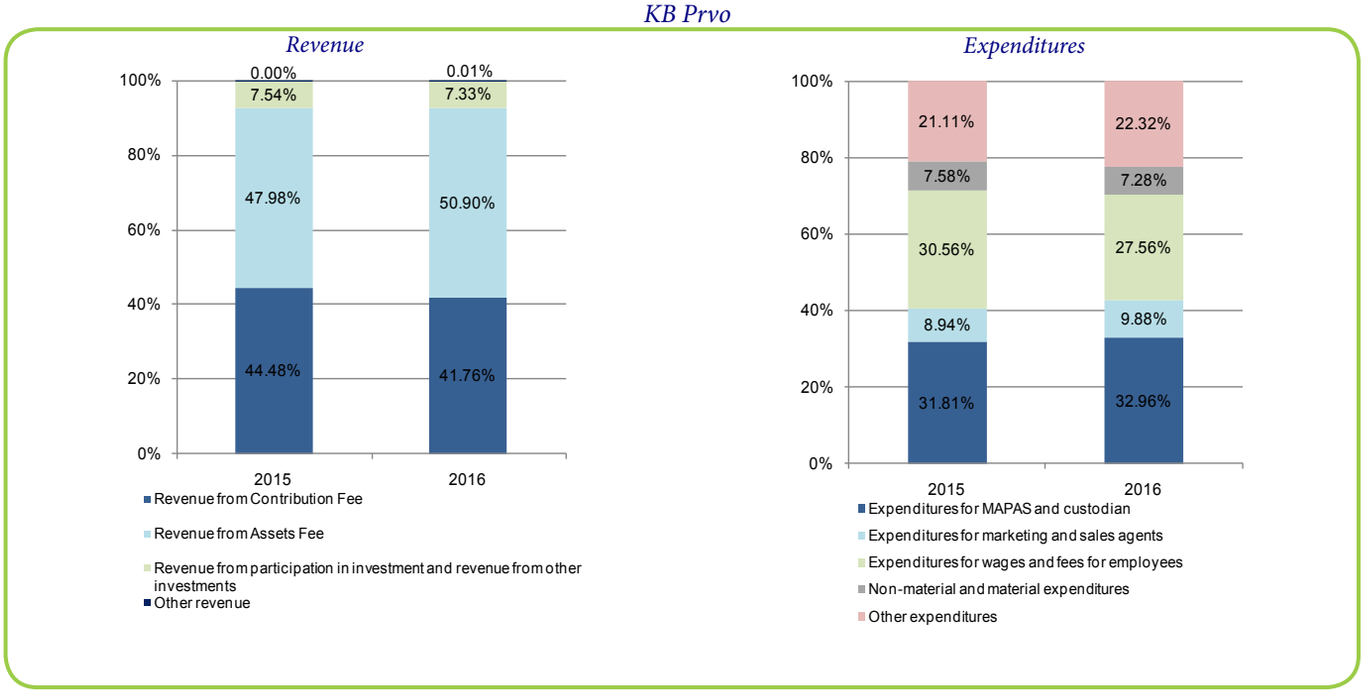
As far as the expenses are concerned, both pension companies have spent more in 2016 in respect to 2015, where such increase is 7% for NLB and 9% for KB Prvo. Most of the expenses of the Pension Companies are operational (around 60% for NLB and 56% for KB Prvo), with highest participation of wages and fees for employees, followed by expenditures for services and other expenditures. In respect to the previous year, the percentage participation of the wages in NLB has slightly increased, while for KB Prvo it decreased for 3 percentage points. In 2016, other expenditures have decreased for NLB, while for KB PRVO there was a minor increase. The rest of the expenditures refer to pension fund management (around 40% for NLB and 44% for KB Prvo). Also, the expenditures for marketing and sales agents are 10% for both pension companies thereby slightly increasing in respect to the previous year for both pension companies. Around 29% in NLB and 33% in KB Prvo of the expenditures are for payment of fees to MAPAS, PDIF and the custodians. Around 12% of the expenses of NLB and 13% of expenses of KB Prvo, are for the fees for the custodians, so their percentage participation in comparison to 2015 remains the same. In terms of absolute amounts of the expenses for the custodian, they have increased for around 7% for NLB and 15% for KB Prvo in respect to 2015. Also, there is an increasing trend for the custodian expenses, as those are calculated as percentage from the pension fund's assets. So, the increase of the total expenses for the custodian fees for both pension companies, since 2010 and until 2015, is around 30% per year, and 11% in 2016.

Figure 4.1. Structure of revenue and expenditures per company for 2015 and 2016

NLB



KB Prvo



4.2 Financial results of the pension companies

In 2016, both pension companies demonstrated positive financial results. Table 4.3 gives more detailed information on the financial results.

Both Pension Companies ended 2016 with net profit (profit after tax). KB Prvo's net profit is higher than NLB's, which is due to the fact that KB Prvo has more revenues than NLB, and less expenditures for 2016. In 2016, both pension companies had higher net profit than 2015, NLB for 15% and KB Prvo for 12%. Also, both Pension Companies earned total comprehensive income in the amount of 63 million denars for NLB and 89 million denars for KB Prvo. The accumulated profit (as of 31.12.2016) for NLB is around 161 million denars and for KB Prvo is around 200 million denars.

Table 4.3. Financial results of the pension companies for 2016 *in denars*

Description*	NLB	KB Prvo
Profit (for 2016)	72,353,430	99,703,211
Profit after tax (for 2016)	64,449,378	89,030,741
Nonrecurring cots	0	0
Net profit (for 2016)	64,449,378	89,030,741
Other comprehensive income**	-806,000	0
Total comprehensive income***	63,640,000	89,031,000
Accumulated profit (as of 31.12.2016)	160,619,907	200,572,960

**The data on the Other comprehensive income and the Total comprehensive income come from the Audited financial reports of the pension companies for 2016.*
***The data on the Other comprehensive income includes unrealized income or losses not shown in the Balance Sheet.*
****The data on the Total comprehensive income includes net income and other comprehensive income.*

4.3 Share capital, initial capital and own assets of pension companies

It is crucial for the system and the members of the system that pension companies are strong and stable institutions, which have adequate share capital. The existing pension companies should have a minimum of 1.8 million Euros in denar counter-value as share capital, exchanged per the middle exchange rate of the National Bank of the Republic of Macedonia. In case of increased assets under management, the pension company is obligated to increase the share capital according to the Law.

The share capital of the pension company is paid only in cash. In order to support the financial strength of the pension companies it is not allowed that the share capital is procured from loans or credits and it may not be burdened in any manner. The share capital must come from legal sources and it must be taxed in accordance with the Macedonian legislation and the legislation of the country in which each shareholder is registered as a legal entity.

The Pension Company is obligated, at any time, to maintain the share capital at a minimum of the total amount, Also, the Pension Company is obligated to maintain, at any time, its own assets at the minimum of the total amount of the share capital.

Table 4.4. Share capital, initial capital and own assets of pension companies *in denars*

Description	NLB	KB Prvo
Share capital and reserves	371,604,026	422,154,000
Share capital	130,001,478	110,459,024
Excess of share capital beyond statutory minimum	25.28%	18.34%
Own assets*	338,157,265	389,568,283
Excess of own assets beyond statutory minimum**	129.09%	118.41%

** Own assets are calculated according to the Rulebook on the Methodology for Calculation of Own Assets of the Pension Company .*
*** According to the statutory obligation, from October 2015, NLB, are obligated to maintain increased share capital i.e. share capital in the amount of 4.8 million Euro in denar counter-value., because the amount of assets of the mandatory and the voluntary pension funds under their management surpasses 300 million Euro. From September 2016, KB Prvo is obligated to maintain increased share capital i.e. share capital in the amount of 5.8 million Euros in denar counter-value, because the amount of assets of the mandatory and the voluntary pension funds under their management surpasses 400 million Euro.*

4.4 Indicators

In analyzing the financial data of the Pension Companies it is impIn analyzing the financial data of the Pension Companies it is important to observe the indicators per member and the efficiency coefficient. Table 4.5 gives the more important indicators per member and the efficiency coefficient for both Pension Companies for 2016.

The above indicators prove that the average indicators per member are higher for around 26 denars for KB Prvo, while for NLB the average expenditures per member are higher for 68 denars. Compared to 2015, both companies mark an increase in the average revenues per member for around 4% for NLB and 5% for KB Prvo, while for the expenditures - for NLB have slightly increased and for KB Prvo they have slightly decreased. NLB marked an increase in the profit per member for around 10% in respect to 2015, and 14% for KB Prvo. Both Pension Companies have decreased their efficiency coefficient in respect to 2015, for 3% for NLB and 1% for KB Prvo.

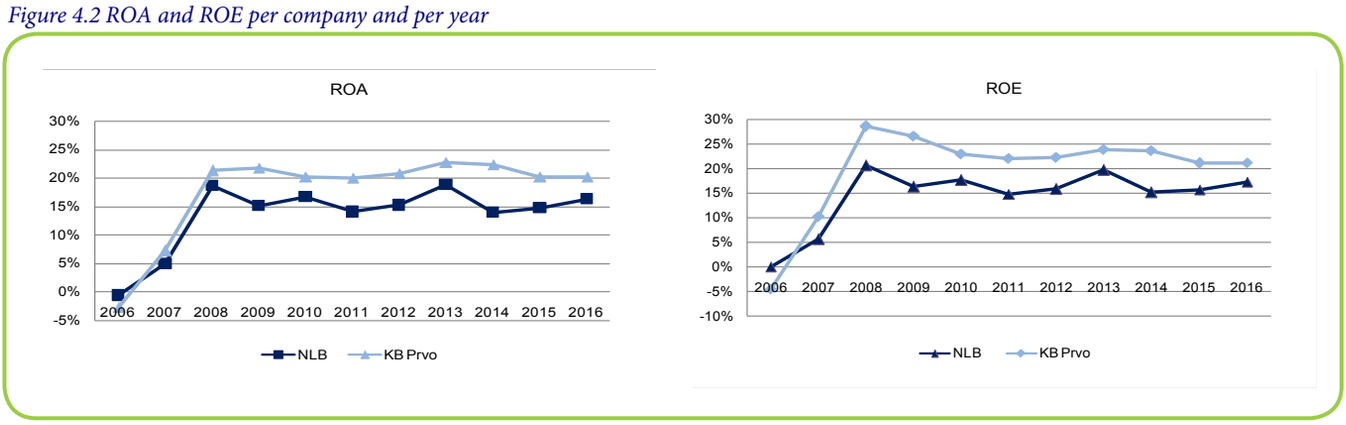
Figure 4.2 shows the movement of profitability indicators, ROA (net profit/total assets and ROE (net profit/capital), compared for both companies for the period 2006-2016.

Compared to 2015, in 2016 KB Prvo has almost the same rates of return on assets and on capital, while for NLB the return rates have increased.

Table 4.5. Indicators *in denars*

Description	NLB	KB Prvo
Indicators for revenues and expenditures per member		
Average revenues per member	987.90	1.013.44
Average expenditures per member	633.69	565.85
Profit per member	354.21	447.59
Efficiency indicators		
Efficiency coefficient (total expenditures / total revenues)	64.15%	55.83%

Figure 4.2 ROA and ROE per company and per year



Information on mandatory pension funds

5.1 Membership in mandatory pension funds

5.2 Transfer of members from one to another mandatory pension fund

5.3 Contributions in the mandatory pension funds

5.4 Investments and portfolio structure of mandatory pension funds

5.5 Net assets, accounting units and rates of return of the mandatory pension funds

5.6 Fees for mandatory pension funds

5.7 Pay outs of pensions from the mandatory fully funded pension insurance

5

5.1 *Membership in mandatory pension funds*

An insured person may be entitled to a membership in a pension fund upon:

1) signing a membership contract and upon registration in the Membership Register kept by MAPAS;

2) random allocation in a mandatory pension fund by MAPAS in cooperation with the PDIF, when the insured person is obligated to become a member but had not signed a membership agreement in the prescribed period for selecting a mandatory pension fund, followed by registration in the Membership Register kept by MAPAS.

There are two major categories of second pillar members:

- Mandatory members – insured persons who got employed, and entered the mandatory pension and disability insurance for the first time after January 1, 2003

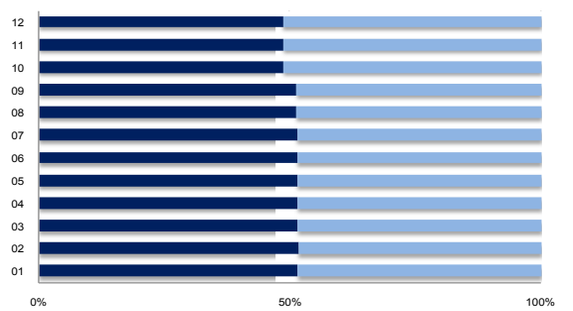
- Voluntary members – insured persons who were employed for the first time before January 1, 2003

Insured persons as per Chapter VII - Acquisition and realization of entitlements of some categories of insured persons under special conditions of the Law on Pension and Disability Insurance (employees with increased pension service working for the Ministry of Interior, Penitentiary-Corrective institutions, the Macedonian Army and similar) and individual farmers - cannot be members of the second pillar. As an exception, if such persons change their status of insured persons as per Chapter VII or as individual farmers, they may sign a membership contract with a pension fund by their choice, within one year from the status change. Also, persons that have already joined the second pillar and afterwards have changed their status into one of the above-mentioned categories have the right to switch back to the mono-pillar system within one year from the status change.

On September 20, 2005 the membership in the second pillar started. The voluntary members had the possibility to make their choices until December 31, 2005. Mandatory members are obligated to sign a membership contract within three months from their first employment. Once these categories of insured persons are employed, MAPAS i.e. PDIF temporary allocates them to a randomly chosen mandatory pension fund, in order for their assets to be invested immediately after their employment. The mandatory members, who will not sign a membership contract with the expiration of the statutory deadline, shall remain members in the pension fund to which they were temporarily allocated.

MAPAS prescribes the weight, which is used for allocation of members to pension funds. This is done the first working day of each month. The weight depends on the value of the fee from contributions, charged by the Pension Company and from the nominal return of the pension fund, where the impact is higher from the return (70%) rather than the fee (30%)[3]. Figure 5.1 presents the weight used in 2016 for allocation of insured persons in mandatory pension funds.

Figure 5.1 Weight used in 2016 for allocation of insured persons in mandatory pension funds.



	01	02	03	04	05	06	07	08	09	10	11	12
NLBz	51,53%	51,58%	51,52%	51,50%	51,40%	51,38%	51,32%	51,23%	51,29%	48,68%	48,68%	48,51%
KBPz	48,47%	48,42%	48,48%	48,50%	48,60%	48,62%	48,68%	48,77%	48,71%	51,32%	51,32%	51,49%

Just like in the previous years, in 2016 the number of allocated members between the two mandatory pension funds is almost equal. Considering that the value of both weights is around 50% (in the first nine months the value of the weight for NLBz is slightly higher than the one of KBPz, while in the rest of the months the KBPz weight is higher). Even though the contribution fee was reduced in 2016, the weights have almost the same value, because both companies charge the same fee from contributions and the nominal return for booth pension funds is almost the same.

The total number of members and temporarily allocated members in the mandatory pension funds as of December 31, 2016 is 427,025, which is an increase of 21,737 second pillar members or 5.4% in respect to 2015. This means that around 75% of the total number of insured persons in the PDIF are members of the two-pillar pension system. The allocation of members and temporarily allocated insured persons among the pension funds in 2016 remained almost the same as in 2015, where on 31.12.2016- 52% of the total number of members and temporarily allocated insured persons are in KBPz, while 48% are in NLBz.

Out of the total number of second pillar members, 69,108 or 16% are voluntary members, while 359,917 or 84% are mandatory members. Out of the total number of mandatory

[3] *The formula for weight calculation is prescribed with the Rulebook for Membership in a Mandatory Pension Fund.*

members, 171,147 members have signed a membership agreement, while 164,932 are members allocated to a pension fund by MAPAS, and 21,838 are temporarily allocated members. Only 6% of the persons who got their first employment and/or became mandatory members of the second pillar in 2016, signed a membership agreement with a mandatory pension fund, while the rest or 94% remained in the pension funds as allocated by MAPAS.

In terms of the structure of members and temporarily allocated insured persons, there were no unexpected or significant changes in 2016, as shown on the Figures 5.2 and 5.3.

It is obvious that with every quarter the participation of voluntary members is decreasing, while that of the mandatory members is increasing. This is to be expected because each year the number of newly employed persons is increasing, which automatically increases the mandatory membership. Also, it is evident that the number of mandatory members who signed membership agreements is slightly decreasing in each quarter, unlike permanently allocated members whose participation is growing gradually in the total membership in each following quarter.

Figure 5.2 Structure of members and temporarily allocated insured persons per membership status in NLBz

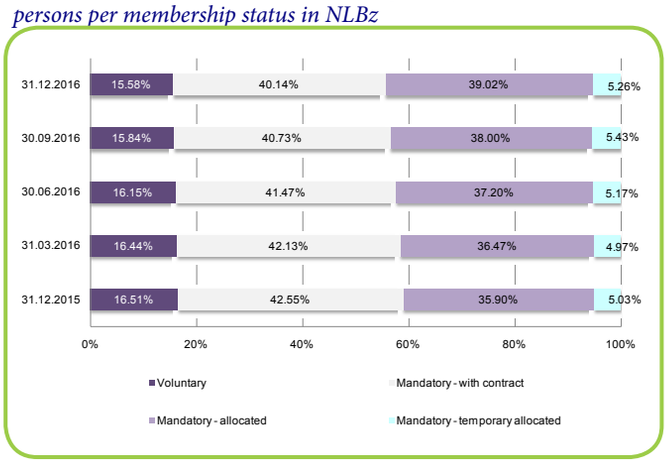
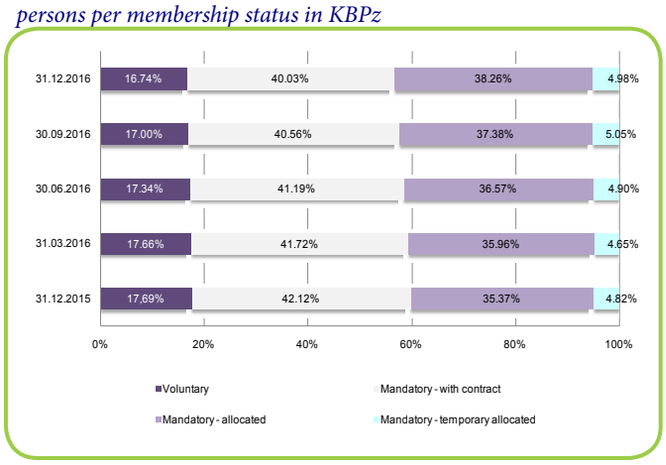


Figure 5.3 Structure of members and temporarily allocated insured persons per membership status in KBPz



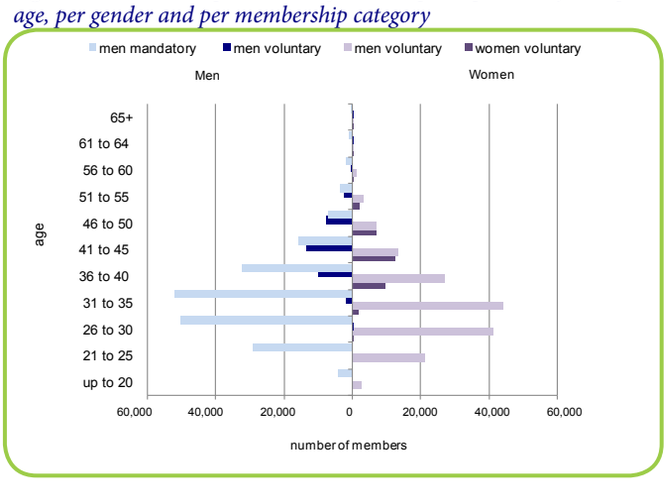
The analysis of the membership structure by age demonstrates that the largest group of members is composed of those of young age, for whom the second pillar is most favourable. The mandatory members are young people, at the age from 26 to 35 years, while voluntary members are slightly older at the age from 36 to 45 years. The average age of mandatory members is 33 years (for men and women), the average age of the voluntary members is 43 years (for men and women), and of all members it is 35 years. The membership structure of the two-pillar pension system per age, per gender and per membership category is shown on Figure 5.4.

According to the projections of the State Statistical Office, the total population of the Republic of Macedonia at the end of 2015 is 2,071,278. Out of the entire population at the end of 2015, 20% are members of the two-pillar pension system. The membership structure of the second pillar out of the total population, per age and per gender, as of 31.12.2015 is demonstrated on Figure 5.5.

This figure demonstrates that only a small percentage of the population participates in the two-pillar pension system and the majority of the members are young persons, at the age from 25 to 34 years. This is the case because the reformed pension system is still very young and it has been operational only for eleven years.

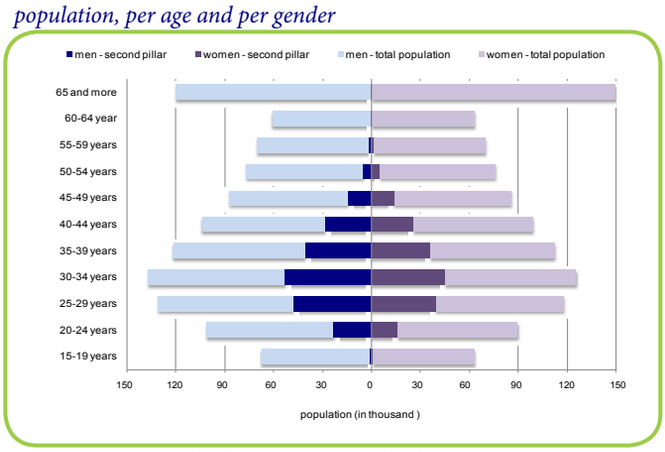
The membership structure of mandatory pension funds per statistical regions[4] in the Republic of Macedonia is given on Figure 5.6. The majority of members are from the region of Skopje, while for NLBz least of the members are from the North-eastern part of the country, and for KBPz from the South-eastern part of the country.

Figure 5.4 Membership structure of the two-pillar pension system per age, per gender and per membership category



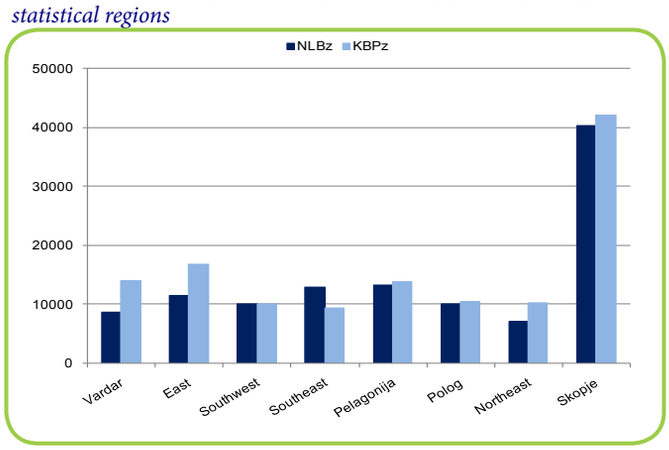
[4]*The statistical regions are defined by the State Statistical Office as territorial units, the nomenclature of the territorial units is based on the territorial organization of the local self-government in the Republic of Macedonia and it is harmonized with the EU classification.*

Figure 5.5 Membership structure of the second pillar out of the total population, per age and per gender



Source: State Statistical Office – MAK STAT data base – Statistics per regions – Population – Estimations of population

Figure 5.6 Membership structure of mandatory pension funds per statistical regions



5.2 *Transfer of members from one to another mandatory pension fund*

Each member of a mandatory pension fund is entitled to transfer to another mandatory pension fund if that member is not satisfied with the pension fund or with the pension company managing that pension fund. If a person had been a member in a mandatory pension fund less than 24 months, he is obligated to pay a transfer fee (in 2016 -15 Euros); otherwise, the transfer is free of charge. Upon such transfer, all of the assets on the members' account are transferred to the other pension fund.

Table 5.1 gives data on the number of members who transferred from one to another pension fund and the amount of assets that were transferred with those members, throughout 2016.

The number of persons who have changed the mandatory pension fund remains to be very small. During 2016, the total number of persons who have transferred from one to another mandatory pension fund is 30, which is 0.01% of the total number of members. Out of those who transferred, 17 went from KBPz to NLBz and 13 members transferred from NLBz to KBPz. Upon such transfers, around 3.6 million denars were transferred from KBPz to NLBz, while from NLBz to KBPz around 4 million denars were transferred.

Table 5.1 Transfer of members from one to another mandatory pension fund

2016	Members who have transferred FROM a mandatory pension fund	Transferred assets FROM a mandatory pension fund (in denars)	Members who have transferred TO a mandatory pension fund	Transferred assets TO a mandatory pension fund (in denars)
NLBz	13	4,089,733	17	2,875,714
KBPz	17	2,875,714	13	4,089,733

5.3 Contributions in the mandatory pension funds

The taxpayer is obligated to pay the pension and disability contribution –in the Republic of Macedonia the employers pay the contributions on behalf of the employees. The Public Revenue Office is in charge of the integrated collection of the social insurance contributions (pension and disability insurance, health insurance and insurance in the event of unemployment), as well as of the personal income tax.

For those who are members only in the mono-pillar system, their contributions remain with the PDIF (which for 2016 was 18% of the gross wage). For those persons who are part of the two-pillar system the PDIF divides the contribution between the first and the second pillar. The contribution transferred to the mandatory pension fund is 6% of the gross wage and the rest of the contribution for pension and disability insurance remains with the PDIF (for 2016 it was 12% of the gross wage (12% = 18% – 6%)).

The PDIF transfers the contributions of the mandatory pension fund members to their individual accounts, immediately upon payment, or maximum within five working days after receipt of the contributions, under the condition that with the receipt of the contributions the PDIF received the relevant data that would enable the PDIF to perform such transfer.

Figure 5.7 Payment and allocation of contributions

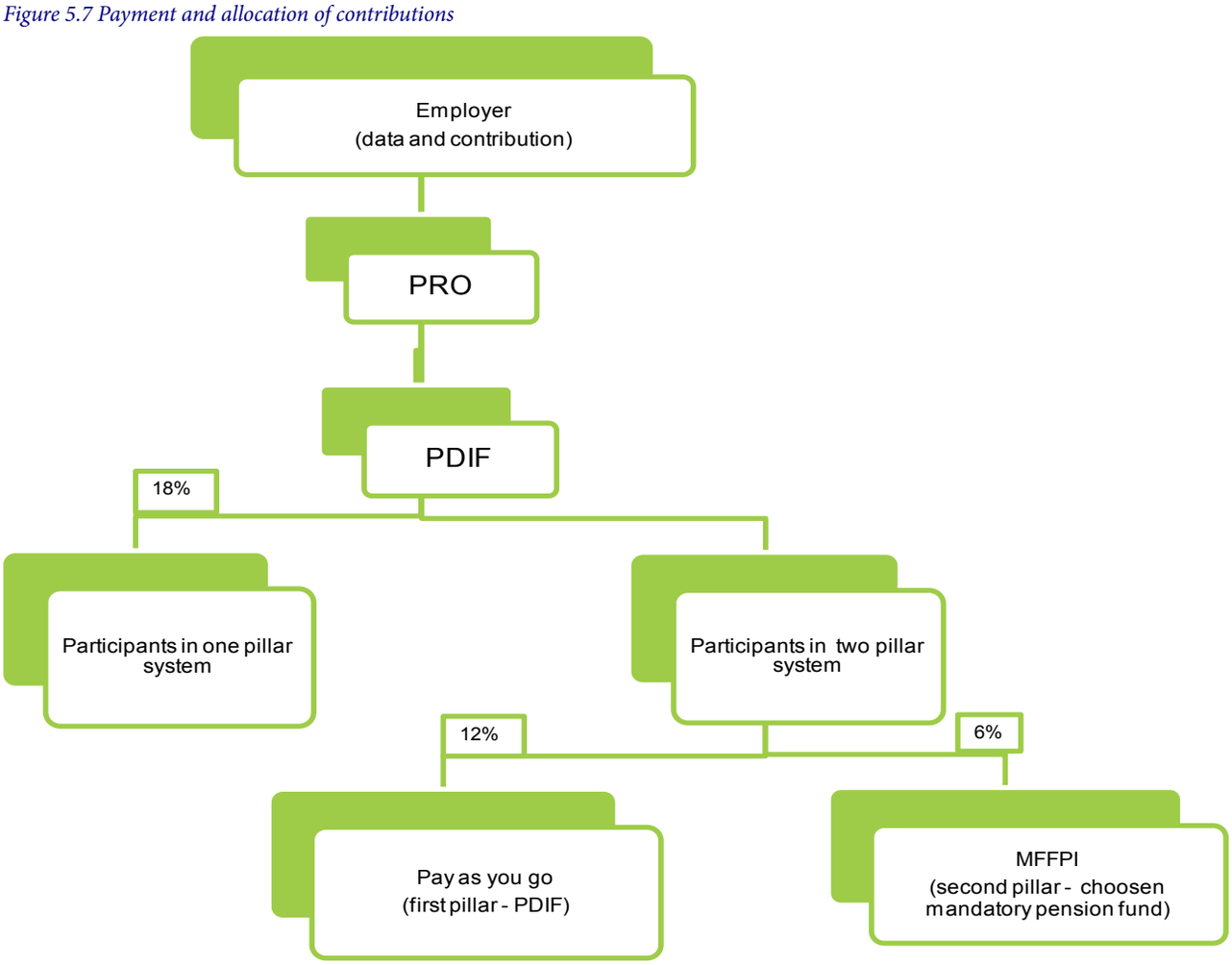


Table 5.2 Paid in contributions in the second pillar *in million denars*

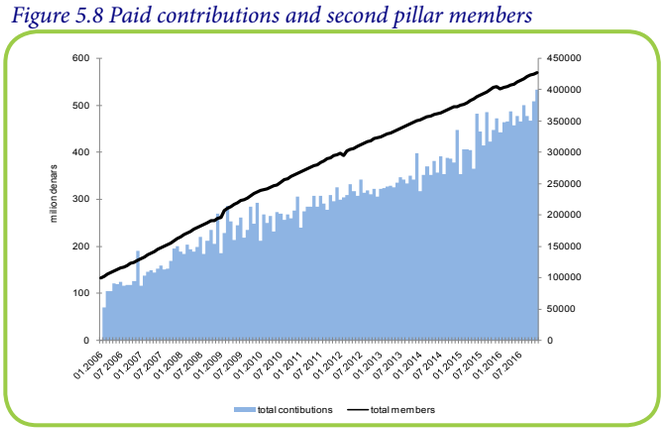
	Total 2015	Jan	Feb	March	April	May	June	July	Aug	Set	Oct	Nov	Dec	Total 2016
NLBz	2,418	210	220	222	232	217	226	221	238	227	222	242	257	2,733
KBPz	2,695	234	244	246	256	241	252	245	263	252	246	268	278	3,025
Total	5,113	444	464	467	489	458	478	467	501	479	468	510	535	5,758

During 2016, 5.8 billion denars were transferred to the mandatory pension funds, as presented in the Table 5.2 below, broken down by months:

Figure 5.8 shows all contributions (in million denars) paid in the second pillar, each month, from the very start of the reformed system until 31.12.2016, as well as the total number of members at the end of each month, in the same period.

It is evident that with the increase of membership the paid contributions grow as well (though the trend of payments is not linear, but it has certain peaks and valleys in some months).

Figure 5.8 Paid contributions and second pillar members



In 2016, one part (around 55 million denars) of the paid in contributions in the pension funds was returned to the PDIF for several reasons:

- Entitlements to disability pension benefits;

- Termination of membership contracts or cancellation of allocation of a member;

- Excess of paid contributions in the second pillar due to technical errors or excess of payments by employers

The structure of the returned assets to the PDIF, per mandatory pension fund, is shown in the table below.

Table 5.3 Structure of returned assets to PDIF, per mandatory pension funds

Reasons	From a mandatory pension fund	
	NLBz	NLBz
Entitlements	16,049,102	15,658,322
• Disability pension	3,956,679	4,836,040
• Survivors pension	12,092,423	10,822,282
Termination of contracts and cancellation of allocations	10,326,145	12,759,888
Contributions paid in excess	91,582	174,910
Total	26,466,829	28,593,120

5.4 Investments and portfolio structure of mandatory pension funds

It is very common for mandatory fully funded pension systems to introduce proactive control and quantitative and qualitative investment limits in the initial stages of implementation. Thus, the law and the secondary regulations define: the investment principles and goals, as well as the allowed types of investment instruments, the conditions that the regulated secondary markets must meet in order for the pension funds assets to be traded on such capital markets, the quality of instruments, countries or groups of countries in which pension funds assets may be invested, investment limits per instruments and per issuers, prohibited investment, allowed excesses of investment limits etc.

The pension company is obligated to invest the assets of the mandatory pension fund in accordance with the legal provisions and its investment strategy in order to earn the highest return for the benefit of the active and retired members. Also, it is obligated through diversification and due diligence, to minimize the risks from losses which might occur due to default of the issuer or other contractual parties, from the influences of the domestic or foreign markets, losses in the real value for the mandatory pension fund assets due to inflation and losses due to selling of assets for securing liquidity of the mandatory pension fund. In doing so, the members of the management and supervisory boards are obligated to employ care, efficiency and skills of prudent men upon discharging their duties of control and management over the investment of the pension funds' assets. Each member of the management or supervisory board of the pension company must meet their obligations in accordance with their fiduciary duties and they must provide for their application by each employee or contractor of the company.

The law and the secondary regulation stipulate that the pension fund's assets may be invested in bank deposits, certificates for deposits, bonds or other debt securities, shares and commercial notes issued by issuers with headquarters in the Republic of Macedonia or abroad, in the countries of the EU or OECD. Having in mind the necessary diversification that must be attained among different types of investment, there are maximum limits for investing in one company and maximum limits on the amounts that might be invested in certain types of instruments. In order to prevent investing in instruments that might be disadvantageous to mandatory pension funds, the law prohibits investments in shares, bonds and other securities that are not traded on official markets or that are not publicly traded, instruments that are not legally disposable, instruments that cannot be assessed, most types of property that cannot be immediately assessed and other items with uncertain values, like antiques, art etc.

Pension funds' assets are constantly growing and the domestic market is becoming smaller for their investments. So, the pension funds can afford to trade on large scale foreign market, and thus provide for diversification due to bigger choices of instruments and companies for investing of their assets.

Figures 5.9 and 5.10 give the investment structure of the mandatory pension funds from the beginning of the system (for the period 2006-2015 annually and for 2015 the structure is given on a quarterly basis).

Table 5.4 Maximum investment limits

Type of instrument	Maksimum limit
Investment abroad (EU and OECD)	50 %
• bonds and other securities issued by foreign governments and central banks	50 %
• securities issued by non-state foreign companies, banks or investment funds	30 %
Securities issued or guaranteed by RM on the domestic market or NBRM	80 %
Bank deposits, deposit certificates, mortgage backed securities, and other securities issued by domestic banks	60 %
• bank deposits	30 %
Bonds issued by local self-government and domestic joint stock companies, which are not banks and, commercial notes from domestic joint stock companies, which are not banks	40 %
• bonds issued by local self-government	10 %
Shares issued by domestic joint stock companies	30 %
Participation units and shares of open-end, close-end and private investment funds in RM	5 %
• participation shares in private investment funds	1.5%

Figure 5.9 Investment structure for NLBz

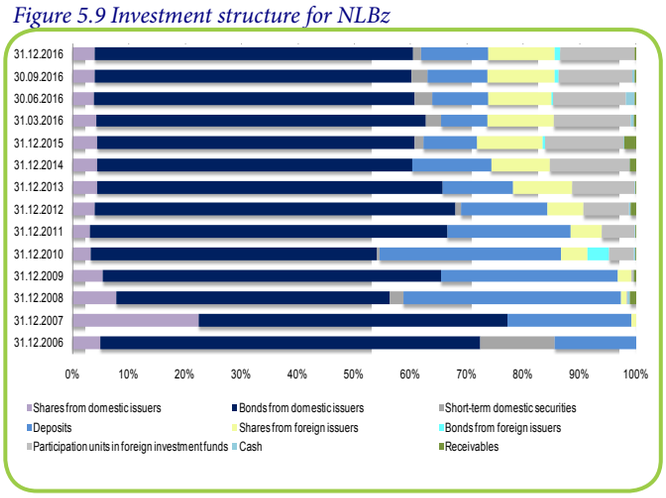
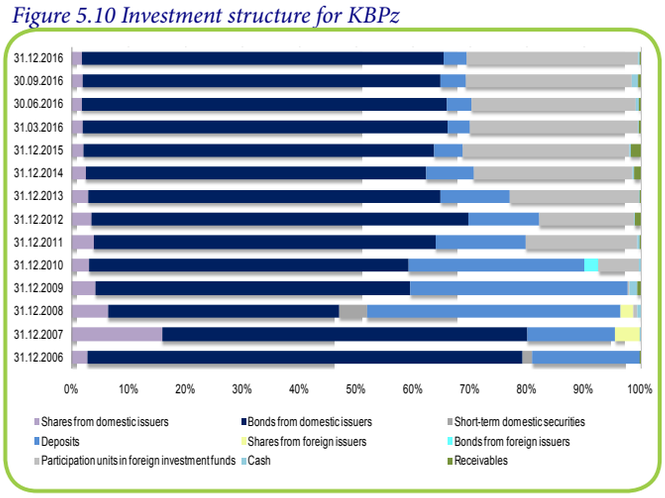


Figure 5.10 Investment structure for KBPz



The structure of investments of the mandatory pension funds, as of 31.12.2016 is given in Figure 5.11. The participation of domestic government shares has increased in respect to the previous year and it was 60.91%. Besides bonds (60.25%) domestic securities include short-term securities (0.66%). The participation of bank deposits has increased in respect to 2015 and it was 7.73%. Domestic shares' participation is rather low (2.85%)% in the investment portfolio, and it is almost the same as the previous year. In 2016, the investments abroad had increased in respect to 2015 and they were 28.22%, out of which the investments in foreign shares were 5.47% and, 22.29% were investments in participation units of foreign investment funds and 0.47% in government bonds. The rest were investments in cash and cash equivalents (0.11%) and receivables (0.17%).

In 2016 both pension funds were in compliance with the statutory maximum investment limits. KBPz "passively exceeded" the limits on investments in participation units of investment funds by, due to changes of market prices and currencies. Figure 5.12 demonstrates the percentage participation in the portfolio per classes of assets for NLBz and KBPz and the statutory limits on 31.12.2016.

In 2016, just like in 2015, pension companies did not invest much in shares of domestic issuers. In 2016, both

Figure 5.11 Structure of investments of the mandatory pension funds, as of 31.12.2016

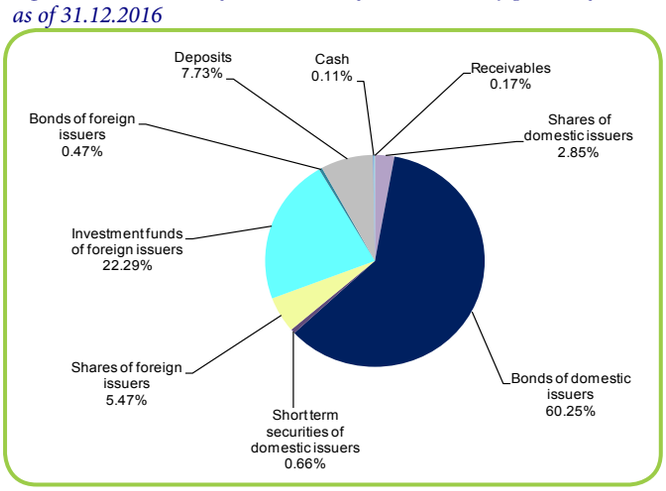
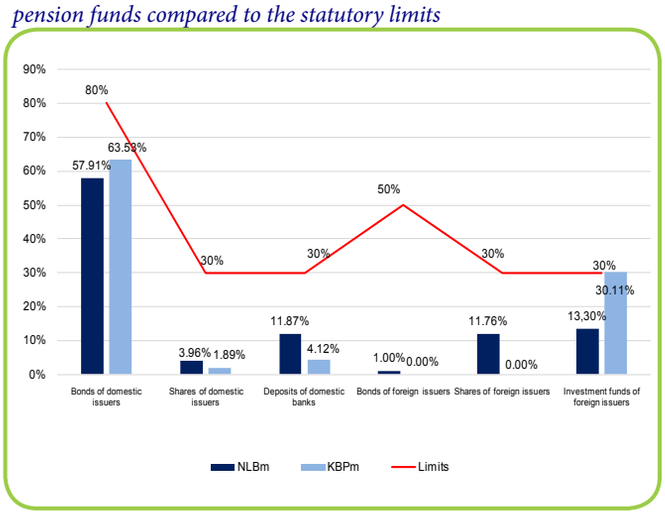


Figure 5.12. Classes of assets in the portfolios of the mandatory pension funds compared to the statutory limits

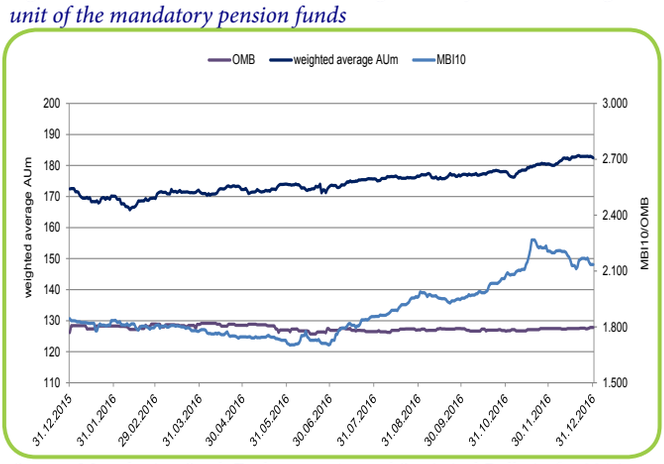


mandatory pension funds had almost the same exposure to shares in respect to 2015. Considering that this exposure is very limited, the changes in the Macedonian Stock Exchange Index (MBI 10) did not have any significant impact on the average value of the accounting unit of the mandatory pension funds. Namely, in 2016, MBI10 marked a growth of 16.45%, while the average increase in the value[5] of the accounting unit of the mandatory pension funds was 5.81%.

Also, the value of the bond index of the MSE – OMB, does not have a significant impact on the average value of the accounting unit of the mandatory pension funds, considering that only 1.30% of the assets are invested in domestic bonds traded on the Macedonian Stock Exchange. The rest of the portfolio is invested in domestic bonds which are parts of the continuous domestic bonds. In 2016, OMB had a small decrease of 0.43 %, while the average increase in the value of the accounting unit of the mandatory pension funds was 5.81% in respect to 2015.

[5]*The average value is calculated as weighted average of the accounting units of the mandatory pension funds in respect to the net assets of the mandatory pension funds.*

Figure 5.13 MBI10, OMB and the average value of the accounting unit of the mandatory pension funds



Source: Macedonian Stock Exchange – Annual Statistical Bulletin for 2016

The Figure 5.13 shows the movements of the MBI10, OMB and the average value of the accounting unit of the mandatory pension funds in 2016.

In 2016, most of the mandatory pension funds' assets were invested in domestic securities (58.92% for NLBz and 65.53% for KBPz). Part of the domestic securities of NLBz are short-term securities (1.43% from the total assets of NLBz) and government bonds of foreign issuers (1.00% of the total assets of NLBz). The next largest category of investments is instruments from issuers/ shareholders from the financial sector – in which NLBz invested 28.62% and KBPz 34.54% of the total pension funds' assets. In this category, participation units in foreign investment funds have the largest participation (44.46% for NLBz and 87.16% for KBPz), compared to the previous year is lower for NLBz and higher for KBPz. These are followed by domestic bank deposits (41.48% for NLBz and 11.94% for KBPz) and financial services (11.24% for NLBz), while the lowest participation is that of shares in domestic banks (0.81% for NLBz and 0.90% for KBPz). Mandatory pension funds invest in other sectors as well: pharmacy, food industry, transportation, tourism, textile, IT, telecommunications, chemical industry, construction, automobile industry etc, however with very low participation (from 0.11% to 3.09%).

Per the currency structures of the mandatory pension funds' assets (as shown on Figures 5.16 and 5.17), it can be noticed that the largest amount of the NLBz assets (57.11%) and of KBPz (51.95%) are invested in Euros. From this, it can be noticed that NLBz increased its investments in Euros, while KBPz decreased them in respect to 2015. The investments in instruments in domestic currency are lower for both pension funds in respect to 2015 and they are 23.12% for NLBz and 23.88% for KBPz. The participation of instruments in USD has increased compared to the previous year for KBPz and it is 24.17%, while for NLBz it has slightly decreased and it is 18.91% for KBPz). Small part of the NLBz assets is in invested in CHF (0.86%).

Figure 5.14 Investment structure per sectors for NLBz

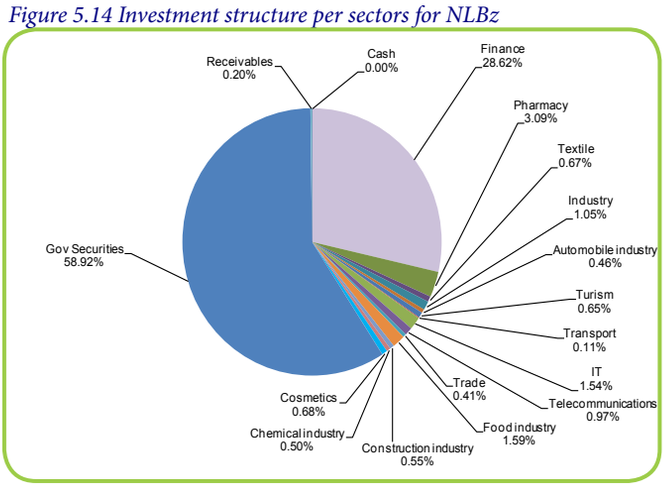


Figure 5.15 Investment structure per sectors for KBPz

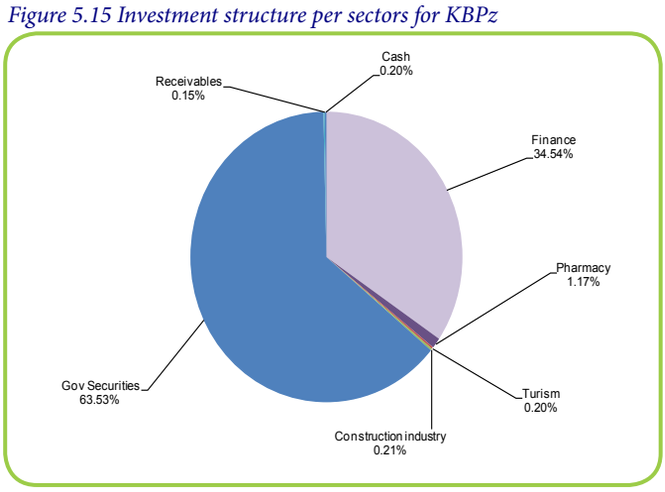


Figure 5.16 Currency structure for NLBz

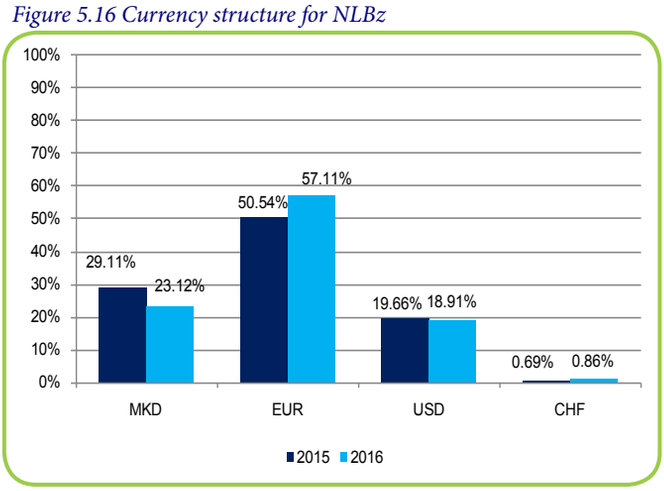


Figure 5.17 Currency structure for KBPz

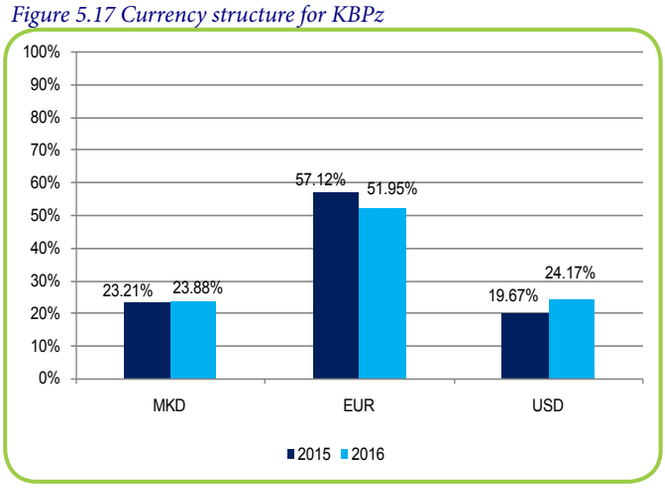
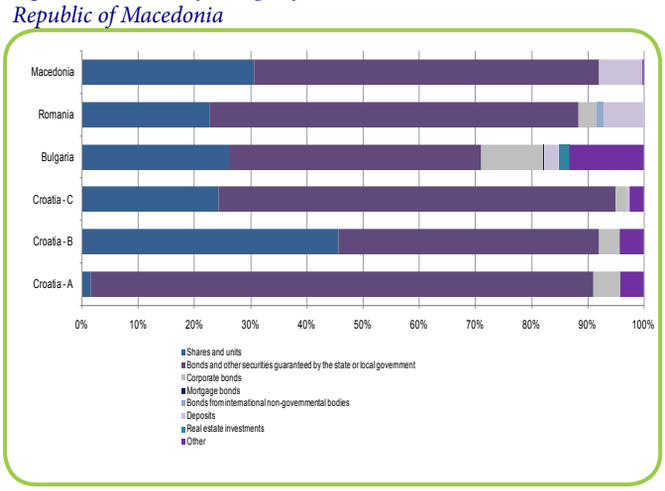


Figure 5.18 Pension funds portfolios in several countries and in Republic of Macedonia



Source: www.hanfa.hr ; www.fsc.bg ; www.asfromania.ro and own calculations

The Macedonian system shows similarities but also significant differences when compared to global experiences or to countries with similar pension systems in terms of investment portfolios. Figure 5.18 shows pension funds portfolios (similar to the Macedonian pension funds) in several other countries and in Macedonia, as of 31.12.2016.

Analyzing the portfolios from types of instruments perspective, it is obvious that Bulgaria has least investments in bonds and other securities guaranteed by the government or the local authorities (45%). On the other hand, the rest of the countries invested more than 60% in bonds and other securities guaranteed by the government or the local authorities (Croatia B[6] 71%, Romania 66% and Macedonia 61%). The rest of the assets were invested in various ways. The following countries are leaders in deposit investments: Macedonia (8%) and Romania (7%), then Bulgaria (3%) and Croatia C (1%). Most investments in shares and units can be seen in Macedonia (31%), Bulgaria (26%), Croatia B (24%) and Romania (23%). Unlike pension funds in Macedonia, the pension funds in other countries invested in corporate bonds (Bulgaria 11%, Romania 3% and Croatia B 2%), but it should be noted that the Macedonian market is scarce in such instruments. Only Bulgarian pension funds invested in real estate (2%) (In other countries this instrument is mostly prohibited). The portfolio structure from the perspective of investing at home or abroad demonstrates the largest exposure of Bulgarian funds (51%), then Macedonian (28%), Croatian B (10%), Romania (7%).

[6]*Croatia introduced multi funds, i.e. three categories of pension funds A (with highest risk), B (with current portfolios at the moment of introduction of the multi funds) and C (lowest risk) .*

5.5 Net assets, accounting units and rates of return of the mandatory pension funds

The contributions transferred in the mandatory pension funds, reduced for the fee from contributions are invested immediately upon transfer. The earned returned is allocated in the mandatory pension fund i.e. on the members' individual accounts. Once a month, pension companies charge a management fee, which is calculated daily as percentage from the pension funds' assets. Also, transaction fees are charged from the pension fund upon each transaction. The valuation of the pension funds assets is done on a daily basis. It is done based on the market value of each asset, or based on the depreciated value of the assets if the instrument is kept until maturity or in a portfolio available for sale or if it is not possible to determine the market value.

The assets of the mandatory pension fund might change throughout the year for the following reasons:

- inflow of contributions;
- outflow due to fees and transaction commissions;
- inflows as a result of transfers from another pension fund (for persons who were temporarily allocated to another pension fund and have signed a contract with the current pension fund and for persons that were members in another pension fund and then transferred to the current pension fund);
- outflows due to transfers to another pension fund (for persons who were temporarily allocated to the current pension fund and have signed a contract with the other pension fund and the persons that were members of the current pension fund and then transferred to another pension fund);
- outflows of persons who have terminated their membership contracts, surplus of paid contributions or entitlements for disability or survivor pensions);
- outflows due to payouts of inheritance;
- outflows due to lump sum payments to persons who are not entitled to old-age pensions
- outflows due to payouts of old age pensions – programmed withdrawals
- (un) realized incomes or losses from investments

The value of the net assets at the end of the year is derived from the net assets at the end of the previous year and all the changes to them, as mentioned above. This is demonstrated in Table 5.5.

The total net assets of mandatory pension funds as of 31.12.2016 are approximately 48 billion denars or around 781 million Euro, which is approximately 7.91% of the GDP[7] of the Republic of Macedonia.

Table 5.5 Changes in the assets of the mandatory pension fund (in million denars)

	NLBz	KBPz
Net assets as of 31.12.2015	18,578.00	21,374.23
Contributions	2,733.08	3,025.03
Fees from contributions	81.98	90.74
Contributions reduced for fees from contributions	2,651.10	2,934.29
Fees from assets	96.51	110.84
Expenditures for intermediary commissions	2.37	0.65
Transfers from another fund	3.25	5.34
Transfers to another fund	5.34	3.25
Transfers to PDIF due to termination, return of contributions or retirement	26.47	28.59
Inheritance pay out	4.01	3.55
Old-age pension benefit payouts – programmed withdrawals	0.18	0.27
Lump sum payouts	0.77	0.22
Gross profit from investments	1,262.09	1,524.94
Net profit from investments	1,163.22	1,413.46
Net assets as of 31.12.2016	22,358.80	25,691.42

Figures 5.19 and 5.20 demonstrate net assets at the end of each year as well as their annual increase in percentage in respect to the previous year. It is evident that the net assets of both mandatory funds grow with almost the same pace. The biggest growth is marked in 2009 in respect to 2008.

Figures 5.21 and 5.22 demonstrate the changes in the value of the net assets and the cumulative contributions, accompanied by the growth of contributions paid in the mandatory pension funds and the growth of the net assets, from the start of the system (i.e. the first payment on January 1, 2006) until 31.12.2016. Evidently, in the first years the net assets grow proportionally with the cumulative contributions, while in the last five years the assets of the pension funds are growing faster than the growth of the contributions.

[7] *Source for GDP: State Statistical Office – announcement on the GDP fourth quarter of 2016- estimated data.*

Figure 5.19 Annual growth of the net assets of NLBz in respect to the previous year, in %

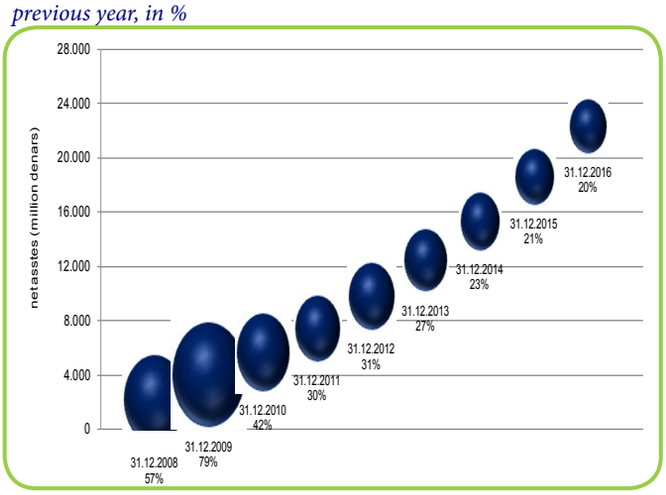
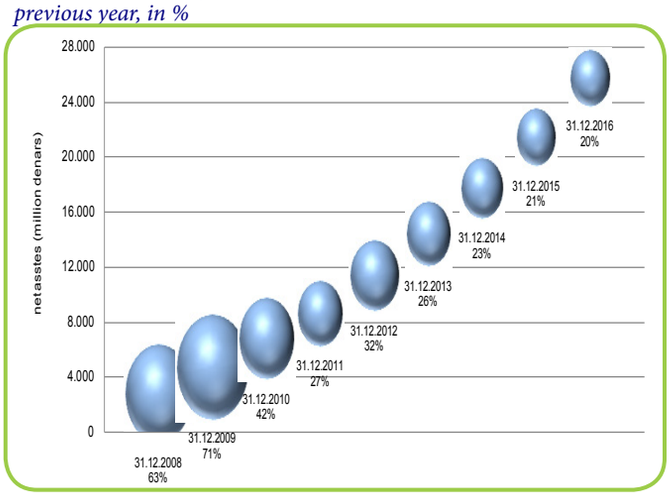


Figure 5.20 Annual growth of the net assets of KBPz in respect to the previous year, in %



For both mandatory pension funds, the net assets and the cumulative contributions have been growing since the start of the system. The biggest growth of net assets for both pension funds (around 150%) and of paid contributions (around 40%) was noticed in 2007. This is due to the large increase in membership and contributions, as well as of the accounting unit. Then there is a decrease in the net assets and the paid contributions. Trends stabilize over the years, and in the last four years the average increase of the net assets is 23% and the average increase of the cumulative paid contributions is 11%. In 2016, the growth of the net assets is 20% for NLBz and for KBPz, while the growth of the paid contributions is 13% for NLBz and 12% for KBPz.

Accounting units are used for record keeping of the mandatory pension funds assets. One accounting until is a proportionate share of the total net assets of the fund. The value of the accounting unit is equal to the value of the net assets divided by the number of accounting units on all individual accounts and sub-accounts. The starting value of the accounting unit was 100 denars. Pension funds, Macedonian ones as well, are subjects to cyclical movements, which mean changes in the values of the accounting units, depending on the investments and the changes in the values of the instruments in which the assets are invested, as well as the dynamics of collecting contributions and fees.

The changes in the value of the accounting units of the mandatory pension funds, from the beginning of the system until 31.12.2016 are given in Table 5.6 and Figure 5.23. As shown on the Figure, the accounting units have a growing trend. In 2016, the accounting unit was growing grow and this growth was particularly obvious by the end of the year.

Usually, the return of the pension funds is calculated for several years and it is presented annually. So, the legislation for the Macedonian pension system, stipulates that the return shall be calculated for a seven-year period (calculation period) and it will be presented annually in real and nominal value. In case a pension fund is younger than 84 months, but older than 12, the return is calculated at the end of June i.e. at the end of December for the period from the first June i.e. December, after the establishment of the pension fund until the end of June i.e. December when the calculation period ends. In such case, the calculation period is 78, 72, 66, 60, 54, 48, 42, 36, 30, 24, 18 or 12 months.

The nominal return[8] is the change (growth) in percentage in the value of the accounting unit, on the last valuation date of the calculation period and the value of the accounting unit on the last day of the month preceding the first month of the calculation period, converted into equivalent annual nominal rate of return.

Figure 5.21 Net asset growth compared to the growth of paid contributions in NLBz

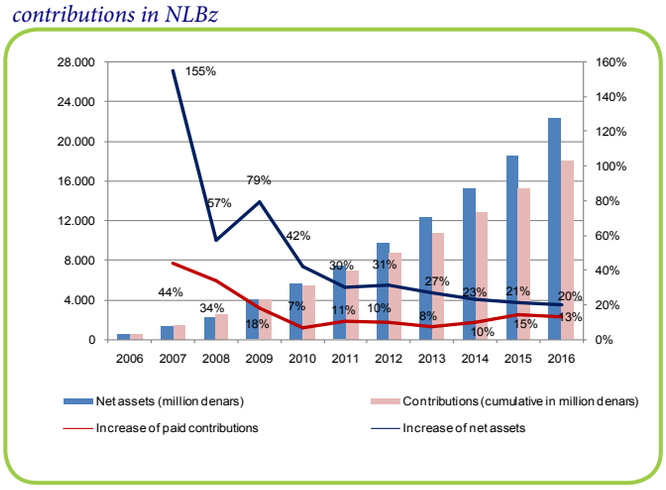


Figure 5.22 Net asset growth compared to the growth of paid contributions in KBPz

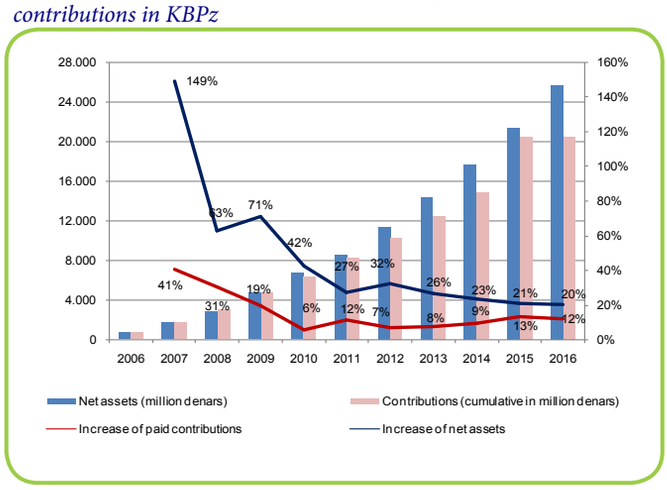


Table 5.6. Value of the accounting unit from the beginning of the system

Date	Value of the accounting unit	
	NLBz	KBPz
31.12.2006	105.929336	106.265900
31.12.2007	115.511364	115.303221
31.12.2008	100.155213	107.116421
31.12.2009*	116.874672	120.667142
31.12.2010	125.009646	129.590887
31.12.2011	129.003093	130.697013
31.12.2012	139.225567	142.372582
31.12.2013	151.117506	153.757419
31.12.2014	160.733889	164.578077
31.12.2015	170.193521	174.392410
31.03.2016	169.262193	173.334215
30.06.2016	170.979651	175.630271
30.09.2016	174.473373	179.119684
31.12.2016	179.771032	184.786292

** In the second half of 2009, both pension companies decided to reclassify the financial instruments held to maturity, into financial instruments available for sale. In this procedure, the pension companies actually re-evaluated the financial instruments, by applying fair value and have determined the value of assets, net assets, value of accounting units and number of accounting units, which caused a significant correction in the value of the accounting unit.*

The real return for each calculation period, converted into equivalent annual real rate of return is calculated based on the annual rate of return in nominal value and the change in the living costs of the calculation period, on annual basis.

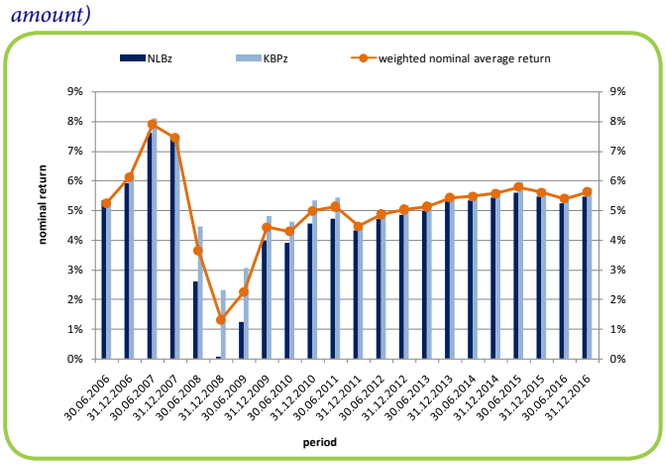
Table 5.7 demonstrates the return of the mandatory pension funds, per periods, presented annually.

The return on the individual account is variable, it depends on the return of the mandatory pension fund, and the fees charged from the pension company. The return or the yield is a parameter, which cannot be predicted realistically as it depends on the conditions on the capital markets and the economy as a whole.

Considering the long-term nature of the pension insurance, it is important to calculate the return from the start of the system (eleven years) and in average[9], it is 5.62% in nominal value and 3.49% in real value.

The changes in the nominal return during these ten years of existence of the system are shown with the Figure 5.24. Plotted on the Figure are the returns per periods, from the beginning of the system until 31.12.2016, per funds and with the weighted average return. It is obvious that at the beginning of the system, the return is growing, so by the end of 2006 and 2007 the rates are high, while by the end of 2008 the rates are at their lowest, due to the negative developments on the domestic and foreign financial markets. By the end of 2009, the rates recover and start growing by 2010. In 2011 again, there is a slight decrease in respect to 2010. However, in the next years, by mid-2015 it is obvious that the rates of return start to pick up and have a steady growth, followed by a slight drop by mid-2016 which takes rise again as of the end of 2016.

Figure 5.24 Return of the mandatory pension funds (in nominal amount)



[8]The formulas for calculating the nominal and real return are prescribed with the Rulebook on valuation of assets of mandatory and voluntary pension funds.
[9]The average return is calculated with the same formula used to calculate the rate of return of mandatory pension fund, where instead of the accounting unit, the weighted average of the accounting unit is used in respect to the net assets ..

Figure 5.23. Value of the accounting unit from the beginning of the system

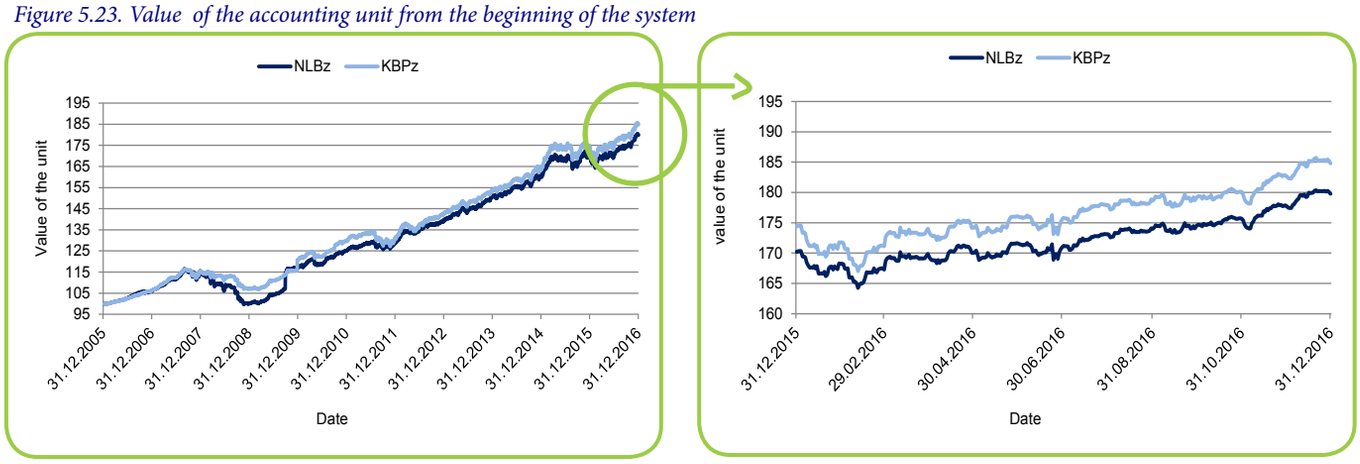
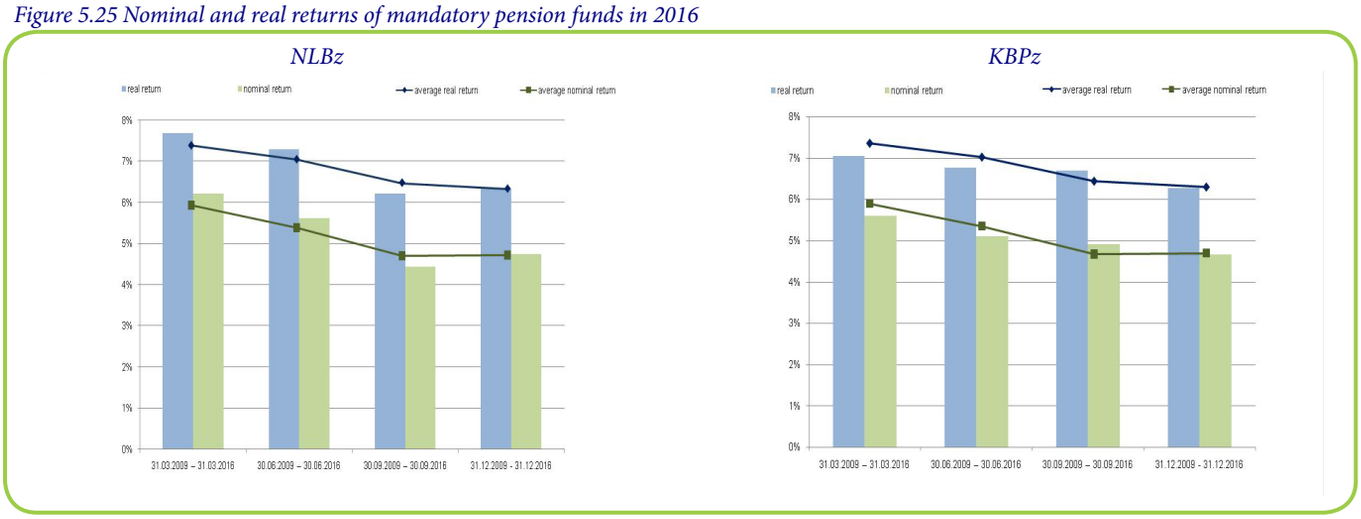


Table 5.7 Return of the mandatory pension funds

Period*	NLBz		KBPz	
	In nominal value	In real value	In nominal value	In real value
01.01.2006 - 31.12.2008	0.05%		2.32%	
31.12.2006 – 31.12.2009	3.33%		4.32%	
31.12.2007 – 31.12.2010	2.67%		3.97%	
31.12.2008 - 31.12.2011	8.80%		6.86%	
31.12.2009 – 31.12.2012	6.00%		5.66%	
31.12.2006 – 31.12.2013	5.20%	2.16%	5.41%	2.37%
31.12.2007 – 31.12.2014	4.83%	2.67%	5.21%	3.05%
31.12.2008 - 31.12.2015	7.87%	6.45%	7.21%	5.80%
31.03.2009 – 31.03.2016	7.68%	6.22%	7.05%	5.60%
30.06.2009 – 30.06.2016	7.29%	5.62%	6.76%	5.10%
30.09.2009 – 30.09.2016	6.21%	4.44%	6.69%	4.92%
31.12.2009 - 31.12.2016	6.34%	4.74%	6.27%	4.67%
Start** -31.12.2016	5.47%	3.35%	5.74%	3.61%

** Until the amendments to the Law on mandatory, fully funded pension insurance in 2013, the return was calculated for a period of 3 years, only in nominal value.*
*** For NLBz and KBPz the start is on January 1, 2006*

Figure 5.25 Nominal and real returns of mandatory pension funds in 2016



The movements in the real and nominal rates of return for 2016 for the period of seven years, per mandatory pension fund and compared to the average return are shown on Figure 5.25. In 2016, the nominal return is extending in the range from 6.21% to 7.68%, while the real return is in the range 4.44% to 6.22%. The highest values are noticed in the returns for the period 31.03.2009 – 31.03.2016.

The main goal of investing the assets of the mandatory pension funds is to cause growth of such assets. Therefore, the return is the measure of such growth. At the same time, one should mind the risk from investments. The risk represents the inability to predict the accomplishment of the return on the invested assets. The risk to return ratio is direct, which means that higher risk brings higher return and vice versa. The nominal return to risk[10] ratio (calculated by one of the possible calculation methods) from the beginning of the system until the end of 2016 is shown on Figure 5.26.

Figure 5.26 Return to risk ratio

[10]The return is calculated on annual level from the growth of the accounting unit and from the beginning of the system. The risk represents the volatility of the accounting unit and it is calculated as annualized standard deviation of the pension funds 'return.

5.6 Fees for mandatory pension funds

According to the Law, Pension Companies charge three types of fees: fee from contributions, fee from assets and fees for transfers. They use these fees to cover the following functions: manage the mandatory pension funds assets, valuation of assets, membership, keeping of individual accounts, reporting to members, payment of fees to MAPAS and the custodian and covering of own expenses.

This type of financing of pension companies is common for pension systems similar to Macedonian. The entry fee (fee from contributions) is charged as a percentage from the contributions, it is paid once, upon payment of the contribution and then the contribution is invested until the assets are withdrawn. The management fee is charged at the end of each month from the total assets under management. The burden of the contribution fees is felt at the beginning, as they are relatively high in the beginning years. Management fees however, are more burdensome at the end, since the accumulated assets are much bigger towards retirement[11]. On a long run, the contribution fee will have insignificant impact on the amount of the pension benefit, while the assets management fee will gain on significant with the years; therefore the law regulates the very low percentage limits for this fee. However, at the beginning of the system, the impact of the contribution fee on the individual accounts is quite evident. This is expected, since in the start-up years the assets of the pension fund are limited and, the company has a lot of set-up expenses, which are covered from the company's own assets and from the fees charged from the members. As the system develops in the future, the assets of the mandatory pension fund will grow and it can be expected that they will earn more profit for the individual accounts of the members. The short-term results are of no significance, because the system is designed for savings that are accumulated for e period of 30 to 40 years. The members start saving while they are young, and get their pension at 64 (for men) or 62 (for women). Thus, one should look for the advantages of this type of insurance solely on a long run.

Table 5.8 Fees charged by Mandatory Pension Companies

Type of fee	NLB	KB Prvo
Fee from contributions	3.00%*	3.00%*
Monthly fee from the assets of the mandatory pension fund	0.04%**	0.04%**
Transfer fee		
Number of days***	Amount of transfer fee	Amount of transfer fee
number of days ≤ 720	15 Euros	15 Euros
number of days > 720	Transfer fee not charged	Transfer fee not charged

** Amount equal to the maximum amount prescribed by law for 2016 (previously it was 3,25% for both – NLBz and KBPz).*
*** Amount equal to the maximum amount prescribed by law for 2015 (previously it was 0.045% for both – NLBz and KBPz)*
**** The number of days is calculated from the day in which a person became a member of the existing pension fund (or in case of first membership, the first day in the month in which the contributions started for the member in the current pension fund) until the deadline in which the member should submit to MAPAS the transfer from and the proof of payment of the transfer fee.*

The types and amounts of fees charged by the Mandatory Pension Companies in 2016, are shown in the Table 5.8.

At the very beginning of the system, the contribution fee was set by a public tender at 8.5%. Further on, as the system developed the state authorities decreased the fees charged from the Pension Companies, and as the contributions continued to grow, this fee was decreased several time. The fees from contributions from the beginning of the system until 2016 are shown in Table 5.9

Table 5.9 Contribution fees charged by pension companies in the second pillar

Pension company	Fee	Effective from
NLB	9.90%	Tender
	8.50%	Beginning of the system (2006)
	7.90%	July 2007
	6.90%	February 2008
	6.50%	May 2009
	5.50%	January 2010
	4.50%	January 2011
	4.00%	January 2012
	3.75%	June 2013
	3.50%	January 2014
	3.25%	January 2015
	3.00%	January 2017
KB Prvo	9.90%	Tender
	8.50%	Beginning of the system (2006)
	7.90%	July 2007
	6.80%	February 2008
	5.50%	January 2010
	4.50%	January 2011
	4.00%	January 2012
	3.75%	June 2013
	3.50%	January 2014.
	3.25%	January 2015
	3.00%	January 2017

[11] *Administrative Charges for Funded Pensions: An International Comparison and Assessment, Edward Whitehouse, June 2000.*

The fee from assets was set in the Law, and until May 2013, it was 0.05% from the net assets of the mandatory pension fund and then until December 2014 it was 0.045%. From January 2015, the fee is 0.04%.

With the amendments to the Law introduced in 2013, the contribution and the asset management fees have statutory maximum limits beyond which pension Companies are not allowed to charge. Also, the amendments stipulate their gradual reduction over several years. So, the maximum amount of the contribution fee will not surpass 2%, while 0.03% is the maximum for the asset management fee, which will be implemented from 2019-2020 onward. Until these amounts are reached, the fees will be reduced gradually from their current values, as seen in Table 5.10.

The collection of fees (in million denars) by pension companies in 2016 is given in Table 5.11:

Transaction commissions for acquisitions or transfers of assets of a mandatory pension fund are charged from the pension fund and paid to selected service providers.

Table 5.10 Maximum amounts of contribution and management fees for the second pillar, stipulated by law.

Year	Fee from contributions	Monthly fee from assets
2016	3.00%	0.040%
2017	2.75%	0.035%
2018	2.50%	0.035%
2019	2.25%	0.030%
2020	2.00%	0.030%

These fees are calculated as a percentage from the value of each transaction. For each transaction on the Macedonian Stock Exchange, the pension fund pays commissions to the Macedonian Stock Exchange and the Central Securities Depository. During 2016, NLBz paid 2.37 million denars for transactions commissions and KBPz paid 0.65 million denars in commissions.

Table 5.11 Collection of fees in 2016 by pension companies (in million denars)

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
NLBz- total	13.67	13.99	14.25	14.68	14.33	14.70	14.71	15.39	15.15	15.14	15.91	16.57	178.49
From contributions	6.29	6.59	6.65	6.96	6.52	6.78	6.63	7.15	6.79	6.66	7.27	7.70	81.98
From assets	7.38	7.40	7.61	7.72	7.81	7.92	8.08	8.24	8.35	8.49	8.64	8.88	96.51
KBPz - total	15.48	15.80	16.10	16.55	16.20	16.66	16.66	17.35	17.16	17.12	17.94	18.55	201.58
From contributions	7.02	7.33	7.37	7.69	7.22	7.55	7.36	7.88	7.56	7.38	8.03	8.35	90.74
From assets	8.46	8.47	8.74	8.86	8.98	9.11	9.30	9.47	9.59	9.74	9.92	10.21	110.84

5.7 Pay outs of pensions from the mandatory fully funded pension insurance

The retirement conditions are the same for the first and for the second pillar: age – 64 years for men and 62 years for women, and at least 15 years of career.

The first pillar pays the following benefits: part of the old age pension, survivors, disability and minimum pensions. The pension from the first pillar is calculated as a defined benefit per a predefined formula (percentage depending on the career years multiplied by the pension basis, determined from the valorised wages earned in the entire career of the person).

The second pillar pays out part of the old age pension, in a form chosen by the member:

- as a pension annuity; determined from the entire amount of money accumulated on the individual account; the annuity is paid out for the rest of the member's life by an authorised insurance company; or
- as programmed withdrawals provided by the pension company managing the mandatory pension fund , or
- as a combination of both .

The provision of pension annuities and programmed withdrawals is regulated with the Law on Payment of Pensions and Pension Benefits from the Fully Funded Pension Insurance.

In case an insured person is entitled to a disability pension and is a member of the second pillar, the total amount of assets on the member's account is transferred to the PDIF and the payout of the total amount of the disability pension is done by the PDIF. As an exception, if the amount of assets on the member's account surpasses the amount for disability pension regulated with the Pension and Disability Insurance Law, than the member can choose to receive a second pillar pension benefit instead of the disability pension from the PDIF.

In case a second pillar member dies and his/her family members are entitled to a survivor's pension, the total amount of assets on the member's account is transferred to the PDIF and the benefit payout is done by the PDIF. As an exception, if the amount of assets on the member's account surpasses the amount for survivor's pension regulated with the Pension and Disability Insurance Law, than the member can choose to receive a second pillar pension benefit instead of the survivor's pension from the PDIF.

In 2016, the second pillar members i.e. close family members of the deceased members acquired 62 disability pensions and 141 survivor's pensions, respectively. Their accumulated assets were transferred to PDIF that pays the disability and survivors' pensions. In 2016, 14 members of the second pillar started to receive their old age pension from the second pillar through programmed withdrawals.

Table 5.12 Pension entitlements for second pillar members

Type of pension/ Mandatory pension fund	NLBz	KBPz	Total
Disability	28	34	62
Survivors	74	67	141
Old age pension – programmed withdrawals	6	8	14
Lump sum payments – old age	16	4	20
Lump sum payments – inheritance	49	52	101
Total	173	165	338

Additionally, the legislation stipulates payouts from the member's individual accounts without entitlements to a pension, in the following cases:

- when a deceased pension fund member has no family members entitled to a survivors pension, and the assets on that member's account become a part of his/her property and will be managed in accordance with the Law on Inheritance.

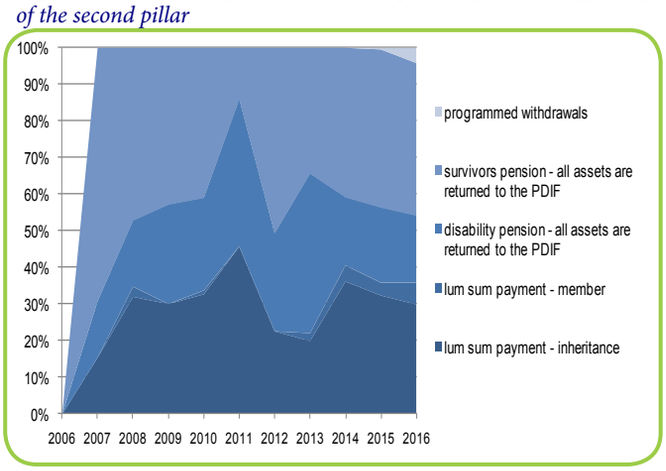
- when a pension fund member has not acquired the entitlement to an old-age pension according to the Law on Pension and Disability Insurance because he/she does not have at least 15 years of service, he/she can buy monthly pension annuity if the amount of that annuity is equal or higher than 40% of the minimum pension. In case the calculated amount of pension annuity is lower than 40% of the minimum pension, the mandatory pension fund shall pay a lump sum of the accumulated assets on the member's account. In such cases, the acquisition of the pension annuity and the lump sum payment of the total accumulated assets can be done after reaching 65 years of age.

In 2016, the inheritance for 101 deceased members was paid out from the individual accounts, out of which 49 were members of NLBz and 52 were members of KBPz. Also, there were 20 lump sum payouts to 20 members (sixteen NLBz members and four KBPz members).

Table 5.13 gives a detailed overview on the acquired pension entitlements for the second pillar members per mandatory pension fund.

Figure 5.27 gives the structure of entitlements and payouts from the second pillar in its eleven years of existence, as of 31.12.2016. The number of payouts is low, because its members are very young. Most of the payouts are for survivors' pensions due to death of second pillar members, followed by disability pensions and lump sum payments and payouts to members with programmed withdrawals.

Figure 5.27 Structure of entitlements and payouts from the beginning of the second pillar



Information on the voluntary pension funds

6

6.1 The goal of voluntary fully funded pension insurance

The primary goal of the voluntary fully funded pension insurance is to provide higher old-age income at retirement to the persons who are already insured in the mono-pillar and/or in the two-pillar pension system; to provide a pension for those individuals who are not covered by the mandatory pension system and to provide conditions for establishment of occupational pension schemes in the process of the harmonization of the Macedonian social insurance with the European Union systems. The basic principles of this insurance: to provide an additional old-age income, membership on a voluntary base, voluntary fully funded insurance on defined contribution basis, investment of assets based on safety, diversification of risk and maintaining of adequate liquidity, as well as transparency.

The voluntary fully funded pension insurance offers coverage for a larger group of the population in the Republic of Macedonia, as well as for persons who are not citizens of the Republic of Macedonia. As it provides for additional old-age income, this type of insurance increases a person's material security in the retirement days. Macedonia, like many European countries has occupational pension schemes sponsored by the employers or the citizens associations, which provide and finance additional pension insurance for their employees or members. Due to the ever increasing pressure over the European social insurance systems, the occupational pensions will play more significant role in the provision of old-age income. Therefore, the occupational pensions have to be developed in addition to the social insurance, in order to ensure reliable, permanent and efficient social insurance, one that will provide for a decent living standard after retirement. In the third pillar, an employer or a citizens association (sponsor) can organize and finance occupational pension schemes and pay the contributions in the voluntary pension funds for their employees or members. A group of employers or citizens associations can organize and finance occupational pension schemes together. Thus, the sponsor signs a contract with the chosen pension company that manages the pension fund in which the occupational scheme of the sponsor shall be included.

The voluntary fully funded pension insurance should have a broad impact on the entire national economy, as the savings of the population will increase, investments will be boosted and they will additionally stimulate and deepen the capital markets, which will lead to an increase in the demand for new instruments and new financial services, etc.

The voluntary fully funded pension insurance became operational in the second half of 2009 and the existing pension companies were granted licenses for management of voluntary pension funds. Therefore, Open Voluntary Pension Fund "NLB penzija plus" Skopje started on July 15, 2009 while KB Prv Open Voluntary Pension Fund – Skopje on December 21, 2009.

6.2 Membership in the voluntary pension funds

A person may become a member of a voluntary pension fund by:

1) signing a contract for membership in a voluntary pension fund with the Voluntary Pension Company or Joint Pension Company and by opening a voluntary individual account

2) signing a contract for membership in a voluntary pension fund with a third person (payer), who shall pay in the name and on behalf of the person and with the Pension Company and by opening of voluntary individual account

3) participating in an occupational pension scheme organized by his/her employer or association were he/she is a member and by opening an occupational account.

One person can have only one voluntary individual account and one occupational account. These accounts can be in the same or in different voluntary pension funds.

As of 31.12.2016, the third pillar has 22,989 members or 1,245 members more than on 31.12.2015. This means that the third pillar membership has grown for around 6%. Out of the total membership, 7,979 members or 35% have individual accounts and 15,010 members or 65% are participants in occupational schemes and have occupational accounts.

Figure 6.1 Membership structure per voluntary pension fund and per membership type in NLBd

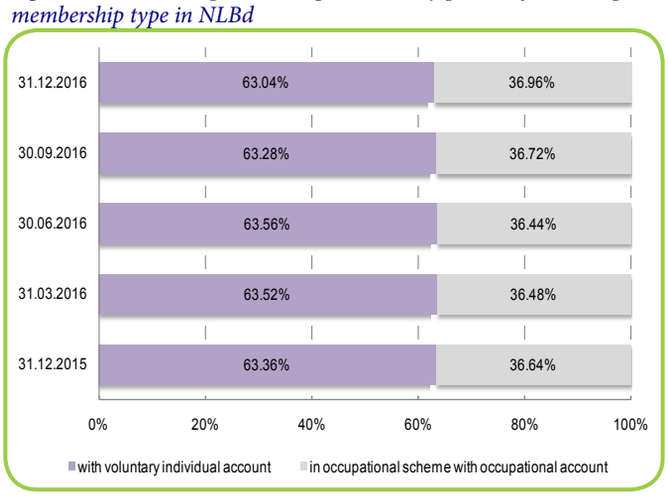
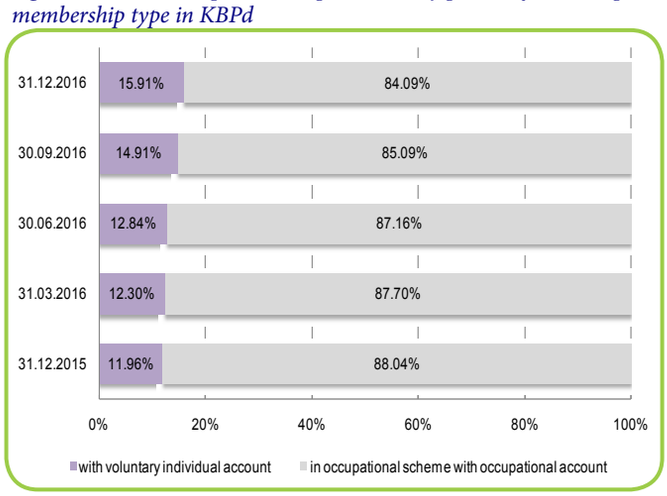


Figure 6.2 Membership structure per voluntary pension fund and per membership type in KBPd



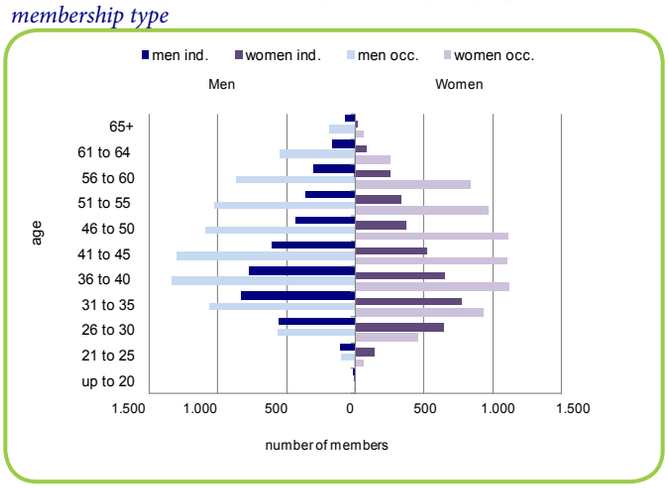
On 31.12.2016, around 40% are members in NLBd and 60% are members in KBPd.

Figures 6.1 and 6.2 show the membership structure in the voluntary pension funds per membership type in 2016 on quarterly level. It is evident from the figures that there is a significant difference in both types of membership for both voluntary pension funds. NLBd has more members with individual accounts (63%), while KBPd has more members with occupational accounts (84%).

The third pillar membership structure per age, gender and type is shown on Figure 6.3.

This figure demonstrates that most members are young people (at the age from 31 to 40). Still, compared to the second pillar, the third pillar has more mature members. The members with occupational accounts are older than those with individual accounts. The average age of the members with individual accounts is 41 years for men and 40 years for women; while for the members with occupational accounts the average age is 45 years for men and for women. The average age for all members is 43 years.

Figure 6.3 Third pillar membership structure per age, gender and membership type



From the experience so far, the members with individual account mostly pay their own contributions, while in a very few cases a third party (payer) pays their contributions (out of 7,979 members with individual accounts only 424 members or 5% have a third party as a payer). The third pillar allows membership to persons who are not Macedonian citizens; however this percentage is very small so far (0.02% out of the total number of members).

In NLBd 3,389 members participate in 1,065 occupational schemes, and in KBPd 11,621 members participate in 2,648 occupational schemes. Some schemes have many members, while other have only 1 or 2 participants. Out of the total number of occupational schemes, 18 of them have over 100 members and only one scheme has over 1,000 members. The average number of members per scheme is 4. The allocation of members per occupational scheme per fund is given on the Figure 6.4, which gives individually only schemes of over 100 members, while the rest is given in the category "other".

The structure of the third pillar membership per statistical regions[12] is given on the Figure 6.5.

The majority of members are from the region of Skopje, where KBPd has 5,830 members and NLBd has 4,005 members. NLBd has least members in the region of Polog, with 469 members, while KBPd in the South-eastern region with 522 members.

[12] *Statistical regions are defined by the State Statistical Office – as territorial units, the nomenclature of the territorial units is based on the territorial organization of the local self-government in the Republic of Macedonia and it is harmonized with the EU classification.*

Figure 6.4 Allocation of third pillar members per occupational scheme

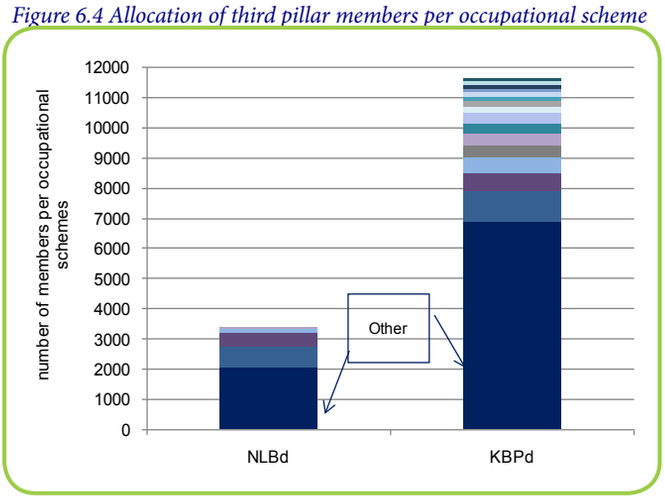
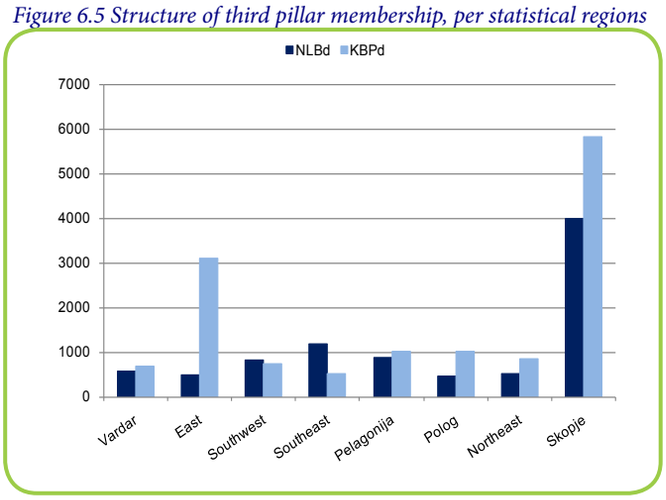


Figure 6.5 Structure of third pillar membership, per statistical regions



6.3 *Members transferring accounts in the same or other voluntary pension fund*

A person has the right to choose a voluntary pension fund and to change it at any time during the membership. If the member has stayed with one voluntary pension fund less than 12 months, he will be required to pay a transfer fee upon transferring to another fund. Otherwise, transfers are free of charge. When a member transfers to another fund, all the assets from his account are transferred as well. When a participant in an occupational scheme changes employers he has the right to transfer the savings from his occupational account to another occupational account or to an individual account, in case the new employer does not have an occupational scheme or does not wish to include the person in his occupational scheme. A participant in an occupational scheme has the right to transfer his assets to an individual account in case he remains unemployed or is not associated with any citizens association.

Table 6.1 gives data in the number of members who transferred to another Voluntary Pension Fund and the amount of transferred assets from one to another Voluntary Pension Fund during 2016. In 2016, 3 members transferred from NLBd to KBPd, and 17 members transferred from KBPd to NLBd (0.09% of the total membership). Also, in 2016, there were transfers within the same pension fund but from one to another occupational scheme and from occupational to individual accounts.

Table 6.1 Transfer of members from one to another voluntary pension fund

2016	Members who have transferred FROM a voluntary pension fund	Transferred assets FROM a voluntary pension fund (in denars)	Members who have transferred TO a voluntary pension fund	Transferred assets TO a voluntary pension fund (in denars)
NLBd	3	140,039	17	1,051,420
KBPd	17	1,051,420	3	140,039

6.4 Contributions to the voluntary pension funds

The payment of the voluntary contribution is allowed only for the person that meets the membership requirements per the Law on Voluntary Fully Funded Pension Insurance. So, the members owning voluntary accounts may pay the voluntary contributions on their own, or a payer may do it on their behalf. Only a sponsor may do the payment of the voluntary contribution for a member who has an occupational account. The payments are done from the transaction account of the member and/or from the payer's or sponsor's accounts. The voluntary contribution is paid on a special account of the voluntary pension fund, kept with the custodian, from where the assets are allocated to the individual or to the occupational accounts of the member, depending on the type of membership, and only after the person had met the membership requirements.

The member, the payer and the sponsor are free to determine the amount of the contribution and the dynamics of payments and, the change in the amounts of payment or the termination of payments do not influence the right to a membership in a voluntary pension fund. The amounts of voluntary contributions are set by the sponsor for all participants in the occupational scheme and are set as a percentage from the wages of the occupational scheme members.

During 2016, in the voluntary pension funds were paid 243 million denars, or per months as shown in Table 6.2.

In 2016, more contributions were paid in KBPd than in NLBd. In respect to 2015, the contributions paid in NLBd grew for 23%, while for KBPd they grew for 4%. In both pension funds, a significantly higher percentage of paid contributions in 2016 is made towards occupational accounts (81%).The allocation of payments per type of account, on a monthly basis is presented with the Figure 6.6.

Figure 6.6 Allocation of third pillar payments per type of account

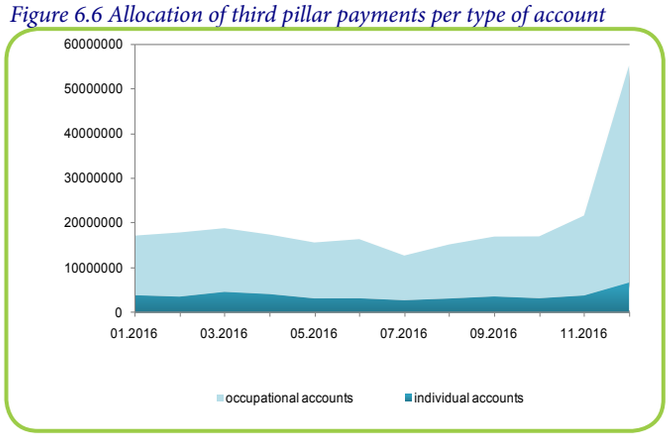


Table 6.2 Contributions in the third pillar per months and per funds *(in million denars)*

	Total 2015	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total 2016
NLBd	89.00	6.04	7.25	8.38	6.99	6.72	7.60	5.88	7.28	8.17	9.52	12.52	23.26	109.60
KBPd	128.03	11.19	10.68	10.52	10.48	8.98	8.84	6.89	7.98	8.85	7.55	9.21	32.05	133.21
Total	217.03	17.23	17.93	18.90	17.47	15.70	16.44	12.77	15.26	17.02	17.06	21.73	55.31	242.82

6.5 Investments and portfolio structure of voluntary pension funds

The voluntary fully funded pension insurance, just like the mandatory one, is subject to proactive control and, qualitative and quantitative investment limits in their start-up stage. However, the voluntary fully funded pension insurance has more liberal investment rules in respect to the mandatory one.

Besides investment instruments allowed for the mandatory pension fund, the voluntary pension funds are also allowed to invest their assets in debt securities issued by the European Central Bank, European Investment Bank, the World Bank, as well as in debt securities issued by local authorities. In order to obtain certain level of diversification among different

Table 6.3 Maximum investment limits

Type of instrument	Mksimum limit
Investments abroad (EU, OECD)	50%
• bonds and other securities issued by foreign governments and central banks and other debt securities issued by the European Central Bank, European Investment Bank and the World Banks	50%
• debt securities issued by the local-self government, non-state foreign companies or banks, shares issued by foreign companies or banks or participation units, shares and other securities issued by investment funds	30%
Securities issued or guaranteed by RM on the domestic market or NBRM	80%
Bank deposits, deposit certificates, mortgage backed securities, and other securities issued by domestic banks	60%
Bonds issued by local self-government and domestic joint stock companies, which are not banks and, commercial notes from domestic joint stock companies, which are not banks	40%
• bonds issued by local-self government	10%
Shares issued by domestic shareholders	30%
Participation units and shares in Macedonian investment funds	5%

types of investment, voluntary pension funds must follow prescribed maximum limits for investing in one company and maximum limits on the amounts that might be invested in certain types of instruments. In order to prevent investing in instruments that might be disadvantageous to voluntary pension funds, the law prohibits investments in shares, bonds and other securities that are not traded on official markets or that are not publicly traded, instruments that are not legally disposable, instruments that cannot be assessed, most types of property that cannot be immediately assessed and other items with uncertain values.

Figures 6.7 and 6.8 present the structure of voluntary pension funds investments from the beginning of the system.

Figure 6.9 presents the structure of investments of the voluntary pension funds, as of 31.12.2016. In 2016, the participation of bonds from domestic issuers has increased in respect to 2015, and remains almost the same and it is 48.63%. Also, the participation of investments abroad has increased and it is 28.33% (21.77% in units of investment fund and 5.92% in shares and 0.63% in bonds). The participation of deposits in domestic banks remains almost the same as the previous ears and it is 13%, followed by shares from domestic issuers 8.42%, cash 1.57% and receivables 0.05%.

In 2016, both pension funds complied with the maximum investment limits. Figure 6.10 presents the percentage participation in the portfolio per classes of assets for NLBd and KBPd and the statutory limits as of 31.12.2016.

Figure 6.7 Structure of voluntary pension fund investments - NLBd

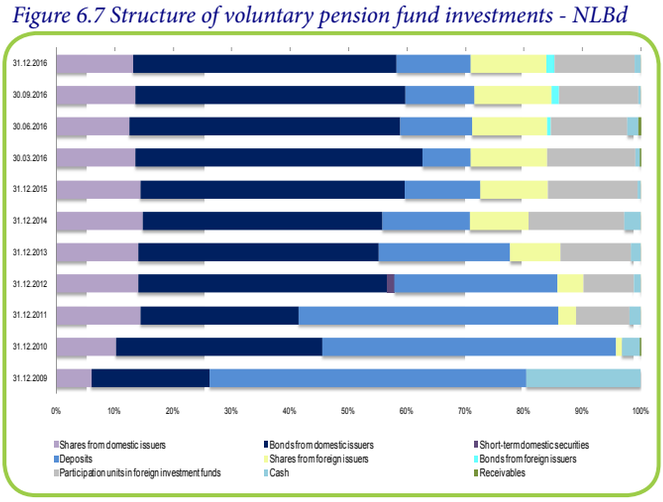


Figure 6.8 Structure of voluntary pension fund investments - KBPd

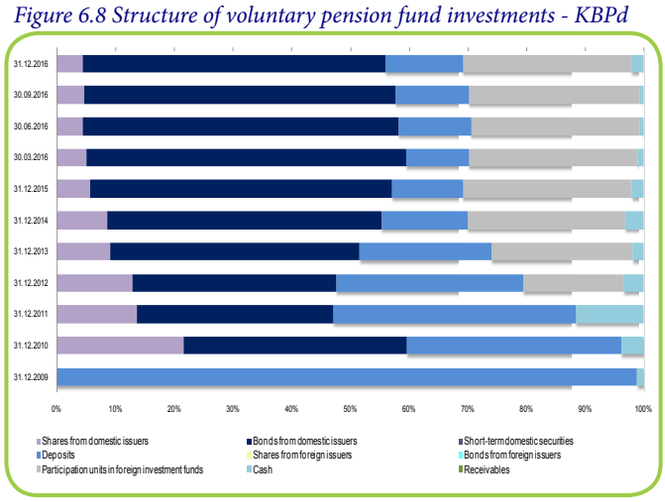
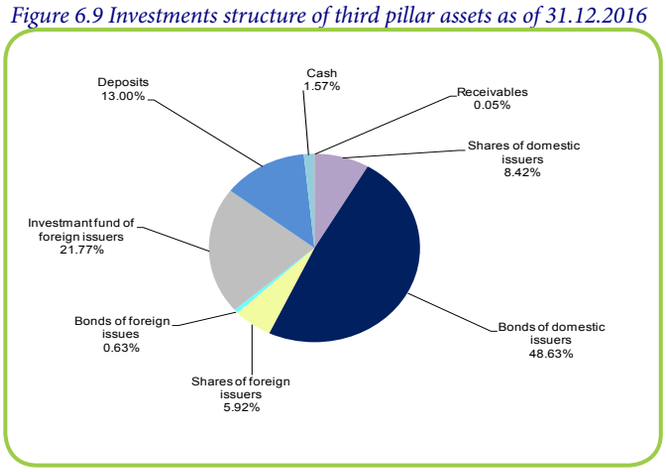


Figure 6.9 Investments structure of third pillar assets as of 31.12.2016



Voluntary pension funds have a slightly higher exposure to domestic shares (8.42%) than the mandatory pension funds. In 2016, MBI10 had a rise for around 16.45% , while the average value of the accounting unit of the voluntary pension funds in 2016 grew for 5.05% in respect to 2015.

Compared to the mandatory pension funds, the voluntary ones are more exposed to domestic bonds traded on the Macedonian Stock Exchange (9.97% of the total assets of the voluntary pension funds). The reminder of the portfolio invested in domestic bonds is continuous domestic bonds. In 2016, OMB, had a slight fall of 0.43% , while the average value[13] of the accounting unit of the voluntary pension funds grew 1for 5.05 in respect to 2015.

The next Figure shows the comparison in the changes of the value of MBI10, OMB and the average value of the accounting unit of the voluntary pension funds in 2016.

In 2016, the assets of the voluntary pension funds were mostly invested in securities (NLBd 46.49% and KBPd 51.63%). Part of the domestic securities of NLBd is invested in government bonds of foreign issuers (1.38% of the total assets of NLBd). This is followed by the instruments from issuers/shareholders in the financial sector (33.40% for NLBd and 42.06% for KBPd). Within the financial sector, the highest participation in both pension funds' investments is that of units of foreign investment funds (45.06% for NLBd and 68.09% for KBPd), followed by domestic bank deposits (41.74% for NLBd and 31.53% for KBPd). Also, the investments in the financial sector include investments in shares of domestic banks (3.26% for NLBd and 0.38% of KBPd), and financial services 9.91% only for NLBd's portfolio. Voluntary pension funds invest in other sectors, such as: pharmacy, food industry, tourism, telecommunications, IT, construction and other industries, however with much smaller participation (from 0.15% to 5.36%). The structure of investments of the voluntary pension funds per sectors is given in Figures 6.12 and 6.13.

According the currency structure of voluntary pension funds assets, shown on Figures 6.14 and 6.15, we can conclude that there are not any significant changes in respect to the

Figure 6.10 Classes of assets in the portfolios of the voluntary pension funds compared to the statutory limits

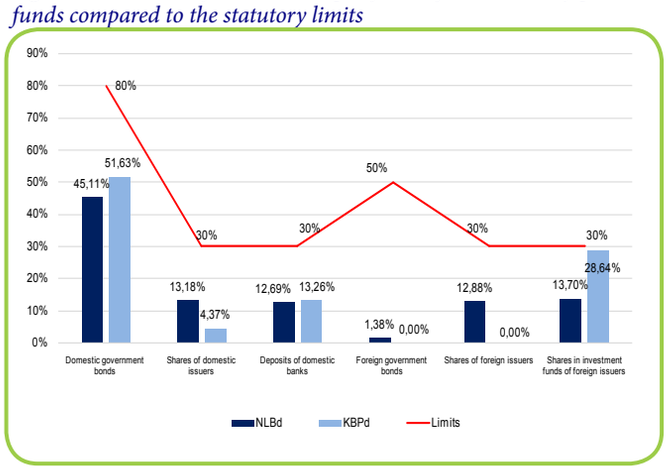
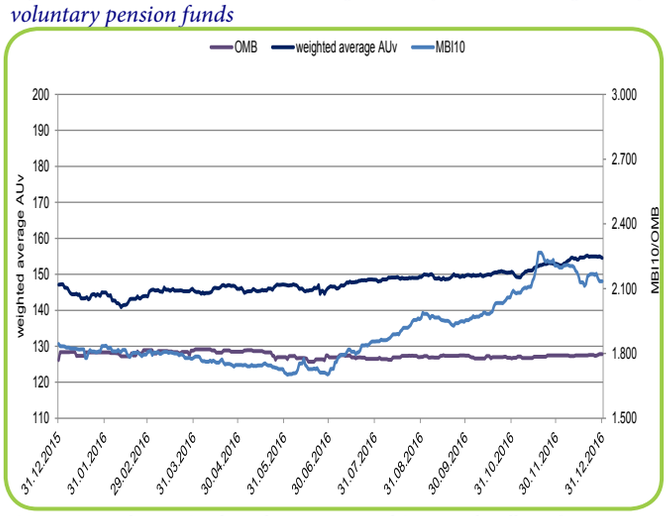


Figure 6.11 MBI10, OMB and average value of the accounting unit of voluntary pension funds



Source: Macedonian Stock Exchange – Annual Statistical Bulletin for 2016

previous year. Namely, the majority of assets, or almost one half of the assets of both voluntary pension funds are invested in instruments in Euro (49.82% for NLBd and 49.57% for KBPd). This is followed by investments in domestic currency (NLBd 28.37% and KBPd 27.33%). Next in line for NLBd are the investments in US dollars (20.39% for NLBd and 23.10 for KBPd), therefore lower than 2014 for NLBd, while for KBPd are higher in respect to last year. In the currency structure of NLBd a very small part includes investments in Swiss Francs (1.06%).

The Macedonian investment portfolios of the voluntary pension funds have many similarities but they also have differences with similar pension systems abroad. Figure 6.16 compares investments of voluntary pension funds assets in Macedonia in 2016 with the investments of such assets in

[13] *Average value is calculated as a weighted average of the accounting units of the voluntary pension funds in respect to the net assets of the voluntary pension funds*

Figure 6.12 Investment structure per sectors for NLBd

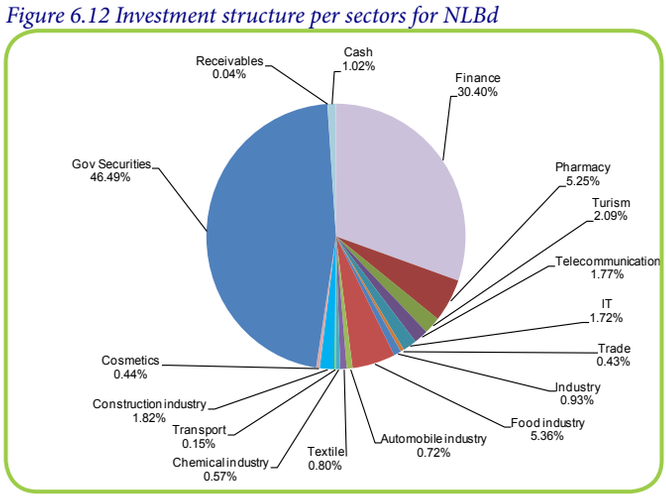


Figure 6.13 Investment structure per sectors for KBPd

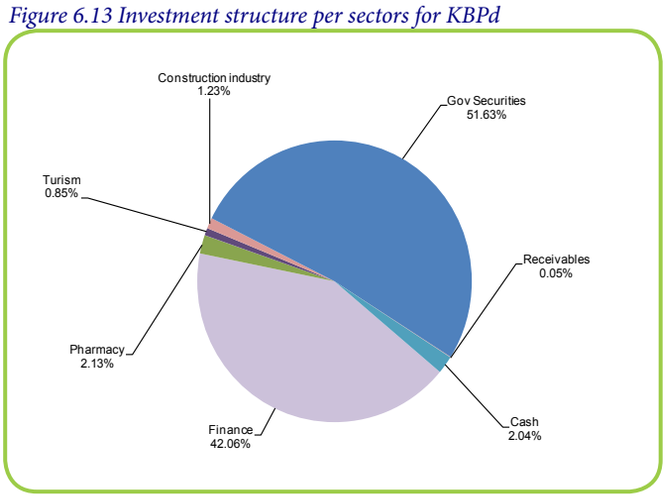


Figure 6.14 Currency structure for NLBd

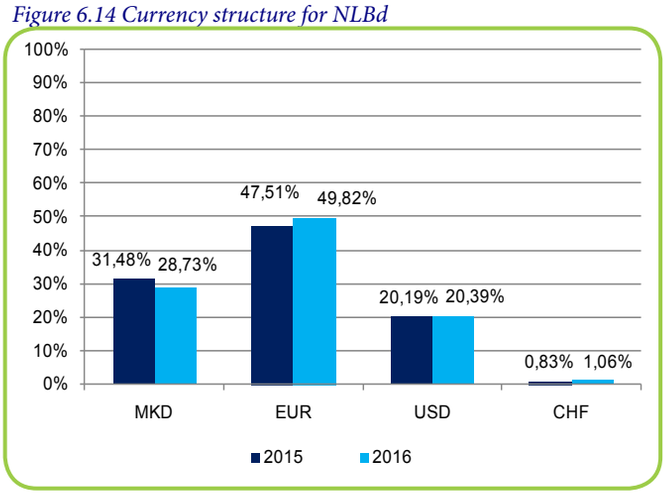
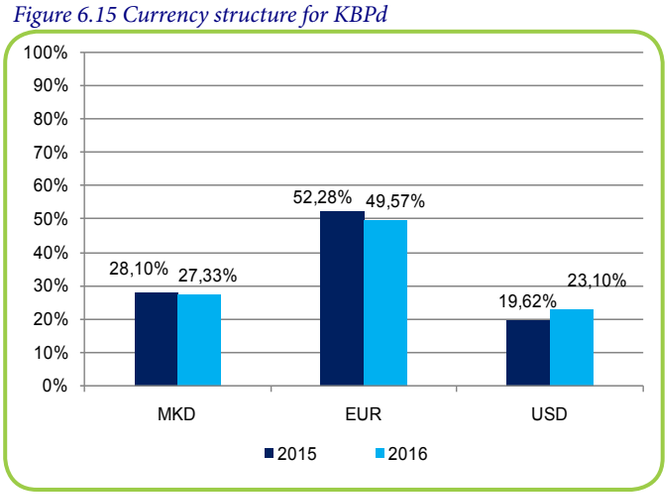
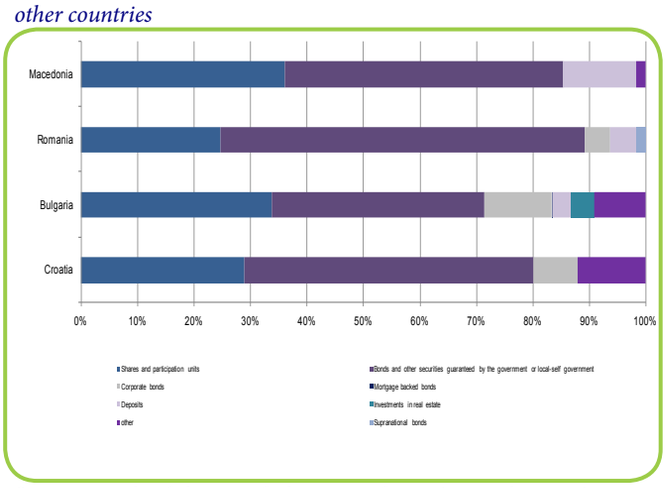


Figure 6.15 Currency structure for KBPd



other countries in the region, which have implemented the voluntary fully funded pension insurance. It is obvious from the portfolios of most countries that the largest exposure is in government bonds and other securities guaranteed by the state or the local self-government (in Romania 65%, Croatia 51%, and Bulgaria 38%). In Macedonia, the exposure to such instruments is 49%, while the exposure to bank deposits is 13%. Unlike Macedonia, the exposure to bank deposits in the other countries is lower: Romania (5%), Bulgaria (3%) while Croatia does not have any investments in deposits. When it comes to shares and participation units, Macedonia has the highest percentage (36%), followed by Bulgaria, (34%), Croatia (29%) and Romania (25%). The above Figure shows that most countries invest in corporate bonds (Bulgaria 12%, Romania 4% and Croatia 8%), except for Macedonia where such instruments lack on the market. Only the pension funds in Bulgaria invest in real estate (4%), while in other countries this instrument is generally prohibited. Regarding investments abroad, Bulgaria has the highest exposure of 45%, followed by pension funds in Macedonia with 28% and Croatia with 8%.

Figure 6.16 Voluntary pension funds portfolios in Macedonia and other countries



Sources: www.hanfa.hr; www.fsc.bg; www.asfromania.ro and own estimates

6.6 *Net assets, accounting unit and rate of return of the voluntary pension funds*

The calculations of the net assets, the accounting unit and the rate of return for the voluntary pension funds are the same as the mandatory pension funds.

The assets of the voluntary pension fund might change throughout the year for the following reasons:
- inflow of contributions;
- outflow due to fees and transaction commissions;
- inflows from personal tax returns;
- inflows as a result of transfers from another pension fund (for persons who were members in another pension fund and have transferred to the current pension fund);
- outflows due to transfers to another pension fund (for persons who were members in the current pension fund and have transferred to another pension fund);
- outflows due to payment of inheritance
- outflows due to payouts of old age pension benefits (lump sum and multiple payments);
- (un) realized incomes or losses from investments.

The value of the net assets at the end of the year is derived from the net assets at the end of the previous year and all the changes as mentioned above. This is demonstrated in Table 6.4

On 31.12.2016, the total net assets of the voluntary pension funds were approximately 998 million denars or 16 million Euros, or 0.16% of the GDP[14].

Figures 6.17 and 6.18 demonstrate net assets at the end of each year as well as their annual increase in percentage in respect to the previous year. It is evident that the net assets of both mandatory funds grow with almost the same pace. The biggest growth is marked in 2011 in respect to 2010.

Table 6.4 Changes in the voluntary pension funds assets (in million denars)

	NLBd	KBPd
Net assets as of 31.12.2015	338.15	397.85
Contributions	109.60	133.21
Fees from contributions	2.90	3.44
Contributions reduced for fees from contributions	106.70	129.77
Payments on individual accounts from personal tax returns	1.10	0.73
Returns of erred contributions	4.55	4.07
Expenditures for intermediary commissions	0.22	0.03
Transfers from another fund	1.05	0.14
Transfers to another fund	0.14	1.05
Inheritance payout	2.35	0.98
Payout of old-age pension benefits – lump sum/ multiple payments	5.32	13.34
Gross profit from investments	24.65	29.65
Net profit from investments	19.88	25.55
Net assets as of 31.12.2016	459.08	538.68

Figures 6.19 and 6.20 demonstrate the changes in the value of the net assets and the cumulative contributions, accompanied by the growth of contributions paid in the voluntary pension funds and the growth of the net assets.

Figure 6.17 Annual growth of the net assets of NLBd in respect to previous year, in %

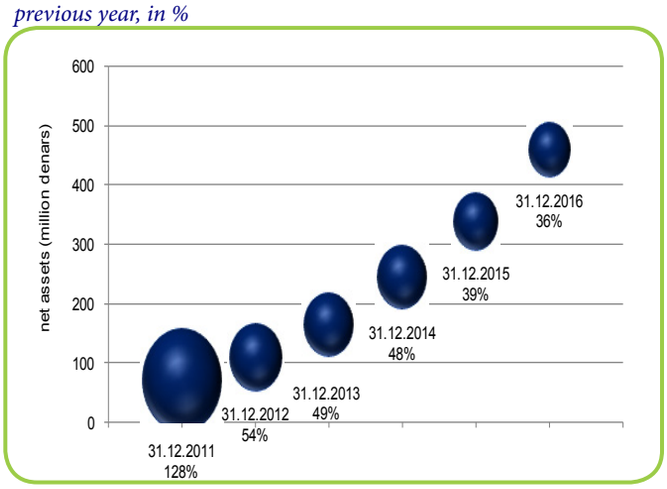
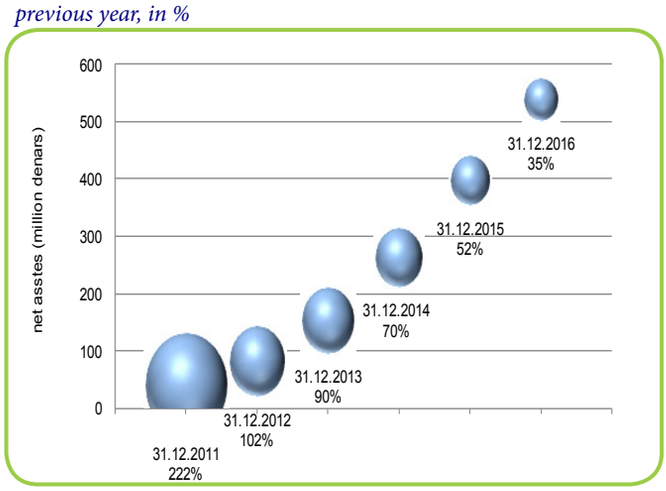


Figure 6.18 Annual growth of the net assets of KBPd in respect to previous year, in %



[14] *Source for GDP: State Statistical Office – announcement on the GDP fourth quarter of 2016- estimated data*

Figure 6.19 Net asset growth compared to the growth of paid contributions in NLBd

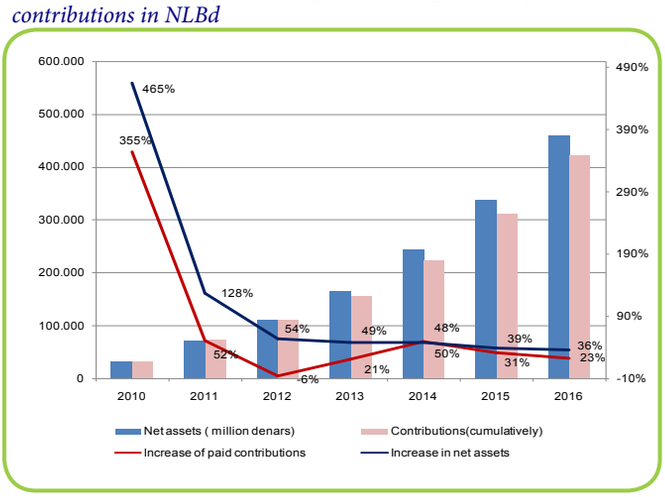


Figure 6.20 Net asset growth compared to the growth of paid contributions in KBPd

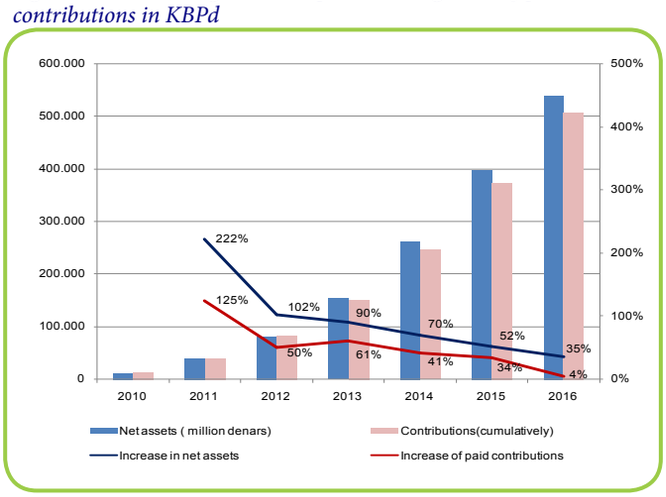


Table 6.5. The value of the accounting unit of the voluntary pension funds from the beginning of the system

Date	Value of the accounting unit	
	NLBd	KBPd
15.09.2009	100.000000	
21.12.2009	102.815757	100.000000
31.12.2009	103.061825	100.204385
31.12.2010	107.592926	106.891617
31.12.2011	111.854726	112.639593
31.12.2012	118.742851	119.129537
31.12.2013	130.511147	129.015451
31.12.2014	140.946772	139.908803
31.12.2015	147.535595	146.709341
31.03.2016	145.578197	145.365859
30.06.2016	145.917674	146.804501
30.09.2016	149.390234	149.857644
31.12.2016	154.578083	154.465341

In the initial period of operations (2009 – 2011), NLBd had a huge growth of net assets and paid contributions. In 2012, compared to 2011, the growth of the net assets was 54%, while the paid contributions had a fall of 6%. In the next four years the growth of the net assets of NLBd starts to stabilize slowly, while the growth of the paid contributions differs from year to year. In 2016, compared to 2015, the net assets for NLBd grew for 36% and the paid in contributions for 23%.

For KBPd as well, the initial period (2010-2012) is marked by significant growth of the net assets and paid contributions. In 2013, compared to 2012, the growth of net assets was 90%, while the growth of the paid contributions was 61%. In the following years the growth of the net assets and paid contributions slowly decreased. In 2016 compared to 2015, the net assets of KBPd grew for 35%, while he paid contributions for 4%.

The changes in the value of the accounting units of the voluntary pension funds, from the beginning of the system until 31.12.2016 are given in Table 6.5 and Figure 6.21. As shown on the Figure, the accounting units have a growing trend. In 2016, the accounting unit was growing and this growth was particularly obvious by the end of the year.

Figure 6.21 The value of the accounting unit of the voluntary pension funds from the beginning of the system

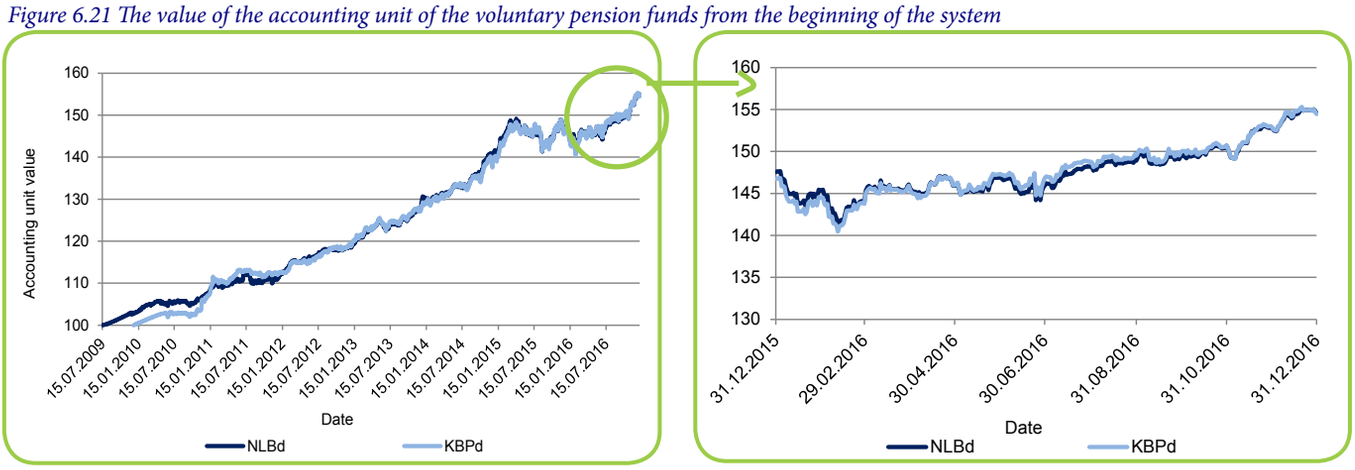


Table 6.6. Returns of voluntary pension funds

Period*	NLBd		KBPd	
	In nominal value	In real value	In nominal value	In real value
31.12.2009 - 31.12.2010	4.40%		6.67%	
31.12.2009 – 31.12.2011	4.18%		6.02%	
31.12.2009 - 31.12.2012	4.83%		5.93%	
31.12.2009 – 31.12.2013	6.08%	3.00%	6.52%	3.42%
31.12.2009 – 31.12.2014	6.46%	4.09%	6.90%	4.52%
31.12.2009 - 31.12.2015	6.16%	4.25%	6.56%	4.64%
31.12.2009 - 31.03.2016	5.68%	3.90%	6.13%	4.34%
31.12.2009 - 30.06.2016	5.49%	3.70%	6.05%	4.24%
30.09.2009 -30.09.2016	5.69%	3.94%		
Start** -31.12.2016	6.02%	4.46%	6.37%	4.77%

** Until the amendments to the Law on voluntary, fully funded pension insurance in 2013, the return was calculated for a period of 3 years, only in nominal value.*
*** The start is on 15.7.2009 for NLBd and on 21.12.2009 for KBPd.*

The return of the voluntary pension funds is calculated the same way and with the same formula as the return for the mandatory pension funds. Table 6.6 presents the annual return of the voluntary pension funds, per periods.

The return on the individual account and/or occupational account is variable and it depends on the return of the voluntary pension fund and the fees charged by the pension company. The return or the yield is a parameter, which cannot be predicted realistically because it depends on the conditions on the capital markets and the economy as a whole.

Considering the long-term nature of the pension insurance, the return of the voluntary pension funds should be calculated from the beginning of their existence, and presented annually. So, for NLBd the return is 6.02% in nominal value and 4.46% in real value, while for KBPd it is 6.37% in nominal value and 4.77% in real value.

Figure 6.22 shows the changes in the nominal return in the last seven years, giving the returns per periods from 31.12.2009 until 31.12.2016, per funds and the average weighted return. At the beginning, the return is growing, so, at the end of the first half of 2011, both funds have high returns, while at the end of 2011, the returns start to fall. Then, in the following years, the returns start to pick up

Figure 6.22. Voluntary pension funds returns (in nominal value)

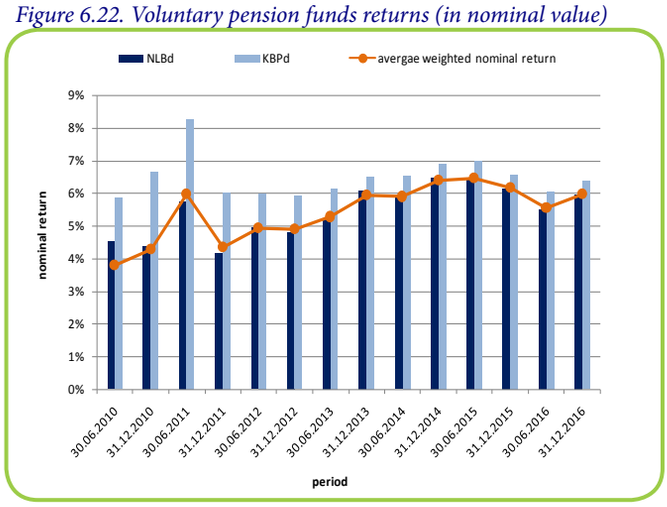
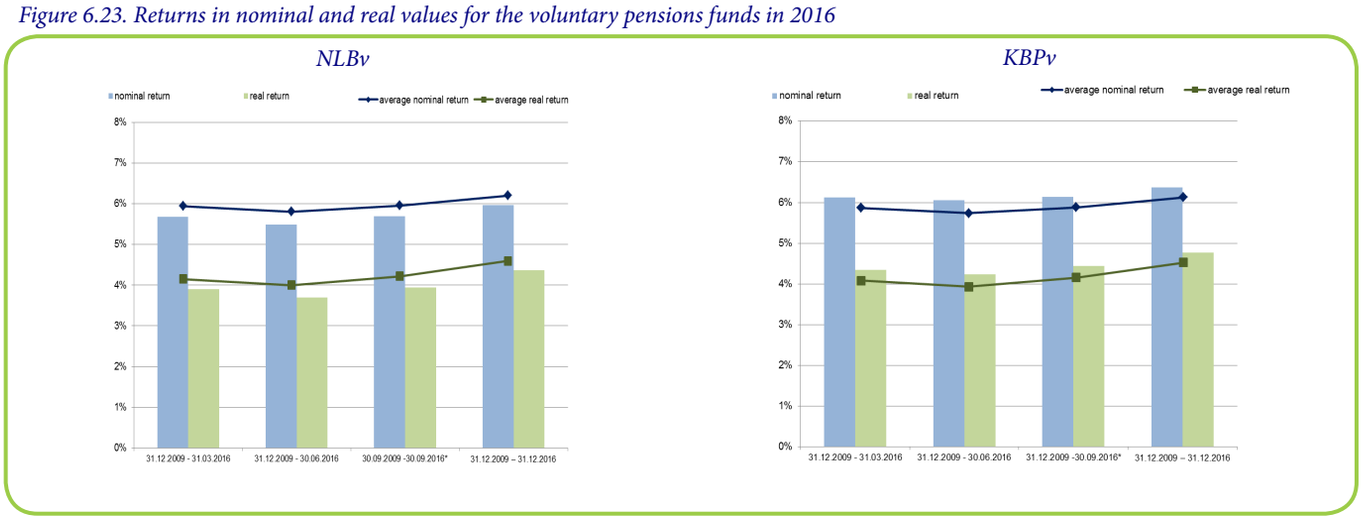


Figure 6.23. Returns in nominal and real values for the voluntary pensions funds in 2016



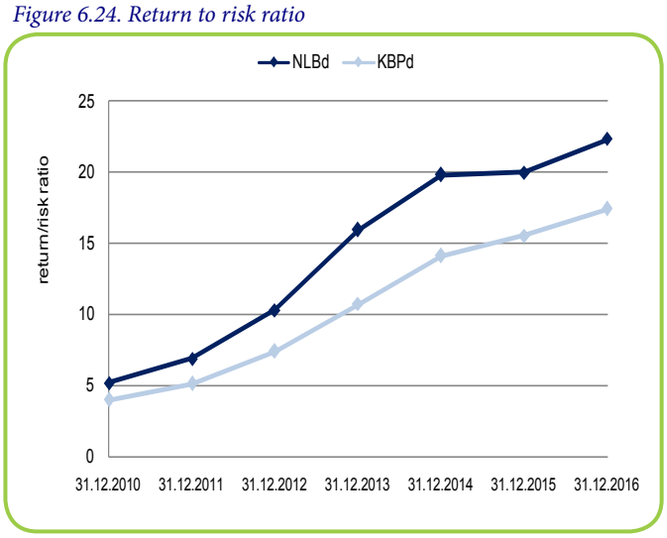
**The average return for the period, as of 30.09.2016 is calculated as simple average of the return of NLBd for the period 30.9.2016-30.9.2016 and the return of KBPd for the period 31.12.2009-31.12.2006*

gradually by mid 2015, and then to drop again by mid 2016. As of 31.12.2016 the return starts to grow again.

The changes in the nominal and in real values of the return for 2016, per periods, and presented annually per voluntary pension fund and compared to the average return and are given on the Figure 6.23. In 2016, the nominal returns for both pension funds was between 5.49% and 6.37%, while the real return was from 3.70% to 4.77%. The highest value of the returns is noticed for the period 31.12.2009 – 31.12.2016.

The main goal of investing the assets of the voluntary pension funds is to cause growth of such assets. So, the return is the measure of growth. At the same time, one should mind the risk from investments. The risk represents the inability to predict the accomplishment of the return on the invested assets. The risk to return ratio is direct, which means that higher risk brings higher return and vice versa. The nominal return to risk[15] ratio (calculated by one of the possible calculation methods) from the beginning of the system until the end of 2016 is shown on Figure 6.24.

Figure 6.24. Return to risk ratio



[15]*The return is calculated on annual level from the growth of the accounting unit and from the beginning of the system. The risk represents the volatility of the accounting unit and it is calculated as annualized standard deviation of the pension funds 'return.*

6.7 *Voluntary pension fund fees*

According to the Law, voluntary pension companies charge three types of fees: fee from contributions, fee from assets and fees for transfers. They use these fees to cover the following functions: manage the voluntary pension funds assets, valuation of assets, membership, keeping of voluntary individual and occupational accounts, reporting to members, payment of fees to MAPAS and the custodian and covering of own expenses.

The fee from contributions is charged upon payment of contributions before it is converted into accounting units. Generally, this fee is charged in the same percentage from all members of the voluntary pension fund. However, there are exceptions for those members who are part of occupational schemes or in cases of multi-year membership. The monthly fee from assets is a percentage from the value of the net assets in the voluntary pension fund and it is calculated on each valuation day of the voluntary pension fund's assets (in accordance with the secondary regulation each day is a valuation day) and it is charged once a month. The transfer fee is charged in cases of transfers of members from one to another pension fund, provided that those members have been part of the current pension fund less than a year.

Table 6.7 Fees charged by the pension companies that manage voluntary pension funds

Type of fee	NLB	KBP
Fee from contributions*	3.80%[16]	2.90%[17]
Monthly fee from the net assets of the voluntary pension fund	0.10%[18]	0.075%[19]
Fee from transfers		
Number of days**	Transfer fee	Transfer fee
Number of days ≤ 360	10 euro	10 euro
Number of days> 360	Free of charge	Free of charge

** For members in occupational schemes the pension company may set fees lower that this fee.*
*** The number of days is calculated based on the number of days passed from the date the member became a member in the current pension fund until he signed a membership agreement with the future pension fund.*

The Law stipulates the maximum amounts and the pension companies have the freedom to determine the amounts they will charge within the given statutory maximum amount.

Table 6.7 presents the types and amounts of fees charged by the pension companies that manage the voluntary pension funds for 2016.

From the beginning NLBd charged a fee of 5.25% from paid contributions, until March 2011, when this fee was reduced to 3.80%. KBPd started with a 5.5% contribution fee, which was reduced to 4% on April 24 and on June 1, 2013, it was reduced once again to 2.90%. Also, in 2011 both companies reduced the asset management fee to 0.100% for NLB and 0.075% for KBP.

Table 6.8 gives us the fees charged by the pension companies managing the voluntary pension funds (in thousand denars), for 2016, per month and per type of fee.

Transaction fees for acquisition or transfer of assets to a voluntary pension fund are charged from the pension fund and paid to selected legal entities, which render services with securities. These fees are calculated as a percentage from the value of each transaction. The pension fund is also charged for each transaction on the Macedonian Stock Exchange, by the Macedonian Stock Exchange and the Central Securities Depository. In 2016, NLBd paid 0.22 million denars in transaction fees, and KBPd paid 0.03 million denars in transaction fees.

Table 6.8 Fees charged by pension companies for 2016 (in thousand denars)

	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
NLB – total	499	533	580	550	540	568	537	582	622	657	748	1,028	7,445
From contributions	164	195	230	193	178	200	158	193	224	251	328	587	2,900
From assets	335	337	349	357	362	369	379	389	398	406	421	441	4,545
KB Prvo – total	575	573	583	596	557	568	526	559	592	559	613	1,214	7,515
From contributions	278	271	270	275	230	233	183	208	234	194	240	825	3,441
From assets	297	302	313	321	327	334	343	351	357	365	374	389	4,074

[16] *From March 1, 2011 (previously it was 5.25%)*
[17] *From June 1, 2013 (previously it was 4.00%)*
[18] *From March 1, 2011 (previously it was 0.15%)*
[19] *From January 1, 2011 (previously it was0.15%)*

6.8 Payout of pension benefits from the voluntary pension insurance

The third pillar is more liberal than the second pillar in terms of entitlements to pension benefits and their payouts. Nevertheless, the third pillar savings are old-age savings. Therefore, the assets on the accounts may be withdrawn not sooner than ten years before the statutory retirement age, as per the Law on Pension and Disability Insurance. At this moment, this means that the assets may be withdrawn at 54 years of age for men and at 52 for women. In addition, when the Commission for Assessment of the Working Capacity in the Pension and Disability Insurance Fund of Macedonia assess a member to be generally incapacitated to further his career, that member, regardless of the age, is entitled to withdraw the assets. In case of death of a voluntary pension fund member, the assets on the member's account shall form part of his/her estate and will be managed in accordance with the Law on Inheritance.

A third pillar member may chose from the following types of benefit payout:

- lump sum payment or payments in several instalments;

- pension annuity in a form of a life-time annuity paid from an authorized insurance company;

- programmed withdrawals provided by the pension company that manages the voluntary pension fund where the insured person is a member on the day of retirement; or

- a combination of the above mentioned methods.

The provision and payout of pensions and pension benefits from the second and the third pillar is regulated with the Law for Payment on Pensions and Pension Benefits from Fully Funded Pension Insurance.

In 2016, the third pillar paid out 216 pension benefits. Most of the pension benefit payouts are old-age benefits, mostly paid as lump sums, and small number of members had their benefits paid as multiple payouts. Small part of the payouts of the third pillar was made for cases of death of a member, by payouts of inheritance. Table 6.9 gives the details on the third pillar payouts in 2016, per voluntary pension fund and per type of account.

Table 6.9. Pension benefit entitlements and payouts from the third pillar

Type of pension benefit and payout / voluntary pension fund	NLBd		KBPd		Total
	Ind. account	Occ. account	Ind. account	Occ. account	
Old age – lump sum	32	17	28	132	209
Old age – multiple payouts	1	1	0	0	2
Inheritance	1	1	0	3	5
Total	34	19	28	135	216

Marketing and Sales Agents of Pension Companies

7

The protection of the interests of current, future and retired members of the fully funded pension insurance is a primary concern of all the system's stakeholders. In that light, the provision of fair and objective information to the public is essential.

The marketing of the pension companies entails all activities for advertising of the mandatory and voluntary pension companies and pension funds, information and signing of membership contracts with the mandatory and voluntary pension funds and payout of assets from such pension funds. These activities include more specifically: advertising for the pension companies' operations and pension funds under their management; disseminating information on the characteristics of the mandatory and voluntary fully funded pension insurances; disseminating information on the fees and transactions commissions; disseminating information on the mandatory and voluntary pension funds returns; giving information on the mandatory and voluntary pension funds' investments portfolios; providing information on the individual accounts, voluntary individual accounts and occupational accounts; enrolment and transfer of members from one to another mandatory pension fund; enrolment and transfers of members from one to another voluntary pension fund; signing of contracts for programmed withdrawals, lump sum payouts and payouts in instalments, as well as other activities for advertising and provision of information related to the pension companies and the pension funds. A pension company may perform marketing activities of pension funds in its premises, in the premises of its marketing associates, directly or via appropriate forms of communication (telephone, fax, Internet). The premises where such marketing activities take place must meet certain conditions prescribed by law.

MAPAS controls all marketing activities of the pension companies. For that purpose, the pension companies must submit all marketing materials to MAPAS in photocopy, or on appropriate medium, not later than three days after such material has been published. In case MAPAS finds some marketing materials or advertisements to be misleading, it can prohibit their further publication or distribution and it may request alterations to the material in a given deadline.

A sales agent is any person who performs marketing activities on behalf of a pension company. Sales agent may be an employee of the pension company or another person otherwise engaged by the pension company. Such sales agent may perform marketing activities for the pension fund and/or sign membership or payout agreements but only for those pension funds that are managed by the pension company on which behalf the sales agent is acting. A sales agent must be present upon the signing of the agreements for membership, transfer, programmed withdrawals, lump sum payouts, or payouts in instalments. Also, the sales agent is obligated to make personal contacts with members, retired members, potential members and he must not subcontract the signing of the agreement to another person. The sale agent plays an important role in the selection of the type of pension benefit payout, therefore he is obligated to present the options to the member who submitted a quotation request and must explain in detail all characteristics and assumptions for all types of payouts.

A person can perform marketing activities after he is registered in the Sales Agent Register kept by MAPAS. MAPAS prescribes the sales agent exam's methodology and procedure as well as the registration in the Sales Agents Register.

In 2016 there were two examination sessions, with 124 candidates, out of which 44 (35%) passed the Sales Agent Exam.

In 2016, 52 agents got registered out of which NLB registered 39 sales agents and KP Prvo 13. Then, 319 renewed their annual registration, out of which 128 sales agents for KB Prvo and 191 agents for NLB. In 2016, 2 NLB and 21 KB Prvo agents had terminated their status as sales agents.

The Figure 7.1 demonstrates the frequency of signed contracts by sales agents from the beginning of the system. It is evident that most contracts were signed in 2005, as this was the stat-up year, and 31.12.2005 was the deadline for the voluntary members to join the two-pillar system by signing a membership contract with a sales agent. In the following years, the number of contracts per agent is significantly decreasing in 2013 and 2014. In 2016, in respect to 2015 the number of sales agents who signed membership contracts remained the same, while the average number of signed contracts per sales agents increased slightly.

The Figure 7.2 demonstrates a similar analysis of signed contracts for the voluntary pension funds. It is evident that the number of agents who signed contracts is highest in 2010, while the number of average contracts per agent is the lowest. In 2014, there is the highest value per average number of contracts and rather small number of agents who signed contracts. Since 2012 the number of sales agents who signed contracts is decreasing. In 2016, in respect to 2015 the number of sales agents who signed membership contracts remained the same, while the average number of signed contracts per sales agent increased slightly.

Figure 7.1. Number of agents that signed membership contracts for mandatory pension funds and average number of contracts per agent.

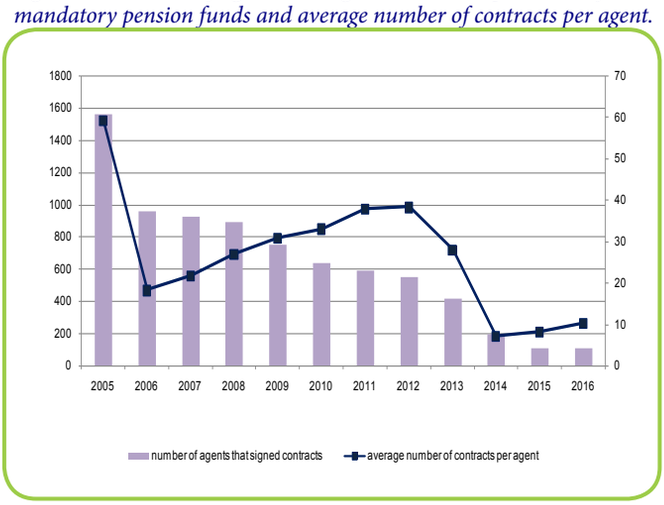


Figure 7.2. Number of agents that signed membership contracts for voluntary pension funds and average number of contracts per agent