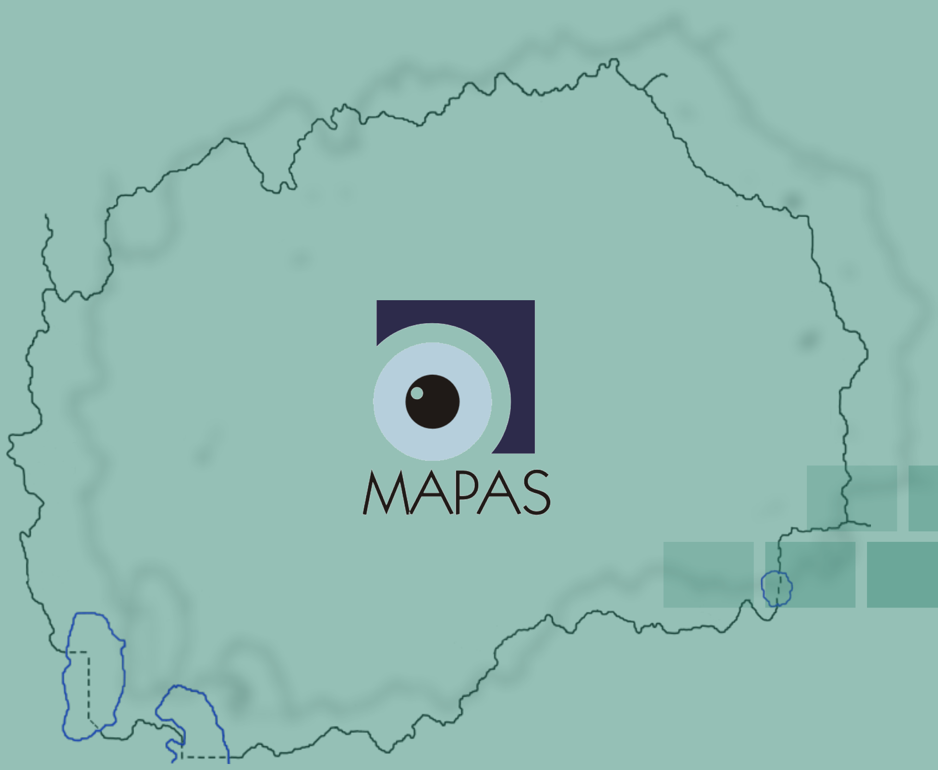
Agency for Supervision of Fully Funded Pension Insurance
Republic of Macedonia

REPORT

On the Developments in the Fully Funded Pension Insurance

2014



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Skopje, june 2015

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Foreword

Dear reader,

It is my honour and pleasure to present the results and the accomplishments of the second and third pillar in the ninth edition of the Annual Report on the Developments in the Fully Funded Pension Insurance of the Agency for Supervision of Fully Funded Pension Insurance. We are proud to say that 2014 was another successful year for the three-pillar pension system in the Republic of Macedonia.

In the Report you shall find information and data on the features of the fully funded pension insurance, assessments on the legislation compliance 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. This is followed by a brief explanation on the latest amendments in the relevant legislation. In 2014, the major interventions in the legislation were made in the secondary regulations governing the investments, membership in the private pension funds, fees, sales agents, marketing etc. Some of the amendments in the secondary regulation were made to simplify the procedure for updating of members' data in the registries, to establish a new system for sales agents' exams and to modify the deadline for distribution of reports on pension savings. Also, we have prepared nine new rulebooks which further regulate the pension benefits payout stage.

One chapter of the Report is dedicated to the financial operations of the Pension Companies, which demonstrate 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 pension funds operations (Chapters five and six).

In 2014, the membership in the second pillar increased for 6.6% (in respect to 2013) amounting to a total of 373,000 members, which is 70% 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 34 years. In 2014, the second pillar received 4.5 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 31.12.2014 was 33 billion denars which is a 23% rise in respect to 31.12.2013, and is 6.28% of the GDP of the Republic of Macedonia. The investment portfolio of the mandatory pension funds is consisted of domestic investments in government securities (58%), deposits (11%) and shares (3%), as well as investments abroad, which include shares (5%) and participation units in investment funds (22%). The accounting units of both mandatory pension funds were rising constantly during 2014. In the 7-year period of their operations, from 2008 to 2014, the mandatory pension funds reached an average annual return of 5.03%, i.e. a real return of 2.87%. In 2014, the mandatory pension funds had realized around 200 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 or to those who are entitled to such pension, but who reached such entitlement before the promulgation of the Law on Payment of Pensions and Pension Benefits from the Fully Funded Pension Insurance.*

In 2014, the number of members in the third pillar increased by 10% in respect to 2013 and reached 20,400 members, out of which 69% 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 42 years. In 2014, 164 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 31.12.2014, the value of the voluntary pension funds assets reached 8.2 billion denars, which is 0.10% 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 (44%), deposits (15%) and shares (12%), as well as in investments abroad which include shares (5%) and participation units in investment funds (22%). The accounting unit for both voluntary funds was continuously rising throughout 2014. In the 5-year period of their operations, from 2010 to 2014, the mandatory pension funds reach an average annual return in the range from 6.46% to 6.9%, i.e. a real return in the range from 4.09% to 4.52%. The voluntary pension funds realized around 100 payouts in 2014, most of them as lump sum payments for old age, and less for inheritance payments due to deaths of voluntary pension funds members.

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 2014, the Agency organized four examinations for sales agents, where 58% 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 has terminated in 2014.

I would like to point out 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.

Guided by our mission, we shall continue with the practice of 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.

I believe that the readers of this very extensive report will find interesting and useful information and that with this report they will have a clearer picture 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 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. 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.

One of the reforms of the basic pay-as-you-go systems usually includes the increase of the retirement age. 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. Another trend is the decrease of the pension benefits or changes in the indexations of pension. 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.

Generally, pension plans based on individual savings have very important characteristics and they 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.

Private pension systems play an increasing role due to size of their assets and the coverage of the population. After the financial crisis, the pension funds are constantly growing, from 2009 until present day. In 2013, the private pension systems in the OECD area accumulated 36 trillion USD, consisted of: pension funds (24.7 trillion USD or 68%), banks and investment companies (7.1 trillion USD or 7.1%), insurance companies (12%) and employers' reserves (0.8%).

The weighted average of the pension assets, as a percentage of the GDP in the OECD countries has grown from 77.1% in 2012 to 84.2% in 2013. The Netherlands has the highest percentage of pension assets as percentage of the GDP – 166.3%. This ratio varies from country to country; so, in five countries, it is higher than 100%, but still in most OECD countries, it is lower than 20%. In non-OECD countries, there is also a significant accumulation of assets, amounting to 38.3% of GDP, which is less than OECD countries (84.2% of GDP). Only nine countries have assets higher than 20% of GDP, which is considered to be a condition for meeting the definition of "mature" pension market and, most countries have less than 20% of GDP in pension assets, which gives space for further growth and development.

After the negative real returns in 2011 in the OECD countries, in 2013 the pension funds in almost all OECD countries reached positive returns, regardless of the instability of the world economy and the volatility of the financial markets. The high performance of most of the capital markets stimulated the average real return in most countries. In 2013, the weighted average of the real returns was 4.7%. Also, the non-OECD countries had positive returns in 2013, with 5.6% average real annual return, which is slightly above the OECD average (4.7%).

This year, similarly to the previous years, the challenges of the private fully funded system remain to be the improvement of their investment outcomes and the reduction of the administrative costs and fees.

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

The main issues evolve around the investments and investment strategies of defined contribution pension funds. Namely, the fully funded pension component of the pension system resolves the demographic risk but the challenge from the uncertainty of the investments remains as the main concern for the member. 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 retirement. 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. Two major trends in the pension industry are the expansion of defined contribution systems and the vast choice of investment opportunities. Based on the experience and data provided from the members of IOPS (International Organizations of Pension Supervisors), IOPS proposes that the design should take into consideration the purpose of the fund, the demographic structure of the members, the risk appetite or the risk tolerance of the members, the investment goals, the need for liquidity and cash flows, diversification, costs, conditions in the market and the management. The EIOPA research shows that the supply of multi-funds is high in the EU countries and usually it is left to the free will of the members to choose the portfolio options, rather than to impose it as a legal obligation. In 2014, Croatia introduced the multi-funds with three categories of pension funds which have different investment strategies of their portfolios, based on the time remaining until retirement of the member.

The costs and the fees are a continuous challenge for the pension systems, as these have a significant influence on the pension income of the future pensioners. One of the indicators for the efficiency of the pension system is the assessment of the overall operational costs. Total operational costs of the pension funds are consisted of all administrative costs and investment management costs. This is the reason why pension supervisors' major concerns are these costs, and this explains their pressure towards reduction of fees charged by pension companies. Supervisors insist on transparency of the structure and publication of costs so that members have insight into the costs and fees and they are able to compare the fees charged by different pension companies. Inevitable fact is that DC pension systems should not be observed only through the eyes of fees and costs, but also the quality and the performance of the pension fund should be taken into serious consideration. If a pension fund is better in quality and in performance than other pension funds, than it is reasonable that such pension fund charges higher fees.

Another global hot topic is the payout of accumulated assets, where special attention is put on the link between the accumulation stage and the payout stage, the design of the payout stage, types of payouts 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. Pension supervisors pay huge attention to this and they always point out that it is very important that members get the correct information so they can make an informed decision when the time comes. According to the EIOPA research on current practices, most of the countries send information to the members after retirement or just before they retire. In other countries (Estonia, Latvia, UK) there are specialized web sites on pension benefit payouts, where members may find all the advise they need, starting from the pension product options all the way to calculations of expected monthly pension benefit.

On the other hand, 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. Namely, members may live longer than expected upon retirement, which requires good management of the longevity risk. Based on the analyses, IOPS recommends regulation that will support the successful longevity risk management or regulation that will provide for adequate use of mortality tables (by pension funds and insurance companies) which will take into consideration future improvements of mortality, which will be updated on regular basis and shall reflect the mortality of the relevant population. Also, the role of the state is important for publishing precise data on mortality in order to facilitate the measuring of the mortality rate and to stimulate the market for instruments which are linked to the longevity as means for mitigation of the longevity risk.

Another popular topic in 2014 was educating the population on pension and generally on financial issues. In this respect, the supervisors stepped in, by providing pension related education to the current and future pensioners in order to explain the pension system and to work on building the confidence in the system, to encourage the population to save more and longer, to assist with the investment decisions etc. FIAP and EIOPA reports indicate that this issue is especially important for the individually financed programs, where 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. There is a reallocation of risks and responsibilities among occupational schemes organizers and the members. Namely, now members bear more risks and their decisions have direct influence over their potential pensions. Hence, potential members and potential pensioners must 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 right choice in relation to their needs for the future and the acceptable risk level. 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 pension companies and the authorities towards improvement of the financial education and culture of the population.

For 2014, IOPS put the accent on the risk-based supervision, and this is reflected in the pension regulations. Pension supervisors throughout the world follow the financial sectors and move towards risk based supervision in order to have a proactive role and to prevent the highest risks. This is a process, which identifies potential risks that pension funds and schemes face, assesses the risks and the potential negative financial impact on the membership and gives the measures for mitigation of those risks. One of the main goals of the risk-based supervision is to provide adequate risk management on institutional level, taking into consideration the quality of the risk management and the accuracy of the risk assessment. Besides specific approaches for each country, IOPS and OECD find that it is feasible to set general good practices for the pension fund risk management, which will be of great assistance to pension supervisors.

In 2014, IOPS celebrated its 10th birthday. The organization was established in 2004, with 24 initial governing members. It was instigated by the Organisation for Economic Co-operation and Development (OECD) and the International Network of Pension Regulators and Supervisors (INPRS). It was felt that, concerning supervision, a more formal, independent, body could better serve as a world-wide forum for policy dialogue and the exchange of information, as well as a standard-setting body, promoting good practices in pension supervision. Ten years after, IOPS has accomplished its main goal and became the leading organization in the field of private pension supervisors. IOPS is well established and recognized, independent, international organization. Currently, IOPS has 83 members and observers, represented by the supervisory authorities from 72 countries and territories of the globe – from Australia to Zambia – which encompass all types of economies and all types of pension and regulatory systems.

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

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.

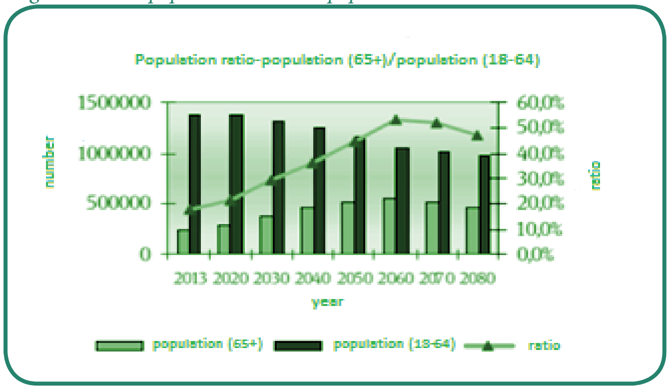
The Macedonian pension system has a long history of existence; it has a rather extensive coverage of the labour force and in the provision of pension benefits for the retirees. However, the social and economic turmoil at the beginning of the '90s left their mark on the pension system, causing financial 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 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 17.68% to 53.03%, while in 2080 it will decrease to 47.34%, which means that on a long-run one third of the population above the age of 18 years will be old population.

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 2013)

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 contemplation of the pension reform, demonstrate that on a long run, such factors might have huge negative impact on the solvency of the Pension and Disability Insurance Fund 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 are newly introduced and they 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.

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), should 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).

Another important feature of the fully funded pension insurance is 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 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 voluntary 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 2014, this percentage was 0.8.

So, MAPAS is a regulatory body that supervises the most important segment of the financial market – the pension funds – which is the second largest segment, amounting to 6% of the GDP and continually growing. With the continuous supervision of the pension funds' investments, MAPAS is responsible for the provision of safe retirement benefits to the future pensioners.

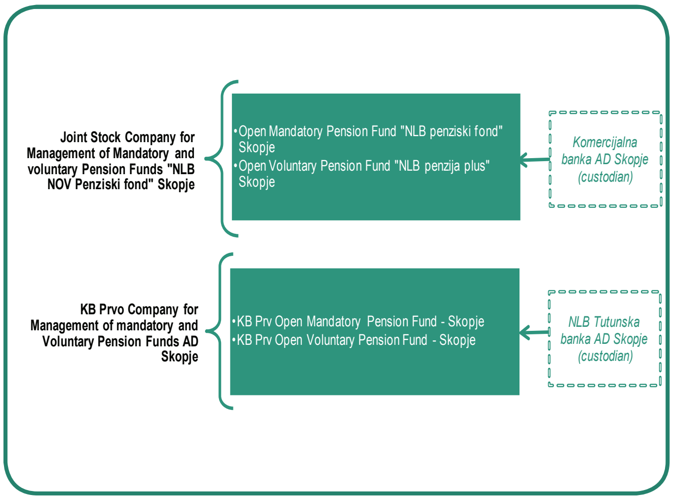
A pension company is a joint stock company, which is established and operates as per the Law on Companies and the Law on Mandatory Fully Funded Pension Insurance or the Law on Voluntary Fully Funded Pension Insurance. A mandatory pension company is established to manage only mandatory pension funds; 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 pension 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, MAPAS granted two licenses for establishment of pension companies, and in 2009, those same 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 one mandatory, and one voluntary pension fund each[2] as seen on Figure 2.2.

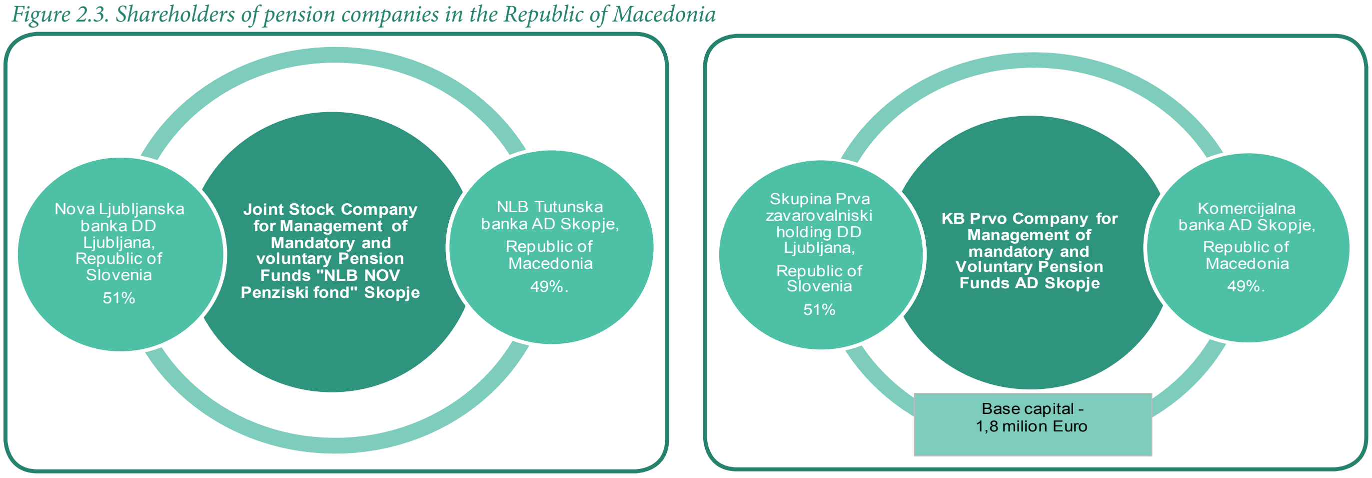
Figure 2.2. Pension companies and pension funds in the Republic of Macedonia



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. Namely, NLB Tutunska Banka as the custodian for KBPz, from January 10, 2014 is charging a fee in the range from 0.053% to 0.081%, depending on the amount of assets of the mandatory pension fund under custody. Komercijalna Banka as custodian for NLBz, from January 24, 2014 is charging a fee in the range from 0.064% to 0.092%, depending on the amount of assets of the mandatory pension fund under custody. NLB Tutunska Banka as a custodian for the assets of KBPd, from 21 December 2009 is charging a fee in the range from 0.20% to 0.25%, depending on the amount of assets of the voluntary pension fund under custody. And, Komercijalna Banka as custodian for the assets of NLBd, from July 15 2009 is charging a fee in the range from 0.20% to 0.25%, depending on the amount of assets of the voluntary pension fund under custody.

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

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

3

In 2014, the Law on Mandatory Fully Funded Pension Insurance was amended only once. However, the Council of Experts in MAPAS passed 18 secondary regulations or amendments to existing secondary regulations for the fully funded pension insurance.

With the amendments to the Law on Mandatory Fully Funded Pension Insurance In March 2014, some of the provisions of this Law were aligned with the provisions of the Law on administrative servants.

Namely, these amendments regulate the terms and conditions for election of the members of the Council of Experts of the Agency, the employees of the Agency performing administrative tasks are awarded the status of administrative servants and the responsibilities of the Council of experts are extended.

During 2014, 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 the contents of the investment strategy of a pension fund;

2. Rulebook on Amendments to the Rulebook on the procedure for selecting domestic legal entities for delivering services with securities;

3. Rulebook on Amendments to the Rulebook on membership in a mandatory pension fund;

4. Rulebook on Amendments to the Rulebook on fees for mandatory pension fund;

5. Rulebook on Amendments to the Rulebook on membership in a voluntary pension fund;

6. Rulebook on Amendments to the Rulebook on the maximum amount and manner of payment of the fee for transfer of a member from one to another pension fund;

7. Rulebook on sales agents;

8. Rulebook on Amendments to the Rulebook on marketing of pension funds;

9. Rulebook on the criteria for the space, material and technical conditions and the IT equipment necessary for organizing the sales agents exam;

10. Rulebook on records and keeping of data that pension companies and insurance companies submit to the Pension and Disability Insurance Fund of Macedonia;

11. Rulebook on submitting statistical data on the actual mortality rate of pension and/or disability beneficiaries from Pension Companies to MAPAS;

12. Rulebook on comparison of annual amounts of programmed withdrawals and first pillar pension and the verification and payment of difference to the minimum amount of pension;

13. Rulebook on the minimum standards for setting interest rates;

14. Rulebook on the minimum standards for mortality tables;

15. Rulebook on presenting offers for projected future pensions;

16. Rulebook on the projections of pensions and amounts on individual accounts for programmed withdrawals;

17. Rulebook on the manner of changing the type of pension benefit payout; and

18. Rulebook on changing the type of pension benefits payout.

These amendments to the rulebooks were necessary for the harmonization of the secondary legislation with the amendments to the Laws on Mandatory and Voluntary Fully Funded Pension Insurance and for further regulating certain procedures. With the amendments in the rulebooks governing the membership in the pension funds, the procedure for updating the data on the members and the retired members is simplified. The Agency passed a new Rulebook on sales agents and a Rulebook on the criteria for the space, material and technical conditions and the IT equipment necessary for organizing the sales agents' exam, as a result of the introduction of completely new system for the examination of candidates for sales agents. The Rulebook on marketing underwent serious amendments, as the deadlines for the Pension Companies for submitting reports on pension savings to their members and retired members are now different. Also, upon adoption of the Law on Payment of Pensions and Pension Benefits from the Fully Funded Pension Insurance, the Agency passed several rulebooks which regulate in detail this area.

In 2014, MAPAS prepared and passed the following instructions:

1. Technical instruction on submitting of annual records and reports from the data base, maintained by the pension companies and

2. Instruction on filling reports for pension savings.

Financial data for the Pension Companies

4

4.1 Revenues and expenditures of pension companies for 2014

4.2 Financial results of the pension companies

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

4.4 Indicators

4.1 *Revenues and expenditures of pension companies for 2014*

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 31.12.2014.

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 2014 are given in the Table 4.1.

Table 4.1. Revenues of Pension Companies for 2014

Basis	NLB		KB prvo	
Revenues from managing a mandatory pension fund				
Contributions Fee	73,755,149	43.03%	83,138,685	44.08%
Assets Fee	74,283,544	43.34%	85,867,388	45.52%
Transfer Fee	923	0.001%	1,875	0.001%
Total revenue from managing a mandatory pension fund	148,039,616	86.36%	169,007,948	89.60%
Revenues from managing a voluntary pension fund				
Contributions Fee	1,853,886	1.08%	2,494,600	1.32%
Assets Fee	2,310,038	1.35%	1,789,755	0.95%
Transfer Fee	617	0.00%	0	0.00%
Total revenue from managing a mandatory pension fund	4,164,541	2.43%	4,284,355	2.27%
Financial revenues	18,994,561	11.08%	15,306,974	8.12%
Other revenues of the pension company	216,191	0.13%	25,079	0.01%
Total revenues	171,414,909	100.00%	188,624,356	100.00%

*Table 4.2. Expenditures of pension companies for 2014**

Basis	NLB		KB prvo	
Expenditures for managing a mandatory pension fund				
Sales agents	872,205	0.77%	549,467	0.52%
Marketing	6,554,261	5.80%	6,091,133	5.78%
Transactions	960,342	0.85%	1,266,647	1.20%
MAPAS	16,769,446	14.84%	18,894,024	17.92%
Custodian	11,181,804	9.89%	11,109,946	10.54%
PDIF				
Other expenditures for pension fund management	951,247	0.84%	1,202,977	1.14%
Total expenditures for managing a mandatory pension fund	37,289,305	32.99%	39,114,194	37.10%

Expenditures for managing a voluntary pension fund				
Sales agents	1,769,873	1.57%	1,489,938	1.41%
Marketing	922,285	0.82%	639,635	0.61%
Transactions	291,412	0.26%	475,410	0.45%
MAPAS	544,245	0.48%	765,686	0.73%
Custodian	485,620	0.43%	500,234	0.47%
Other expenditures for pension fund management	46,255	0.04%	270,149	0.26%
Total expenditures for managing a voluntary pension fund	4,059,690	3.59%	4,141,052	3.93%
Pension company management expenditures				
Wages and fees for employees	46,339,044	40.99%	32,908,042	31.22%
Non-material expenditures	13,857,854	12.26%	7,309,270	6.93%
Material expenditures	1,646,363	1.46%	1,676,292	1.59%
Depreciation	2,842,102	2.51%	3,640,372	3.45%
Financial expenditures	922,216	0.82%	41,492	0.04%
Other operational costs	6,029,009	5.33%	16,591,762	15.74%
Reservation of expenses and risks	53,269	0.05%	0	0.00%
Total expenditures for pension company management	71,689,857	63.42%	62,167,230	58.97%
Total expenditures	113,038,852	100.00%	105,422,476	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.*

Also, 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. The expenditures are divided into three categories: for managing mandatory pension funds, for managing voluntary pension funds and for managing the Pension Company. The expenditures for both Pension Companies in 2014, are demonstrated in Table 4.2

Unlike previous years when the largest portion of the revenues of the pension companies came from fees from contributions, this year most revenues come from fees from assets of mandatory and voluntary pension funds[3] (around 45% in NLB and 47% in KB Prvo), followed by fees from contributions in mandatory and voluntary pension funds (around 44% for NLB and 45% for KB Prvo). In respect to the previous year, the perceptual participation of the revenue from fees from contributions in the total revenue has been decreased for approximately four percentage points in NLB and three percentage points for KB Prvo. While the participation of the revenues from fees from assets has increased for 4.6 percentage points for both pension companies. The perceptual participation of financial revenues and other revenues of pension companies have slightly decreased and it is around 11% for NLB and around 8% for KB Prvo.

Most of the expenses of the pension companies are operational (around 63% for NLB and 59% 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 KB Prvo has been decreased for one percentage point, while NLB kept them on the same level. In 2014, other expenditures have increased in the total expenditures of the pension companies. These expenditures refer to pension fund management (around 37% for NLB and 41% for KB Prvo). Out of those, the expenditures for marketing and sales agents are 9% for NLB and 8% for KB Prvo, thereby slightly decreasing in respect to the previous year (2 percentage points for NLB and 3 percentage points for KB Prvo). Around 26% in NLB and 30% in KB Prvo of the expenditures are for payment of fees to MAPAS, PDIF and the custodians.

[3]The revenues from fees from contributions and fess from the voluntary pension funds assets make up to 1% of the total revenues in both pension companies

Figure 4.1. Structure of revenue and expenditures per company for 2013 and 2014

4.2 Financial results of the pension companies

In 2014, both pension companies demonstrated positive financial results. Table 4.3 gives more detailed information on this issue.

Both pension companies ended 2014 with net profit (profit after tax), and had earned a total comprehensive income (NLB in the amount o 52 million denars and KB Prvo in the amount of 75 million denars). 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 2014. Also, the accumulated profit (as of 31.12.2014) for NLB is 149 million denars and for KB Prvo is 108 million denars.

Compared to 2013, NLB earned less net profit (10%), while KB Prvo earned slightly higher net profit (for 2%). The increase in revenues for both pension companies is almost the same in respect to 2013; however, NLB has marked higher expenditures than KB Prvo

Table 4.3. Financial results of the pension companies for 2014

Description*	NLB	KB Prvo
Profit (for 2014)	58,376,057	83,201,880
Profit after tax (for 2014)	52,082,044	74,686,635
Nonrecurring cost	0	0
Net profit (for 2014)	52,082,044	74,686,635
Other comprehensive income**	251,000	0
Total comprehensive income***	52,334,000	74,686,635
Accumulated profit (as of 31.12.2014)	148,648,475	107,737,536

**The data on the Other comprehensive income and the Total comprehensive income come from the Audited financial reports of the pension companies for 2014.*
***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. 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

Description	NLB	KB Prvo
Share capital and reserves	345,061,945	314,974,999
Share capital	130,001,478	110,459,024
Excess of share capital beyond statutory minimum	47.64%	34.77%
Own assets*	315,872,953	286,764,908
Excess of own assets beyond statutory minimum**	170.30%	145.39%

** 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 April 2013, KB Prvo and, from December 2013, NLB, are obligated to maintain increased share capital i.e. share capital in the amount of 3.8 million Euro in denar counter-value., because the amount of assets of the mandatory and the voluntary pension funds under their management surpasses 200 million Euro.*

4.4 Indicators

In 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 2014.

The above indicators prove that the average indicators per member are approximately the same for both pension companies, while NLB has higher average expenditures per member. Compared to 2013, both companies mark a decrease in the average revenues per member, while for the expenditures - for NLB those are kept at the same level, and KB Prvo marks a slight decrease. NLB marked a decrease in the profit per member for around 10% in respect to 2013, while for KB Prvo the profit per member is kept at the same level as 2013. NLB has an increased efficiency coefficient for around 4%, while for KB Prvo there is a decrease in the same coefficient for 4%.

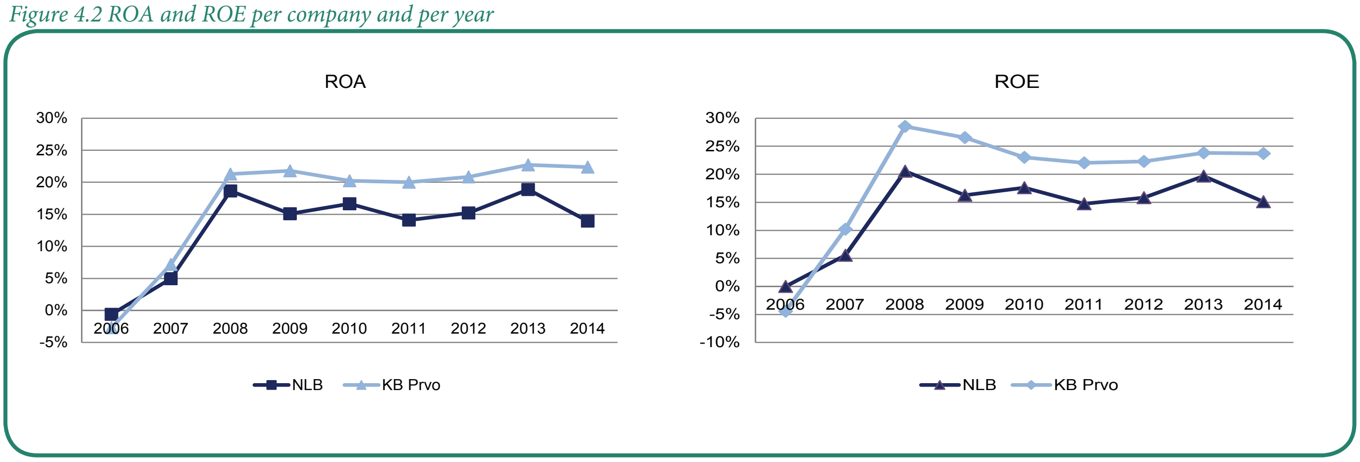
Figure 4.2 shows the movement of profitability indicators, ROA (net profit/total assets and ROE (net profit/capital), compared for both companies for the period 2006-2014.

Compared to 2013, 2014 NLB has lower rates of return on assets and on capital, while for KB Prvo the return rates are kept at the same level as 2013.

Table 4.5. Indicators

Description	NLB	KB Prvo
Indicators for revenues and expenditures per member		
Average revenues per member	924.07	906.48
Average expenditures per member	609.37	506.63
Profit per member	314.70	399.85
Efficiency indicators		
Efficiency coefficient (total expenditures / total revenues)	65.94%	55.89%

Figure 4.2 ROA and ROE per company and per year



Information on the mandatory pension funds

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) allocation in a random 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

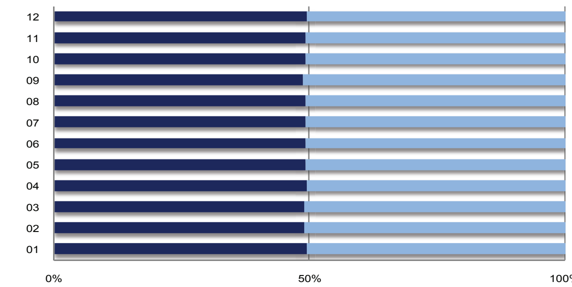
• Voluntary members – insured persons who were employed for the first time before January 1, 2003

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[4]. Figure 5.1 presents the weight used in 2014 for allocation of insured persons in mandatory pension funds.

Figure 5.1 Weight used in 2014 for allocation of insured persons in mandatory pension funds.



	01	02	03	04	05	06	07	08	09	10	11	12
NLBz	49,30%	48,99%	49,00%	49,27%	49,07%	49,09%	49,18%	49,18%	48,60%	49,05%	49,10%	49,28%
KBPz	50,70%	51,01%	51,00%	50,73%	50,93%	50,91%	50,82%	50,82%	51,40%	50,95%	50,90%	50,72%

Just like in the previous years, in 2014 the number of allocated members between the two mandatory pension funds is almost equal. Considering that the value of both weights is around 50% (the weight for NLBz is 49%, while for KBPz is 51%). The weight depends on the value of the fee paid by the pension company and on the nominal return earned by the pension fund, where the return has bigger influence (70%) in respect to the fee (30%). Even though the fees have been reduced in 2014, still both companies charge the same fee from contributions, and the nominal return for both funds is almost the same, thus the weights have almost equal values.

The total number of members and temporarily allocated members in the mandatory pension funds as of December 31, 2014 is 373,151, which is an increase of 23,111 second pillar members or 6.6% in respect to 2013. This means that around 70% of the total insured persons in the PDIF are members of the two-pillar system. Therefore, as of 31.12.2014, 52% of the members and temporarily allocated members are in KBPz, while 48% are in NLBz. This percentage of allocations is almost the same as last year.

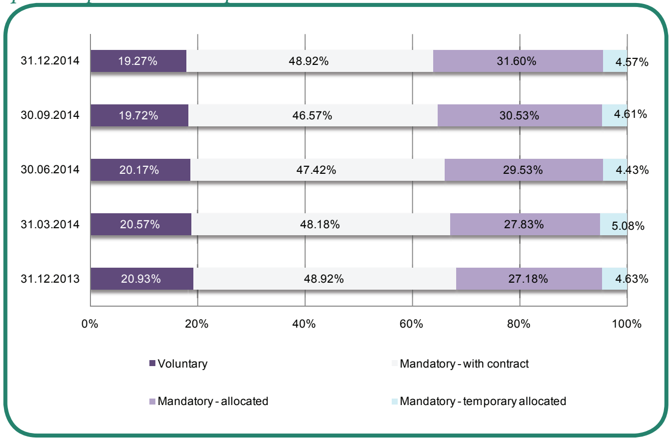
Out of the total number of second pillar members, 69,482 or 19% are voluntary members, while 303,609 or 81% are mandatory members. Out of the total number of members, 169,416 members have signed a membership agreement, while 117,507 are members allocated to a pension fund by MAPAS, and 16,746 are temporarily allocated members. Only 7% of the persons who got their first employment in 2014 signed a membership agreement with a mandatory pension fund, while the rest or 93% 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 2014, 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

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

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



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 in the total membership in each following quarter.

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 30 years, while voluntary members are slightly older at the age from 36 to 40 years. The average age of mandatory members is 32 years (for men and for women), the average age of the voluntary members is 41 years (for men and women), and of all members it is 34 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 2013 is 2,065,769. Out of the total number, 350,040 persons (end of 2013) are members of the two-pillar pension system, which represents 17% of the total population of the country. The membership structure of the second pillar out of the total population, per age and per gender, as of 31.12.2013 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 nine years.

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

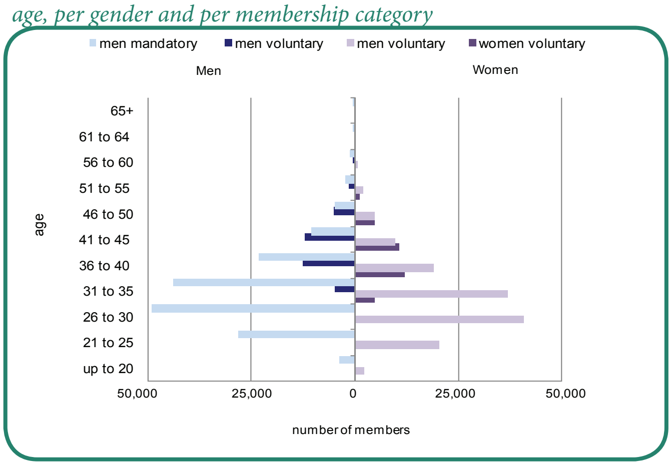
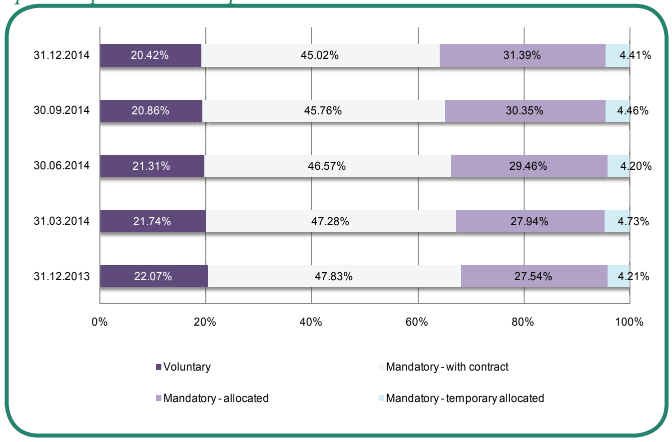
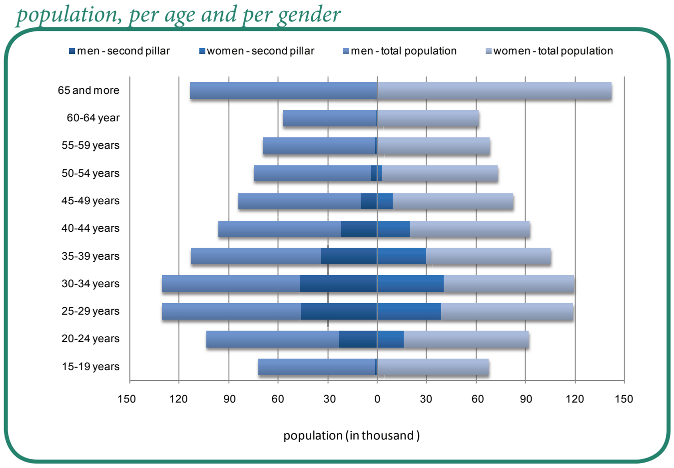


Figure 5.3 Structure of members and temporarily allocated insured persons per membership status in KBPz



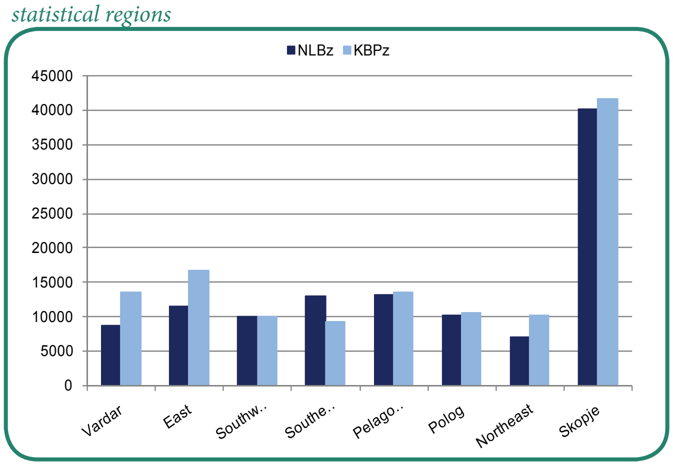
The membership structure of mandatory pension funds per statistical regions[5] in the Republic of Macedonia is given on Figure 5.6. The majority of members are from the region of Skopje, while for NLBz least of the members are from the North-eastern part of the country, and for KBPz from the South-eastern part of the country.

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



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

Figure 5.6 Membership structure of mandatory pension funds per statistical regions



[5] *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.*

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; 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 2014.

The number of persons who have changed the mandatory pension fund remains to be very small. During 2014, the total number of persons who have transferred from one to another mandatory pension fund is 170, which is 0.05% of the total number of members. It is notable, that the number is much higher of those who transferred from NLBz to KBPz. Namely, in 2014, 104 members transferred from NLBz to KBPz, and 66 members transferred from KBPz to NLBz. Upon such transfers, around 1.2 million denars were transferred from NLBz to KBPz, while from KBPz to NLBz around 4.2 million denars were transferred.

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

2014	Members who have transferred FROM a mandatory pension fund	Transferred assets FROM a mandatory pension fund	Members who have transferred TO a mandatory pension fund	Transferred assets TO a mandatory pension fund
NLBz	104	1,159,118	66	4,206,703
KBPz	66	4,206,703	104	1,159,118

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 2014 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 2014 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.

During 2014, 4.5 billion denars were transferred to the mandatory pension funds, as presented in the Table 5.2 below, broken down by months:

Figure 5.7 Payment and allocation of contributions

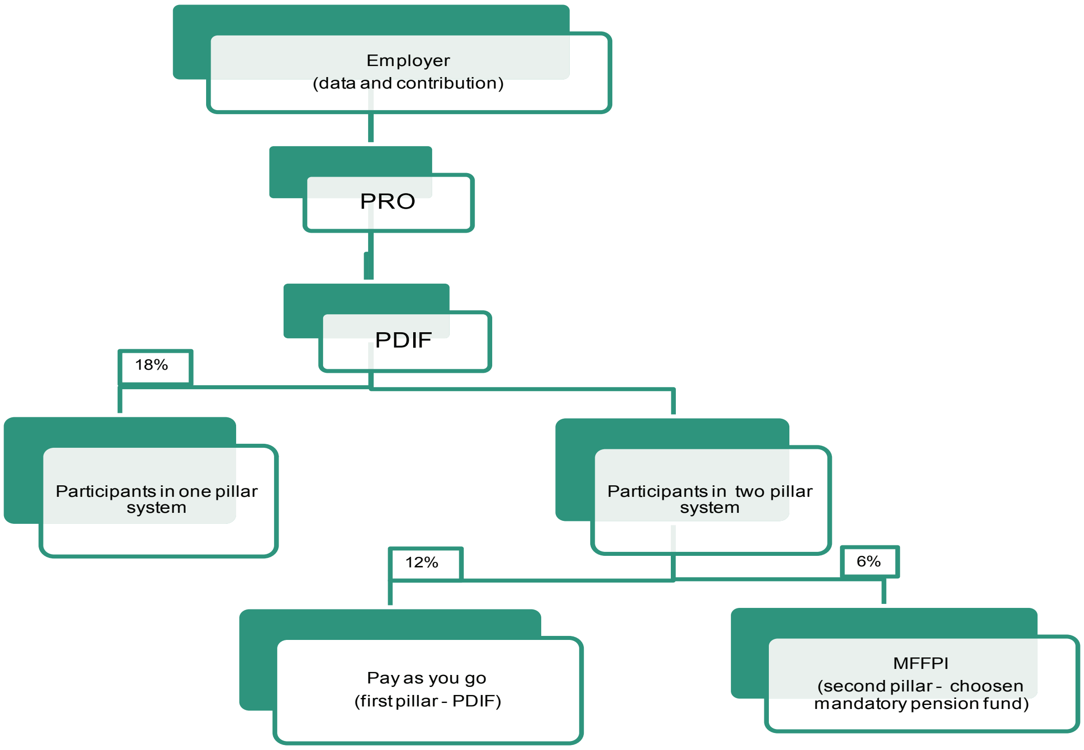


Table 5.2 Paid in contributions in the second pillar *(in million denars)*

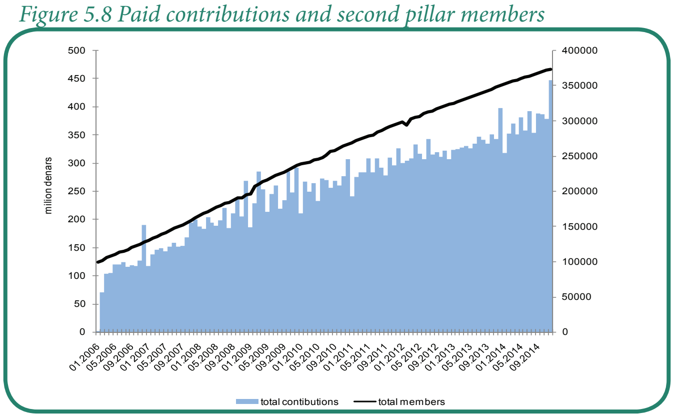
	Total 2013	Jan	Feb	March	April	May	June	July	Aug	Set	Oct	Nov	Dec	Total 2014
NLBz	1,916	149	165	173	165	180	168	183	169	183	182	179	213	2,109
KBPz	2,174	170	188	197	187	202	190	209	186	206	206	201	235	2,376
Total	4,090	319	353	370	352	382	358	392	355	389	388	380	448	4,485

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 31.12.2014, 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).

In 2014, one part (50 million denars) of the paid in contributions in the pension funds was returned to the PDIF for several reasons:

Figure 5.8 Paid contributions and second pillar members



- Entitlements to disability pension benefits
- Termination of membership contracts or cancellation of misallocation of a member due to outdated records
- 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 5.3.

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

Reasons	From a mandatory pension fund	
	NLBz	NLBz
Entitlements	5,543,982	3,706,184
• Disability pension	1,556,342	675,636
• Survivors pension	3,987,640	3,030,548
Termination of contracts and cancellation of allocations	19,169,067	21,804,802
Contributions paid in excess	44,983	38,100
Total	24,758,032	25,549,086

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.

Figures 5.9 and 5.10 give the investment structure of the mandatory pension funds from the beginning of the system (for the period 2006-2013, and for 2014 the structure is given on a quarterly basis).

Table 5.4 Maximum investment limits

Type of instrument	Maximum 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

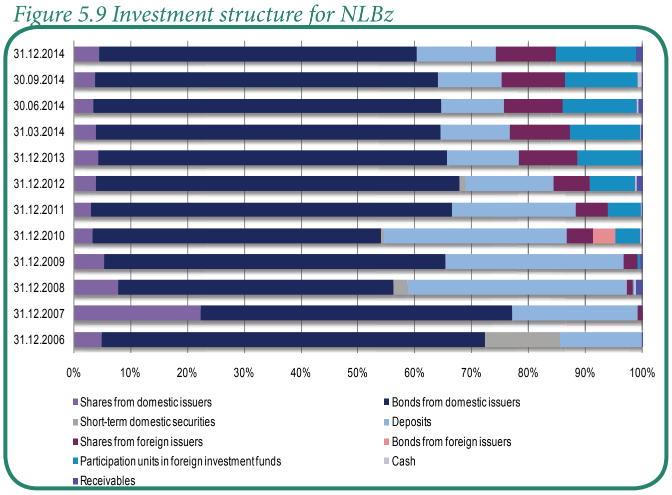
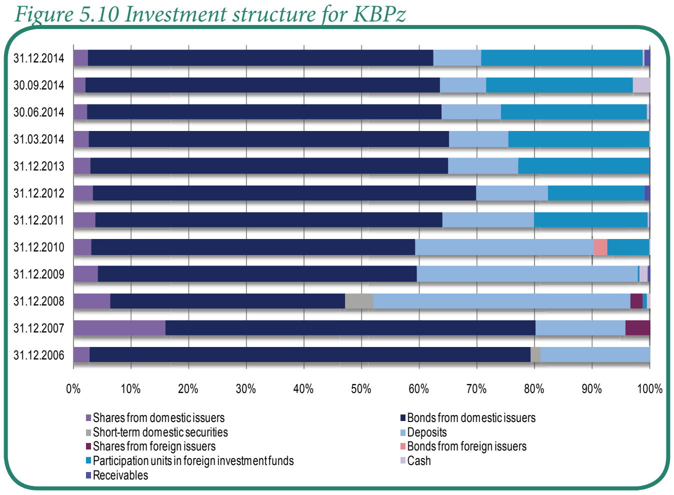


Figure 5.10 Investment structure for KBPz



The structure of investments of the mandatory pension funds, as of 31.12.2014 is given in Figure 5.11. In 2014, the participation of domestic government shares has decreased in respect to the previous year and it was 57.99%. The participation of bank deposits has also decreased in respect to 2013 and it was 10.98%. Domestic shares participated with 3.41% in the investment portfolio, almost the same as the previous year. In 2014, the investments abroad had increased in respect to 2013 and they were 26.35%, out of which the investments in foreign shares were 4.86% and, 21.49% were investments in participation units of foreign investment funds. The rest were investments in cash and cash equivalents (0.18%) and receivables (1.10%).

Figure 5.11 Structure of investments of the mandatory pension funds, as of 31.12.2014

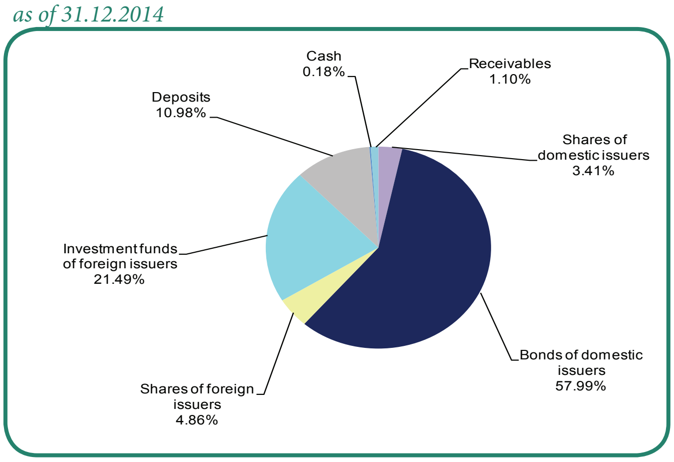


Figure 5.12 demonstrates that both pension funds were in compliance with the statutory maximum investment limits in 2014.

In 2014, just like in 2013, pension companies did not invest a lot of the pension funds' assets in shares of domestic issuers. In 2014, NLBz increased its exposure to shares in respect to 2013, while KBPz decreased it. 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 2014, MBI10 marked an increase of 6.53%, while the average increase in the value of the accounting unit of the mandatory pension funds[6] was 6.73%.

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

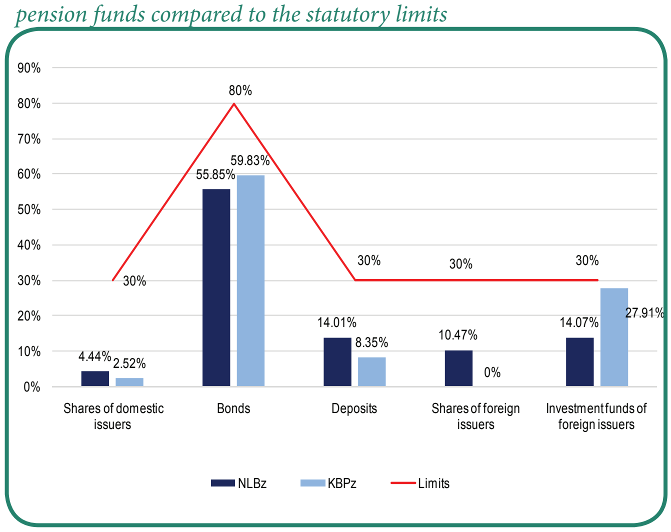
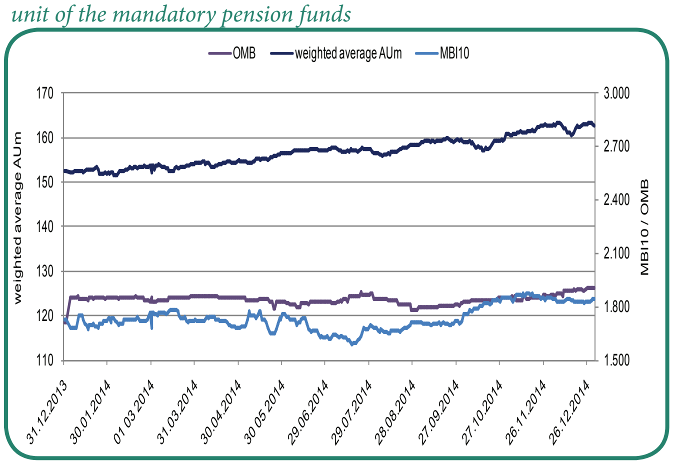


Figure 5.13 MBI10, OMB and the average value of the accounting unit of the mandatory pension funds



Source: Macedonian Stock Exchange – Annual Statistical Bulletin 2014

[6] 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 5.14 Investment structure per sectors for NLBz

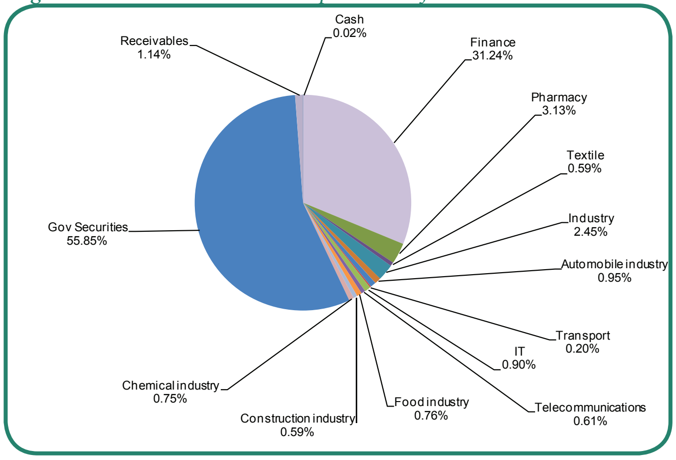
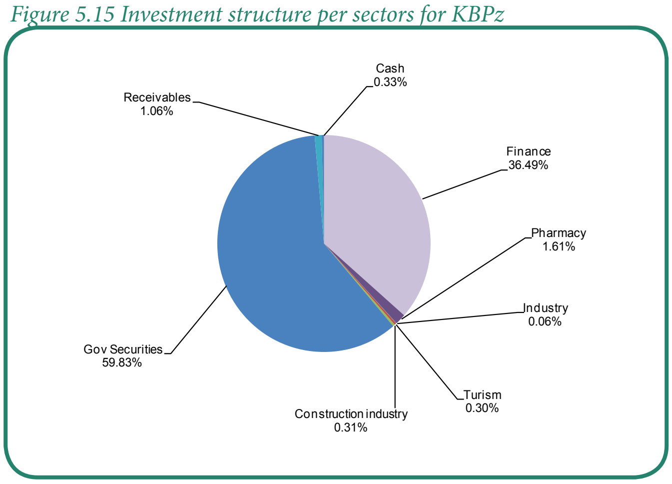


Figure 5.15 Investment structure per sectors for KBPz



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 1.32% 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 2014, OMB increased for 6.36%, while the average increase in the value of the accounting unit of the mandatory pension funds was 6.73%.

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 2014.

In 2014, most of the mandatory pension funds' assets were invested in domestic securities (55.85% for NLBz and 59.83% for KBPz). The next largest category of investments is instruments from issuers/ shareholders from the financial sector – in which NLBz invested 31.24% and KBPz 36.49% of the total pension funds' assets. In this category, participation units in foreign investment funds have the largest participation (45.03% for NLBz and 76.47% for KBPz), which is higher than the previous year. These are followed by domestic bank deposits (44.85% for NLBz and 22.88% for KBPz) and financial services (9.55% for NLBz), while the lowest participation is that of shares in domestic banks (0.58% for NLBz and 0.65% 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 0.20% to 3.13%).

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 both NLBz assets (42.92%) and KBPz assets (59.90%) are invested in Euros, hereby for both pension funds it is noticeable that there is a decrease of instruments in Euros, compared to the previous year. The participation of instruments in US dollars has increased compared to the previous year and it is 18.35% for NLBz and 16.00% for KBPz.

The investments in instruments in domestic currency are lower for NLBz (37.98%) while for KBPz they are higher than last year (24.10%). Small part of the NLBz assets is in invested in CHF (0.75%).

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 31.12.2014

Figure 5.16 Currency structure for NLBz

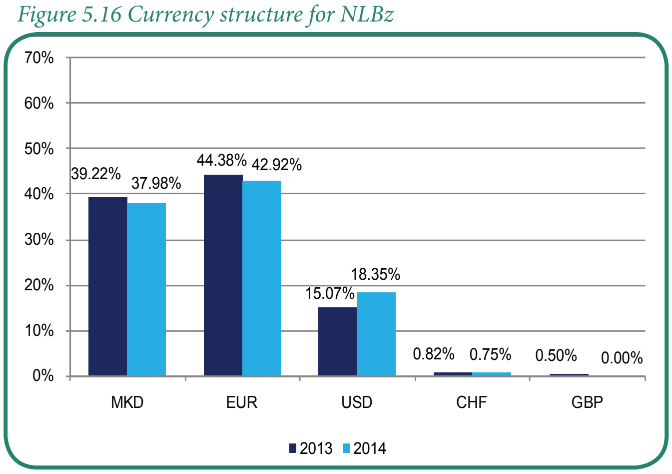
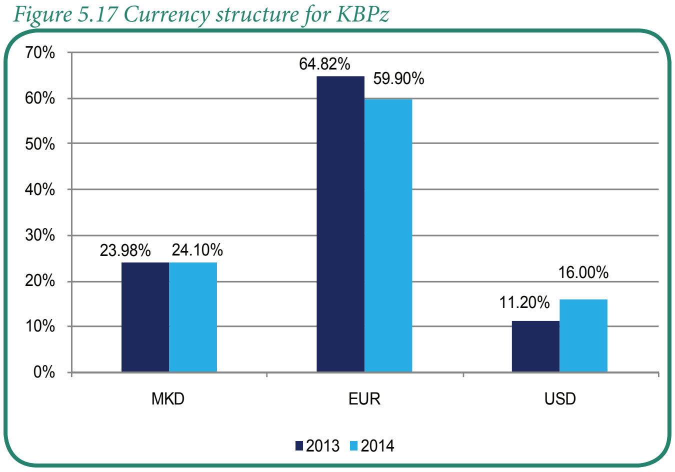
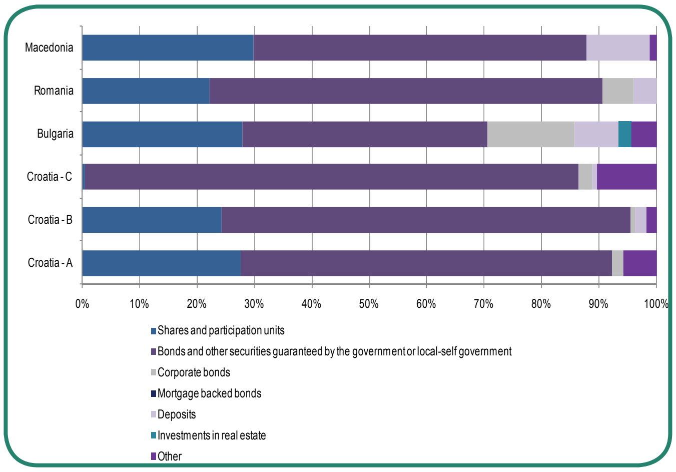


Figure 5.17 Currency structure for KBPz



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 (43%). On the other hand, the rest of the countries invested more than 58% in bonds and other securities guaranteed by the government or the local authorities (Croatia B[7] 71%, Romania 68% and Macedonia 58%). The rest of the assets were invested in various ways. The following countries are leaders in deposit investments: Macedonia (11%) and Bulgaria (8%), then Romania (4%) and Croatia B (21%). Most investments in shares and units can be seen in Macedonia (30%), Bulgaria (28%), Croatia B (24%) and Romania (22%). Unlike pension funds in Macedonia, the pension funds in other countries invested in corporate bonds (Bulgaria 15%, Romania 5% and Croatia 1%), 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 (54%), then Macedonian (26%), Croatian B (14%), Romania (7%).

Figure 5.18 Pension funds portfolios in several countries and in Macedonia



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

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

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

	NLBz	KBPz
Net assets as of 31.12.2013	12,447.83	14,351.87
Contributions	2,109.46	2,376.00
Fees from contributions	73.76	83.08
Contributions reduced for fees from contributions	2,035.70	2,292.92
Fees from assets	74.28	85.87
Expenditures for intermediary commissions	2.84	0.56
Transfers from another fund	4.89	1.84
Transfers to another fund	1.84	4.89
Transfers to PDIF due to termination, return of contributions or retirement	24.76	25.55
Inheritance pay out	2.16	3.91
Lump sum payouts	0.51	0.17
Gross profit from investments	940.05	1,181.30
Net profit from investments	862.92	1,094.87
Net assets as of 31.12.2014	15,322.08	17, 706.97

[7]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)

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;

- reduced 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 or to those who are entitled to such pension, but who reached such entitlement before the promulgation of the Law on Payment of Pensions and Pension Benefits

- (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 31.12.2014 are approximately 33 billion denars or around 537 million euro, which is approximately 6.28% of the GDP[8] of the Republic of Macedonia.

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 31.12.2014. Evidently, in the first years the net assets grow proportionally with the cumulative contributions, while in the last years the assets of the pension funds are growing faster than the growth of the contributions.

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 cumulative 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 cumulative paid contributions. Trends stabilize over the years, and in the last three years the average increase of the net assets is 27% and the average increase of the cumulative paid contributions is 9%. In 2014, the growth of the net assets is 23% for NLBz and for KBPz, while the growth of the cumulative paid contributions is 10% for NLBz and 9% for KBPz.

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

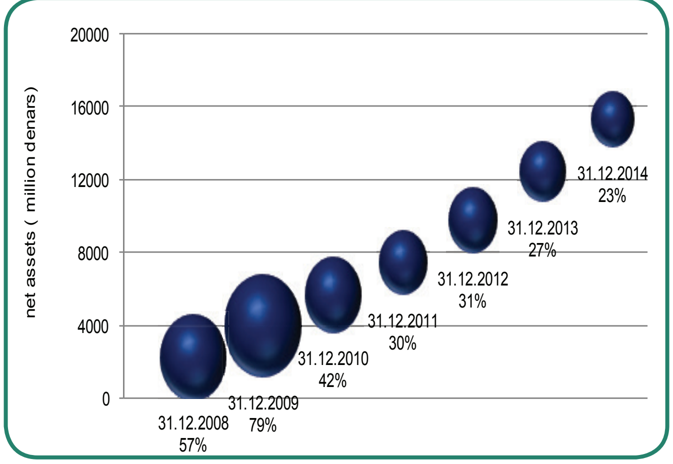
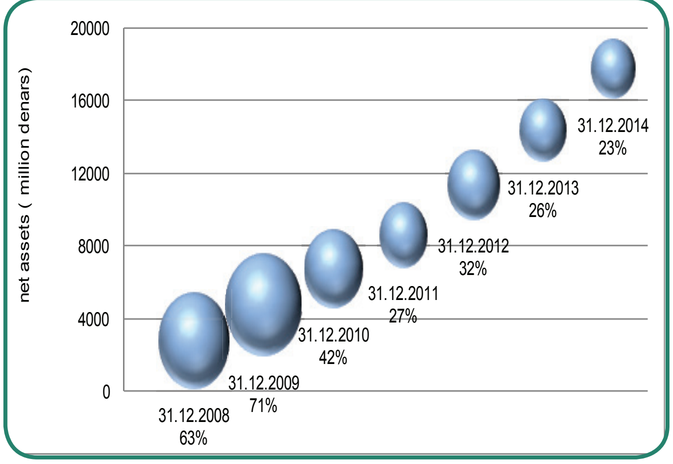


Figure 5.20 Annual growth of the net assets of KBPz in respect to the previous year, in %



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.

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

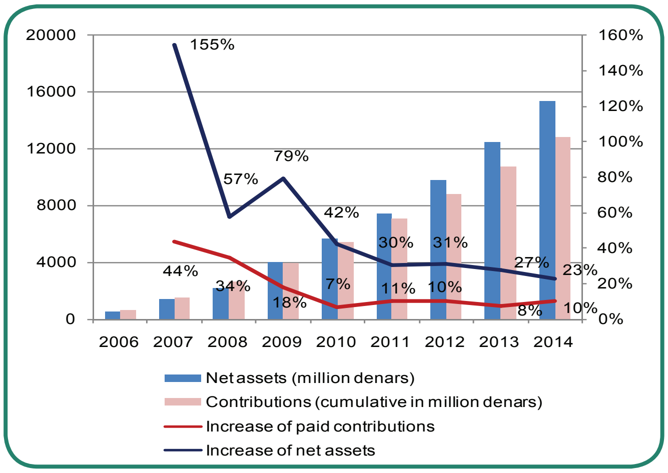
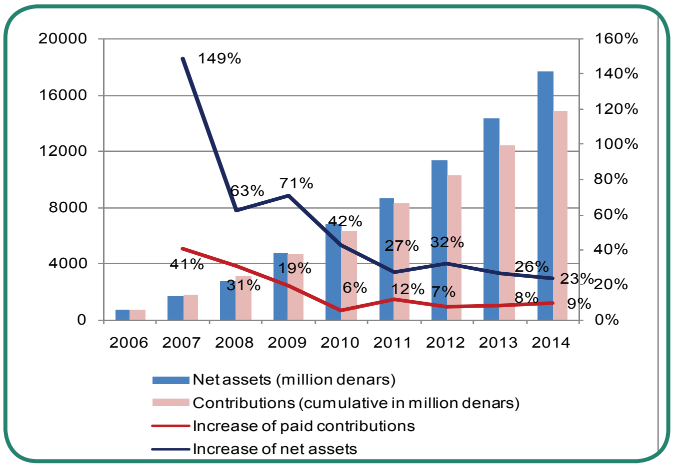


Figure 5.22 Net asset growth compared to the growth of paid contributions in KBPz



[8] *Source for GDP: State Statistical Office – announcement on the GDP fourth quarter of 2014- estimated data*

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.

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
31.03.2014	152.476895	155.737555
30.06.2014	155.278671	158.786257
30.09.2014	157.765465	161.020155
31.12.2014	160.733889	164.578077

**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 changes in the value of the accounting units of the mandatory pension funds, from the beginning of the system until 31.12.2014 are given in Table 5.6 and Figure 5.23. As shown on the Figure, the accounting units have a growing trend. In 2014, the accounting unit continued to 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.

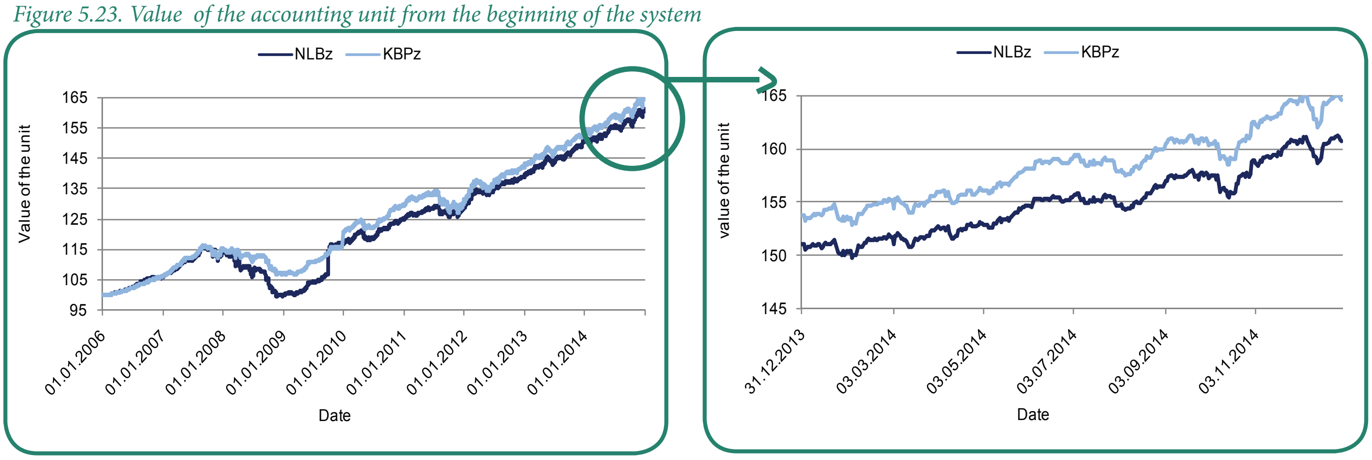
The nominal return[9] is the change (growth) in percentage in the value of the accounting unit, on the last valuation date of the calculation period and the value of the accounting unit on the last day of the month preceding the first month of the calculation period, converted into equivalent annual nominal rate of return.

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.

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



[9] *The formulas for calculating the nominal and real return are prescribed with the Rulebook on valuation of assets of mandatory and voluntary pension funds*

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%
31.03.2007 – 31.03.2014	4.91%	1.98%	5.11%	2.18%
30.06.2007 – 30.06.2014	4.83%	2.05%	5.06%	2.28%
30.09.2007 – 30.09.2014	4.58%	2.01%	4.84%	2.26%
31.12.2007 – 31.12.2014	4.83%	2.67%	5.21%	3.05%
Почеток** -31.12.2014	5.41%	2.75%	5.69%	3.02%

** 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*

Considering the long-term nature of the pension insurance, it is important to calculate the return from the start of the system (nine years) and in average,[10] it is 5.56% in nominal value and 2.89% in real value.

The changes in the nominal return during these nine 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 31.12.2014, 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 three years it is obvious that the rates of return start to pick up and have a steady growth.

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

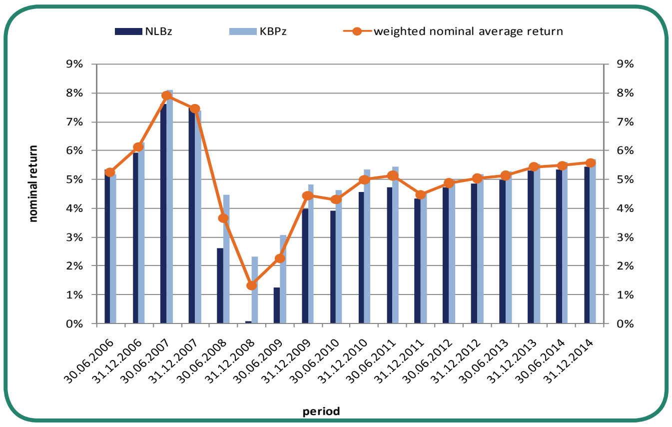
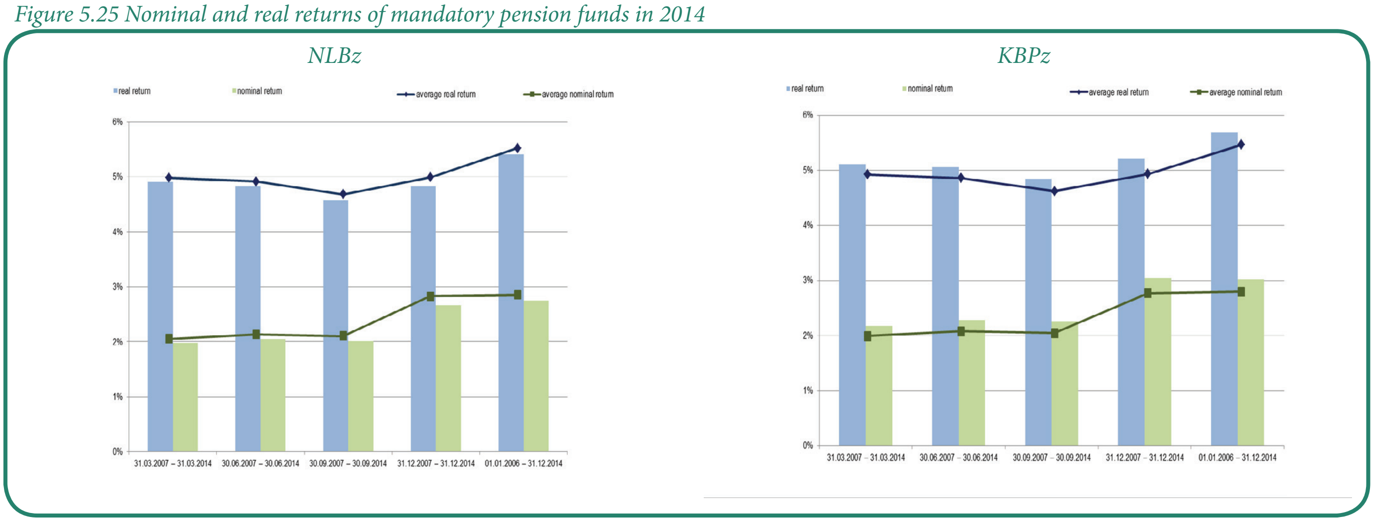


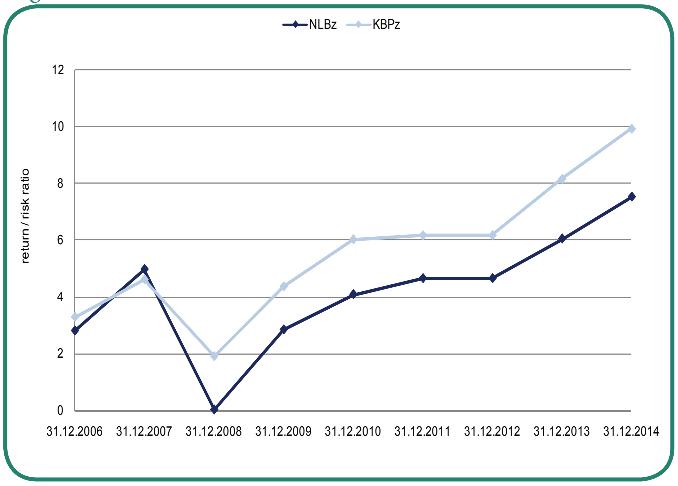
Figure 5.25 Nominal and real returns of mandatory pension funds in 2014



The movements in the real and nominal rates of return for 2014 for the period of seven years, per mandatory pension fund and compared to the average return are shown on Figure 5.25. In 2014, there were no significant variations of the returns. The nominal return is extending in the range from 4.58% to 5.69%, while the real return is in the range 1.98% to 3.05%. The lowest values are noticed in the returns for the period 30.09.2007 – 30.09.2014.

The main goal of investing the assets of the 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[10] ratio (calculated by one of the possible calculation methods) from the beginning of the system until the end of 2014 is shown on Figure 5.26. Higher return to risk ratio is an indicator of the better investment performance of the fund and the potentials of the fund for higher returns per risk unit.

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.

Table 5.8 Fees charged by Mandatory Pension Companies

Type of fee	NLB	KB Prvo
Fee from contributions	3.50%*	3.50%*
Monthly fee from the assets of the mandatory pension fund	0.045%**	0,045%**
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 2013 (previously it was 3,75% for both – NLBz and KBPz)*
*** Previously it was 0.05%*
**** 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 form and the proof of payment of the transfer fee.*

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

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.

The types and amounts of fees charged by the Mandatory Pension Companies in 2014, 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 2014 are shown in Table 5. 9.

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. From June 2013, it was reduced to 0.045%.

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 form their current values, as seen in Table 5.10.

The collection of fees (in million denars) by pension companies in 2014 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. 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 2014, NLBz paid 2.8 million denars for transactions commissions and KBPz paid 0.6 million denars in commissions.

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
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.

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
2015	3.25%	0.040%
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%

Table 5.11 Collection of fees in 2014 by pension companies (in million denars)

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
NLBz- total	10.83	11.46	11.86	11.67	12.31	12.02	12.63	12.21	12.87	12.91	12.96	14.30	148.04
From contributions	5.21	5.76	6.06	5.77	6.31	5.87	6.39	5.90	6.40	6.38	6.24	7.46	73.76
From assets	5.63	5.70	5.80	5.90	6.01	6.15	6.24	6.31	6.47	6.53	6.72	6.84	74.28
KBPz - total	12.44	13.18	13.59	13.35	14.00	13.76	14.53	13.80	14.67	14.72	14.80	16.11	168.95
From contributions	5.94	6.58	6.88	6.53	7.06	6.64	7.32	6.51	7.19	7.19	7.03	8.21	83.08
From assets	6.50	6.60	6.71	6.82	6.95	7.12	7.21	7.29	7.47	7.53	7.77	7.90	85.87

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 the rest 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 survivors 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 survivors pension from the PDIF. In 2014, the second pillar members i.e. close family members of the deceased members acquired 23 disability pensions and 63 survivor's pensions, respectively. Their accumulated assets were transferred to PDIF that pays the disability and survivors' pensions. Also, in 2014 there were lump sum payments to persons who acquired the right to an old age pension before the promulgation of the Law on Payment of Pensions and Pension Benefits from the Fully Funded Pension Insurance.

Table 5.12 gives a detailed overview on the acquired pension entitlements for the second pillar members per mandatory pension fund.

Table 5.12 Pension entitlements for second pillar members

Type of pension/ Mandatory pension fund	NLBz	KBPz	Total
Disability	14	9	23
Survivors	31	32	63
Lump sum payments – old age	5	0	5
Total	50	41	91

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

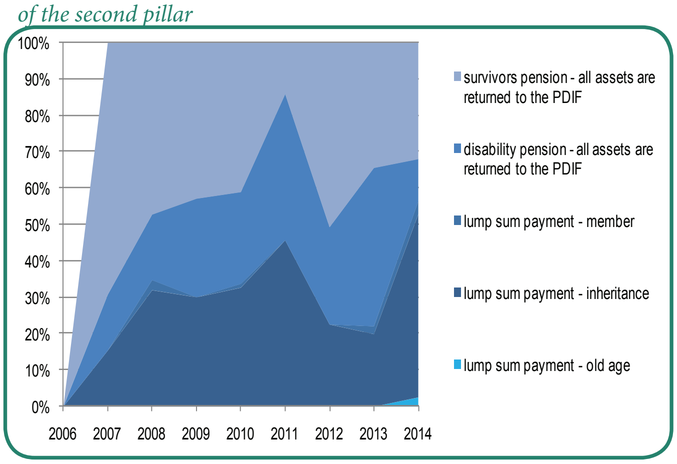
- when a deceased pension fund member has no family members entitled to a survivors pension, and the assets on that member's account become a part of his/her property and will be managed in accordance with the Law on Inheritance.

- 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 2014, the inheritance for 99 deceased members was paid out from the individual accounts, out of which 42 were members of NLBz and 57 were members of KBPz. Also, there were pays out to members who did not acquire the entitlement to an old age pension per the law on Pension and Disability Insurance, to 5 NLBz members and 2 KBPz members.

Figure 5.27 gives the structure of entitlements and payouts from the second pillar in its 9 years of existence. 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.

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



Information on the voluntary pension funds

6.1 The goal of voluntary fully funded pension insurance

6.2 Membership in the voluntary pension funds

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

6.4. Contributions to the voluntary pension funds

6.5. Investments and portfolio structure of voluntary pension funds

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

6.7. Voluntary pension fund fees

6.8. Payout of pension benefits from the voluntary pension insurance

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 31.12.2014, the third pillar has 20,433 members or 1,908 members more than on 31.12.2013. This means that the third pillar membership has grown for 10%. Out of the total membership, 6,285 members or 31% have individual accounts and 14,148 members or 69% are participants in occupational schemes and have occupational accounts. On 31.12.2014, 38% are members in NLBd and 62% are members in KBPd.

Figures 6.1 and 6.2 show the membership structure in the voluntary pension funds per membership type, from the beginning of the system. 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 (89%).

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

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

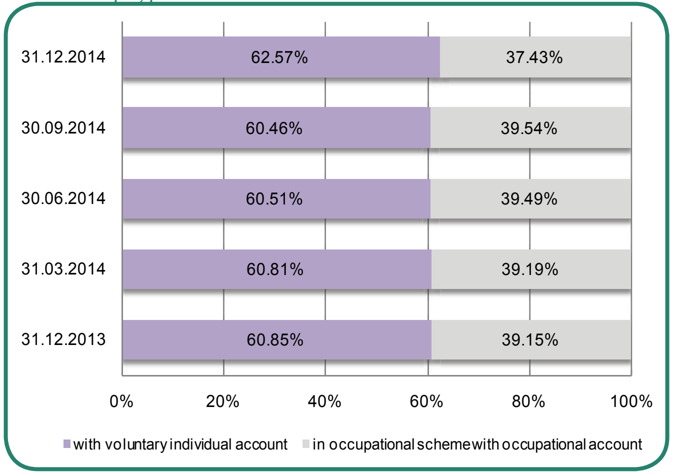
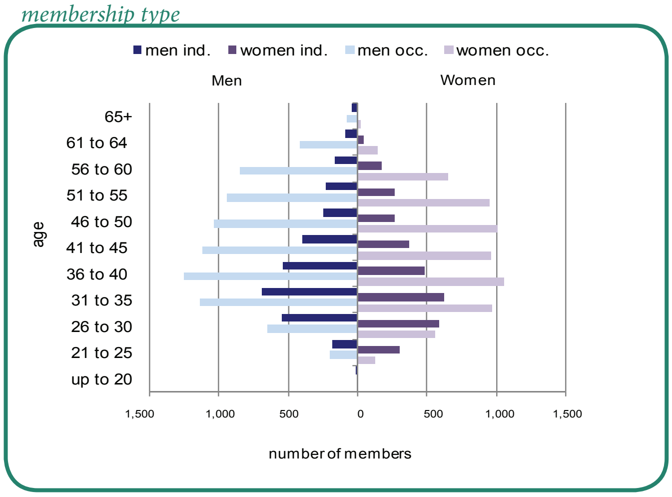


Figure 6.3 Third pillar membership structure per age, gender and membership type



are older than those with individual accounts. The average age of the members with individual accounts is 39 years for men and 38 years for women; while for the members with occupational accounts it is 44 years for men and 43 for women. The average age for all members is 42 years.

From the short 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 6,285 members with individual accounts

Figure 6.4 Allocation of third pillar members per occupational scheme

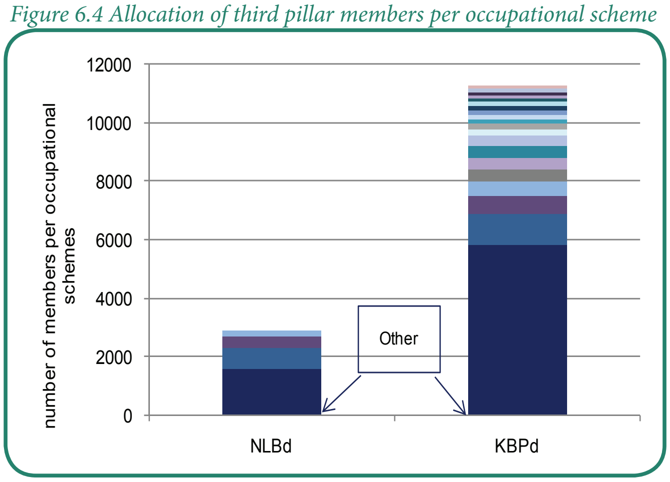
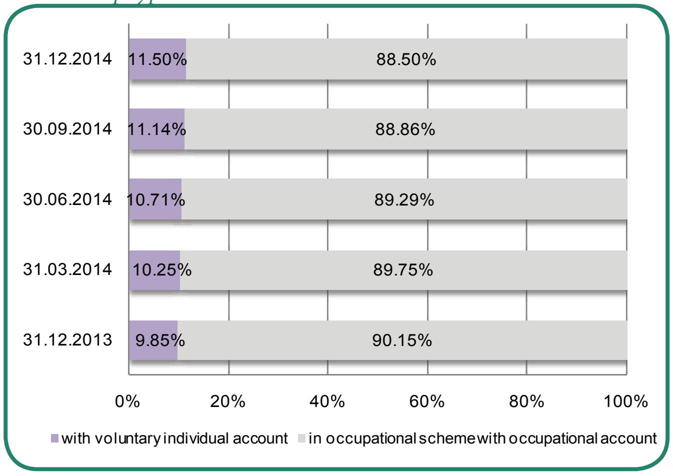


Figure 6.2 Membership structure per voluntary pension fund and per membership type in KBPd



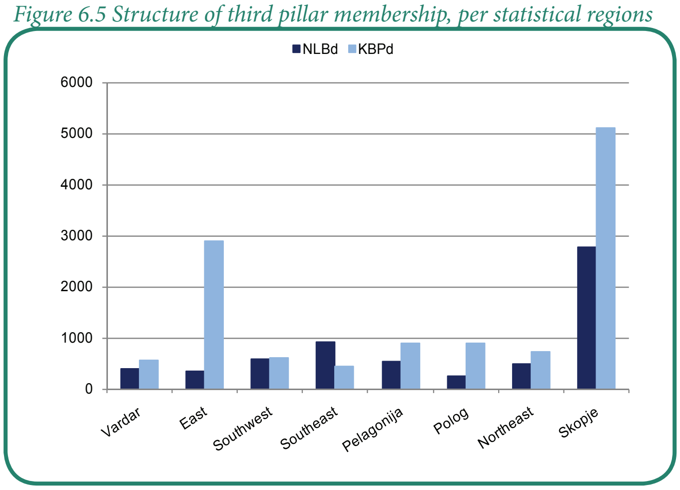
only 326 members or 5.19% have a third party as a payer). The third pillar allows membership to persons who are not Macedonian citizens; however this percentage is very small so far (0.02% out of the total number of members).

In NLBd 2,885 members participate in 742 occupational schemes, and in KBPd 11,256 members participate in 2,291 occupational schemes. Some schemes have many members, while other have only 1 or 2 participants. Out of the total number of occupational schemes, 21 of them have over 100 members and only one scheme has over 1,000 members. The average number of members per scheme is 5. 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 5,410 members and NLBd has 3,404 members. NLBd has least members in the region of Polog, with 357 members, while KBPd in the South-eastern region with 475 members.

Figure 6.5 Structure of third pillar membership, per statistical regions



[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.*

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.

In 2014, two members transferred from NLBd to KBPd, and one member transferred from KBPd to NLBd. Also, there were transfers within the same pension fund but from one to another occupational scheme and from occupational to individual accounts.

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 2014, in the voluntary pension funds were paid 164 million denars, or per months as shown in Table 6.1.

In 2014, more contributions were paid in KBPd than in NLBd. In respect to 2013, the growth in contributions is higher for NLBd (50% growth in respect to 2013), unlike KBPd (where the growth is 41% in respect to 2013). In both pension funds, a significantly higher percentage of paid contributions is made towards occupational accounts (85%).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

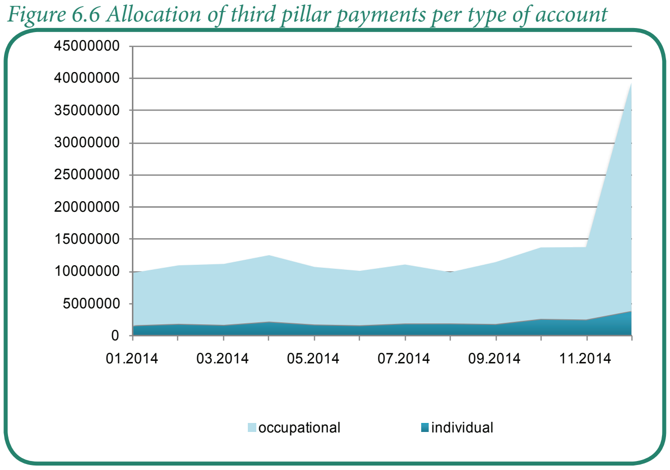


Table 6.1 Contributions in the third pillar per months and per funds *(in million denars)*

	Total 2013	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total 2014
NLBd	45.36	2.92	4.41	4.88	4.27	4.69	3.93	4.84	4.55	4.12	5.83	5.13	18.47	68.03
KBPd	67.67	6.81	6.47	6.22	8.19	5.94	6.10	6.17	5.27	7.26	7.84	8.59	20.85	95.71
Total	113.02	9.73	10.88	11.10	12.46	10.63	10.02	11.01	9.82	11.38	13.67	13.72	39.31	163.74

6.5 *Investments and portfolio structure of voluntary pension funds*

Voluntary fully funded pension insurance, just like the mandatory one, exerts proactive control and, qualitative and quantitative investment limits in its 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 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 until 31.12.2014.

Table 6.2 Maximum investment limits

Type of instrument	Maximum 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%

Figure 6.7 Structure of voluntary pension fund investments - NLBd

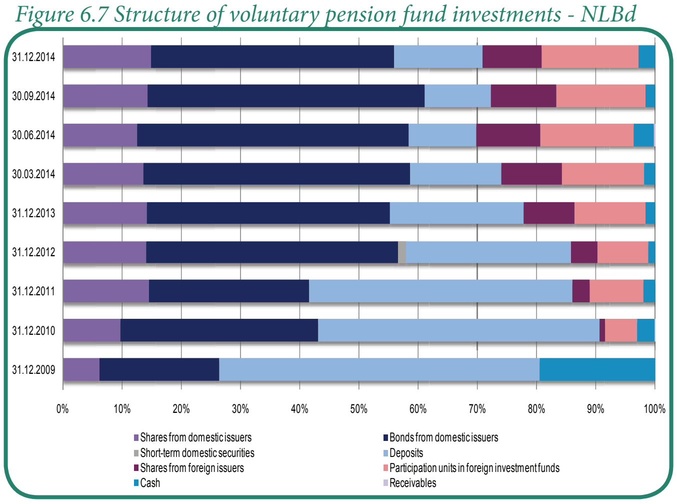


Figure 6.8 Structure of voluntary pension fund investments - KBPd

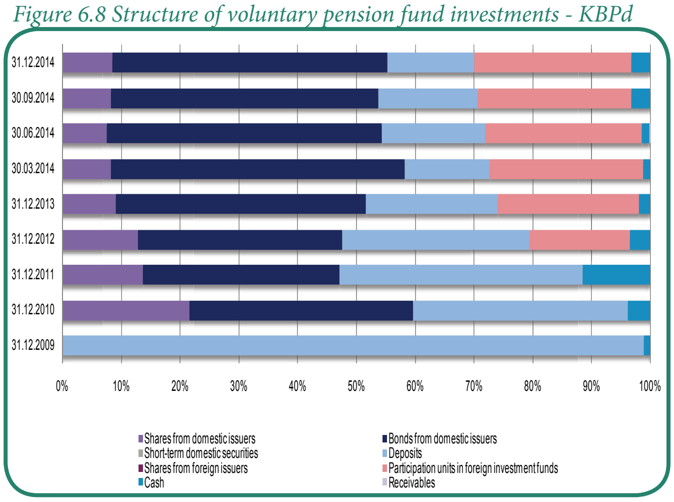
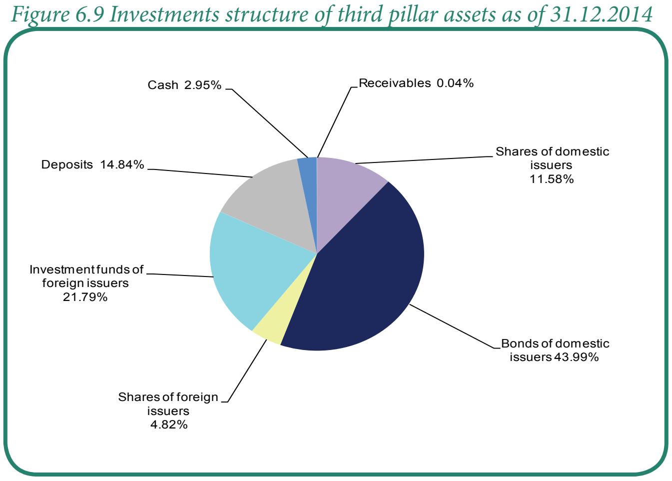


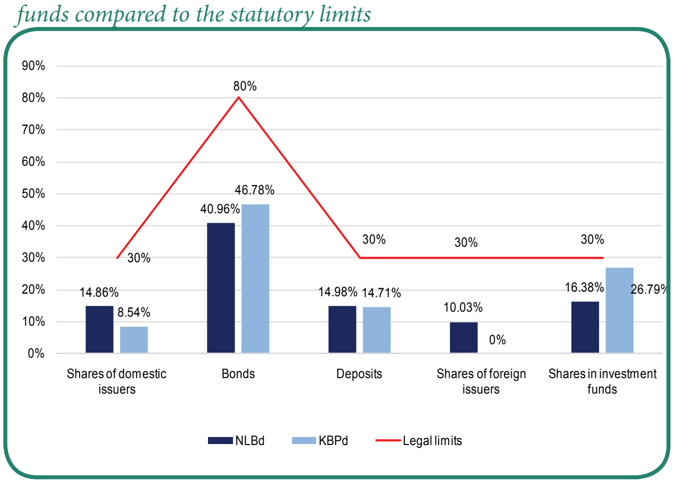
Figure 6.9 presents the structure of investments of the voluntary pension funds, as of 31.12.2014. In 2014, the participation of bonds from domestic issuers has increased in respect to 2013, and it is 43.99%. Also, the participation of investments abroad has increased and it is 26.61% (21.79% in units of investment fund and 4.82% in shares of foreign issuers). The participation of deposits in domestic banks has decreased to 14.84%, followed by shares from domestic issuers 11.58%, cash 2.95% and receivables 0.04%.

Figure 6.9 Investments structure of third pillar assets as of 31.12.2014



It is evident from Figure 6.10 that both voluntary pension funds respected the maximum investment limits in 2014.

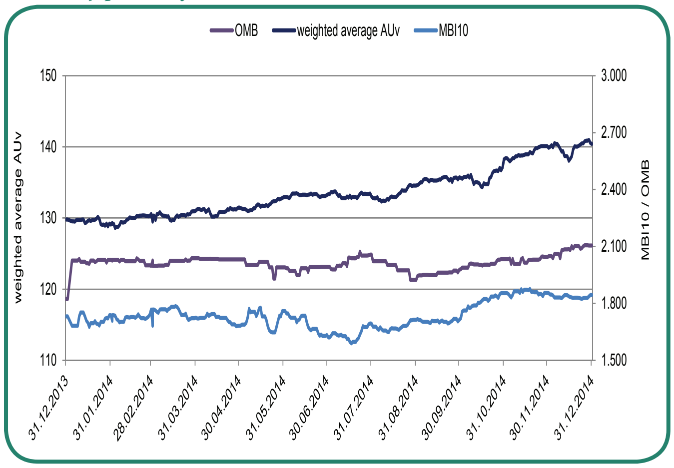
Figure 6.10 Classes of assets in the portfolios of the voluntary pension funds compared to the statutory limits



Voluntary pension funds have a slightly higher exposure to domestic shares (11.58%) than the mandatory pension funds. However, the changes in the Macedonian stock exchange index - MBI10 - did not affect the average value of the accounting unit of the voluntary pension funds. In 2014, MBI10 had a slight rise for around 6.53% , while the average value of the accounting unit of the voluntary pension funds grew for 8.18% in 2014 in respect to 2013.

Compared to the mandatory pension funds, the voluntary ones are more exposed to domestic bonds traded on the Macedonian Stock Exchange (around 7.57%). The reminder of the portfolio invested in domestic bonds is continuous domestic bonds. Still, the value of the domestic bonds index of the Macedonian Stock Exchange – OMB, does not have a significant influence over the average value of the accounting unit of the voluntary pension funds. In 2014, OMB, grew for 6.36%, while the average value of the accounting unit of the voluntary pension funds grew for 8.18%. The Figure 6.11 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 2014.

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



Source: Macedonian Stock Exchange – Annual Statistical Bulletin for 2014

In 2014, the assets of the voluntary pension funds were mostly invested in domestic securities (NLBd 40.96% and KBPd 46.78%) and instruments from issuers/shareholders in the financial sector (34.51% for NLBd and 41.68% for KBPd). Within this sector, the highest participation in both pension funds' investments is that of the foreign investment funds units (47.47 for NLBd and 64.28% for KBPd), followed by domestic bank deposits (43.41% for NLBd and 35.30% for KBPd). In this sector, financial services participate with 7.69% in NLBd portfolio, while for both funds the lowest participation is that of the shares in domestic banks (NLBd 1.43% and KBPd 0.42%). Voluntary pension funds invest in other sectors, such as: pharmacy, food industry, tourism, telecommunications, trade, construction and other industries, however with much smaller participation (0.06% to 7.22%).

According the currency structure of voluntary pension funds assets, shown on Figures 6.14 and 6.15, the majority of NLBd' assets are invested in instruments in USD, 42.66%, which is a significant increase in respect to 2013, while for KBPd, the majority of the assets is invested in instruments in Euro, 52.36%. This is followed by investments in instruments in domestic currency (NLBd 35.51% and KBPd 32.21%), which is a decrease in respect to 2013. Next in line for NLBd are the investments in Euros with 21.08%, though lower than

[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

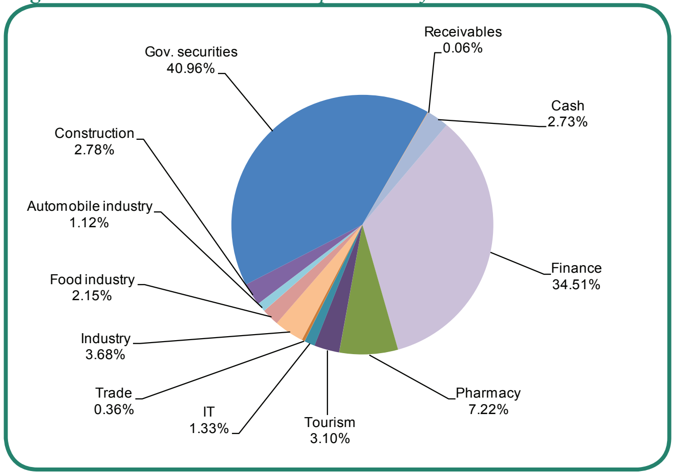


Figure 6.13 Investment structure per sectors for KBPd

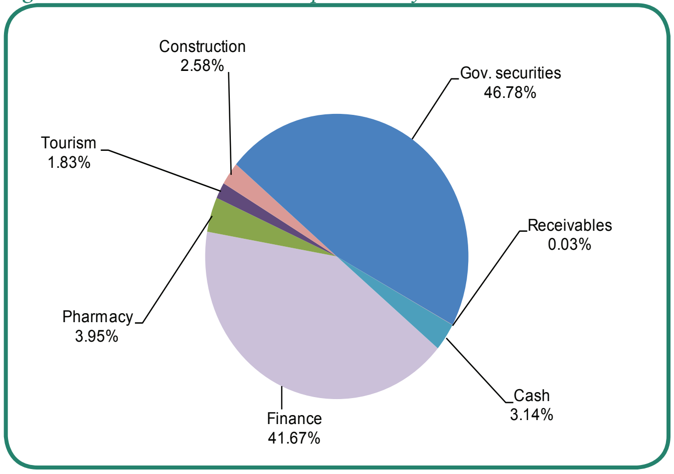


Figure 6.14 Currency structure for NLBd

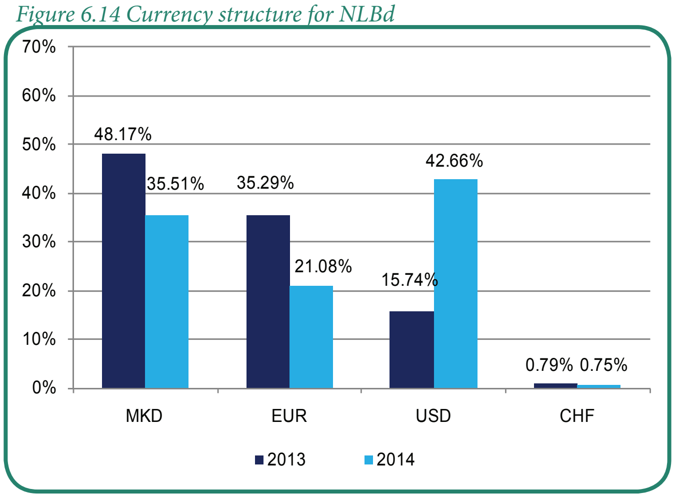
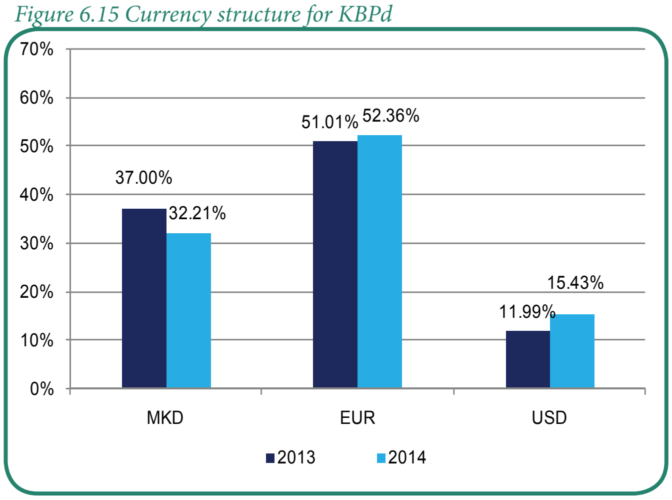


Figure 6.15 Currency structure for KBPd



in 2013, while or KBPd it is the investment in US dollars, with 15.43%, which are higher than 2013. In the currency structure of NLBd a very small part includes investments in Swiss Francs (0.75%).

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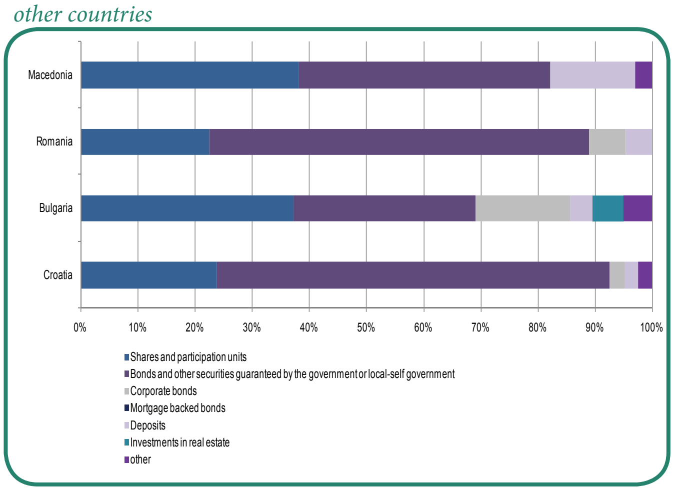
The Macedonian investment portfolios of the voluntary pension funds have many similarities but they also have differences with similar pension systems abroad. Figure 6.16 compares investments of voluntary pension funds assets in Macedonia with the investments of such assets in other countries in the region, which have implemented the voluntary fully funded pension insurance[13].

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 Croatia 69%, Romania 66%, and Bulgaria 32%). In Macedonia, the exposure to such instruments is 44%, while the exposure to bank deposits is 15%. Unlike Macedonia, the exposure to bank deposits in the other countries is lower: Romania (5%), Bulgaria (4%) and Croatia (2%). When it comes to shares and participation units, Macedonia has the highest percentage (38%), followed by Bulgaria, (37%), Croatia (24%) and Romania (23%). The above Figure shows that most countries invest in corporate bonds (Bulgaria 17%, Romania 6% and Croatia 3%), except for Macedonia where such instruments lack. Only the pension funds in Bulgaria invest in real estate (5%), while in other countries this instrument is generally prohibited. Regarding investments abroad, Bulgaria has the highest exposure of 55%, followed by Macedonia with 27% and Croatia 12%, while Romania invests only 7% abroad.

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;
- reduced 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 contribution payment errors;
- outflows of persons who have terminated the membership contracts;
- outflows due to payouts of pension benefits (old age and inheritance);
- (um) 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 6.3:

On 31.12.2014, the total net assets of the voluntary pension funds were approximately 506 million denars or 8.2 million Euros, or 0.10% 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 6.3 Changes in the voluntary pension funds assets
(in million denars)

	NLBd	KBPd
Net assets as of 31.12.2013	164.08	154.22
Contributions	68.03	95.71
Fees from contributions	1.86	2.50
Contributions reduced for fees from contributions	66.17	93.22
Payments on individual accounts from personal tax returns	0.35	0.46
Returns of erred contributions	0.00	0.00
Terminated membership contracts	0.00	0.00
Fees from assets	2.31	1.79
Expenditures for intermediary commissions	0.15	0.06
transfers from another fund	0.00	0.12
Transfers to another fund	0.12	0.00
Inheritance payout	0.08	0.44
Payout of old-age pension benefits – lump sum	2.70	2.13
Gross profit from investments	18.23	18.70
Net profit from investments	15.76	16.85
Net assets as of 31.12.2014	243.47	262.30

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

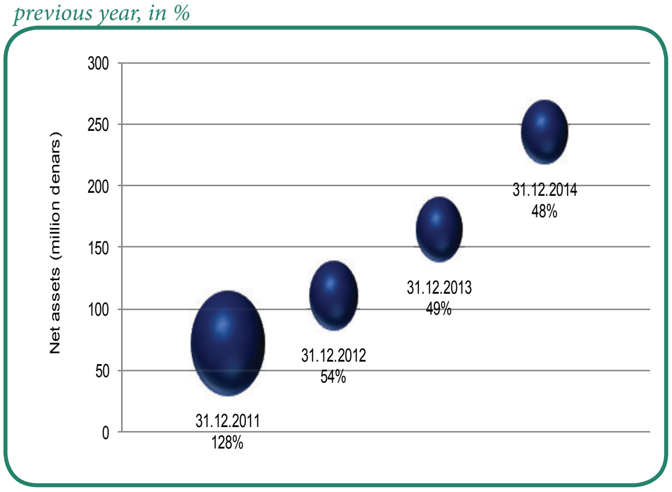
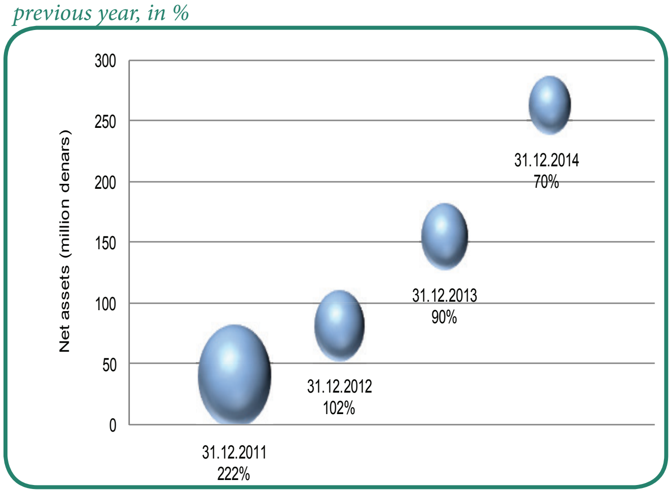


Figure 6.18 Annual growth of the net assets of KBPd in respect to previous year, in %



[14] *Source for GDP: State Statistical Office – announcement on the GDP fourth quarter of 2014 - estimated data .*

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

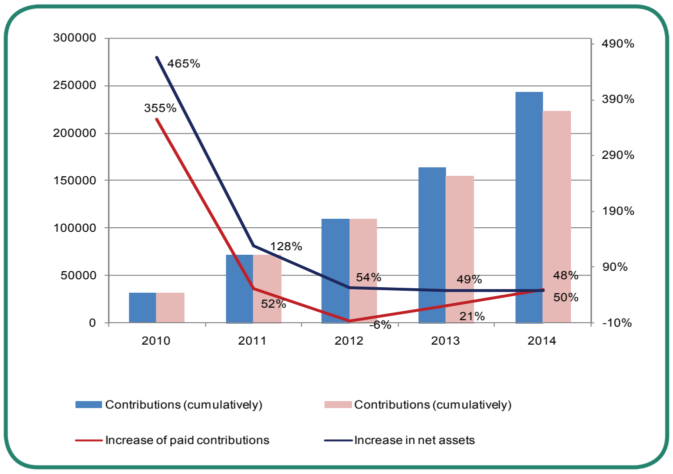
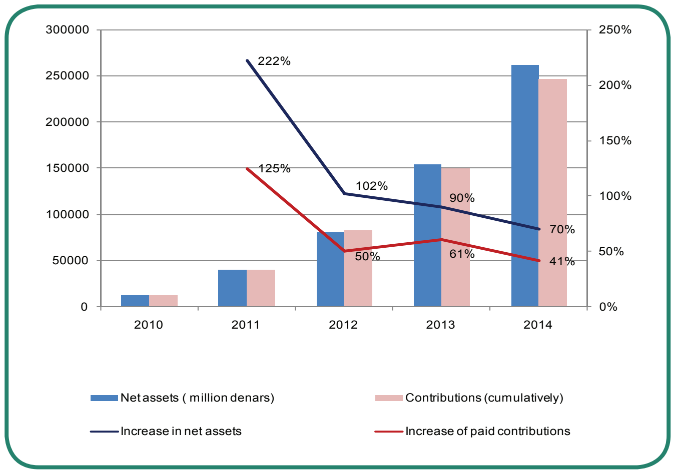


Figure 6.20 Net asset growth compared to the growth of paid contributions in KBPd



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.

Table 6.4. 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
31.03.2014	131.234610	130.832233
30.06.2014	133.211119	133.286569
30.09.2014	135.934981	135.480160
31.12.2014	140.946772	139.908803

From the start of its operations in 2009 until 2010, NLBd earned a huge growth in the net assets (465%) and of the paid in contributions (355%). In 2011 compared to 2010, the net assets grew for 128%, and the cumulative paid contributions for 52%. In 2012 compared to 2011, the growth of the net assets was 54%, while the cumulative paid contributions had a fall of 6%. In 2013, compared to 2012, the net assets for NLBd grew for 49% and the paid in contributions for 21%. In 2014, compared to 2013 the net assets of NLB grew for 48% and the paid contributions for 50%.

In the period from 2010 to 2011, KBPd had a growth of net assets of 222% and 125% of growth of the paid in contributions. In 2012 compared to 2011, the growth of the net assets is 102%, while the growth of the cumulative contributions is 50%. In 2013, compared to 2012, KBPd has a much higher growth than NLBd in paid contributions (61%) and of net assets (90%). Also, in 2014 compared to 2013, KBPd has a much higher growth than NLBd in net assets (70%) while less growth than NLBd in paid contributions (41%).

The changes in the value of the accounting units of the voluntary pension funds, from the beginning of the system until 31.12.2014 are given in Table 6.4 and Figure 6.21. As shown on the Figure, the accounting units have a growing trend. In 2014, the accounting unit continued to grow 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

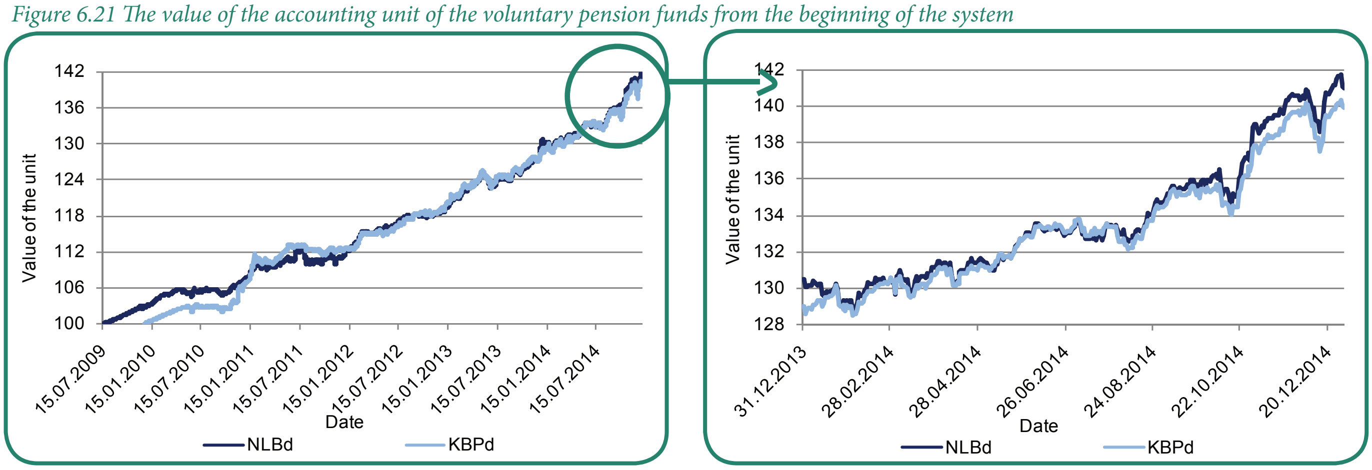


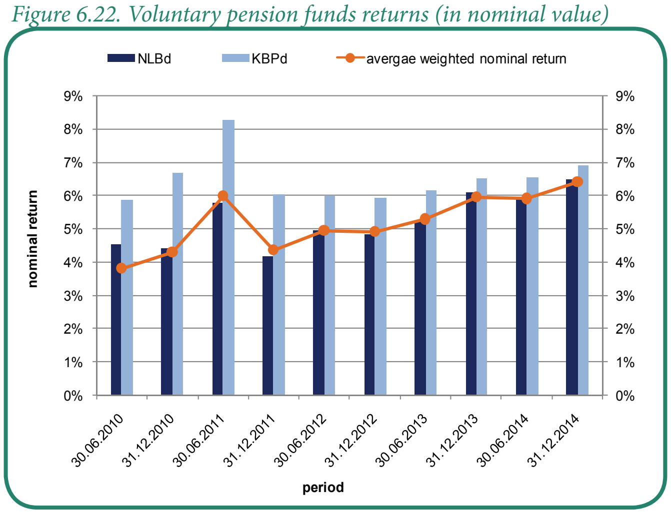
Table 6.5. Returns of voluntary pension funds

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 - 31.03.2014	5.85%	3.09%	6.48%	3.70%
31.12.2009 - 30.06.2014	5.87%	3.24%	6.55%	3.90%
31.12.2009 - 30.09.2014	6.00%	3.56%	6.55%	4.10%
31.12.2009 – 31.12.2014	6.46%	4.09%	6.90%	4.52%
Start** -31.12.2014	6.50%	4.25%	6.90%	4.52%

** 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.*

Table 6.5 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.

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



The return of the voluntary pension funds is calculated the same way as the return of the mandatory pension funds.

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 6.5% in nominal value and 4.25% in real value, while for KBPd it is 6.90% in nominal value and 4.52% in real value.

Figure 6.22 shows the changes in the nominal return in the last four years, giving the returns per periods from 31.12.2009 until 31.12.2014, per funds and the average weighted return. At the beginning of the third pillar, the return is growing, so, at the end of the first half of 2011, both funds have the highest returns, while at the end of 2011, the returns start to fall. Then in 2012, 2013 and 2014, the returns start to pick up slowly.

The changes in the nominal and in real values of the return for 2014, per periods, and presented annually per voluntary pension funds and compared to the average return and are given on the Figure 6.23. In 2014, the returns are rather stable, without major oscillations. The return in nominal value is between 5.85% to 6.90%, while the real return is from 3.09% to 4.52%. The lowest value of the returns is noticed for the period 31.12.2009 – 30.06.2014.

Figure 6.23. Returns in nominal and real values for the voluntary pensions funds in 2014

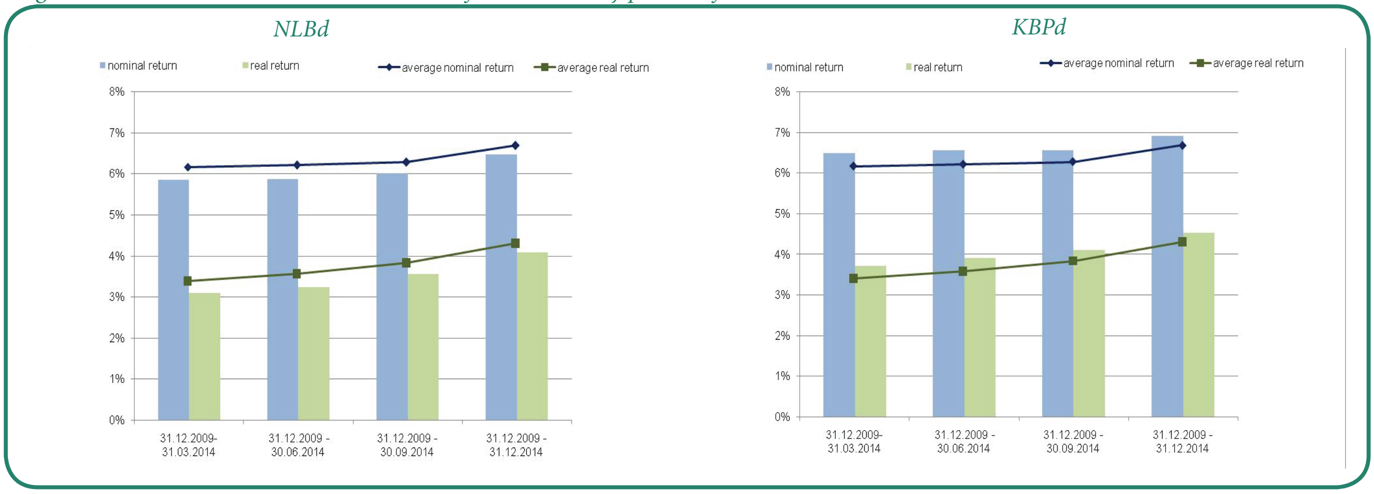
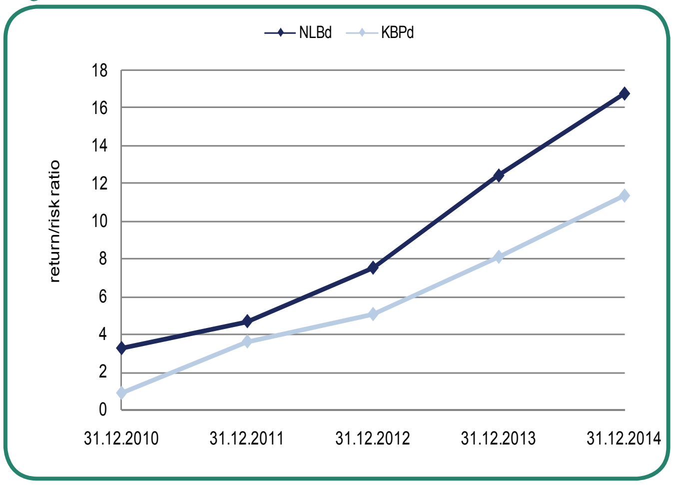


Figure 6.24. Return to risk ratio



The main goal of investing the assets of the 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 2014 is shown on Figure 6.24. Higher return to risk ratio is an indicator of the better investment performance of the fund and the potentials of the fund for higher returns per risk unit.

[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 individual 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 6.6 Fees charged by the pension companies that manage voluntary pension funds

Type of fee	NLB	KB Prvo
Fee from contributions*	3.80%[16]	2.90% [17]
Monthly fee from the assets of the mandatory pension fund	0.10%[18]	0.075% [19]
Transfer fee		
Number of days**	Amount of transfer fee	Amount of transfer fee
number of days ≤ 360	10 Euros	10 Euros
number of days > 360	Transfer fee not charged	Transfer fee not charged

** 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 6.8 presents the fees charged by the pension companies that manage the voluntary pension funds in the Republic of Macedonia.

From the starting day, 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 2013, it was reduced once again to 2.90%. Also, in 2011 both companies reduced the asset management fee to 0.10% for NLB and 0.075% for KBP.

Table 6.9 gives us the fees charged by the pension companies managing the voluntary pension funds (in thousand denars), for 2014, 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 2014, NLBd paid 0.15 million denars in transaction fees, and KBPd paid 0.06 million denars in transaction fees.

[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%)

Table 6.7 Fees charged by pension companies for 2014 (in thousand denars)

	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
NLB – total	254	301	304	301	310	303	324	330	320	371	363	688	4,169
From contributions	90	133	132	124	126	114	131	133	115	161	142	458	1,859
From assets	164	168	173	178	184	189	192	197	205	210	221	230	2,310
KB Prvo – total	292	292	289	349	295	307	317	295	353	373	399	724	4,285
From contributions	174	169	160	215	154	161	165	140	192	205	222	537	2,495
From assets	118	124	128	134	140	146	152	155	162	167	177	186	1,790

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 2014, the third pillar paid out 103 pension benefits. Most of the payouts are old-age benefits paid as lump sums, while less are payouts in cases of death or inheritance. Out of these, 34 are paid from individual accounts and 69 from occupational accounts. Table 6.11 gives the details on the third pillar payouts in 2014, per voluntary pension fund and per type of account.

Table 6.8. Pension benefit entitlements and payouts from the third pillar

Type of pension benefit / voluntary pension fund	NLBd		KBPd		Total
	Ind. account	Occ. account	Ind. account	Occ. account	
Old age – lump sum	13	13	17	50	93
Inheritance	3	0	1	6	10
Total	16	13	18	56	103

7

Marketing and sales agents of pension companies

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 2014 there were four examination sessions, with 111 candidates, out of which 64 (58%) passed the Sales Agent Exam. In 2014, 67 agents were registered, out of which 6 for KB Prvo and 61 for NLB, then 296 agents were re-registered, out of which 182 agents for KB prvo and 114 agents for NLB. Also, 162 agents had their annual registration renewal, out of which 68 agents of KB Prvo and 94 of NLB. In 2014, 224 agents had terminated their status as sales agents, out of which 223 agents of KB Prvo and 1 agent of NLB.

The Figure 7.1 gives us the frequency of signed contracts by sales agents from the beginning of the system until the end of 2014. It is evident that most contracts were signed in 2005, as this was the stat-up year, and as 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 agents who sign membership agreements is decreasing, while the number of contracts per agent is increasing (for the period 2006-2012). In the following three years it is evident that the average number of contracts per agent is decreasing.

The Figure 7.2 gives the overview of signed contracts for the voluntary pension funds. It is evident that the average number of contracts per agent is highest in 2009, while the average is more or less the same for 2010 and 2011, where in 2011 the number of agents that signed contracts has dropped significantly. In 2012, the average number of signed contracts is slightly higher than 2011, and the number of agents has also increased. In 2013, the agents signed more contracts in average than in 2012; however, the number of agents has decreased. Also, in 2014 the number of agents that signed contracts had decreased in respect to 2013, while in average the agents signed more contracts.

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

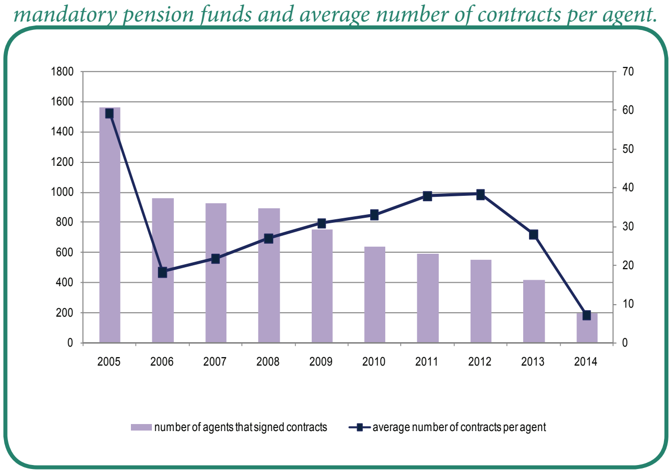
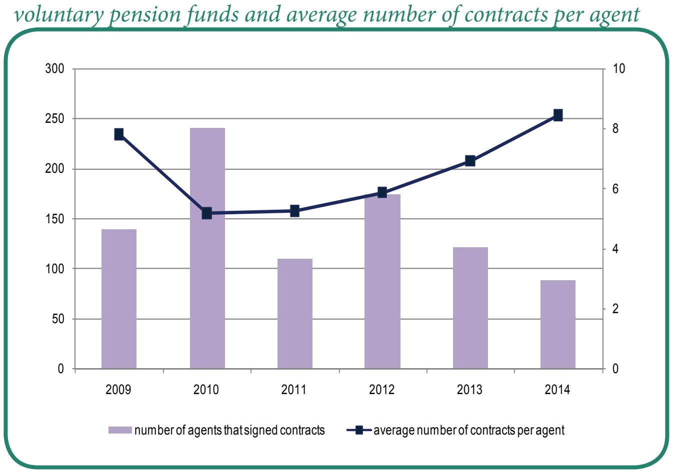


Figure 7.2. Number of agents that signed membership contracts for voluntary pension funds and average number of contracts per agent



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