

2021

REPORT

*On the developments in  
the fully funded pension  
insurance*



**Agency for Supervision of Fully Funded Pension Insurance**

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## Abbreviations

<b>GDP</b>	<i>gross domestic product</i>
<b>Second pillar</b>	<i>Mandatory Fully Funded Pension Insurance</i>
<b>VPF</b>	<i>voluntary pension funds</i>
<b>SSO</b>	<i>State Statistical Office</i>
<b>EU</b>	<i>European Union</i>
<b>MPF</b>	<i>mandatory pension funds</i>
<b>IOPS</b>	<i>International Organisation of Pension Supervisors</i>
<b>KB Prvo</b>	<i>KB First company for mandatory and voluntary pension funds management AD Skopje</i>
<b>KBPd</b>	<i>KB First Open Voluntary Pension Fund - Skopje</i>
<b>KBpz</b>	<i>KB First Open Mandatory Pension Fund - Skopje</i>
<b>MAPAS</b>	<i>Agency for Supervision of Fully Funded Pension Insurance</i>
<b>NBRNM</b>	<i>National Bank of the Republic of North Macedonia</i>
<b>OECD</b>	<i>Organisation for Economic Co-operation and Development</i>
<b>First pillar</b>	<i>Mandatory pension and disability insurance based on generational solidarity</i>
<b>SAVA</b>	<i>Mandatory and Voluntary Pension Funds Management Company Sava Pension Company AD Skopje</i>
<b>SAVAd</b>	<i>Open Voluntary Pension Fund Sava penzija plus</i>
<b>SAVAz</b>	<i>Open Mandatory Pension Fund Sava penziski fond</i>
<b>Third pillar</b>	<i>Voluntary fully funded pension insurance</i>
<b>TRIGLAV</b>	<i>Mandatory and Voluntary Pension Funds Management Company TRIGLAV pension company AD Skopje</i>
<b>TRIGLAVd</b>	<i>Triglav Open Voluntary Pension Fund - Skopje</i>
<b>TRIGLAVz</b>	<i>Triglav Open Mandatory Pension Fund- Skopje</i>
<b>PRO</b>	<i>Public Revenue Office</i>
<b>PDIFNM</b>	<i>Pension and Disability Insurance Fund of North Macedonia</i>

# Foreword



Dear reader,

The report on the developments in the fully funded pension insurance in 2021 of the Agency for Supervision of Fully Funded Pension Insurance - MAPAS, contains a description of the characteristics of fully funded pension insurance, data on fully funded pension insurance, assessment of the implementation of the regulations in the field of fully funded pension insurance and other data relevant to this insurance until the end of 2021. The report is a confirmation that MAPAS provides continuous functioning, development and promotion of the second and third pillar, transparency and efficient supervision of the second largest segment in the financial sector in the Republic of North Macedonia.

In 2021, the total assets of the mandatory pension funds exceeded 100 billion denars and at the end of 2021 they reached 105.66 billion denars, they increased by 21% compared to 2020. The total assets of the voluntary pension funds recorded higher growth compared to the total assets of the mandatory pension funds, i.e., they increased by 25% and reached 2.9 billion denars. Thus, the total assets of the pension funds in the second and third pillar reached approximately 15% of the gross domestic product for 2021. In 2021, the coverage of the population in the second pillar increased, i.e., 96% of the total number of insureds in the PDIFNM or 58% of the total active population are members of the second pillar. Although there was an increased growth, the portion of the population in the third pillar is still modest, i.e., only approximately 2.9% of the total active population in the Republic of North Macedonia are members with a voluntary individual account and are participants in a pension scheme with a professional account in a voluntary pension fund.

In 2021, contributions in the amount of approximately 9.68 billion denars were transferred to the mandatory pension funds, which is approximately 1.34% of the GDP of the Republic of North Macedonia, while a total of about 407.71 million denars were paid into the voluntary pension funds, which is approximately 0.06% of the GDP of the Republic of North Macedonia.

The structure of the investment portfolio of the mandatory pension funds does not differ significantly compared to last year. The investment portfolio in 2021 consists of domestic investments which include government securities (59.87%), deposits (6.82%), shares (2.89%), stocks in investment funds (0.27%) and corporate bonds (0.02%), as well as investments abroad, which include stocks of investment funds (25.57%) and shares (4.13%). At the level of mandatory fully funded pension insurance, in the seven-year period from 2015 to 2021, the average annual return was reduced to 5.91% in a nominal amount or 4.41% in a real amount, calculated through the change of the weighted average of the accounting units of the mandatory pension funds.

The structure of the investment portfolio of the voluntary pension funds also does not differ significantly compared to last year. The commencement of the operation of the voluntary pension fund TRIGLAV did not have a significant impact on the overall investment structure of the voluntary pension funds, given the fact that in the initial years of operation the new fund still has a small amount of funds relative to the total assets of the voluntary pension fund. The investment portfolio in 2021 consists of domestic investments that include government securities (49.88%), deposits (11.36%), shares (8.21%), corporate bonds (0.61%) and a very small part in stocks in investment funds (0.01%), as well as investments abroad, which include stocks in investment funds (24.22%) and shares (4.99%). At the level of voluntary fully funded pension insurance,

*in the seven-year period from 2015 to 2021, the obtained average annual return amounted to 5.85% in nominal amount, i.e., 4.35% in real amount, calculated through the change of the weighted average of the accounting units of the mandatory pension funds.*

*In 2021 as well, efforts were made to improve and specify or simplify certain procedures within the functioning of the fully funded pension insurance, therefore in that regard, amendments to bylaws and instructions were adopted. Thereby, the possibility for digital conclusion of an agreement for membership in a mandatory/voluntary pension fund and the possibility for electronic communication between the pension funds and MAPAS were regulated. In addition, in order to increase the number of permitted investment instruments and to expand the investment universe, certain constraints on investing in pension funds were reduced, the level of the required credit rating for the quality of all instruments was reduced and the lowest rating level was determined within the law, i.e., rating recommendable for investment according to international credit rating agencies. This change has expanded the opportunities for investment in additional OECD or EU member states.*

*Pension savings are long-term, and the challenges brought by fully funded pension insurance are inevitable. The conditions in the pension field must be monitored continuously and on an ongoing basis, thus appropriate measures must be taken, in order to strengthen individual savings by encouraging competition, promoting efficient and flexible portfolio management and expanding coverage, aimed at protection of the members' interests and provision of a secure pension in old age.*

*We assure you that as a supervisory and regulatory body, in our daily work, we are guided by our mission and, as in previous years, we will invest our resources towards upgrading and promoting the fully funded pension insurance.*

*We believe that this report with detailed data and information about the second and third pillar will be useful to all interested parties.*

*Chairman of the Council of Experts,  
Maksud Ali*

## Important 2021 dates

**1.3.2021**

*Start of operation of Triglav Open Voluntary Pension Fund - Skopje*

**1.5.2021**

*Sava Pension Company a.d. Skopje reduced the fees it charges in the third pillar (from 2.9% to 2.5% fee from contributions and from 0.100% to 0.075% fee from assets)*

**2.9.2021**

*The value of the net assets of the mandatory pension funds exceeded 100 billion denars.*

# MAPAS, mission and vision

*The Agency for Supervision of Fully Funded Pension Insurance - MAPAS is a regulatory and supervisory institution established in order to care about the interests of the members and retired members of the pension funds and to encourage the development of fully funded pension insurance. It was established in July 2002. It has the capacity of a legal entity with public authorizations, set out by the Law on Mandatory Fully Funded Pension Insurance and the Statute. The Agency is accountable for its operation before the Assembly of the Republic of North Macedonia.*

*MAPAS is responsible for issuing, withdrawing and revoking licenses for establishing pension companies, licenses for performing an activity - management of pension funds and issuing, withdrawing and revoking approvals for managing mandatory and voluntary pension funds. It supervises the operation of pension companies, mandatory and voluntary pension funds, as well as property custodians and foreign asset managers. MAPAS also promotes, organizes and encourages the development of fully funded pension insurance in the Republic of North Macedonia, in cooperation with the Ministry of Labor and Social Policy, and develops public awareness of the goals and principles of pension companies and mandatory and voluntary pension funds, on the benefits of the membership in a mandatory and/or voluntary pension fund, including the goals, principles and benefits of participating in an occupational pension scheme, the rights of members of mandatory and voluntary pension funds and other issues related to fully funded pension insurance. MAPAS adopts acts in accordance with the laws in the field of fully funded pension insurance as well as expert instructions, manuals, etc., related to fully funded pension insurance, and it initiates the adoption of laws and other acts related to pension companies and the pension funds they manage. Moreover, MAPAS cooperates with relevant institutions in the Republic of North Macedonia and abroad in order to ensure effective control of fully funded pension insurance in the Republic of North Macedonia.*

*The Agency for Supervision of Fully Funded Pension Insurance is managed by a Council of Experts, which consists of a Chairman of the Council and four members, as follows:*

*Maksud Ali- Chairman*

*Mentor Jakupi – professionally engaged member*

*Darko Sazdov– professionally engaged member*

*Borche Bozhinovski- external member*

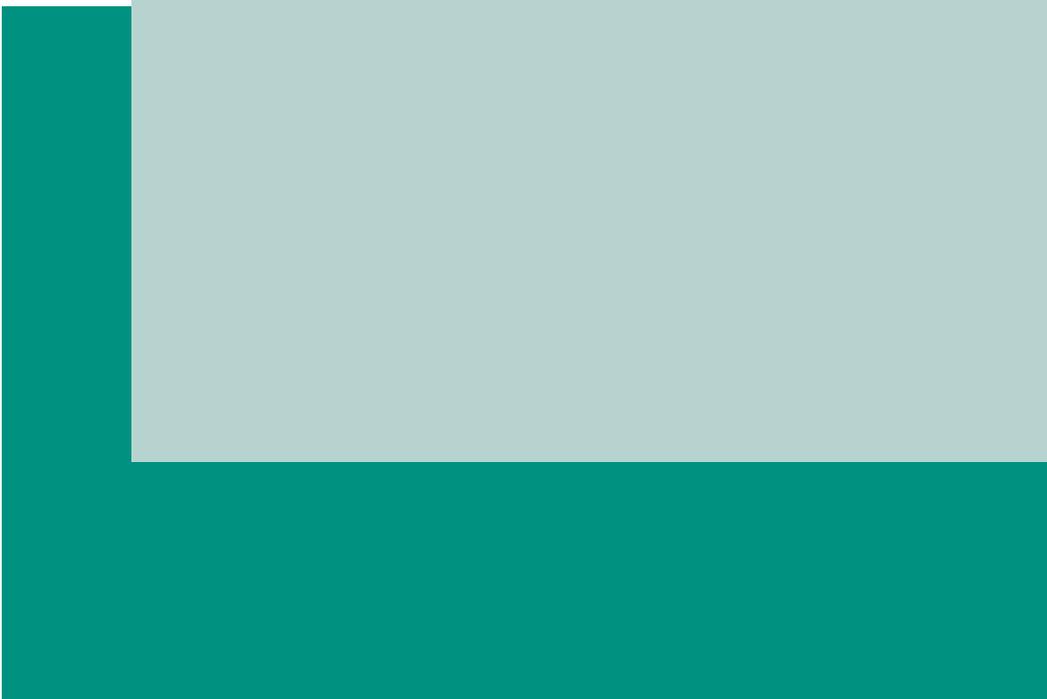
*Marina Makenadzjeva- external member*

**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 North Macedonia.

# 1 Brief overview of the global conditions and trends in the pension industry with an emphasis on the fully funded pension insurance

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

Pension systems in the world are commonly defined as multi-pillar, in order to diversify the various risks that affect them. In 2021, pension system assets worldwide increased by 11% compared to 2019 and exceeded 56 billion USD (54 billion USD in OECD member countries and 2 billion USD in selected non-OECD member countries). The main drivers of pension systems worldwide are still pension funds (assets in the amount of 35 billion in 2020).

Following the decline in the first quarter of 2020, global financial markets recovered in the course of the year, allowing pension funds to offset the negative investment results of the first quarter. This was driven by sectors that thrived during the pandemic (e.g., technology development companies), support from central banks to keep borrowing costs low (e.g., lower interest rates) and the positive expectations throughout the year (vaccine development and their approval by health authorities). The weighted (in terms of pension assets) real net investment income is 6% in OECD member countries and 5.7% in non-OECD member countries.

In 2021, the discussions on digitalization and technology development in the pension sector were followed by a supervisory approach to strengthening cyber resilience in the private pension sector. IOPS has identified the main cyber threats and trends related to private pensions in recent years and during the Corona virus pandemic and summarized the experience to date regarding effective measures to mitigate these risks.

The pension systems in the world<sup>1</sup> are characterized by different structures as a result of the different socio-economic and demographic conditions in the countries, the influence of the culture of the people and their habits and perceptions of pension savings. In recent decades, the risks of an aging population and the changing nature of the labor market have prompted a wide range of pension system reforms in order to mitigate them, however with the same ultimate goal – provision of a sustainable pension system and adequate income for the insureds after their retirement.

The assets in pension systems worldwide in 2020 increased by 11% compared to 2019 despite the shock caused by the pandemic of the Corona virus and the decline in the amount of pension assets at the end of March 2020. In 2020, pension funds worldwide exceeded 56 billion USD (54 billion USD in OECD countries and 2 billion USD in selected non-OECD countries). The main drivers of pension systems worldwide are still pension funds (assets in the amount of 35 billion in 2020). In addition, some countries also use other forms of pension savings, such as pension insurance agreements with insurance companies (such as, Denmark, France) or products provided and managed by banks and investment companies (such as individual retirement accounts, in the USA).

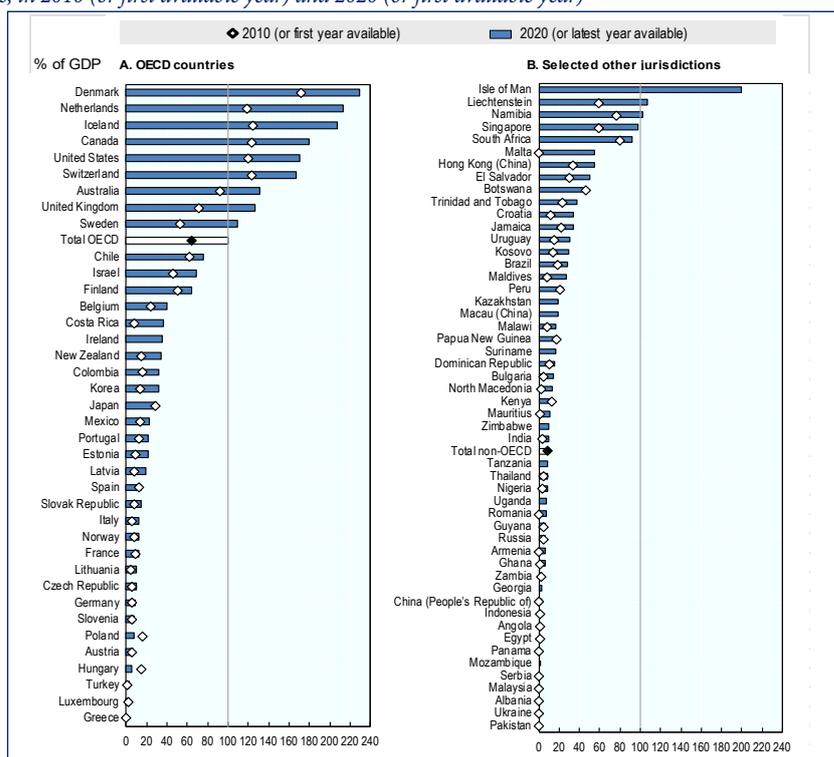
The size of the value of the assets of private pension systems in all countries is different, which is probably due to the different beginnings of the establishment of the systems, whether the inclusion in the pension plan is mandatory or voluntary and, of course, due to the investment results. In absolute terms, the largest amounts of pension assets are registered in North America (Canada and the United States), West Europe (Netherlands, Switzerland and the United Kingdom), Australia and Japan, where pension assets have exceeded 1 billion USD. On the other hand, the assets of private pension systems in 70 (out of 92 surveyed countries) represent less than 0.2 billion. The size of the assets of private pension systems in all countries is different in relative terms as well. Nine of the 38 OECD countries at the end of 2020 had assets that exceeded 100% of their economy. In small countries such as Iceland, the accumulated funds include a low amount compared to other pension systems, however a high amount in relation to their economy (207% of the GDP). On the other hand, the amount of pension assets is less than 20% of GDP in 52 of the 92 surveyed countries, including some large and fast-growing countries (such as China, India).

The comparison of the size of the value of assets of private pensions systems with the size of the economy, expressed in terms of gross domestic product, provides a better picture of the relative importance of the private pension segment in the country. The amount of pension assets in OECD countries relative to the total GDP of OECD countries increased from 64% in 2010 to 100% ten years later (presented in Graph 1.1<sup>2</sup>). Same as in 2010, in 2020 Denmark leads with 229% of the GDP, followed by the Netherlands (213%) and Iceland (207%). In some non-OECD countries pension assets have reached levels above 100% of the GDP (106% in Liechtenstein and 102% in Namibia). On the other hand, despite an observed increase, pension assets in some countries (Albania, Greece and Serbia) are still less than 1% of the GDP at the end of 2020.

Another indicator of the importance of fully funded and private pensions in a country is the coverage rate. The coverage rate can be measured by the number of active members of the pension plans (persons who have funds in the pension plans

<sup>1</sup>Used sources: OECD reports, World Bank and IOPS, and own analyses and considerations.

Graph 1.1. Total pension assets, in 2010 (or first available year) and 2020 (or first available year)



Source: OECD, Pension market in focus, 2021.

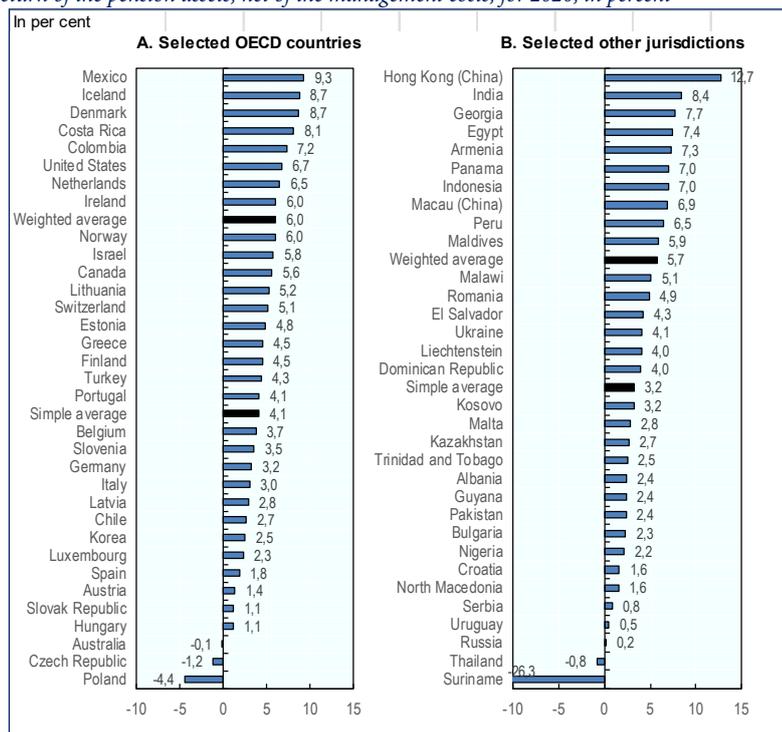
and have not retired yet) in relation to the working age population (persons from 15 to 64 years of age). Joining a pension plan can be mandatory, voluntary or encouraged through automatic inclusion. The available data show that in 2020 in 17 of the 32 surveyed countries in total, mandatory pension plans cover more than 75% of the working age population. The highest coverage rates are recorded in Denmark, Estonia, Finland, Iceland, Latvia and Sweden, where almost the entire working age population participates in the mandatory pension plans. In Latin America, Chile (83%) and Costa Rica (82.9%) have high coverage rates of 83% of the working age population, which is not the case in other countries, such as Colombia (52.4%) and Peru (35.4%) where persons have the right to choose between the pension system of generational solidarity and a private fully funded pension system. The relatively low coverage rates in mandatory pension plans are additionally affected by the high rates of informal employment in these countries. The participation in voluntary pension plans varies greatly across countries. More than half of the employees in Germany and Iceland, and more than half of the working age population in Belgium, the Czech Republic, Japan and Poland are covered by voluntary pension plans. In some countries, participation in voluntary pension plans has been relatively low, especially in Albania, Bulgaria, Pakistan and Kazakhstan. However, in Bulgaria and Kazakhstan, many insureds are already members of the mandatory pension plans, 87% and 77.6% of the working population, respectively. The low coverage in Albania and Pakistan may be the result of insufficient awareness and little interest of the population (especially the young population) in such pension plans. In most countries, the trend of membership growth has been maintained in 2020, possibly as a result of job retention measures and other policy measures aimed at mitigating the impact of the corona virus on labor markets and enabling employees retain their jobs or retain rights in their retirement savings plans during a pandemic. However, in several countries (such as, Chile) the percentage of people with pension savings in relation to the working age population has decreased.

The total amount of paid contributions in the pension plans depends on the participation of the persons who have access and are included in the pension plans, how many of them actively contribute to the plans and the amount of the contributions. Payment can be made by the members, their employers or countries (for example, as financial incentives). The largest amounts of paid contributions in 2020 are observed in countries with mandatory fully funded pension plans. Relative to the size of their economy, the highest amounts of contributions were paid in Iceland (10.6% of GDP), Switzerland (9.6%), Dominican Republic (8.5%), Denmark (8.2%) and Australia (6.9%). In these countries, participation in pension plans is mandatory and the coverage rate is relatively high (from 55% to 92% of the working population). Payments in pension plans in these countries can be made by both employees and employers. For comparison, the lowest amounts of paid contributions are observed in voluntary pension systems in Pakistan and Albania, where the participation in pension plans is voluntary and less than 2% of the working population is included in the pension plan.

The investment results of fully funded and private pension plans are the main driver of the growth of pension assets. From the perspective of the members of pension plans, positive investment returns increase the certainty of the promises of the

plans for defined retirement and increase the amount of funds and retirement income that the members of plans with defined contributions can expect. The growth of pension assets in 2020 is partly due to the investment results of fully funded and private pension plans in 2020. Although lower than in 2019, the real investment return on pension assets (net of management costs) in 2020 reached an average of 4.1% in OECD member countries and 3.2% in non-OECD countries. The weighted (in terms of pension assets) real net investment return recorded higher values, 6% in OECD member countries and 5.7% in non-OECD countries, reflecting the fact that some of the largest pension markets had higher profits. Some of the largest pension markets, such as Canada, the Netherlands, Switzerland and the United States, recorded relatively high investment results, with real investment returns of more than 5% in 2020. The best results were observed in Hong Kong (China) (12.7%), Mexico (9.3%) and Iceland (8.7%). Overall, investment returns were observed in most surveyed countries (in 30 of the 33 surveyed non-OECD countries, and in 30 of the 32 surveyed non-OECD countries). Graph 1.2. shows the real investment returns of pension assets, net of management costs for 2020, in selected OECD countries and selected non-OECD countries.

Graph 1.2. Real investment return of the pension assets, net of the management costs, for 2020, in percent



Source: OECD, Pension market in focus, 2021.

Following the decline in the first quarter of 2020, global financial markets recovered during the year, allowing pension funds to offset the negative investment results of the first quarter. This was driven by sectors that thrived during the pandemic (e.g., technology companies), central bank support to keep borrowing costs low (e.g., interest rate cuts), and positive expectations throughout the year (development of vaccines and their approval by the health authorities).

Long-term returns are more relevant indicators than short-term returns given the long-term nature of pension plans. Pension plans in most surveyed countries have yielded positive investment returns in the long run. Despite the impact of the Corona virus and the investment losses for pension plans in many countries in the first quarter of 2020 and 2018, pension plans have yielded positive real annual investment returns in the last five years in all OECD countries except the Czech Republic and in all non-OECD countries except Egypt, Nigeria and Suriname.

The results of investing in pension assets largely depend on the allocation of the assets and the level of risk. Higher exposure of the portfolio of riskier instruments implies potentially higher amounts of return and higher return volatility. In most surveyed countries, in 2020, pension funds were invested in bonds and shares, with more than half of the investments in 35 of the 38 OECD member countries and in 38 of the 46 surveyed non-OECD countries. Therefore, the development of bond and stock markets plays a major role in the financial performance of pension plans. The highest stock of bonds and shares in the total portfolio of pension funds was observed in Romania (98.6%), Chile (97.8%), Dominican Republic (97.2%), Estonia (96.9%), Maldives (96.7%), Mexico (96.5%), Nigeria (96.2%), Albania (95.6%), Croatia (95.1%) and Lithuania (95%). The percentage of shares and bonds varies from one country to another in 2020. Although there is generally a greater preference for bonds, in 11 OECD member countries and 12 non-OECD countries, the percentage of shares was higher than the percentage of bonds. Government bonds, in contrast to corporate bonds, included major part of direct bond

investments in a number of countries. For example, government bonds accounted for 100% of direct bond investments in Albania, 99.9% in North Macedonia, 97.8% in the Maldives, 96.9% in Croatia, 95.9% in Kazakhstan and Serbia, 89% in Israel and 88.9% in the Czech Republic, but only 22.1% in Norway, 13.9% in New Zealand, 11.7% in Suriname and 9.1% in Macau (China). Also, a significant part of pension assets in some of the surveyed countries includes cash and deposits. For example, in Australia (15%) and Peru (5%), compared to 2019, major part of the pension assets was kept in cash and deposits for potential outflows due to early withdrawals of pension assets related to the Corona virus. In Ukraine, the share of cash and deposits was 40.3%, since private pension funds invested the most in instruments with a minimum level of risk. In most surveyed countries, investments in loans, real estate, private equity funds and other alternative investments account for a relatively small share of pension assets. A significant share of real estate investments (direct or indirect) is observed, for example, in Canada (more than 11.9% of the total assets) and Switzerland (20.1%). The investment regulation may also provide for constraints on investment in non-traditional instruments. Most countries restrict or completely ban investments in real estate (at least direct investments), private funds and/or loans.

Some countries have reduced investment constraints in recent years and encouraged investment in infrastructure and long-term projects (such as Croatia and Romania). In Croatia, the amendments of the Law of 2014 expanded the investment opportunities for mandatory pension funds, for direct investments in infrastructure projects and in alternative investment funds. In Romania, the changes of the regulation in 2019 enabled investment of the pension fund assets in infrastructure projects (up to 15% of the pension funds). In Switzerland, as of October 2020, a 10% limit was imposed on infrastructure investments, especially the 15% limit on alternative investments, in order to enable an increased exposure of pension funds to infrastructure investments.

In 2021, there were discussions on the investments of the pension funds in infrastructure, with an emphasis on the supervision of these investments. The published document of the International Organisation of Pension Supervisors (IOPS) shows the regulatory framework for infrastructure investments of pension funds, it contains a discussion on barriers to such an investment, and recent regulatory measures aimed at facilitating infrastructure investments by pension funds. The report provides good practices and lessons learned from the supervisory experiences (of 33 IOPS member countries) regarding infrastructure investments which are generally considered complex, illiquid, non-transparent and require very solid skills and resources. In most countries, there is no specific definition of infrastructure in the regulations or supervisory practice, and in most countries, infrastructure investments by pension funds are subject to general investment constraints (such as restrictions on classes of asset, concentration rates or credit rating). Investment analysis and supervision of infrastructure investments by pension funds can be improved if a common, internationally recognized definition and classification of infrastructure is established and a common methodology is developed that will enable the collection of more granular investment data (allocations, performances). In general, the supervision of these investments is carried out at the level of management of the entire portfolio, therefore an individual supervisory approach to infrastructure investments is not recommended. However, supervisors should pay attention to the indicated good practices for better supervision of infrastructure investments by pension funds, such as: strengthening the management of pension funds in order to promote effective investment risk management, setting supervisory guidelines for the requirements of the supervisor related to key investment issues (e.g. valuation, in-depth analysis and risk by contractors, using market participants to create control mechanisms (e.g., double reporting by the pension fund and the property custodians), etc.

One of the main topics discussed in 2021, in continuation of the discussions on digitalization and technology development in the pension field, was the supervisory approach to strengthening cyber resilience in the private pension sector. Supervisors re-focused on supervisory measures and approaches in the field of cyber security, in order to summarize the experiences so far, in order to advise financial institutions, including pension companies and pension fund managers, so that they can mitigate and effectively respond to cyber risks. In recent years, financial institutions, including private pension funds and companies, have increasingly relied on innovative technologies to develop new IT solutions, increasing the scope of vulnerabilities and the opportunities for cyber-attacks. In 2020, the need for digital solutions that will enable online services and information sharing, as well as remote work through digital channels, has increased with the movement restrictions that countries have introduced in response to the spread of the Corona virus. These conditions have increased security concerns, including the capacities of virtual networks to support remote work and information security in access from home. Thus, financial institutions have become quite exposed to cyber threats and attacks. Pension companies and pension funds keep large amounts of personal data and assets of insureds, making them an attractive target for cyber-attacks, though to a lesser extent compared to banks and other payment service institutions. Insureds may suffer damages related to misuse of personal data and loss of funds. Pension companies, on the other hand, may face operational challenges such as disruption of service processes and interruption of business activity, loss of data on members, non-fulfillment of financial goals, as well as non-compliance with the fiduciary duty. Therefore, cyber security is of great public interest and requires special and increased attention by supervisors, both nationally and internationally. To that end, the IOPS shared a report locating major cyber threats and trends related to private pensions in recent years and during the Corona virus pandemic. The report includes views of supervisors and management practices for cyber risk assessment by pension companies and pension fund managers and identifies a number of areas that require increased attention. The report also offers key findings on enhancing cyber security in an environment affected by the Corona virus pandemic.

Supervision based on risk assessment has continuously been a current topic of the IOPS for several years in a row, so also in 2021. Pension supervisors around the world monitor the financial sectors and move towards a supervisory approach, based on risk assessment and control, in order to act proactively and prevent the greatest risks. This is a process that involves identifying the potential risks faced by pension funds, or plans, assessing those risks and potential negative financial impacts on pension fund members, as well as taking steps to mitigate or eliminate the effects of these risks. One of the main goals of supervision, based on risk assessment, is to ensure proper risk management at the institutional level, taking into consideration the quality of risk management and the accuracy of risk assessment. Despite the specific situations in the supervisory approach, in each country individually, the OECD and the IOPS believe that general good risk management practices can be established in pension funds, which will be of great help to pension system supervisors. In 2020 and 2021, some of the activities included updating of the IOPS tool for risk-based supervision and case studies of several IOPS members, as well as a discussion on the challenges of risk-based supervision through an analysis of the lessons learned and the challenges related to the design, implementation, usage and audit of the systems that already practice risk-based supervision.

# 2

## Structure of the fully funded pension insurance in the Republic of North Macedonia

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- 2.1 Description of the pension system
- 2.2 The role of fully funded pension insurance in the pension system
- 2.3 Institutions in fully funded pension insurance

## 2. Structure of the fully funded pension insurance in the Republic of North Macedonia

The Macedonian pension system is a combined system of public, currently funded and private fully funded pension insurance. Fully funded pension insurance is based on the principle of capitalization of contributions paid in the name and at the expense of the member. Feature of this insurance is that the assets in it are privately and competitively managed by pension companies. Important features of fully funded pension insurance are the right to personal choice, the right to portability of funds, as well as ensuring a high degree of transparency.

In Republic of North Macedonia, there are three pension companies that manage one mandatory and one voluntary pension fund each.

### 2.1 Description of the pension system

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

- Insurance based on generational solidarity (so-called first pillar),
- Mandatory fully funded pension insurance (so-called second pillar),
- Voluntary fully funded pension insurance (so-called third pillar).

This structure is a result of the thorough reform of the pension system, which was being prepared for many years, and its legal framework was established in 2000. There are four laws and a number of bylaws that regulate the pension system in the Republic of North Macedonia. These include: 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 Fully Funded Pension Insurance and a number of bylaws that further elaborate the relevant field.

The pension system in the Republic of North Macedonia has a history of long existence, large coverage of the workforce and provision of pensions for the insured persons. However, the socio-economic changes in the Republic of North Macedonia, in the early 1990s, had an impact on the pension system, which faced financial difficulties in its operation. They were caused by the unfavorable movements in the economy which affected the reduction of the number of active insured persons and the reduced collection of contributions, on the one hand, and the increase of the number of pensioners, on the other hand. Pension costs have been growing continuously.

Another factor that has a strong impact on the pension system is the demographic factor. Namely, the aging of the population, which is a world trend, means that people live longer due to better living conditions and better health services, and at the same time the number of newborns, i.e., the number of young people has been decreasing. As a result of this factor, the share of adults in the total population is increasing.

Such demographic movements in the pension system cause the emergence of an increased number of retirees and longer use of pension, while reducing the number of insureds. For a system with current financing, the ratio between the insureds and the pensioners is very important, because the pensions to the existing pensioners are paid with the contributions from the existing insureds. The actuarial projections, made during the preparation of the pension system reform, showed that these factors can be expected to have a major negative impact on the solvency of the PDIFNM, in the long run, i.e., without reforms, the system would function with an expressed deficit, which will increase quickly and significantly.

In order to meet these expected conditions, a thorough reform of the pension and disability insurance in our country was implemented, which introduced a three-pillar pension system, with a combined way of financing future pensions and diversification of demographic and economic risks, in order to ensure safe pension for current and future generations of retirees and long-term financial stability of the pension system.

The first pillar is financed on an ongoing basis (PAYG), which means that the contributions of existing insureds are used for paying the pensions of current retirees. This pillar functions according to the principle of the so-called defined pensions, i.e., pensions are provided through this pillar according to a predetermined formula for pension calculation. The first pillar is used for payment of part of the old-age pension, disability pension, family pension, as well as the lowest amount of pension.

The second and third pillars are fully funded pension insurance in which the paid contributions are capitalized in the name and on the account of the member. These two pillars operate on the principle of the so-called defined contributions, i.e., with them, the level of contribution to be paid is determined in advance, while the pension is determined later, depending on the accumulated amount. The second pillar is used for payment of part of the old-age pension. The third pillar provides financial protection/compensation in case of old age, disability and in case of death of the insured.

The establishment of a multi-pillar pension system as a combined system of public pension insurance that is funded on an ongoing basis, and private, fully funded pension insurance in the Republic of Macedonia, is expected to ensure long-term stability of the system and security in exercising the rights of pension and disability insurance, by achieving long-term benefits for the individuals who participate in the pension system, for the pension system itself, as well as additional effects on the economy. Namely, from an individual point of view, greater security is provided in the provision of pension which will be financed from several sources, hence the risks are divided. At the same time, the reform achieves greater transparency and provision of information to the members of pension funds. The reform should lead towards the establishment of a solvent pension system as well as an increase in savings, encouraged investments by the population and stimulated economic growth.

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

Fully funded pension insurance is radically different from current funded pension insurance both in terms of the treatment and the record of paid contributions and in terms of the determination and payment of the pension. In this insurance, each member has an individual account on which the member's assets are recorded and a close connection and dependence are provided between the volume of paid contributions and the future pensions that will be realized by each person. This type of insurance is based on the principle of accumulation of funds from contributions to individual accounts, which are further invested and the realized return on investment, reduced for the operating costs of the system, is fully added to the accumulated funds on individual accounts. The future pension depends on the accumulated funds on the individual account and on the life expectancy at retirement, i.e., the expected period of using the pension. It is important to note that these pension savings are long-term savings, in the course of which there is a gradual however continuous increase in savings, due to which, at the beginning, while the insured is young, the savings are small, however in the future, when the insured person reaches retirement age, the savings become significantly greater.

A characteristic of this insurance is that the assets in it are privately and competitively managed, therefore the paid contributions are invested by specialized licensed pension companies that manage pension funds. This ensures that the economic goals determine the investment strategy, creating an opportunity to maximize the overall return in the interest of the members. The diversification of investment risks (including international diversification) is one of the most important characteristics of this system.

Furthermore, important characteristics of fully funded pension insurance are the right to personal choice and the initiative of the individual. Before January 1, 2003, all employees were given the opportunity to decide whether to join the second pillar of the pension system and to choose which mandatory pension fund they wish to join, while all newly employed persons after January 1, 2003, had the opportunity to choose a mandatory pension fund of their choice. Furthermore, with the amendments to the Law on Mandatory Fully Funded Pension Insurance from December 2018, the members of the mandatory pension funds who voluntarily joined the second pillar (employed for the first time before January 1, 2003) and who were born before January 1, 1967, were given the opportunity to choose to terminate or extend the duration of their membership in the second pension pillar. All newly employed persons after January 1, 2019, who on the date of joining the mandatory pension and disability insurance are younger than 40 years of age, have the opportunity to choose a mandatory pension fund of their choice. Then, the membership in the voluntary pension funds is a personal choice of the individual or it takes place through participation in an occupational pension scheme, financed by the employer, or by a citizens' association.

The portability of assets is also an important right in a fully funded pension insurance system. All members of a mandatory or voluntary pension fund have the right to transfer from one pension fund to another, whereby their saved funds are transferred. In case of participation in an occupational pension scheme, the person has the right, when transferring to another insurer, to transfer the saved funds either to another occupational pension scheme or to a voluntary individual account.

Fully funded pension insurance provides a high degree of transparency, which is one of its most important characteristics and useful innovations in the pension system. The companies have a legal obligation, at least once a year, to inform, in writing, the members and retired members of the pension fund, about the balance of the assets on their individual accounts, by submitting the so-called "green envelope", with a report on the pension savings. The green envelope also contains data on the investment of the pension fund, the collected fees and the realized return of the pension fund.

## 2.3 Institutions in fully funded pension insurance

The institutions that participate in the three-pillar pension system are:

- The Ministry of Labor and Social Policy – in charge of creating and conducting the policy of pension and disability insurance and of supervising the implementation of the legality of this insurance.
- The Agency for supervision of fully funded pension insurance - regulatory and supervisory institution in fully funded pension insurance. MAPAS charges a fee from the pension companies, which is calculated as a percentage of the contributions paid to the pension funds. For 2021, this percentage was 0.8%.
  - Pension company - a joint stock company, established by financial institutions with large capital and experience, whose sole activity is the management of pension fund assets. In the reformed pension system, there is a possibility to establish three types of 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
  - Property custodian of the pension fund - safely keeps the assets of the pension fund on a special account, separate from the company's assets.
  - Public Revenue Office - performs centralized collection of contributions and submits the total contributions for pension and disability insurance to the PDIFNM.
  - The Pension and Disability Insurance Fund of North Macedonia distributes pension insurance contributions between the first and second pillar and transfers contributions and relevant data about the members to the selected mandatory second pillar pension funds. Each company that manages a mandatory pension fund is obliged to pay a monthly fee to the PDIFNM in the amount of 0.1% of each paid contribution in the previous month in the mandatory pension fund it manages.

A pension company is a joint stock company that is established and operates in accordance with the Company Law and the Law on Mandatory Fully Funded Pension Insurance, or the Law on Voluntary Fully Funded Pension Insurance. A pension company is established on the basis of a license from MAPAS and it manages a pension fund on the basis of a pension fund management approval. Mandatory pension fund management company is established and it manages only mandatory pension funds, voluntary pension fund management company is established and it manages only voluntary pension funds, and mandatory and voluntary pension fund management company is established and it manages mandatory and voluntary pension funds. Mandatory and voluntary pension fund management company should have a charter capital in the amount of at least 1.8 million euros in denar countervalue according to the average exchange rate of the National Bank of the Republic of North Macedonia, a mandatory pension fund management company should have charter capital of at least 1,5 million euros and a voluntary pension fund management company should have a charter capital of at least 0.5 million euros. In an event of increase of the assets of the mandatory and/or voluntary pension fund managed by the pension company, the company is obliged to increase the charter capital in accordance with the legal provisions. The only activity of the pension company is the management of pension funds, their representation before third parties and activities that directly arise from the performance of management of pension funds. The main responsibilities and activities of the pension company are: membership, asset management, risk management and control mechanisms for risk mitigation, administration and record keeping, compliance with laws and bylaws, regular reporting to members, the public and MAPAS, payment of programmed withdrawals of retired members, etc. The pension company operates in accordance with the rules for good corporate governance of the company and has a fiduciary duty to work only for the benefit of the members and the retired members of the pension fund it manages, which it should conduct by applying high standards of ethics and integrity and no conflict of interest. In order to perform these functions, the pension companies, in accordance with the law, charge three types of compensation. (More details on fees can be found in Chapters 5.7 and 6.7.)

A pension fund (mandatory or voluntary) is an open investment fund, which is established and operates in accordance with the Law on Investment Funds, unless otherwise regulated by the Law on Mandatory Fully Funded Pension Insurance or the Law on Voluntary Fully Funded Pension Insurance. The Mandatory Pension Fund consists of the contributions and assets of the members, the assets of the retired members and the returns from the invested contributions and assets, reduced for the fees collected from the mandatory pension fund. The voluntary pension fund consists of voluntary contributions, paid on behalf of and for the account of the members, the assets of the members, the assets of the retired members and returns on invested contributions and funds, reduced for the fees collected by the voluntary pension fund. The owners of the pension fund are its members and retired members, and their individual ownership rights are determined by the amount of funds on their accounts. The assets of the pension fund may not be subject to receivables, and an enforcement may not be conducted on those assets, by or on behalf of, the creditors of the pension company which manages that pension fund.

In 2005, MAPAS, through an international public tender, issued two licenses on the establishment of companies, whereby two pension fund management companies were established, and in 2009, MAPAS issued licenses for performing an activity - management of a voluntary pension fund and approvals for management of a voluntary pension fund to the two existing mandatory pension management companies. In 2017 and the first half of 2018, a process of sale of the Joint Stock Company for Management of Mandatory and Voluntary Pension Funds “NLB Nov Penziski Fond” Skopje was conducted, i.e., 100% of the shares issued by NLB Nov Penziski Fond JSC Skopje<sup>2</sup> were transferred to Pozavarovalnica Sava dd Ljubljana, Republic of Slovenia. In June 2018, MAPAS gave an approval to change the name of the company Joint Stock Company for Management of Mandatory and Voluntary Pension Funds “NLB Nov Penziski Fond” Skopje into a Company for Mandatory and Voluntary Pension Fund Management Sava Pension Company a.d. Skopje, it gave an approval to change the name of the Pension Fund Open Mandatory Pension Fund – “NLB Penziski Fond” Skopje into Open Mandatory Pension Fund Sava Pension Fund and gave an approval to change the name of the pension fund Open Voluntary Pension Fund – “NLB Penzija Plus” Skopje into Open Voluntary Pension Fund Sava Penzija plus. In 2019, a third pension company was established. Namely, at the end of March 2019, MAPAS issued a license for establishment of a company for management of mandatory and voluntary pension funds of Zavarovalnica Triglav DD Ljubljana, Republic of Slovenia, an approval for management of a mandatory pension fund and an approval for voluntary pension fund management.

As of December 31, 2021, in the Republic of North Macedonia, there are three pension companies that manage one mandatory and one voluntary pension fund, as shown in Table 2.1.

Table 2.1. Pension companies and pension funds in RNM

Mandatory and Voluntary Pension Funds Management Company Sava Pension Company a.d. Skopje	KB First Company for Mandatory and Voluntary Pension Funds Management AD Skopje	Mandatory and Voluntary Pension Funds Management Company TRIGLAV PENSION COMPANY AD Skopje
which manages:	which manages:	which manages:
<ul style="list-style-type: none"> <li>• Open Mandatory Pension Fund Sava Pension Fund</li> <li>• Open Voluntary Pension Fund Sava Penzija Plus</li> </ul>	<ul style="list-style-type: none"> <li>• KB First Open Mandatory Pension Fund - Skopje</li> <li>• KB First Open Voluntary Pension Fund - Skopje</li> </ul>	<ul style="list-style-type: none"> <li>• Triglav Open Mandatory Pension Fund – Skopje</li> <li>• Triglav Open Voluntary Pension Fund - Skopje</li> </ul>
Property custodian of the pension funds: NLB Banka AD Skopje	Property custodian of the pension funds: Sparkasse Makedonija AD Skopje	Property custodian of the pension funds: Komerrijalna Banka AD Skopje
Shareholder:	Shareholders:	Shareholder:
<ul style="list-style-type: none"> <li>• Pozavarovalnica Sava d.d. Ljubljana, Republic of Slovenia - 100% participation in the capital of the company.</li> </ul>	<ul style="list-style-type: none"> <li>• Skupina Prva Zavarovalniški Holding DD Ljubljana, Republic of Slovenia - 51% share in the capital of the company.</li> <li>• Komerrijalna Banka AD Skopje, Republic of North Macedonia - 49% share in the capital of the company.</li> </ul>	<ul style="list-style-type: none"> <li>• Zavarovalnica Triglav DD Ljubljana, Republic of Slovenia - 100% share in the capital of the company.</li> </ul>
Startup capital 2.1 million euro	Startup capital 1.8 million euro	Startup capital 3 million euro.

One of the pension companies had a combination of domestic (49% share) and foreign (51% share) shareholders, while two pension companies have a single foreign shareholder (100% share). The shareholders of the three pension companies are indicated in Table 2.1.

The assets of the pension fund are completely separated from the assets of the company that manages that fund and are kept with a property custodian bank. This segregation of assets is extremely important in order to achieve a high degree of asset security and additional control of transactions with the assets of the pension fund. The function - property custodian, for both mandatory and voluntary pension funds, is performed by commercial banks that meet the legal requirements and wherewith the company has concluded agreements on custody of the assets of the pension funds. The three pension companies have selected a custodian for the two pension funds they manage, as shown in Table 2.1. For the property custody function of mandatory and voluntary pension funds, custodians charge a fee from the pension companies. The fees are calculated as a percentage of the assets of the pension funds, in accordance with the concluded agreements for custody of the assets of the pension funds. An overview of the fees charged by property custodians from pension companies in 2021 is presented in Table 2.2.

<sup>2</sup>Shareholders of the Joint Stock Company for Mandatory and Voluntary Pension Funds Management “NLB Nov Penziski Fond” Skopje were Nova Ljubljanska Banka, DD, Ljubljana, Republic of Slovenia which participated with 51% in the capital of the company and NLB Banka AD Skopje, Republic of North Macedonia which participated with 49% in the capital of the company.

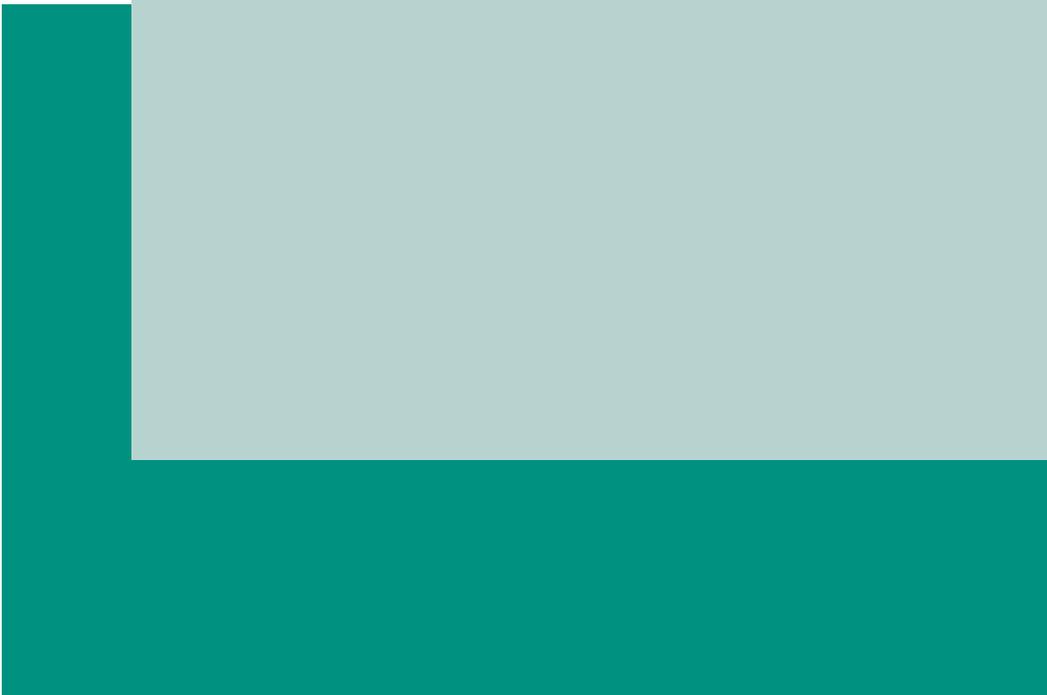
Table 2.2. Fees charged by property custodians from the pension companies for property custody of the pension funds

For mandatory pension funds	Amount (at an annual level)	For value of the assets (in million Euros)	Date of application
Sparkasse Makedonija AD Skopje as a property custodian of KBPz		0,034%	3 October 2020
		0,032%	3 October 2021
		0,030%	3 October 2022
NLB Banka AD Skopje as a property custodian of SAVAz	0,058%	up to 100	4 April 2019
	0,055%	over 100 to 200	
	0,050%	over 200 to 300	
	0,048%	over 300 to 400	
	0,040%	over 400 to 500	
	0,037%	over 500 to 600	
	0,035%	over 600 to 700	
	0,032%	over 700 to 800	
	0,029%	over 800 to 900	
	0,025%	over 900 to 1000	
Komercijalna Banka AD Skopje as property custodian of TRIGLAVz	0,050%	up to 50	1 April 2019
	0,041%	over 50 to 100	
	0,038%	over 100 to 200	
	0,035%	over 200 to 300	
	0,033%	over 300 to 400	
	0,028%	over 400 to 500	
	0,026%	over 500 to 600	
	0,025%	over 600 to 700	
	0,023%	over 700 to 800	
	0,020%	over 800 to 900	
Komercijalna Banka AD Skopje as property custodian of TRIGLAVd	0,018%	over 900 to 1000	1 April 2019
	0,017%	over 1000	
	0,050%	up to 50	
	0,041%	over 50 to 100	
	0,038%	over 100 to 200	
	0,035%	over 200 to 300	
	0,033%	over 300 to 400	
	0,028%	over 400 to 500	
	0,026%	over 500 to 600	
	0,025%	over 600 to 700	
0,023%	over 700 to 800		
0,020%	over 800 to 900		
0,018%	over 900 to 1000		
0,017%	over 1000		
For voluntary pension funds	Amount (at an annual level)	For value of the assets (in million Euros)	Date of application
Sparkasse Makedonija AD Skopje as a property custodian of KBPd		0,06%	3 October 2018
NLB Banka AD Skopje as a property custodian of SAVAd	0,180%	up to 50	4 April 2019
	0,144%	over 50	
Komercijalna Banka AD Skopje as property custodian of TRIGLAVd	0,050%	up to 50	1 April 2019
	0,041%	over 50 to 100	
	0,038%	over 100 to 200	
	0,035%	over 200 to 300	
	0,033%	over 300 to 400	
	0,028%	over 400 to 500	
	0,026%	over 500 to 600	
	0,025%	over 600 to 700	
	0,023%	over 700 to 800	
	0,020%	over 800 to 900	
0,018%	over 900 to 1000		
0,017%	over 1000		

# 3

Amendments to the laws and bylaws, which regulate the fully funded pension insurance

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### 3. Amendments to the laws and bylaws, which regulate the fully funded pension insurance

In order to improve and clarify or simplify certain procedures in 2021, amendments were made to the rulebooks governing the areas of licensing, membership in the second and third pillar, investment of pension fund assets, etc.

Thereby, the possibility for digital conclusion of a contract for membership in a mandatory/voluntary pension fund and the possibility for electronic communication between the pension companies and MAPAS were regulated. Then, in order to increase the number of permitted instruments for investment and expansion of the investment universe, certain limitations on investment of pension fund assets were reduced, the required credit rating for the quality of all instruments was reduced and the lowest rating was determined within the limits of the law, i.e., rating recommended for investment according to international credit rating agencies. This amendment expanded the possibilities for investing in additional instruments in the Republic of North Macedonia and in OECD or EU member countries.

In 2021, one amendment to the Law on Mandatory Fully Funded Pension Insurance, the Law on Voluntary Fully Funded Pension Insurance and the Law on Payment of Pensions and Pension Benefits from Fully Funded Pension Insurance was adopted to each law respectively. On the other hand, in 2021, the Council of Experts of MAPAS adopted nine rulebooks, i.e., amendments to rulebooks, which refer to the mandatory and/or voluntary fully funded pension insurance.

Namely, the Assembly of the Republic of North Macedonia adopted three amendments to the laws related to fully funded pension insurance, as follows:

1. Law Amending the Law on Mandatory Fully Funded Pension Insurance (“Official Gazette of the Republic of North Macedonia” no. 103/2012 dated 10.05.2021),
2. Law Amending the Law on Voluntary Fully Funded Pension Insurance (“Official Gazette of the Republic of North Macedonia” no. 103/2012 dated 10.05.2021) and
3. Law Amending the Law on Payment of Pensions and Pension Benefits from the Fully Funded Pension Insurance during a State of Emergency (“Official Gazette of the Republic of North Macedonia” no.103/2012 dated 10.05.2021).

With the amendments to the laws, the Law on Misdemeanors was harmonized, i.e., the fines were reduced and a range in the determination of fines was prescribed. In addition, the competence of the court and the Commission for decision-making on misdemeanors, conducting proceedings and imposing misdemeanor sanctions was also specified.

In 2021, MAPAS prepared modifications and amendments to the existing bylaws related to the mandatory and/or voluntary fully funded pension insurance, as follows:

1. Rulebook amending the Rulebook on Licensing of Pension Companies (“Official Gazette of the Republic of North Macedonia” no. 98/2021 dated 04.05.2021);
2. Rulebook amending the Rulebook on the Manner and Procedure for Granting Approvals to the Amendments to the Documents Submitted during Licensing (“Official Gazette of the Republic of North Macedonia” no. 160/2012 dated 14.07.2021);
3. Rulebook amending the Rulebook on the Manner and Procedure for Election of a Member of the Board of Directors and the Supervisory Board of a Pension Company (“Official Gazette of the Republic of North Macedonia” no. 160/2021 dated 14.07.2021);
4. Rulebook amending the Rulebook on Membership in the Mandatory Pension Fund (“Official Gazette of the Republic of North Macedonia” no. 212/2012 dated 10.09.2021);
5. Rulebook amending the Rulebook on Membership in a Voluntary Pension Fund (“Official Gazette of the Republic of North Macedonia” no. 212/2021 dated 10.9.2021);
6. Rulebook amending the Rulebook on the Manner and Procedure of Marketing of Pension Funds (“Official Gazette of the Republic of North Macedonia” no. 253/2021 dated 11.11.2021);
7. Rulebook amending the Rulebook on Investing the Assets of the Mandatory Pension Funds (“Official Gazette of the Republic of North Macedonia” no. 274/2021 dated 10.12.2021);
8. Rulebook amending the Rulebook on Investing the Assets of the Voluntary Pension Funds (“Official Gazette of the Republic of North Macedonia” no. 274/2021 dated 10.12.2021) and
9. Rulebook on the Form and Content of the Misdemeanor Payment Order (“Official Gazette of the Republic of North Macedonia” no. 5/2022 dated 05.01.2022).

The amendments to the rulebooks were made in order to specify certain procedures and to harmonize with the amendments to the relevant acts. The amendment of the Rulebook on Licensing of Pension Companies opens the possibility for the legal

entities that have experience in asset management in the broader sense of the word (investment funds, banks and other financial institutions). With the amendment of the Rulebook on the Manner and Procedure for Granting Approvals of the Amendments to the Documents Submitted during Licensing and the Rulebook on the Manner and Procedure for Election of a Member of the Board of Directors and the Supervisory Board of a Pension Company and the Rulebook on the Manner and Procedure of Marketing of Pension Funds, the provisions of these rulebooks are harmonized with the Law on Electronic Documents, Electronic Identification and Confidential Services. In this way, the communication between the pension companies and MAPAS is accelerated in the process of informing MAPAS and thus the efficiency and effectiveness of the processes are improved. Then, the amendments to the Rulebook for Membership in a Mandatory Pension Fund and the Rulebook for membership in a voluntary pension fund prescribed the possibility for digital conclusion of an agreement for membership in a mandatory/voluntary pension fund and enabled the communication between the pension company and MAPAS to take place in electronic form in accordance with the Law on Electronic Documents, Electronic Identification and Confidential Services. With the amendment of the Rulebook on Investing the Assets of Voluntary Pension Funds and the Rulebook on Investing the Assets of Mandatory Pension Funds, the constraints on investing the assets of pension funds were reduced in order to increase the number of permitted investment instruments and expand the investment universe. In addition, the level of the required credit rating for the quality of all instruments was reduced and the lowest level of rating within the law was determined, i.e., the rating recommended for investing according to international credit rating agencies. This modification expands the opportunities for investment in additional OECD or EU member states. With the adoption of the Rulebook on the form and content of the misdemeanor payment order, the form and content of the misdemeanor payment order were prescribed in the settlement procedure conducted by the authorized persons of the Agency.

In 2021, MAPAS updated the existing ones and prepared new ones, and adopted the following guidelines:

1. Guideline for Using the Portal for Exchange of Documents between the Pension Companies and MAPAS (May 2021);
2. Technical Guidelines for Defining Data Formats and File Sharing for the Module Contributions in Mandatory Fully Funded Pension Insurance (April 2021) and
3. Technical Guideline for Defining Data Formats and File Sharing for Module Membership in Mandatory Fully Funded Pension Insurance (April 2021).

## Data on financial operation of the pension companies

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# 4

Revenues and expenditures of the pension companies for 2021	4.1
Financial result of the pension companies	4.2
Capital, charter capital and own assets of pension companies	4.3
Indicators	4.4

## 4. Data on financial operation of the pension companies

Sava Pension Company a.d. Skopje and KB First Pension Company AD Skopje in 2021 achieved positive financial results. Both pension companies ended 2021 with a net income and realized a total comprehensive income, namely, Sava Pension Company a.d. Skopje in the amount of about 106 million denars and KB First Pension Company AD Skopje in the amount of about 160 million denars. TRIGLAV PENSION COMPANY AD Skopje had a negative financial result in the third year of its operation. The pension funds managed by this company have a relatively small number of members and the assets are smaller, which affects the lower amount of income on the one hand, and there are significant costs for managing the company and funds on the other hand.

### 4.1 Revenues and expenditures of the pension companies for 2021

Pension companies prepare financial statements about their financial operations, in accordance with the Company Law, the Rulebook on the Form and Content of the Financial Statements of the Pension Company and the Rulebook on Bookkeeping and Applicable International Accounting Standards. The data, on the basis of which the analyses in this chapter are made, are from the unaudited annual financial statements of the three pension companies, as of 31.12.2021.

In order to perform the sole activity – management of the assets of pension funds, the pension companies are financed through legally determined fees, i.e., they charge a fee from contributions, a fee from the assets of the pension funds and a transfer fee. Pension companies also have financial income as a result of investing free cash in deposits and securities, which are allowed in accordance with the Law on Voluntary Fully Funded Pension Insurance. The revenues of the three pension companies for 2021 are presented in Table 4.1.

Table 4.1. Revenues of the pension companies for 2021

(in denars)

Basis	SAVA		KB First		TRIGLAV	
Revenues from the management of the mandatory pension fund						
Fee from contributions	89.020.848	31,25%	96.444.642	29,78%	8.271.749	45,55%
Fee from assets	159.814.930	56,10%	181.009.705	55,90%	6.910.074	38,05%
Fee from transfer	925	0,00%	2.776	0,00%	6.548	0,04%
<b>Total revenues from the management of the mpf</b>	<b>248.836.703</b>	<b>87,35%</b>	<b>277.457.123</b>	<b>85,68%</b>	<b>15.188.371</b>	<b>83,64%</b>
Revenues from the management of the voluntary pension fund						
Fee from contributions	4.572.944	1,61%	5.824.524	1,80%	51.404	0,28%
Fee from assets	12.572.735	4,41%	11.580.706	3,58%	5.741	0,03%
Fee from transfer	1.232	0,00%	0	0,00%	0	0,00%
<b>Total revenues from the management of the vpf</b>	<b>17.146.911</b>	<b>6,02%</b>	<b>17.405.230</b>	<b>5,37%</b>	<b>57.145</b>	<b>0,31%</b>
Financial revenues	17.659.611	6,20%	28.598.931	8,83%	2.361.392	13,00%
Other revenues of the company	1.217.900	0,43%	358.094	0,11%	551.659	3,04%
<b>Total revenues</b>	<b>284.861.125</b>	<b>100,00%</b>	<b>323.819.378</b>	<b>100,00%</b>	<b>18.158.567</b>	<b>(in denars)</b>

Table 4.2. Expenditures of the pension funds for 2021

Basis	SAVA		KB First		Triglav	
Expenditures for management of the mandatory pension fund						
Expenditures for company agents	1.180.164	0,70%	1.267.809	0,87%	7.723.842	13,65%
Marketing expenditures	15.019.723	8,95%	10.733.387	7,33%	4.844.331	8,56%
Transaction expenditures	103.216	0,06%	0	0,00%	0	0,00%
Expenditures for MAPAS	35.588.836	21,21%	38.557.046	26,32%	3.312.371	5,86%
Expenditures for property custodian	14.619.672	8,71%	16.842.777	11,50%	971.443	1,72%
Expenditures for the PDIFNM	4.417.063	2,63%	4.820.001	3,29%	403.739	0,71%
Other expenditures from the fund management	1.155.327	0,69%	1.211.330	0,83%	1.223.181	2,16%
<b>Total expenditures for management of the mpf</b>	<b>72.084.001</b>	<b>42,97%</b>	<b>73.432.350</b>	<b>50,12%</b>	<b>18.478.907</b>	<b>32,67%</b>

Expenditures for managing a voluntary pension fund						
Expenditures for company agents	4.221.540	2,52%	1.818.198	1,24%	19.769	0,03%
Marketing expenditures	815.631	0,49%	868.747	0,59%	12.399	0,02%
Transaction expenditures	68.406	0,04%	0	0,00%	0	0,00%
Expenditures for MAPAS	1.532.823	0,91%	1.714.967	1,17%	11.406	0,02%
Expenditures for property custodian	2.286.216	1,36%	772.843	0,53%	1.032	0,00%
Other expenditures from the fund management	62.389	0,04%	389.448	0,27%	3.131	0,01%
<b>Total expenditures for management of the vpf</b>	<b>8.987.005</b>	<b>5,36%</b>	<b>5.564.203</b>	<b>3,80%</b>	<b>47.737</b>	<b>0,08%</b>
Expenditures for management of the pension company						
Salaries and compensations for the employees	52.521.787	31,31%	37.268.570	25,44%	18.847.988	33,32%
Expenditures for services	14.250.045	8,49%	7.363.414	5,03%	11.721.608	20,72%
Expenditures for raw materials and other materials	1.338.622	0,80%	946.891	0,65%	691.502	1,22%
Depreciation	2.159.548	1,29%	4.080.690	2,79%	3.106.868	5,49%
Financial expenditures	1.759.228	1,05%	10.860.912	7,41%	0	0,00%
Other operating expenditures	13.865.381	8,27%	6.635.793	4,53%	4.303.244	7,61%
Reservations for expenditures and risks	793.899	0,47%	355.470	0,24%	-632.177	-1,12%
<b>Total expenditures from management of the company</b>	<b>86.688.510</b>	<b>51,67%</b>	<b>67.511.740</b>	<b>46,08%</b>	<b>38.039.033</b>	<b>67,25%</b>
<b>Total costs</b>	<b>167.759.516</b>	<b>100,00%</b>	<b>146.508.293</b>	<b>100,00%</b>	<b>56.565.677</b>	<b>100,00%</b>

\* For the expenditures, the data that cannot be separated, per mandatory and voluntary pension fund, the pension company uses the number of members in the mandatory, i.e., voluntary pension fund as a separation weight.

When performing their sole business activity, pension companies generally incur costs for managing the assets of the pension funds, for assessment of the assets, registration of members, keeping accounts of the members and reporting to members, as well as for payment of the fees for MAPAS, for the PDIFNM and for the property custodian and to cover costs related to the operation of the pension companies. The costs of the pension companies are divided into three groups: costs for managing the mandatory pension fund, costs for managing the voluntary pension fund and costs for managing the company. The costs of the three pension companies in 2021 are presented in Table 4.2.

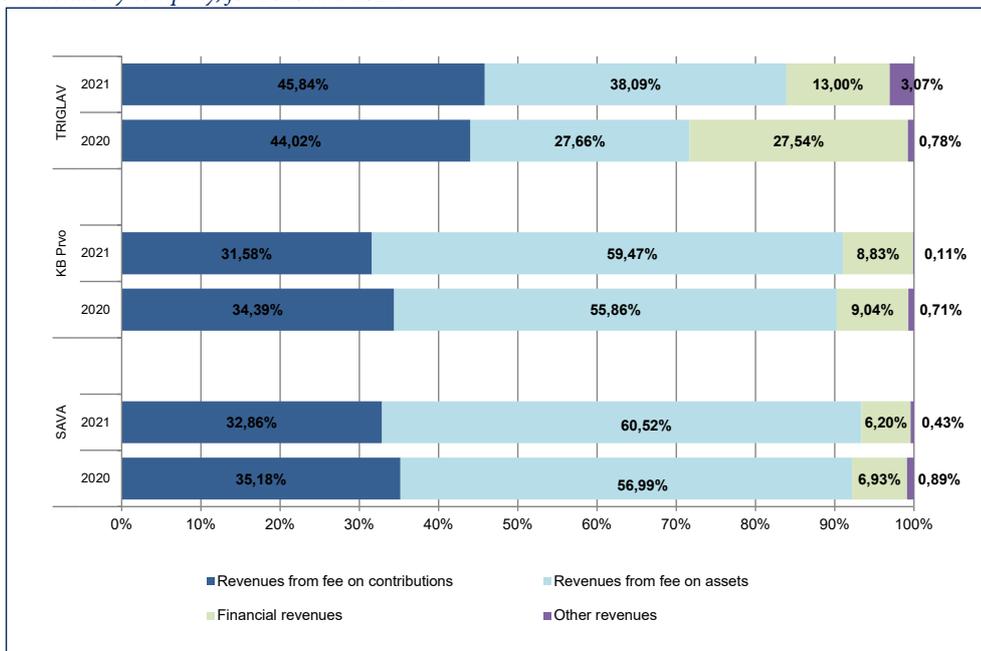
Within the revenue side, in both SAVA and KB First there is an observable increase in the total revenues in 2021 compared to 2020, by about 10% in SAVA and 13% in KB First. Thereby, most of the revenues of SAVA and KB First, in 2021, are obtained from fees from assets of the mandatory and voluntary pension funds (approximately 61% in SAVA and 59% in KB First), followed by fees from contributions in mandatory and voluntary pension funds (about 33% in SAVA and 32% in KB First). Compared to the previous year, the percentage share of the income from fees from contributions, in the total revenues, in both pension companies it decreased by approximately two percentage points in SAVA and approximately three percentage points in KB First. Consequently, the percentage share of the revenues from fee from assets increased by approximately four percentage points in both SAVA and KB First. Compared to 2020, the percentage of financial revenues in SAVA decreased by approximately one percentage point while at KB First it remained approximately at the same level. The percentage share of the other revenues of the companies is the lowest (less than 1%) in both pension companies.

Within the expenditure side in 2021, compared to 2020, in both SAVA and KB First there is an observable increase in the total costs by approximately 10% in SAVA and approximately 12% in KB First. Thereby, in SAVA, most of the costs, i.e., approximately 52% of the costs are related to the operation of the company, the largest part of which includes costs of salaries and allowances for the employees, followed by service costs and other operating costs. In KB First in 2021, the costs related to the operation of the company were approximately 46%. Again, most of these costs refer to the costs for salaries and allowances for the employees, followed by financial costs and service costs. The remaining 54% of the costs of KB First refer to pension fund management costs. In SAVA, the costs for managing the pension funds were approximately 48%. The costs for marketing and agents are approximately 13% of the total costs of SAVA and approximately 10% of the total costs of KB First, which compared to the previous year means that they increased by two percentage points in SAVA and by three percentage points in KB First. Approximately 35% of the costs of SAVA and 43% of the costs of KB First refer to fees for MAPAS, the PDIFNM and property custodians.

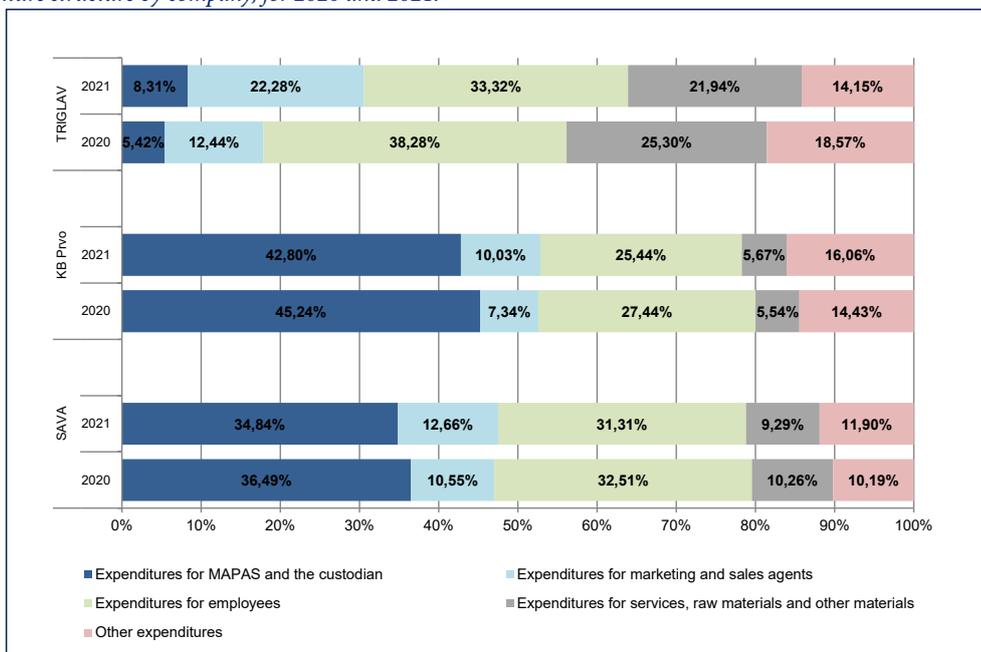
TRIGLAV started activities of pension fund management and marketing of the mandatory and voluntary pension fund and public opinion survey from 01.04.2019. Triglav Voluntary Pension Fund - Skopje started operating on March 1, 2021. There is an evident difference in the amounts and distributions on the basis of revenues and costs in regards to SAVA and KB First, which have been operating for sixteen years. In TRIGLAV, the revenues from the fee from contributions have the largest share on the revenue side, i.e., approximately 46% of the total revenues. The revenues from the fee from assets have a smaller share of approximately 38%. This is to be expected, because in the first years of the fund's operation, the funds of the mandatory

and voluntary pension fund are lower. Then, the financial revenues have a share of approximately 13% in TRIGLAV’s total revenues, while the lowest is the percentage share of the other revenues (approximately 3%). In terms of expenditures, most of the costs, i.e., approximately 67% of the costs refer to the operation of the company, where the costs of salaries and allowances for employees have the largest share, followed by service costs and other operating costs. The costs for managing the pension funds are approximately 33%. The costs for marketing and agents are approximately 23% of the total costs. Approximately 8% of the costs refer to the fees for MAPAS, the PDIFNM and property custodians and approximately 14% are the remaining costs from the pension fund management.

Graph 4.1. Revenue structure by company, for 2020 and 2021.



Graph 4.2. Expenditure structure by company, for 2020 and 2021.



## 4.2 Financial result of the pension companies

SAVA and KB First in 2021, achieved a positive financial result. Both pension companies completed 2021 with a net profit (profit after tax). KB First realized higher net profit than SAVA, which is mostly due to the fact that KB First realized higher revenues, and it also has lower costs than SAVA, for 2021. Both pension companies, recorded higher net profit in 2021 compared to 2020, namely SAVA's profit increased by 12% and KB First's profit increased by 14%. In addition, the two pension companies made a total comprehensive profit, SAVA realized profit in the amount of approximately 106 million denars and KB First realized profit in the amount of approximately 160 million denars. SAVA's accumulated profit (as of December 31, 2021) is approximately 500 million denars and KB First's accumulated profit is approximately 613 million denars. TRIGLAV recorded a negative financial result in the third year of its operation. The mandatory pension fund managed by TRIGLAV still has a relatively low number of members and the funds are smaller, which affects the lower amount of income on the one hand, and on the other hand there are significant costs for maintaining the infrastructure of the company and employees, costs for marketing as well as ongoing fund management costs. In addition, the voluntary pension fund managed by TRIGLAV has been operating for only ten months and has a relatively small number of members and a small amount of funds. More detailed data on the financial result of the pension companies are shown in Table 4.3.

Table 4.3. Financial result of the pension companies for 2021

(in denars)

Description*	SAVA	KB First	TRIGLAV
Profit / Loss (for 2021)	117.102.000	177.311.000	-38.407.000
Profit / Loss after tax (for 2021)	109.470.000	159.659.000	-38.407.000
Extraordinary expenses	0	0	0
Net profit (for 2021)	109.470.000	159.659.000	-38.407.000
Other comprehensive profit**	-3.510.000	0	0
Total comprehensive profit ***	105.960.000	159.659.000	-38.407.000
Accumulated profit / Transferred loss (until 31.12.2021)	499.015.000	612.880.000	-51.302.000

\*The data on other comprehensive profit and total comprehensive profit are from the audited financial statements of the pension companies for 2021.

\*\*The data on other comprehensive profit includes unrealized profits or losses, which are not shown in the balance sheet.

\*\*\*The data on total comprehensive profit include the net profit and the other comprehensive profit.

## 4.3 Capital, charter capital and own assets of pension companies

A very important factor for the system and the members is for the pension companies to be strong and stable institutions and to have an adequate charter capital. The three pension companies should have a charter capital of at least 1.8 million euros, in denar countervalue, according to the average exchange rate of the National Bank of the Republic of North Macedonia. In an event of an increase of the assets of the mandatory and/or voluntary pension fund, which is managed by the pension company, the company is obliged to increase the capital, in accordance with the legal provisions.

The charter capital of the pension company is paid only in monetary assets. In order to increase the financial strength of pension companies, it is not allowed for the charter capital to originate from loans and credits and it cannot be encumbered in any way. The charter capital of the company must originate from legal sources and it must be taxed in accordance with the regulations of the Republic of North Macedonia and the regulations of the country in which each foreign shareholder is established as a legal entity.

The company is obliged, at all times, to maintain the amount of the capital, however not less than one half of the amount of the charter capital. The company is obliged, at all times, to maintain its own funds, in an amount not less than half of the amount of the charter capital.

Table 4.4. Capital, charter capital and own funds of the pension companies

(in denars)

Description	SAVA	KB First	TRIGLAV
Capital and reserves	686.062.786	766.930.266	94.744.722
Charter capital	130.001.478	110.459.024	184.483.800
Excess capital over a legally established minimum	13,61%	24,46%	71,17%
Own funds*	601.707.613	710.020.125	80.648.643
Excess own funds over the legal minimum**	126,77%	130,45%	45,71%

\*The own funds are calculated in accordance with the Rulebook on the methodology for calculation of own funds of a pension company.

\*\*In accordance with the legal obligation, SAVA, from February 2021, is obliged to maintain increased capital in relation to the charter capital, i.e., capital in the amount of 8.8 million euros in denar countervalue, due to the fact that the amount of the assets of the mandatory and voluntary pension fund, which it manages, exceeded the amount of 700 million euros. Then, from November 2021, it is obliged to maintain an increased capital in relation to the charter capital, i.e., capital in the amount of 9.8 million euros in denar countervalue, due to the fact that the amount of the assets of the mandatory and voluntary pension fund, which it manages, exceeded the amount of 800 million euros.

KB First, from March 2021, is obliged to maintain an increased capital in relation to the charter capital, i.e., capital in the amount of 9.8 million euros in denar countervalue, due to the fact that the amount of the assets of the mandatory and voluntary pension fund, which it manages, exceeded the amount of 800 million euros. Then, KB First, from November 2021, is obliged to maintain an increased capital in relation to the charter capital, i.e., charter in the amount of 10 million euros in denar countervalue, due to the fact that the amount of the assets of the mandatory and voluntary pension fund, which it manages, exceeded the amount of 900 million euros.

## 4.4 Indicators

When analyzing the financial data of the pension companies, the movement of specific indicators per member and the efficiency coefficient are both important. Table 4.5 shows the most important indicators per member and the efficiency ratio of the three pension companies for 2021.

Compared to 2020, the average revenue per member increased by 8% in SAVA, 11% in KB First and 10% in TRIGLAV. Then, compared to 2020, the average expenditures per member increased by 8% in SAVA and 10% in KB First, while in TRIGLAV they decreased by 21%. Thereby, in both companies that have been operating for more than sixteen years, there was an increase in profit per member compared to 2020 in the amount of approximately 9% in SAVA and 12% in KB First. It is also observed that the efficiency ratio in both companies shows a slight decrease compared to 2020. In 2021 TRIGLAV recorded reduced loss per member of approximately 31% compared to 2021, at the same time the efficiency ratio shows a large share of the total costs relative to the total revenue.

Graph 4.3 and Table 4.6 show the movement of the profitability indicators ROA - return on assets (net profit/total assets) and ROE - return on equity (net profit/capital), compared for SAVA and KB First, for the period from 2006 to 2021 and for TRIGLAV for the period from 2019 to 2021. It can be observed that, in 2021, compared to 2020, the rate of return on the funds increased in SAVA and KB First. The rate of return on equity in 2021, compared to 2020 at SAVA is slightly higher, while at KB First it is slightly lower. The ROA and ROE ratios for TRIGLAV are also negative in 2021 (-39% ROA and -41% ROE).

Table 4.5. Indicators

(in denars)

Description	SAVA	KB First	TRIGLAV
Revenue and expenditure indicators per member			
Average revenues per member	1.081,60	1.137,32	602,11
Average expenditures per member	636,98	514,57	1.875,64
Profit/loss per member	444,63	622,75	-1.273,53
Efficiency indicators			
Efficiency coefficient (total expenditures / total revenues)	58,89%	45,24%	311,51%

Graph 4.3. ROA and ROE by company and by year

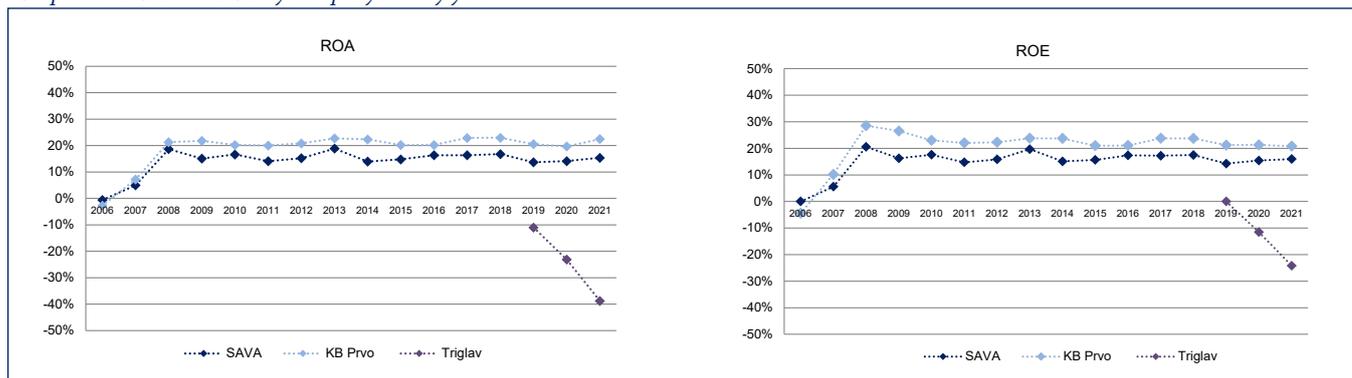


Table 4.6. Profitability indicators

Pension company	SAVA		KB First		TRIGLAV	
Year / Description	ROA	ROE	ROA	ROE	ROA	ROE
2006	-0,60%	0,00%	-2,69%	-4,45%		
2007	4,97%	5,57%	7,19%	10,19%		
2008	18,66%	20,55%	21,30%	28,53%		
2009	15,09%	16,26%	21,80%	26,54%		
2010	16,66%	17,60%	20,24%	23,00%		
2011	14,09%	14,75%	20,02%	22,03%		
2012	15,21%	15,84%	20,84%	22,31%		
2013	18,88%	19,68%	22,71%	23,80%		
2014	13,94%	15,09%	22,35%	23,71%		
2015	14,77%	15,65%	20,20%	21,00%		
2016	16,34%	17,34%	20,23%	21,09%		
2017	16,35%	17,23%	22,89%	23,78%		
2018	16,79%	17,49%	22,96%	23,71%		
2019	13,70%	14,26%	20,52%	21,24%	-10,99%	-11,55%
2020	14,13%	15,43%	19,66%	21,29%	-23,13%	-24,18%
2021	15,38%	15,96%	22,46%	20,82%	-38,77%	-40,54%

# 5 Information on mandatory pension funds

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- 5.1 Membership in mandatory pension funds
- 5.2 Data on membership in mandatory pension funds
- 5.3 Transfer of a member from one mandatory pension fund to another
- 5.4 Contributions in mandatory pension funds
- 5.5 Investment and portfolio structure of the mandatory pension funds
- 5.6 Net assets, accounting unit and rate of return of the mandatory pension funds
- 5.7 Fees in mandatory pension funds
- 5.8 Payment of pensions from mandatory fully funded pension insurance

## Information on mandatory pension funds

The total number of members and temporarily allocated insured persons in the second pillar, as of 2021, is 550,477, which means an increase of about 3.87%, compared to 2020. The growth of the membership in 2021 compared to 2020 maintains the same slow growth as last year. The movement in the trend of transitions of members from one mandatory pension fund to another, which was encouraged by the start of operation of the third mandatory pension fund in 2019, continued in 2021.

During 2021, contributions in the amount of 9.68 billion denars were transferred to the mandatory pension funds. In addition to the contributions, the PDIFNM transferred a total of 1.62 million denars as compensation for untimely transfer of contributions for members for whom it did not transfer the contributions to the accounts of the selected mandatory pension funds within three months from the date of receipt of the contributions.

As a result of the growth of paid contributions and investment results, the total assets of the mandatory pension funds in 2021 increased by 21% and reached 105.66 billion denars, which represents about 14.61% of the GDP of the Republic of North Macedonia. The structure of the investment portfolio of the mandatory pension funds does not differ significantly compared to last year and consists of domestic investments that include government securities (59.87%), deposits (6.82%), shares (2.89%), shares in investment funds (0.27%) and corporate bonds (0.02%), as well as investments abroad that include shares of investment funds (25.57%) and shares (4.13%).

In 2021, the value of the accounting unit was more stable compared to the movements in 2020 that were caused by the unfavourable conditions in the financial markets during the coronavirus pandemic. At the end of the year, the value of the accounting unit of SAVAm increased by 9.53%, compared to 2020, of KBPm by about 10.85%, and of TRIGLAVm by 8.32%.

At the level of the second pillar, in the seven-year period 2015 – 2021, an average income of 5.91% was realized at the annual level in nominal amount or 4.41% in real amount, calculated on the basis of the change in the weighted average of the accounting units of the mandatory pension funds.

In 2021, pension and payments for 442 members of the second pillar were realized.

### 5.1 Membership in mandatory pension funds

An insured person can become a member in a mandatory pension fund in two ways:

1) by signing an agreement for membership in a mandatory pension fund and by registering in the Register of Members kept by MAPAS;

2) by random distribution in a mandatory pension fund, by the PDIFNM, in case when the insured, who is obliged to become a member of a mandatory pension fund, has not signed a membership agreement in the period for selection of a mandatory pension fund and with registration in the Register of Members kept by MAPAS.

The amendments to the Law on Mandatory Fully Funded Pension Insurance (“Official Gazette of the Republic of Macedonia” no. 245/2018 dated 28.12.2018 and no. 180/2019 dated 02.09.2019) stipulate several essential changes regarding the accession to mandatory fully funded pension insurance which are valid as of 01.01.2019.

Namely, there are two categories of insureds who are members of the second pillar:

- Mandatory members

- o insureds who were employed, i.e., who have joined the mandatory pension and disability insurance, for the first time, after January 1, 2003 and were born after January 1, 1967;

- o insureds who were employed, i.e., joined the mandatory pension and disability insurance, for the first time after January 1, 2019 and who are younger than 40 years of age on the date of joining.

- Voluntary members

- o insureds who were employed for the first time, before January 1, 2003, who by their own choice by concluding a membership agreement joined the mandatory fully funded pension insurance, and were born after January 1, 1967;

- o insureds who were employed for the first time, before January 1, 2003, who by their own choice joined a mandatory fully funded pension insurance by concluding a membership agreement, and who were born before January 1, 1967 and signed a statement for extension of membership in a mandatory fully funded pension insurance.

Insureds whose insurance length of service is considered with increased duration and insureds who belong to Chapter VII – “Acquisition and realization of the rights of specific categories of insureds under special conditions of the Law on Pension and Disability Insurance” (employees with beneficial length of service at the Ministry of Interior, penitentiary-correctional facilities,

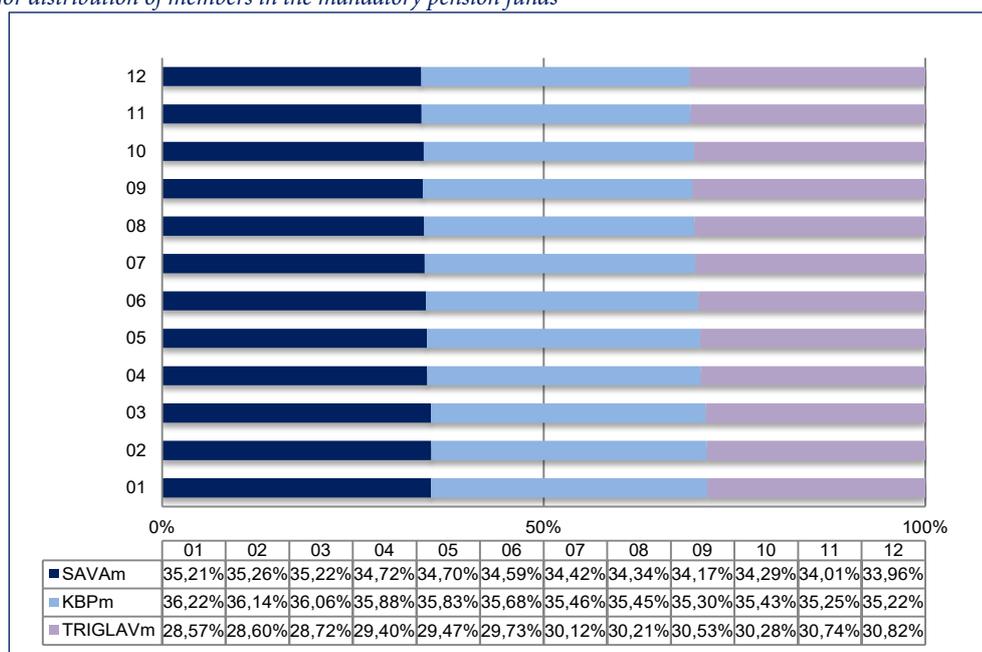
the Army of the Republic of Macedonia, etc.) are not included in the second pillar, if they have completed insurance length of service with increased duration which enables reduction of the age limit for exercising the right to old age pension for at least one year. When insureds who are members of a mandatory pension fund complete an insurance length of service with increased duration that allows lowering the age limit for exercising the right to old age pension for at least one year in accordance with Article 118 paragraph (3) of the Law on Pension and Disability Insurance, they have the right to choose to extend the membership in the second pillar with a written statement for extension of the membership in the mandatory pension fund within three months from the completion of the insurance length of service. If these members do not give a written statement, their membership in a mandatory pension fund ends after the expiry of this term.

## 5.2 Data on membership in mandatory pension funds

Insureds who are mandatory members of a fully funded pension insurance, are obliged to join a mandatory pension fund within three months from the date of first employment. The PDIFNM temporarily distributes these insureds in the mandatory pension funds, at random, from the moment of their employment, so that their funds can be invested immediately after the employment. If they do not sign a membership agreement with any company within the legal deadline, these insureds remain members of the mandatory pension fund in which they were previously temporarily distributed.

The weight, according to which the temporary distribution of the insureds in mandatory pension funds is performed at random, is determined by MAPAS for each mandatory pension fund, on the first working day of each month. The weight depends on the value of the contribution fee collected by the pension company and the return in nominal amount realized by the pension fund, whereby the return (70%) has greater impact compared to the contribution fee (30%)<sup>3</sup>. The weights used for the distribution of the insureds in the mandatory pension funds in 2021 are presented in Graph 5.1.

Graph 5.1. Weight for distribution of members in the mandatory pension funds



On April 1, 2019, the mandatory pension fund TRIGLAVz started operating, wherewith as of April 2019, the insureds are distributed in three mandatory pension funds. In order to support the operation in the initial years of operation of a new mandatory pension fund, and in accordance with the defined provisions in the regulation, if the mandatory pension fund operates for less than 12 months as a value for return (for weight calculation), the average return in nominal amount of the existing mandatory pension funds is considered. Then, if the fund has been operating for less than 36 months and longer than 12 months, the value of the return that is considered (for the calculation of the weight) is the higher value between the return in nominal amount of the mandatory pension fund and the average return in nominal amount of all existing mandatory pension funds including the contribution in nominal amount of the mandatory pension fund. This principle of distribution of the insureds is justified in order to encourage competition in the fully funded pension insurance, in order to increase the choice of pension funds for the members and to encourage better investment results of the pension funds. Having in mind the fact that, in 2021, the three pension companies collected compensation from contributions in the same amount, the amounts of the weight were mostly influenced by the amounts of the realized returns

<sup>3</sup>The formula for calculating the weight is prescribed in the Rulebook on membership in a mandatory pension fund.

of the mandatory pension funds. Namely, in 2021, the weight of TRIGLAVz is lower compared to SAVAz and KBPz because in the calculation of the weight, the considered return of TRIGLAVz is the average of the returns in nominal amount of all three mandatory pension funds. The return of TRIGLAVz, although generally growing, was significantly lower during this period and affected the average of the returns in nominal amount of all three mandatory pension funds. Then, throughout 2021, the value of the weight of KBPz is slightly higher (on average by one percentage point) relative to the value of the weight of SAVAz.

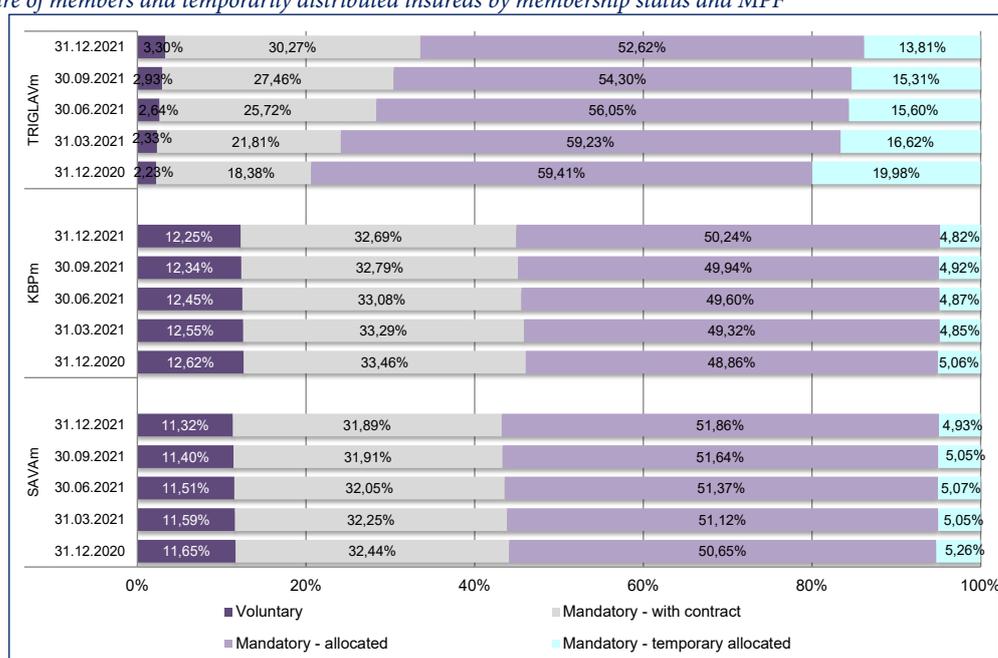
The total number of members and temporarily distributed insureds in the mandatory pension funds, as of December 31, 2021, is 550.477, which means an increase in the number of members of the second pillar by 20.494, or about 3.87%, compared to 2020. The growth of the membership in 2021 compared to 2020 keeps the same slow growth as the previous year.

In regard to the distribution of membership by mandatory pension funds, it is expected that in 2021 the largest number of insureds are members of SAVAz and KBPz. Hence, of the total number of members and temporarily distributed insureds under the mandatory pension funds, as of 31.12.2021, 49% are in KBPz, 46% are in SAVAZ and 5% are in TRIGLAVz. Compared to 2020, there is an observable lower percentage share of membership in both SAVAZ and KBPz (by about one percentage point), i.e., higher percentage share of membership in TRIGLAVZ (by about two percentage points).

Of the total number of members of the second pillar, 62.403 or 11% are voluntary members, while 488.074 or 89% are mandatory members. Out of the total number of mandatory members, 177.204 members signed a membership agreement, 281.347 did not sign an agreement and are permanently assigned and 29.523 insured persons are temporarily assigned. In 2021, there is an observable increase in the number of new insured persons who sign membership agreements. Namely, it can be noticed that in 2021 about 15% of the insured persons who are obliged to join a mandatory pension fund in 2021 and for which the deadline for selection of a mandatory pension fund has expired, signed a membership agreement, while the remaining ones, approximately 85%, did not sign a contract and remained in the fund where they were previously distributed.

In the structure of members and temporarily distributed insureds by membership status, in 2021, for SAVAz and KBPz, no unexpected and significant changes occurred. The structure of members and temporarily distributed insureds by membership status, in 2021, is similar in both SAVAz and KBPz. Thereby, it can be noticed that in each quarter, the percentage participation of voluntary members decreases, while the participation of mandatory members increases, which is expected, because every year the influx of mandatory members increases. In addition, it can also be noticed that the percentage share of mandatory members who have signed a membership agreement gradually decreases from quarter to quarter, as opposed to the share of mandatory members who are permanently distributed, which gradually increases from quarter to quarter. The structure of members and temporarily distributed insureds by membership status of TRIGLAVz differs compared to SAVAz and KBPz, which is expected, since TRIGLAVz has been operating for less than three years. It can be noticed that in 2020 in TRIGLAVz, the highest percentage share includes distributed mandatory members, followed by the percentage share of temporarily distributed insureds. In the following quarters, the participation of mandatory members who signed a membership agreement was increasing gradually, and although minimally, the participation of voluntary members was increasing gradually as well. The voluntary members of TRIGLAVz are insureds who signed agreements for transfer from SAVAz or KBPz to TRIGLAVz. Also, in the following quarters, the percentage share of distributed mandatory members increased, while the share of temporarily assigned insureds decreased. The structure of members and temporarily distributed insureds by mandatory pension funds and by membership status in 2021 is presented on a quarterly basis, in Graph 5.2.

Graph 5.2. Structure of members and temporarily distributed insureds by membership status and MPF



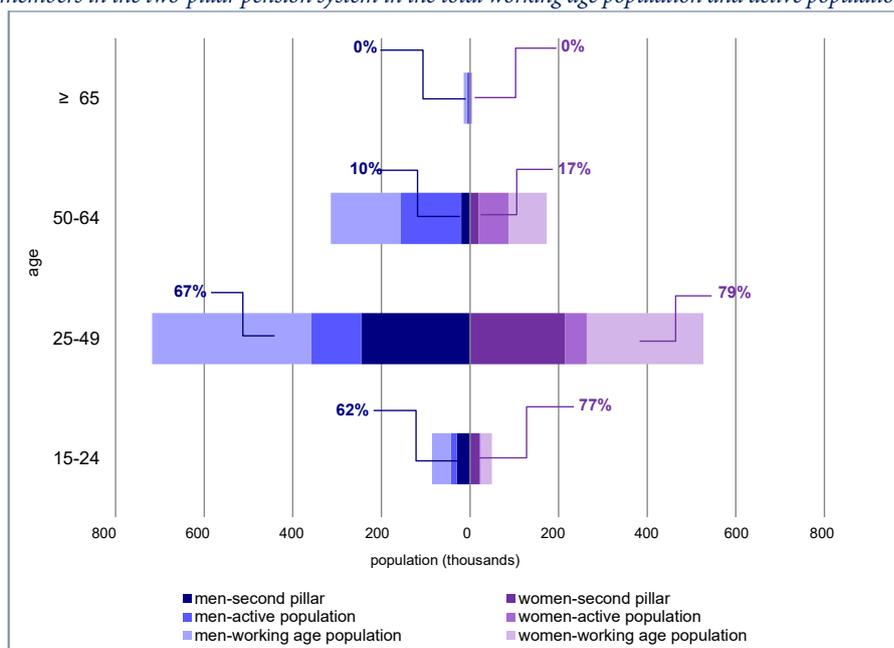
The analysis of the structure of members by age shows that most of the members are young people. Mandatory members are young people, whereby 77% of the mandatory members are up to 40 years of age, while voluntary members are slightly older and 77% of them are up to 50 years of age. The average age of the mandatory members is 34 for men and 35 for women, and for the voluntary members it is 47 years (for both men and women), and for all members, in total, it is 36 years. The structure of the members of the two-pillar pension system by age, gender and category of membership is shown in Graph 5.3.

According to SSO data, at the end of 2021, the total number of working age population<sup>4</sup> in the Republic of North Macedonia is 1,682,799, while the total active population<sup>5</sup> is 943.004. At the end of 2021, approximately 33% of the total working age population of the Republic of North Macedonia are members of the two-pillar system, i.e., approximately 58% of the total active population in the Republic of North Macedonia are members of the two-pillar pension system. The structure of the members in the two-pillar pension system, in the total working population and active population in the Republic of North Macedonia, by age groups and by gender, as of 31.12.2021, is shown in Graph 5.4. It can be noticed that a significant percentage (over 74%) of the active population from 15 to 49 years of age is included in the two-pillar pension system.

Graph 5.3. Structure of members of the two-pillar pension system by age, gender and membership category



Graph 5.4. Structure of members in the two-pillar pension system in the total working age population and active population, by age groups and gender



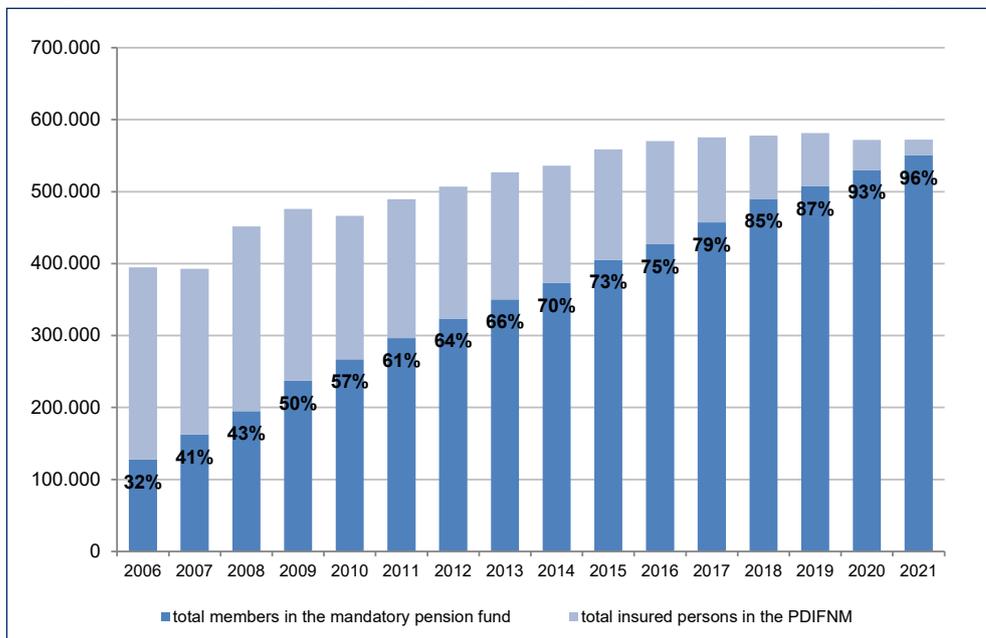
Source: MAPAS and SSO - Active Population in the Republic of North Macedonia, Results of the Labor Force Survey, 2021.

<sup>4</sup>Working population - consists of all persons from 15 to 79 years of age.

<sup>5</sup>Economically active population - consists of employed and unemployed persons.

According to the data of the PDIFNM regarding the number of insureds as of 31.12.2021, approximately 96% of the total number of insureds in the PDIFNM are members of the two-pillar pension system. In Graph 5.5. one can see the increase of the participation of the members in the two-pillar pension system in the total number of insureds in the PDIFNM can be seen from the beginning of the operation of the second pillar.

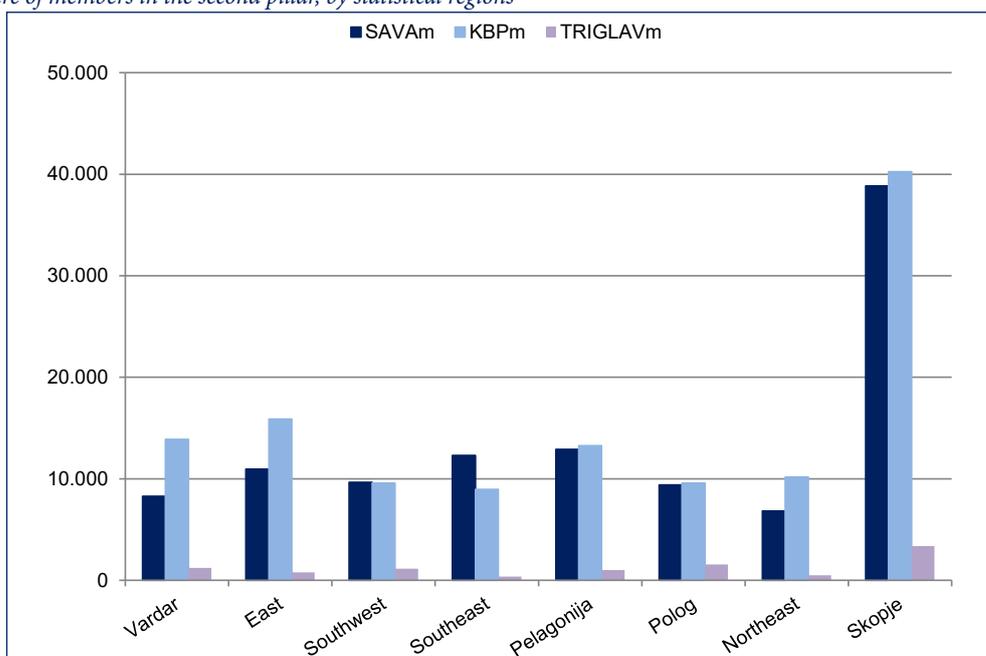
Graph 5.5. Participation of members in the two-pillar pension system in insured persons in the PDIFNM Fund, by years, 2006-2021



Source: MAPAS and PDIFNM

The structure of the members in the mandatory pension funds, by statistical regions<sup>6</sup> in the Republic of North Macedonia, is presented in Graph 5.6. The Skopje region has the most members in all three mandatory pension funds. SAVAZ has the fewest members from the Northeast region, KBPz has the least members from the Southeast region, and TRIGLAVz has the fewest members from the Southeast region.

Graph 5.6. Structure of members in the second pillar, by statistical regions



<sup>6</sup>The statistical regions are defined according to SSO - territorial units. The nomenclature of the territorial units is based on the territorial organization of the local self-government in the RNM and it is harmonized with the EU classification.

### 5.3 Transfer of a member from one mandatory pension fund to another

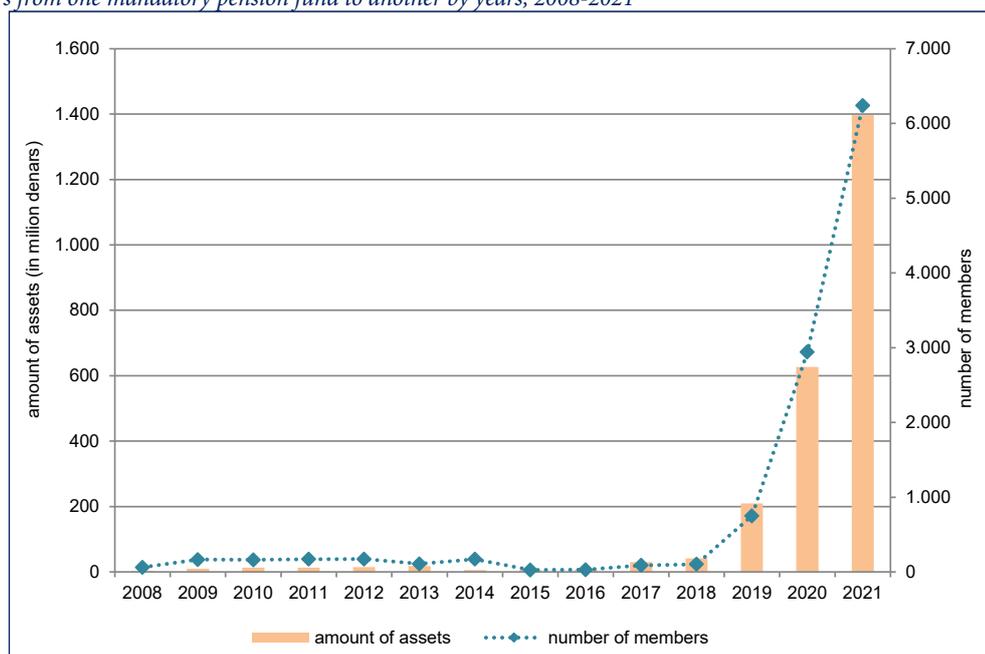
Every member of a mandatory pension fund has the right to transfer to another mandatory pension fund, if he is not satisfied with the mandatory pension fund where he is a member, i.e., from the company that manages it. If the person has been a member of the mandatory pension fund for less than 24 months, in case of transfer, he/she is obliged to pay a transfer fee. If the person has been a member of a fund for more than 24 months, then the transfer to another fund is free. During the transfer, the total funds from the member's account are also transferred. Table 5.4. contains data on the number of members who transferred from mandatory pension fund to another and on the amount of transferred funds from one mandatory pension fund to another, on that basis, in the course of 2021.

Table 5.4. Transfers of members from one mandatory pension fund to another

2021		MPF to which members have transferred, i.e., in which funds have been transferred			Total
		SAVAz	KBPz	TRIGLAVz	
Members who transferred from a MPF	SAVAz	-	91	2.848	2.939
	KBPz	125	-	3.167	3.292
	TRIGLAVz	3	5	-	8
	Total	128	96	6.015	6.239
Assets that have been transferred from a MPF (in denars)	SAVA	-	36.698.580	623.236.491	659.935.071
	KBPz	29.752.874	-	705.050.958	734.803.832
	TRIGLAVz	1.174.753	1.147.414	-	2.322.167
	Total	30.927.627	37.845.994	1.328.287.449	1.397.061.070

The movement in the trend of transfers of members from one mandatory pension fund to another, which was encouraged by the commencement of the operation of the third mandatory pension fund in 2019, continued in 2021. In 2021, the total number of members in the mandatory pension funds, who transferred from one mandatory pension fund to another, is 6.239, which is 1.13% of the total number of members. Although the percentage share of members who made a change in the mandatory pension fund in the total number of members is still small, in 2021, the number of members who made a change in the mandatory pension fund, is significantly higher compared to 2020. Thereby, 128 members transferred to SAVAz, 96 switched to KBPz and 6.015 members transferred to TRIGLAVz. During the transition, approximately 31 million denars were transferred to SAVAz, approximately 38 million denars were transferred to KBPz and approximately 1.34 billion denars were transferred to TRIGLAVz. Graph 5.7. shows an overview of all transfers of members from one mandatory pension fund to another and the total transferred funds from one mandatory pension fund to another from 2008 to 2021.

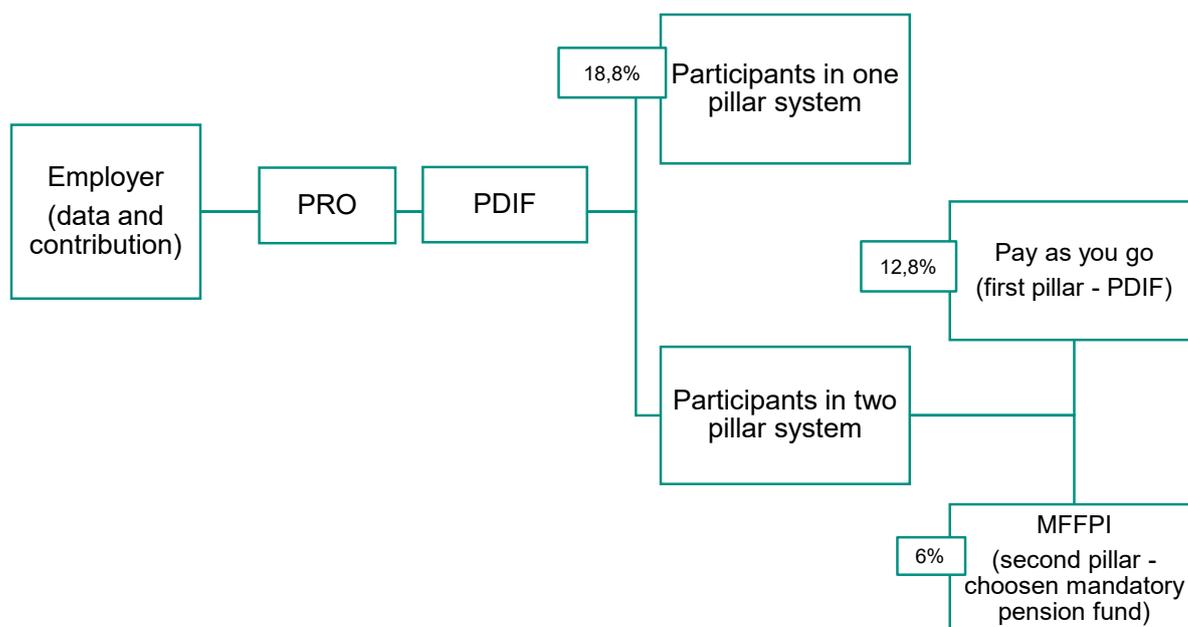
Graph 5.7. Transfers from one mandatory pension fund to another by years, 2008-2021



## 5.4 Contributions in mandatory pension funds

The payment of the contributions for pension and disability insurance is made by the debtor for payment of contribution, i.e., the employer, on behalf of the employee. The Public Revenue Office performs integrated collection of mandatory social insurance contributions (pension and disability insurance contribution, health insurance contribution and contribution for employment in case of unemployment) and personal income tax.

Graph 5.8. Schematic representation of the payment and distribution of contributions



For the insureds who participate in a one-pillar system, the total paid contribution remains in the PDIFNM (for 2021, it was 18.8% of the gross salary). For the insureds who are included in the two-pillar system, the PDIFNM distributes the paid contribution between the first and second pillar. The amount of the contribution, which is transferred to a mandatory pension fund, is 6% of the gross salary, and the contribution that remains in the PDIFNM is the amount that was received as the difference between the total contribution for pension and disability insurance and the contribution paid to the mandatory pension fund (for 2021, it was 12.8% of the gross salary ( $12.8\% = 18.8\% - 6\%$ )).

Immediately, and not later than five working days from the receipt of the contributions, the PDIFNM transfers the contributions of the members of the mandatory pension funds to the individual accounts in the selected mandatory pension funds, provided that appropriate data in accordance with the law were received within the same deadline, which enable the PDIFNM to perform that obligation. If the PDIFNM does not transfer the contributions of the members of the mandatory pension funds to the accounts of the selected mandatory pension funds immediately, and not later than five working days from the day of receiving the contributions due to lack of appropriate data, the PDIFNM is obliged within a period not longer than three months from the day of receipt of the contributions to provide appropriate data and to transfer the contributions of the members of the mandatory pension funds to the accounts of the selected mandatory pension funds with the property custodian. Then, the PDIFNM submits data to the companies and MAPAS related to the performed transfer of contributions.

In 2021, contributions in the amount of approximately 9.68 billion denars were transferred to the mandatory pension funds, which is approximately 1.34% of the GDP<sup>7</sup> of the RNM. The total paid contributions in the mandatory pension funds in 2021 increased by 4.69% compared to the total paid contributions in 2020. The detailed paid contributions by months (in millions of denars) are presented in Table 5.5.

Table 5.5. Paid contributions in the second pillar

(in million denars)

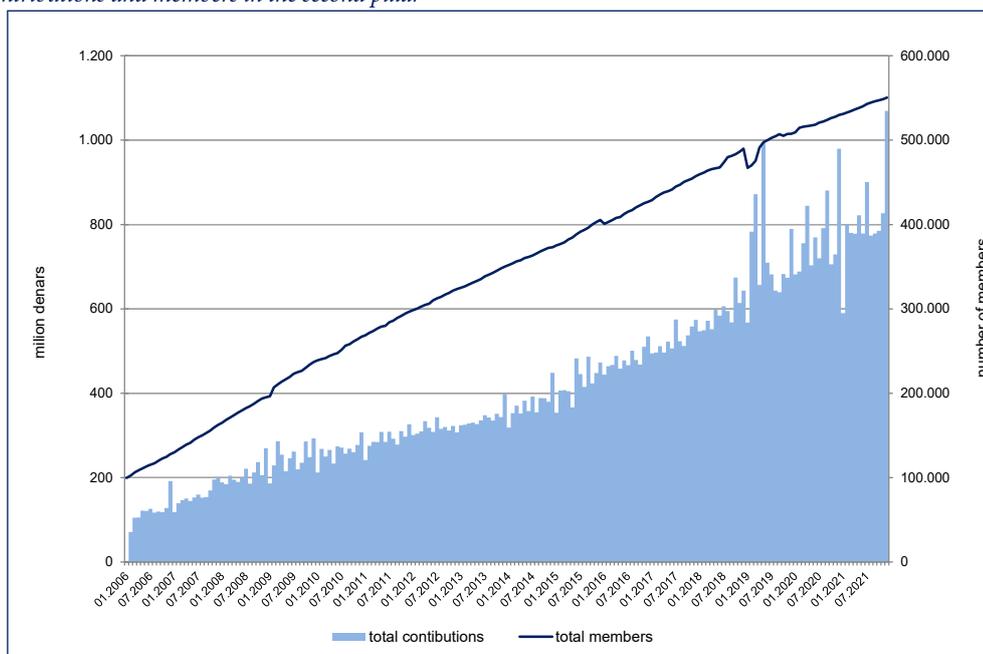
	Total 2020	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total 2021
SAVAz	4.328	272	370	362	359	380	358	415	355	356	359	377	486	4.449
KBPz	4.710	299	403	392	391	410	388	447	384	386	388	408	525	4.820
TRIGLAVz	211	19	26	27	28,48	31	33	39	35	37	38	42	59	413
Total	9.249	590	799	780	778	822	779	901	774	779	785	827	1.070	9.682

<sup>7</sup>Source for GDP: SSO - Announcement - gross domestic product, fourth quarter of 2021 - estimated data.

Graph 5.9. shows the total contributions (in millions of denars), paid in the second pillar, every month, from the commencement of the operation of mandatory fully funded pension insurance until 31.12.2021 and the total number of members, at the end of each month, in the same period.

It can be noticed that, in general, with the increase in the number of members, the paid contributions in the mandatory pension funds increase (although the trend of payments is not completely linear, however there are certain declines and bigger increases in specific months). The larger increases in the paid contributions in the months in the first half of 2019 are probably due to the paid contributions for the insureds who were untimely distributed in the second pillar. The reduction of the membership status in the first month of 2019 is due to the termination of the membership of certain categories of insureds on 01.01.2019 in accordance with the amendments to the law.

Graph 5.9. Paid contributions and members in the second pillar



### 5.4.1 Compensation for untimely transfer of contributions

The amendments to the Law on Mandatory Fully Funded Pension Insurance from 28.12.2018 provide for an obligation of the PDIFNM Fund to pay compensation for untimely transfer of contributions in case when the PDIFNM did not distribute the insureds who were mandatory members of the second pillar in accordance with the criteria before the adoption of the amendments to the law, in case if the PDIFNM does not distribute the insured persons who are mandatory members of the second pillar in accordance with the new criteria for membership within three months after their accession to the mandatory pension and disability insurance and in case if the PDIFNM does not transfers the contributions of the members of the mandatory pension funds to the accounts of the selected mandatory pension funds within three months from the day of receipt of the contributions. The funds for mandatory fully funded pension insurance, realized on the basis of untimely and incomplete payment of contribution, are transferred to the individual account of the member of the mandatory pension fund.

The amount of compensation for untimely transfer of contributions is determined<sup>8</sup> on the basis on of an assessment of the balance of a hypothetical individual account of a member of a mandatory pension fund who has an identical history of payment of contributions as the insured with untimely distribution, i.e., on the basis of an assessment of the balance of part of the funds on the individual account of the member of the mandatory pension fund, the amount of the total untimely transferred contributions and the contribution fees charged by the pension company.

In 2021, in the mandatory pension funds, the PDIFNM transferred a total of approximately 1.62 million denars as a fee for untimely transfer of contributions for members for which it did not transfer the contributions to the accounts of the selected mandatory pension funds within three months of the day of receipt of the contributions. Table 5.6. shows detailed data on the transferred fees for untimely transfer of contributions by funds.

<sup>8</sup>The formula for calculating the fee for untimely transfer of contributions is prescribed in the Rulebook for untimely transfer of contributions.

Table 5.6. Paid fees for untimely transferred contributions in the second pillar in 2021

Mandatory pension fund	Fee for untimely transfer of contributions
SAVAz	0,62
KBPz	0,97
TRIGLAVz	0,03
Total	1,62

## 5.4.2 Returned assets to the PDIFNM

In 2021, a part of the paid assets in the mandatory pension funds (about 372 million denars) was returned to the PDIFNM for several reasons:

- exercising the right to disability or family pension;
- excess of paid contributions in the second pillar due to technical errors or excess of payments by the employer
- termination of membership agreements or annulment of distribution;
- termination of membership of insureds who during the insurance have completed insurance length of service with increased duration which allows to lower the age limit for exercising the right to old age pension for at least one year.

In 2021, most of the returned assets to the PDIFNM (67%) refer to the termination of membership of the insureds who during the insurance have completed insurance length of service with increased duration which allows to lower the age limit for exercising the right to old age pension for at least one year and did not give a written statement for extension of the membership in the mandatory pension fund within three months of the completion of the insurance service.

The structure of the refunds in the PDIFNM, by mandatory pension funds, is shown in detail in Table 5.7.

Table 5.7. Structure of returned funds in the PDIFNM, by MPF

(in millions of denars)

Reasons	From the mandatory pension fund			Total
	SAVAz	KBPz	TRIGLAVz	
Earned pension	50,88	52,35	3,98	107,21
- disability pension	8,07	8,88	0,46	17,41
- family pension	42,81	43,47	3,52	89,80
Excess contribution payments	0,18	0,14	0,005	0,33
Termination of agreements and cancellation of distributions	5,50	8,67	0,05	14,22
Termination of membership	124,68	123,01	2,48	250,17
- members who during the insurance have completed the insurance length of service with increased duration that allows to lower the age limit for exercising the right to old age pension for at least one year	124,68	123,01	2,48	250,17
Total	181,24	184,18	6,518	371,93

## 5.5 Investment and portfolio structure of the mandatory pension funds

Usually, in fully funded pension systems, proactive control and quantitative and qualitative investment constraints are used in the initial phase. Having this as the point of departure, the law and bylaws define the investment goals and principles, the types of instruments in which the assets of the mandatory pension funds can be invested, the conditions that must be met by the regulated secondary capital markets, where the assets of the mandatory pension funds are traded, the quality of the instruments in which the assets of the mandatory pension funds can be invested, countries or groups of countries in which the assets of the mandatory pension funds can be invested, investment constraints within the instruments and issuers, prohibited investments, overcoming of investment constraints, etc.

The company is obliged to invest the assets of the mandatory pension fund in accordance with the laws and bylaws and its investment strategy, in order to achieve the highest return, only for the benefit of the members and retired members of the mandatory pension fund and through diversification and financial analysis to minimize the risk of losses that incurred as a result of non-payment by the issuer or the other contracting party arising from the impact of the domestic and foreign financial markets, losses in the real value of the assets of the mandatory pension fund due to inflation and losses resulting from sales of the assets of the mandatory pension fund due to provision of liquidity to the mandatory pension fund. Thereby, a member of the management board and the supervisory board in the company, during the management and control of the investment of assets of the mandatory pension fund, is obliged to apply a degree of care, efficiency and skills, which would be applied by a reasonable person when investing his own funds. Each member of the board of directors and the supervisory board in the company should fulfill his obligation in accordance with his fiduciary duties and should ensure their application by every employee and person with a work engagement in the company.

The law and bylaws stipulate that the assets of the mandatory pension funds can be invested in bank deposits and certificates for deposit, bonds and other debt securities, in shares and commercial bills issued by issuers with headquarters in the Republic of North Macedonia and abroad, in EU or OECD member states. Considering that it is necessary to achieve appropriate diversification between different types of investments, maximum constraints are stipulated for investing in a specific company and maximum constraints on the amounts that can be invested in certain types of instruments. In order to prevent investments in instruments that are not suitable for investing in mandatory pension funds, it is legally prohibited to invest in shares, bonds and other securities that are not listed on the official market or that are not publicly traded, instruments that cannot be legally available, instruments that cannot be immediately assessed, multiple forms of property that cannot be immediately assessed and items of uncertain value, such as antiques, works of art, etc.

Considering that the assets of the mandatory pension funds are constantly growing, their increase is accompanied by the opportunity to expand to a larger number of capital markets and on a larger scale, since the domestic market is becoming smaller in terms of the needs to invest the assets of the mandatory pension funds, as well as in order to enable greater diversification of the assets during their investment and greater choice of companies for investing the assets of the mandatory pension funds by the companies. The maximum investment constraints are presented in Table 5.8.

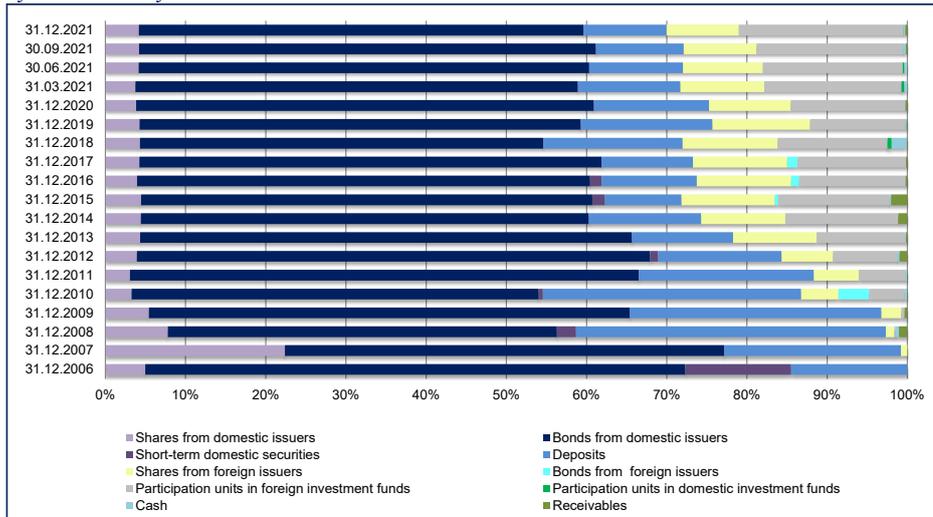
Table 5.8. Maximum investment limits

Type of instrument	Maksimum limit
Investment abroad (EU and OECD)	50%
<ul style="list-style-type: none"> <li>bonds and other securities issued by foreign governments and central banks</li> </ul>	50%
<ul style="list-style-type: none"> <li>securities issued by non-state foreign companies, banks or investment funds</li> </ul>	30%
Securities issued or guaranteed by RNM on the domestic market or NBRNM	80%
Bank deposits, deposit certificates, mortgage backed securities, and other securities issued by domestic banks	60%
<ul style="list-style-type: none"> <li>bank deposits</li> </ul>	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%
<ul style="list-style-type: none"> <li>bonds issued by local self-government</li> </ul>	10%
Shares issued by domestic joint stock companies	30%
Participation units and shares of open-end, close-end and private investment funds in RNM	5%
<ul style="list-style-type: none"> <li>participation shares in private investment funds</li> </ul>	1,5%

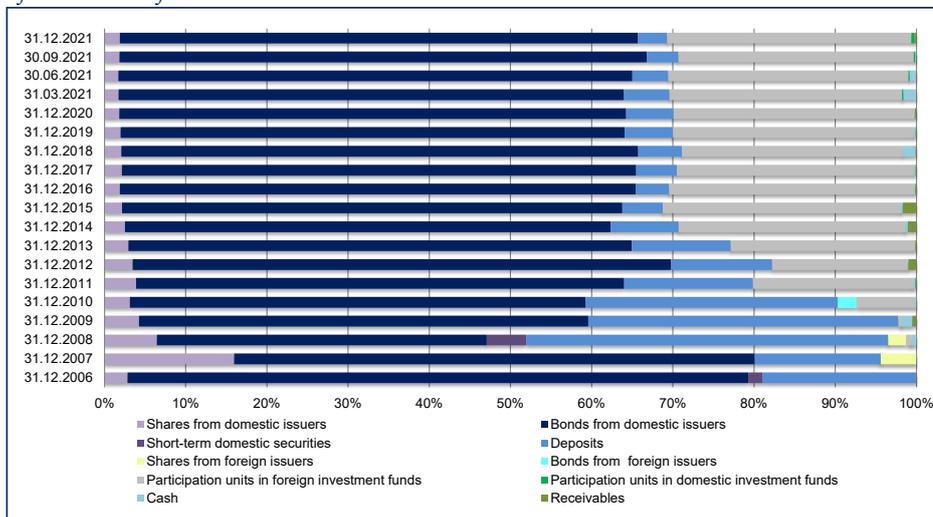
MAPAS may prescribe constraints on investments in certain types of instruments other than the constraints set out in the law, which will be valid for a period that is also prescribed by MAPAS, however not longer than five years. In 2019, decisions were made on additional constraints according to which a maximum percentage of 100% was determined for the value of the assets of a mandatory and voluntary pension fund that can be invested in deposits with banks licensed by the NBRNM, if they carry interest, i.e., in bonds and other securities issued or guaranteed by the RNM on the domestic market, in a period of one year from the date of the first payment in a mandatory and voluntary pension fund.

The structure of investments of the mandatory pension funds SAVAz and KBPz, from the initial functioning of the system (for the period 2006 - 2020, annually, and for 2021, quarterly) is presented in Graph 5.10. and in Graph 5.11. The structure of the investments of the mandatory pension fund TRIGLAVz from the initial operation of the fund (April 1, 2019) and on a quarterly basis for 2021, is shown in Graph 5.12.

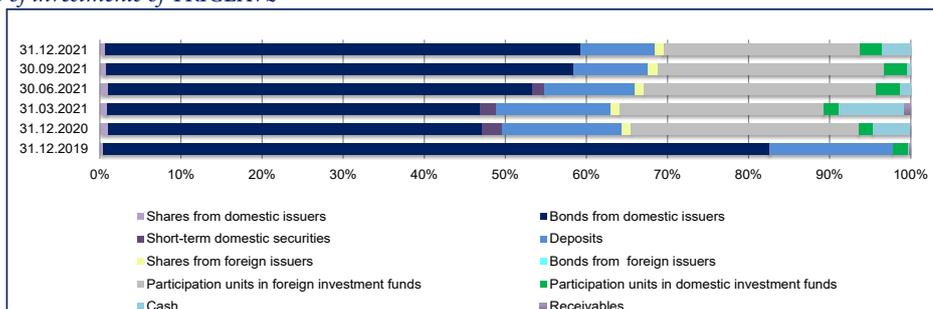
Graph 5.10. Structure of investments of SAVAz



Graph 5.10. Structure of investments of KBPz

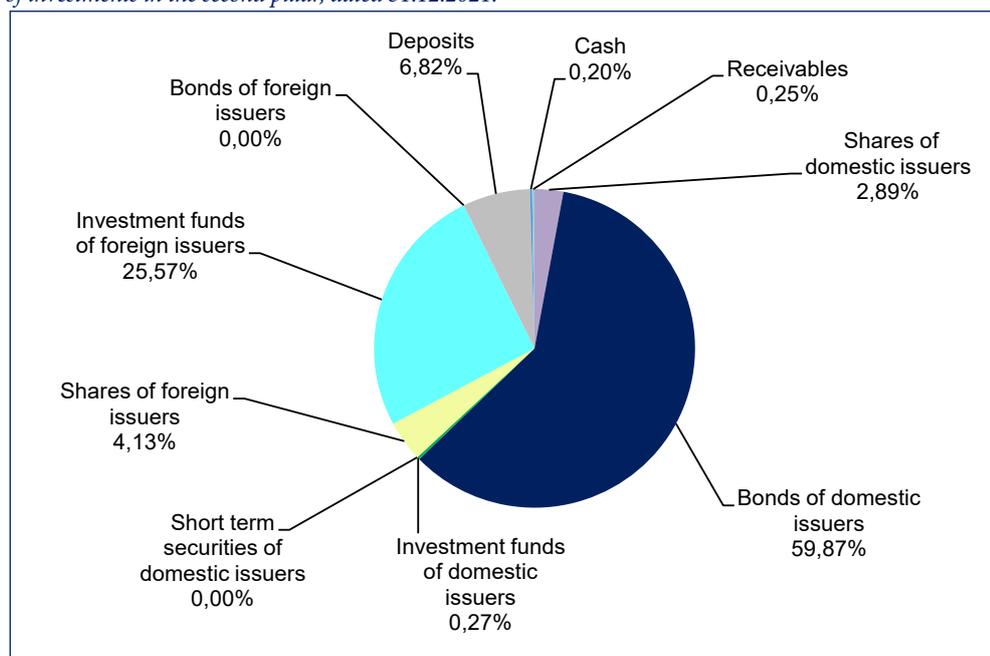


Graph 5.12. Structure of investments of TRIGLAVz



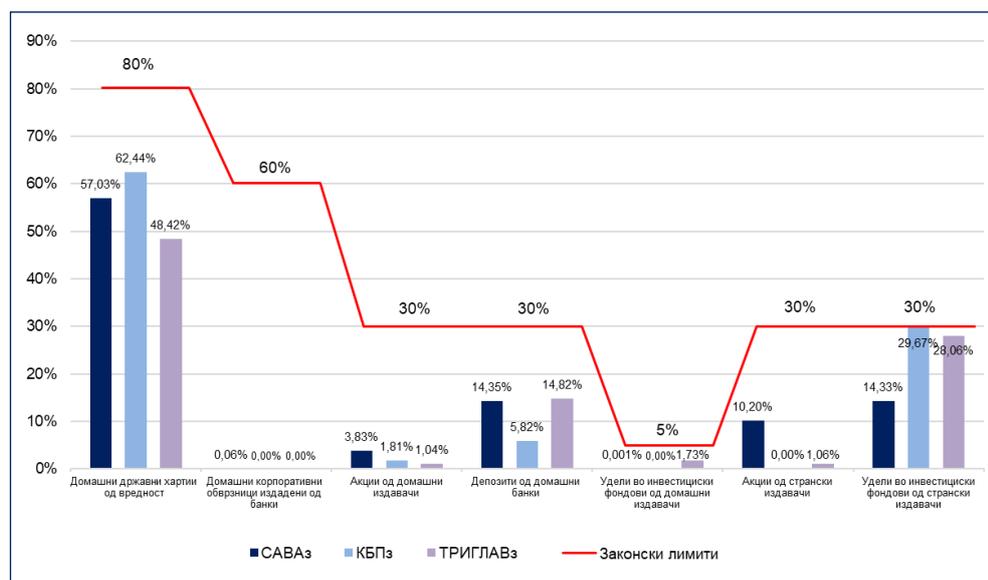
The structure of the investments of the mandatory pension funds, as of 31.12.2021, does not differ much compared to the structure of the investments of the mandatory pension funds, as of 31.12.2020, and it is presented in Graph 5.13. The share of domestic bonds, which include domestic government bonds (59.85%) and a corporate bond (perpetual bond issued by a bank - 0.02%) is 59.87%, which means it is minimally increased compared to the situation on 31.12.2020 (59.75%). The share of bank deposits is reduced and it is 6.82%. Domestic shares make a small part of the portfolio (2.89%) and this participation remains almost at the same level compared to the situation on 31.12.2020. A very small part of the investments of the mandatory pension funds belong to investments in stocks of domestic investment funds (0.27%). In 2021, the share of investments abroad increased, compared to the previous year, and amounted to 29.70%. Investments in foreign securities include investments in stocks of investment funds (25.57%) and investments in shares (4.13%). The other assets are monetary assets 0.20% and receivables 0.25%.

Graph 5.13. Structure of investments in the second pillar, dated 31.12.2021.



In 2021, the three mandatory pension funds invested within the maximum investment constraints. In KBPz there is an observable "passive overdraft" of the constrain on investments in investment fund stocks by foreign issuers, which is due to changes in market prices and currencies and is in accordance with regulations. Graph 5.14. shows the percentage share in the portfolio by asset classes in SAVAz, KBPz and TRIGLAVz and the legal restrictions, with a status on 31.12.2021.

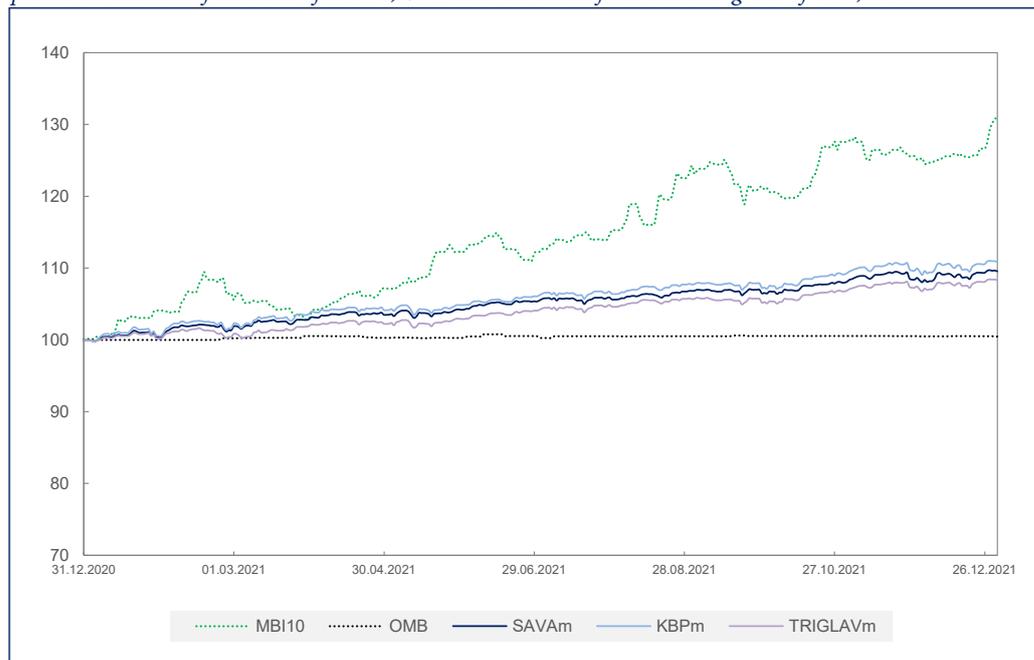
Graph 5.14. Asset classes in the MPF portfolio compared to the legal constraints



Same as in the previous year, in 2021, a small percentage of the assets of the mandatory pension funds (2.89%) were invested in shares of domestic issuers. In 2021, in both SAVAz and KBPz, the exposure in shares, compared to 2020, is almost at the same level. Thereby, the exposure of shares in domestic issuers is twice higher in SAVAz (4.17%), compared to KBPz (1.89%). The exposure in shares of domestic issuers of TRIGLAVz in the third year of its operation compared to 2020 decreased and amounts to 0.67%.

In comparison, the movement<sup>9</sup> of the value of the Macedonian Stock Market Index- MBI10, the Bond Index of the Macedonian Stock Exchange - OMB and the values of the accounting units of the mandatory pension funds, in 2021, are presented in Graph 5.15. The value of the accounting unit of SAVAz increased by 9.53%, the accounting unit of KBPz increased by 10.85% and the accounting unit of TRIGLAVz increased by 8.32%. In 2021, MBI10 increased by approximately 30.79%. In 2021 OMB increased approximately 0,46%

Graph 5.15. Comparative movement of the value of MBI10, OMB and the value of the accounting unit of MPF, 2021

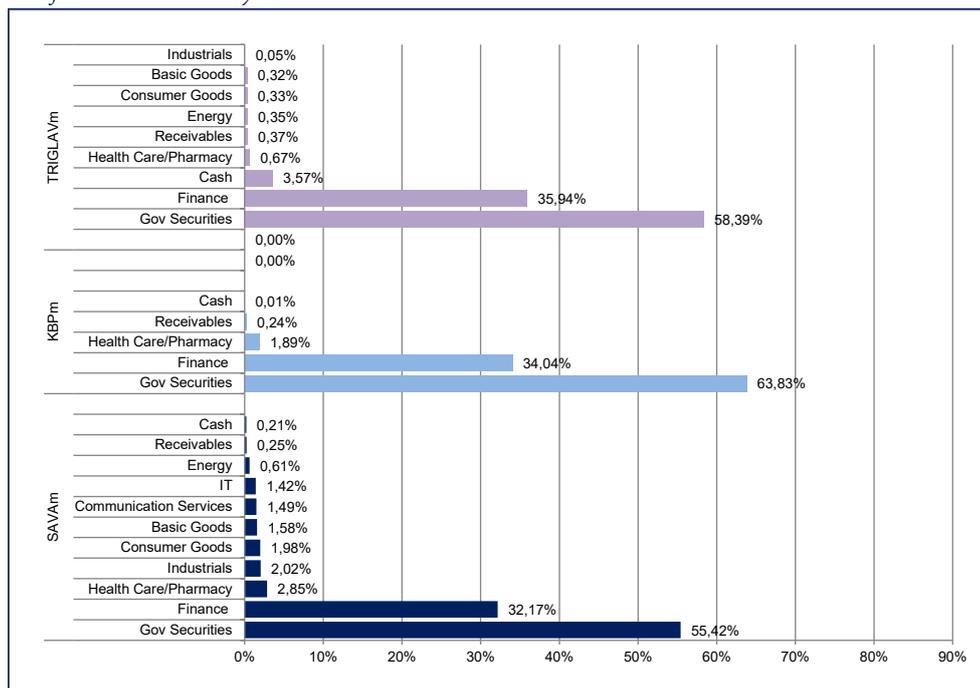


Source: MAPAS and Macedonian Stock Exchange JSC Skopje - Annual Statistical Bulletin 2021.

Half of the assets of the mandatory pension funds in 2021 belong to government securities, namely to the domestic government securities (55.42% at SAVAz, 63.83% at KBPz and 58.39% at TRIGLAVz). Then, analyzed by sectors, about one third of the assets of the three pension funds are investments in instruments by issuers/joint stock companies in the financial sector, i.e., 32.17% at SAVAz, 34.04% at KBPz and 35.94% at TRIGLAVz from the total assets of the fund. Within this sector, SAVAz has the largest portion of stocks in foreign and domestic investment funds (63.9%) and domestic bank deposits (32.17%) and the portion of financial services is lower (3.5%), of shares in domestic and foreign banks (0.3%) and bonds issued by domestic banks (0.1%). The dominant portion in KBPz includes foreign and domestic investment funds within the financial sector (89.5%), followed by domestic bank deposits (10.5%). At TRIGLAVz, the portion of foreign and domestic investment funds (74.5%) prevails within the financial sector, followed by domestic bank deposits (25.5%). In addition to the abovementioned sectors, mandatory pension funds invest in other sectors: pharmacy, consumer goods, industry, basic goods, information technology, communication services and energy, however with a much smaller share (from 0.05% to 2.85%). The structure of investments of mandatory pension funds by sectors is presented in Graph 5.16.

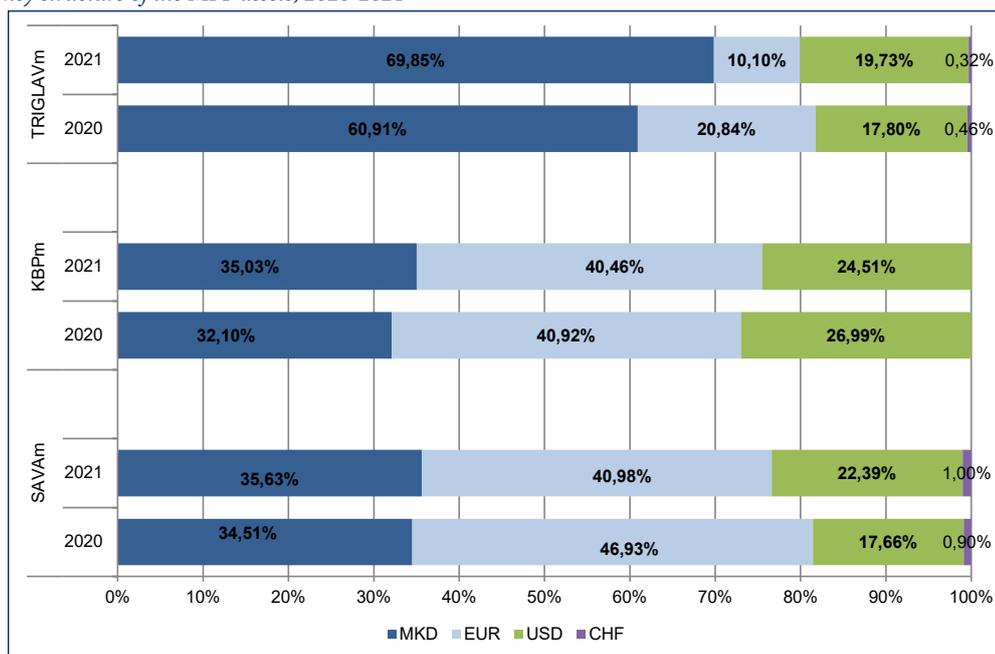
<sup>9</sup>The movements are presented through the change of the indices/units in relation to the initial index equal to 100, on 31.12.2020.

Graph 5.16. Structure of MPF investments by sectors



According to the currency structure of the assets of the mandatory pension funds, which is shown in Graph 5.17, it can be noticed that in 2021 both SAVAz (40.98%) and KBPz (40.46%), most of the assets are invested in euros, with an observable decrease in the share of instruments in SAVAz, in euros, compared to the previous year, while in KBPz the portion of instruments in euros in 2021 remains almost at the same level compared to 2020. Whereas, the portion in instruments, in domestic currency, is 35.63% in SAVAz and 35.03% in KBPz, whereby in both pension funds an increase can be noticed compared to the previous year. Then, in SAVAz (22.39%) there is an observable increase in the portion of instruments, in US dollars, compared to 2020, while in KBPz (24.51%) there was a decrease in the portion of instruments, in US dollars. A very small part of the assets of SAVAz are invested in Swiss francs (1.00%). The currency structure of TRIGLAVz differs from the currency structure of SAVAz and KBPz. However, the currency structure of TRIGLAVz in the third year of its operation differs from the currency structure in 2020. The value of the assets of TRIGLAVz is still on the side of invested assets in instruments in denars (69.85%), then 19.73% of invested assets in instruments in USD, and the remaining 10.10% in instruments in EUR and 0.32% in Swiss francs.

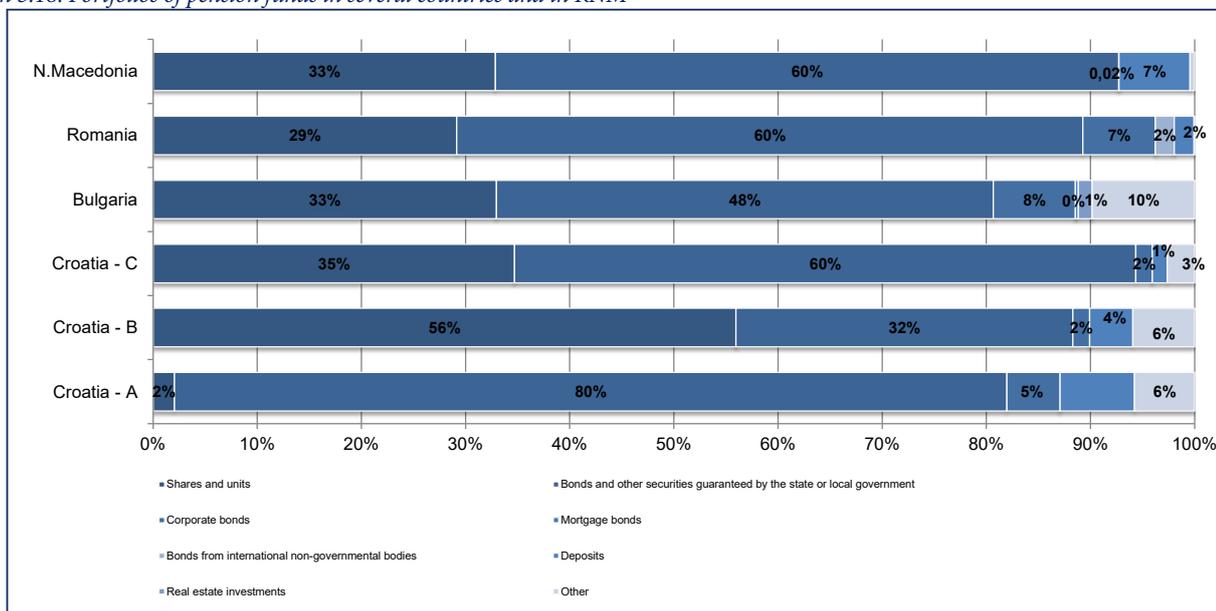
Graph 5.17. Currency structure of the MPF assets, 2020-2021



If one compares the countries in the region that have similar pension systems with the Macedonian one, similarities can be noticed, however also significant differences in the investment portfolios of the mandatory pension funds. Graph 5.18. shows portfolios of pension funds (corresponding to the mandatory pension funds in North Macedonia) in several countries and in the Republic of North Macedonia, on 31.12.2021.

If the portfolios of the mandatory pension funds are reviewed by types of instruments, it can be noticed that, except in Bulgaria, in all countries, 50% of the assets of the pension funds are invested in bonds and other securities guaranteed by the country or the local government (60% in Romania, Croatia B<sup>10</sup>, and in North Macedonia, and 48% in Bulgaria). The rest of the funds are invested in different ways. Most investments in stocks and shares are made in Croatia B (35%), followed by North Macedonia and Bulgaria (33%), and Romania (29%). Pension funds in Macedonia have the most investments in deposits (7%), followed by Romania (2%), Croatia B (1%) and Bulgaria (less than 1%). The pension funds also invested in corporate bonds, that is, 8% in Bulgaria, 7% in Romania, 2% in Croatia B. Compared to the pension funds in other countries, the portion of investments in corporate bonds in North Macedonia is significantly lower, 0.02%. Only pension funds in Bulgaria have investments in real estate (1%) (in the other countries, this instrument is usually not allowed). Regarding the exposure of the portfolios of the mandatory pension funds in instruments issued by foreign issuers<sup>11</sup>, it can be noticed that the pension funds in North Macedonia have the largest exposure abroad (30%), followed by Croatia B (25%) and Romania (12%)<sup>12</sup>.

Graph 5.18. Portfolios of pension funds in several countries and in RNM



Sources: [www.hanfa.hr](http://www.hanfa.hr) ; [www.fsc.bg](http://www.fsc.bg); [www.asfromania.ro](http://www.asfromania.ro) and own calculations.

<sup>10</sup>In Croatia there are multi-funds, i.e., three categories of pension funds: A (with the highest risk), B (existing portfolios at the time of introduction of the multi-funds) and C (with the lowest risk).

<sup>11</sup>The data on foreign investments for Bulgaria dated 31.12.2021 were not available at the time of the analysis.

<sup>12</sup>The data on foreign investments for Romania are dated 30.11.2021.

## 5.6 Net assets, accounting unit and rate of return of the mandatory pension funds

Contributions paid into mandatory pension funds, reduced by the contribution fee, are invested immediately. The total realized return is attributed to the funds in the mandatory pension fund, i.e., to the individual accounts of the members. Once a month, the companies also charge a fee for asset management, which is calculated daily as a percentage of the net assets of the mandatory pension fund. Additionally, in each transaction, the transaction commissions from the mandatory pension fund are charged with the funds of the mandatory pension fund. The value of the assets of the mandatory pension fund is assessed daily. It is determined on the basis of the market value of each individual asset or on the basis of the amortized value of the asset, if the instrument is held to maturity, or in the available-for-sale portfolio, or if its market value cannot be estimated.

The changes in the assets of the mandatory pension funds from the beginning to the end of the year occur due to:

- inflow of contributions,
- inflow of compensation for untimely transfer of contributions in case of untimely transfer of contributions,
- outflow due to fees and transaction fees,
- inflow due to transfer from the other mandatory pension fund (for persons who were previously temporarily distributed to another fund, and then signed an agreement with the current fund and for persons who were members of another fund, and then transferred to the current fund),
- outflow due to transfer to the other mandatory pension fund (for persons who were temporarily distributed to the respective fund, but then signed an agreement with the other fund and persons who were members of the respective fund, and then transferred to the other fund),
- outflow for persons who terminated the membership agreements, outflow due to overpayment, outflow due to exercising the right to disability or family pension and outflow for persons whose membership in the mandatory pension fund has ended and who have completed the insurance length of service with increased duration during the insurance which allows to lower the age limit for exercising the right to old age pension for at least one year.
- outflow due to payment of inheritance,
- outflow due to one-time payments to persons who did not exercise the right to an old-age pension,
- outflow due to payment of old age pension - programmed withdrawals,
- (un)realized gains or losses on investments.

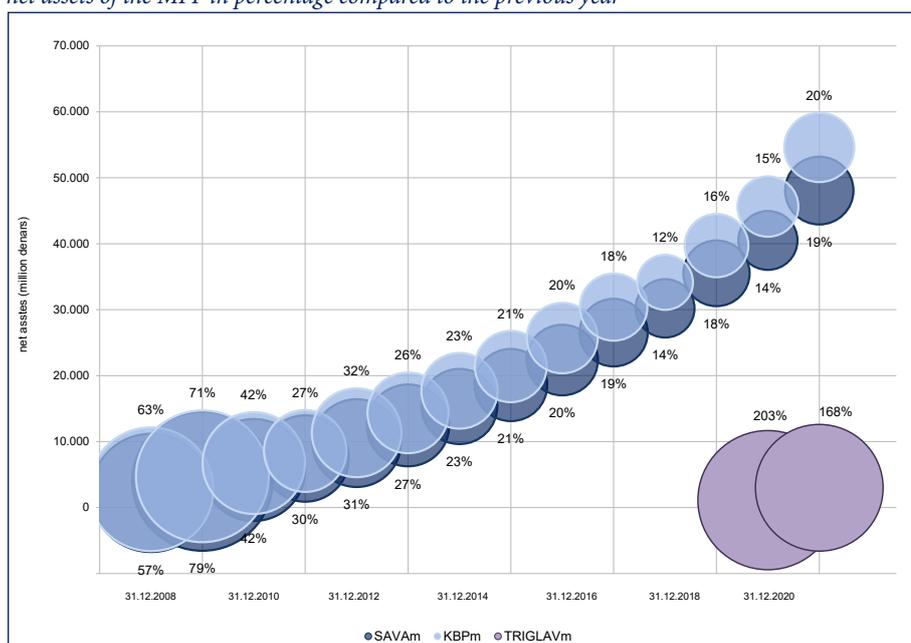
Starting from the value of net assets at the end of the previous year, and taking into consideration all the above-mentioned changes, the value of net assets at the end of the year is obtained, which is shown in Table 5.9.

The total net assets of the mandatory pension funds, with a status on December 31, 2021, amounted to approximately 105.66 billion denars or approximately 72 billion euros, which is about 14.61% of the GDP of the Republic of North Macedonia.

Table 5.9. Changes in the assets of the MPF (in millions of denars)

	SAVAz	KBPz	TRIGLAVz
Net assets on 31.12.2020	40.500,92	45.638,47	1.117,71
Contributions	4.449,07	4.820,00	413,30
Contribution fees	89,02	96,44	8,27
Contributions reduced for contribution fees	4.360,05	4.723,56	405,03
Compensation for untimely transfer of contributions	0,62	0,97	0,03
Fees from assets	159,81	181,01	6,91
Expenditures for intermediary fees	1,80	1,42	0,21
Transfer from the other fund	31,99	39,07	1.328,87
Transfer to the other fund	661,20	735,57	3,15
Transfer from the fund on the basis of termination of an agreement, return of contribution, retirement and termination of membership	181,24	184,18	6,52
Inheritance payment	7,01	14,73	0,00
Payment of old age pension - programmed withdrawals	0,25	0,62	0,00
Lump sum payment	0,00	0,01	0,00
Gross return on investment	4.177,98	5.321,87	161,87
Net return on investment	4.016,36	5.139,44	154,75
Net assets on 31.12.2021	48.059,63	54.605,42	2.996,68

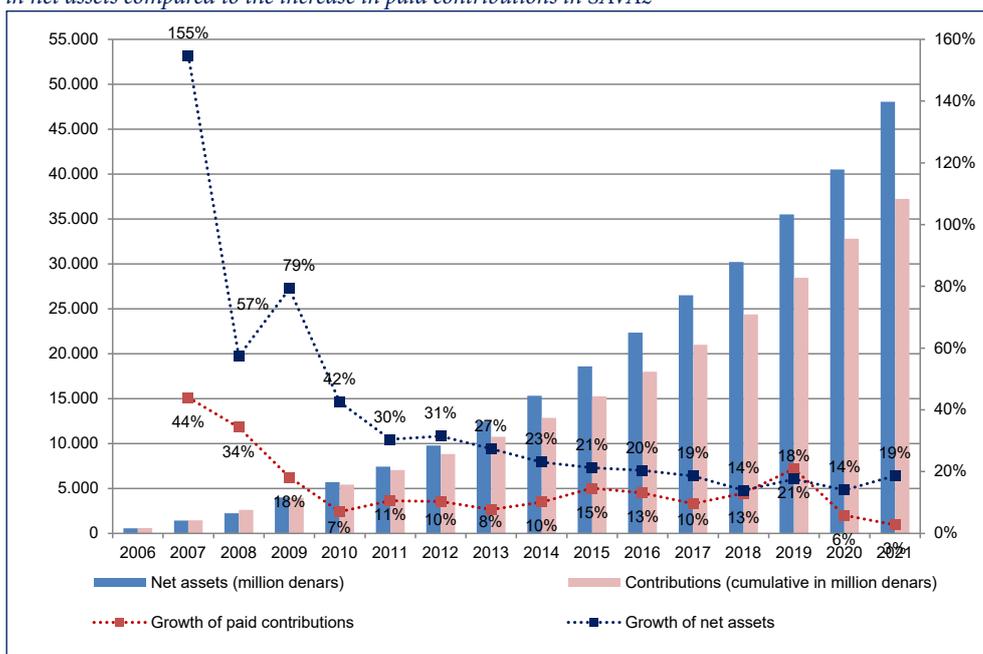
Graph 5.19. Increase in net assets of the MPF in percentage compared to the previous year



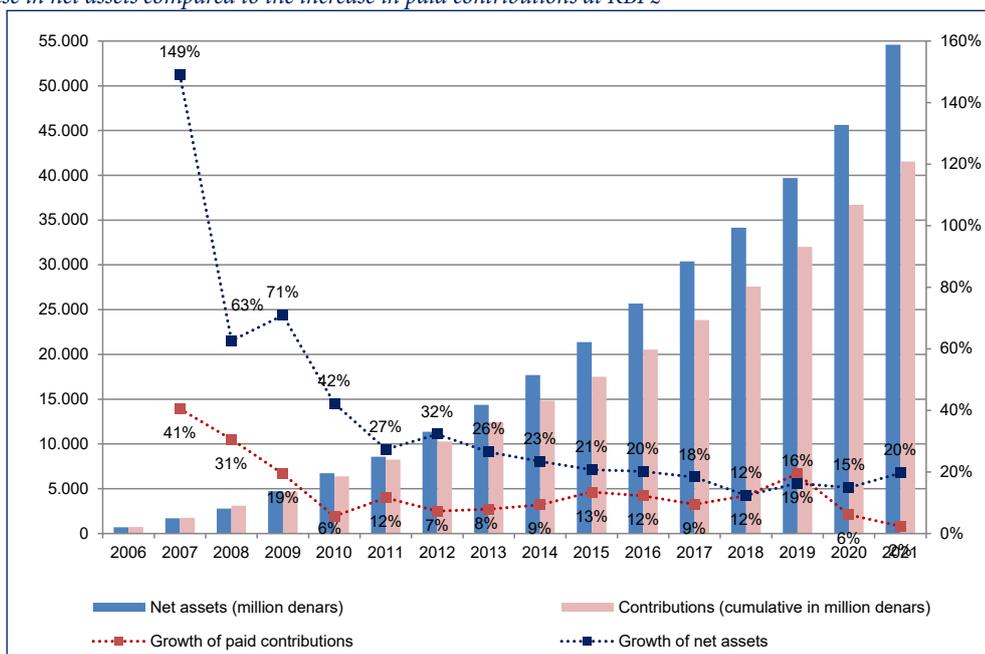
Graph 5.19. shows the values of the net assets of the mandatory pension funds, at the end of each year (2008-2021), and their increase in percentage, compared to the net assets in the previous year. Thereby, one can notice that the net assets of both SAVAz and KBPz are growing at a similar pace. The largest increase in both SAVAz and KBPz was observed in 2009 compared to 2008. In TRIGLAVz there is an observable large increase in net assets in the initial years of operation of the fund.

The movement of the value of the net assets and the cumulative contributions as well as the increase of the paid contributions and the increase of the net assets of SAVAz and KBPz, from the beginning of the operation of the system (i.e., from the date of the first payment, on 01.01.2006) until 31.12.2021, are presented in Graph 5.20. and in Graph 5.21. The growth of the net assets of the mandatory pension funds is implied by the growth of the paid contributions and the investment results. For 2021, more than half of the growth of net assets is due to paid contributions. Compared to the first years of operation of the funds, the share of paid contributions in the total growth of the net assets has been decreasing gradually. It can also be noticed that, during the first years, the share of the cumulative contributions in the total net assets is significantly large, then gradually decreases, and in the last five years, it averages 80%.

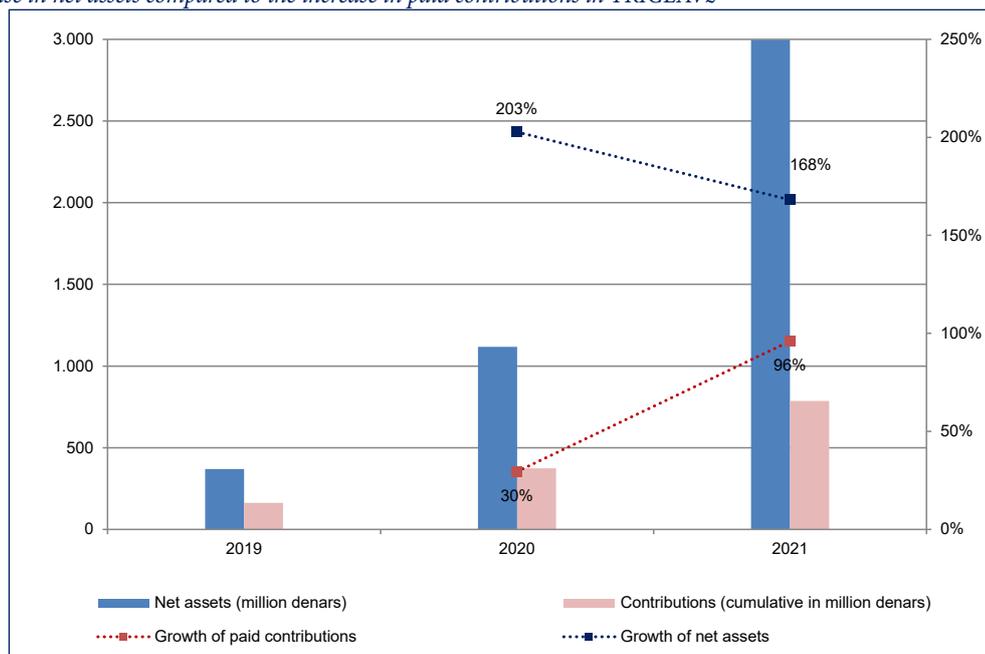
Graph 5.20. Increase in net assets compared to the increase in paid contributions in SAVAz



Graph 5.21. Increase in net assets compared to the increase in paid contributions at KBPz



Graph 5.22. Increase in net assets compared to the increase in paid contributions in TRIGLAVz



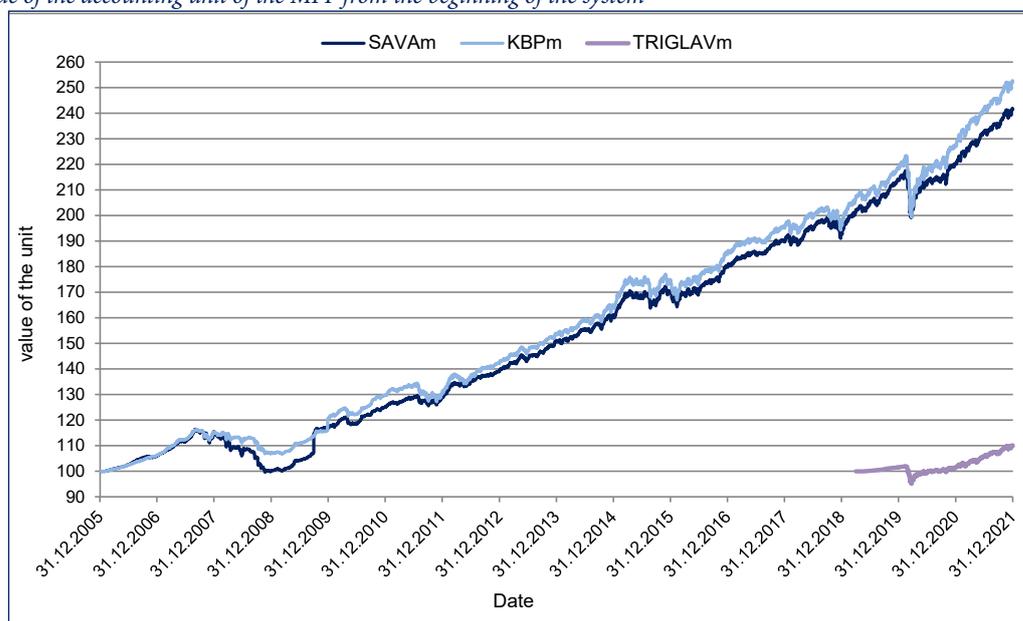
At SAVAz and KBPz, the net assets and cumulative contributions have been growing continuously since the initial functioning of the system. The largest increase in net assets (approximately 150%) as well as in paid contributions (approximately 40%) of SAVAz and KBPz was observed in 2007. This is probably due to the largest percentage increase in membership, i.e., the contributions compared to the previous year, as well as the rather high growth of the unit. This is followed by a decline in the growth of both net assets and paid contributions. Over the years there has been a gradual stabilization, hence the growth of net assets in the last five years, on average, is about 16%, while the growth of contributions paid in the same period, on average, is about 10%. In 2021, there are observable larger parameters compared to 2020, i.e., an increase of net assets of 19% in SAVAz and 20% in KBPz, while the lowest increase in paid contributions is observed, which is about 3% in SAVAz and 2% in KBPz.

The movement of the value of the net assets and the cumulative contributions as well as the increase of the paid contributions and the increase of the net assets of TRIGLAVz, for the first three years of operation of TRIGLAVz, 2019, 2020 and 2021, are presented in Graph 5.22. TRIGLAVz also shows an increase in net assets and cumulative contributions in 2021 compared to 2020. The growth of the net assets of TRIGLAVz, despite being implied by the growth of the paid contributions and the investment results, is largely (over 70%) due to the transferred funds to TRIGLAVz from SAVAz and KBPz based on the concluded agreements on transfer of the members who switched from SAVAz and KBPz to TRIGLAVz.

Accounting units are used for recording the assets of the mandatory pension funds. One accounting unit is a proportional part of the total net assets of the mandatory pension fund. The value of the accounting unit is equal to the value of the net assets divided by the total number of accounting units of all individual accounts and sub-accounts. The initial value of the accounting unit of the pension fund is 100 denars. The pension funds, including Macedonian ones, are subject to cyclical phenomena and movements, which implies an increase or decrease in the values of their accounting units, depending on the investment of funds and the movement of the value of the instruments in which the funds of the pension funds are invested, as well as from the collection of fees and commissions.

The movement of the value of the accounting units of the mandatory pension funds, from the initial functioning of the system until 31.12.2021, is presented in Table 5.10., Graph 5.23. and Graph 5.24. Since the beginning of the operation of SAVAz and KBPz, there has been a growing trend of the accounting units. On April 1, 2019, the third mandatory pension fund, TRIGLAVz, started operating. In 2021, the value of the accounting unit was more stable in relation to the movements in 2020 that were caused by the unfavorable conditions in the financial markets in a situation of the Corona virus pandemic. In 2021, the accounting units of the three mandatory pension funds increased. Thereby, at the end of the year, the value of the accounting unit of SAVAz increased by 9.53%, compared to 2020, and the value of the accounting unit of KBPz increased by about 10.85%, and the one of TRIGLAVz increased by 8.32%. However, pension funds, by their nature, operate in the long run, therefore their performance should be assessed in the long run.

Graph 5.23. Value of the accounting unit of the MPF from the beginning of the system



Graph 5.24. Value of the accounting unit of the MPF in 2021

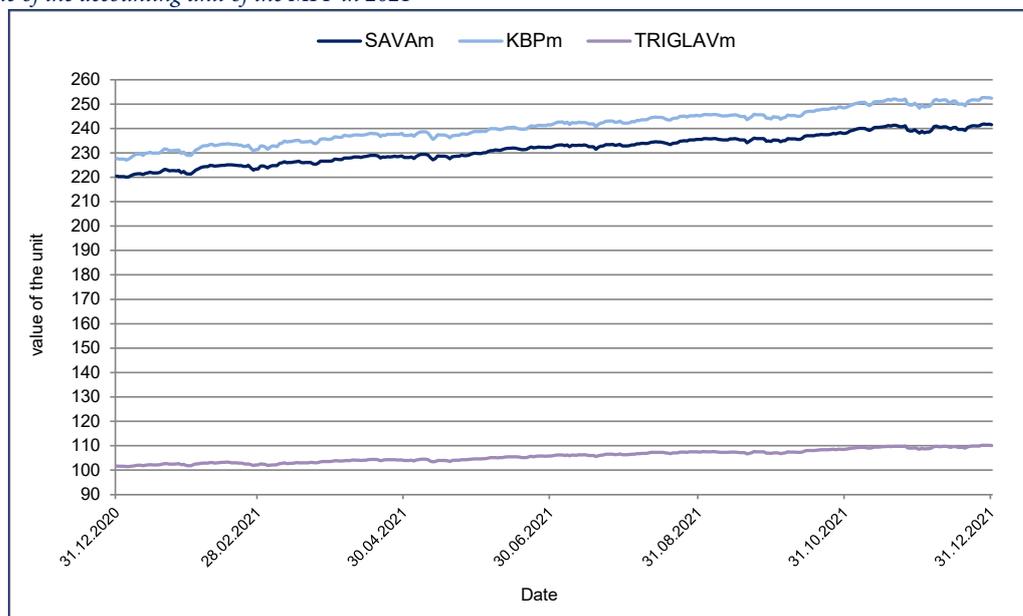


Table 5.10. Value of the accounting unit from the beginning of the system

Date	Value of accounting unit (in denars)		
	SAVAz	KBPz	TRIGLAVz
31.12.2006	105,929336	106,265900	
31.12.2007	115,511364	115,303221	
31.12.2008	100,155213	107,116421	
31.12.2009 <sup>13</sup>	116,874672	120,667142	
31.12.2010	125,009646	129,590887	
31.12.2011	129,003093	130,697013	
31.12.2012	139,225567	142,372582	
31.12.2013	151,117506	153,757419	
31.12.2014	160,733889	164,578077	
31.12.2015	170,193521	174,392410	
31.12.2016	179,771032	184,786292	
31.12.2017	189,686331	195,037486	
31.12.2018	193,113009	196,706281	
31.12.2019	213,757775	218,317207	101,578448
31.12.2020	220,489334	227,667060	101,665261
31.03.2021	226,768762	235,877944	103,621892
30.06.2021	232,208920	241,444823	105,787286
30.09.2021	234,693799	243,890373	106,826622
31.12.2021	241,504146	252,373824	110,128711

The return on the individual account is variable and depends on the return of the mandatory pension fund and the fees charged by the company. Thereby, the return, i.e., profit, is a parameter that cannot be realistically predicted, because it depends on the conditions of the capital market and the entire economy.

Given the long-term nature of the pension insurance, it is important to calculate the return of the mandatory pension funds from the beginning of the system, i.e., from the beginning of the mandatory pension fund reduced to an annual level, which for SAVAz is 5.66% in nominal amount, that is, 3.50% in real amount, for KBPz it is 5.95% in nominal amount and 3.79% in real amount. The return from the commencement of operation of TRIGLAVz reduced on an annual basis is 3.57% in nominal amount, that is, 0.93% in real amount.

The movement of the return in nominal amount, during the sixteen years of existence of the mandatory fully funded pension insurance, can be seen in Graph 5.25, which shows the returns by periods (from the beginning of the system to the appropriate date), from the beginning of the system to 31.12.2021, by funds (for SAVAz and KBPz). The graph also shows the returns by periods from the beginning of TRIGLAVz to the respective date. At the initial functioning of the system, there is an observable increase in the return, hence, at the end of 2006 and 2007, there are high returns, while the lowest returns are observed at the end of 2008, as a result of the negative developments in the domestic and foreign financial markets. This is followed by a gradual recovery from the crisis and an increase in returns, by the end of 2009, as well as at the end of 2010. At the end of 2011, there was a slight decrease in returns, compared to the end of 2010. During the following years, there was an increase (with small deviations from the growth of returns until the end of 2015 and the first half of 2016 and the returns in 2018). The lower amounts of returns in 2018 are mostly due to the impact of prices on world financial markets, which recorded higher volatility in 2018 and a decrease at the end of 2018. In 2019, there is an observable gradual increase in returns. In 2020, lower returns are observed compared to 2019 in SAVAz and KBPz, mostly due to the unfavorable conditions on the financial markets in conditions of a coronavirus pandemic. TRIGLAVz in the initial years of its operation and in exceptional circumstances due to the unfavorable conditions on the financial markets in conditions of the Corona virus pandemic, recorded a return in nominal amount less than zero, which was already offset in the next period. In 2021, there will be an increase in the returns of the three pension funds.

<sup>13</sup>In the second half of 2009, both SAVA and KB First made decisions on reclassification of the financial instruments held to maturity in the category of available-for-sale financial instruments and, in this procedure, the companies reassessed the value of the financial instruments, by applying an objective, fair value and determined the value of the assets, net assets, the value of the accounting units and the number of accounting units, which caused a relatively high correction in the value of the accounting units..

<sup>14</sup>TRIGLAVz is included in the comparative return analyses with a calculated return for the respective periods, according to the regulation, because it exists longer than 12 months, however less than 84 months.

<sup>15</sup>The formulas for calculating the yield in nominal and real amount are prescribed in the Rulebook for assessment of the assets of the mandatory and voluntary pension funds.

Usually, the return for pension funds is calculated for the last few years, reduced to an annual level. Thus, in the Macedonian pension system, it is legally regulated to calculate the return for a period of seven years (accounting period), reduced to an annual level, in nominal and real amount. If the fund exists for less than 84 months, however longer than 12 months, the return is calculated at the end of June, i.e., December, for the period from June 1, i.e., December, after the establishment of the fund, until the end of June, i.e., December, when the calculation is made. In that case, the accounting period is 78, 72, 66, 60, 54, 48, 42, 36, 30, 24, 18 or 12 months<sup>14</sup>.

The return in nominal amount<sup>15</sup> is a change (increase) in percentage of the value of the accounting unit at the last valuation date of the accounting period and the value of the accounting unit on the last day of the month preceding the first month in the accounting period, converted into an equivalent annual rate of return in nominal amount. The return in real amount, for each accounting period, converted into an equivalent annual rate of return in real amount, is calculated based on the annual rate of return in nominal amount and the change in the level of the cost of living in the accounting period, reduced to annual level. The return of the mandatory pension funds, by periods, reduced on an annual level, is shown in Table 5.11.

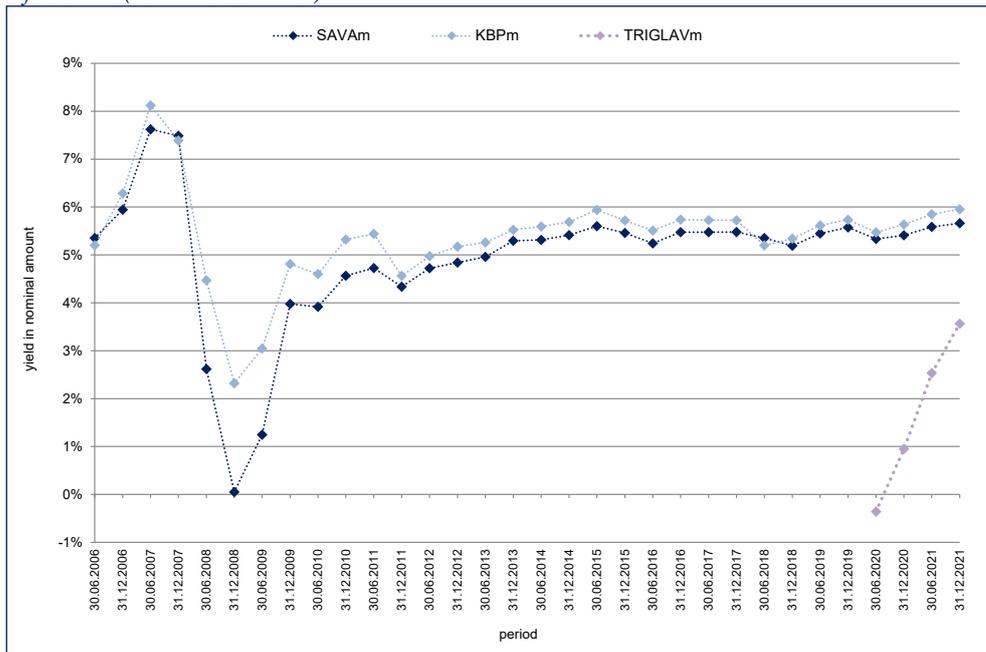
Table 5.11. Yields of MPF\*

Period**	SAVAz		KBPz			
	in nominal amount	in real amount	in nominal amount	in real amount		
01.01.2006 - 31.12.2008	0,05%		2,32%			
31.12.2006 - 31.12.2009	3,33%		4,32%			
31.12.2007 - 31.12.2010	2,67%		3,97%			
31.12.2008 - 31.12.2011	8,80%		6,86%			
31.12.2009 - 31.12.2012	6,00%		5,66%			
31.12.2006 - 31.12.2013	5,20%	2,16%	5,41%	2,37%		
31.12.2007 - 31.12.2014	4,83%	2,67%	5,21%	3,05%		
31.12.2008 - 31.12.2015	7,87%	6,45%	7,21%	5,80%		
31.12.2009 - 31.12.2016	6,34%	4,74%	6,27%	4,67%		
31.12.2010 - 31.12.2017	6,13%	4,63%	6,01%	4,51%		
31.12.2011 - 31.12.2018	5,93%	4,72%	6,01%	4,80%		
31.12.2012 - 31.12.2019	6,31%	5,74%	6,29%	5,72%		
31.12.2013 - 31.12.2020	5,54%	4,84%	5,76%	5,06%	-	-
31.03.2014 - 31.03.2021	5,83%	4,99%	6,11%	5,27%	-	-
31.06.2019 - 31.03.2021	-	-	-	-	1,94%	0,50%
30.06.2014 - 30.06.2021	5,91%	4,81%	6,16%	5,06%	-	-
30.06.2019 - 30.06.2021	-	-	-	-	2,75%	0,55%
30.09.2014 - 30.09.2021	5,83%	4,55%	6,11%	4,82%	-	-
30.06.2019 - 30.09.2021	-	-	-	-	2,88%	0,49%
31.12.2014 - 31.12.2021	5,98%	4,48%	6,29%	4,79%	-	-
30.06.2014 - 31.12.2021	-	-	-	-	3,84%	1,01%
Start** - 31.12.2021	5,66%	3,50%	5,95%	3,79%	3,57%	0,93%

\*Until the adoption of the amendments to the Law on Mandatory Fully Funded Pension Insurance from January 2013, the return of the mandatory pension fund was calculated for a period of 3 years, only in nominal amount.

\*\*The date of commencement of operation of SAVAz and KBPz is 01.01.2006. The date of commencement of operation of TRIGLAVz is 01.04.2019.

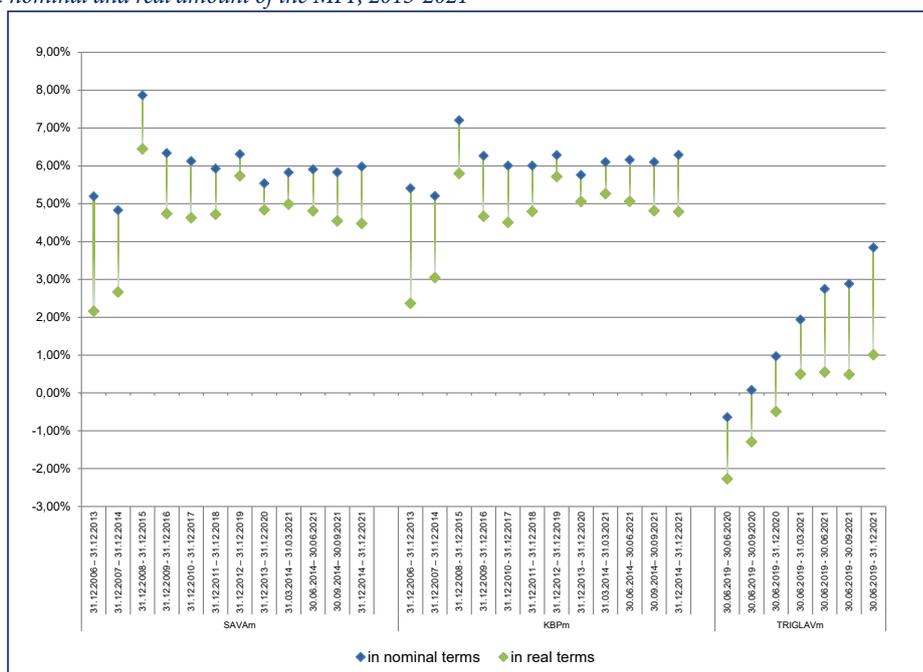
Graph 5.25. Return of the MPF (in nominal amount)



The movement of the return in nominal and real amount, in the period from 2013 to 2020 (annually) and in 2021 (quarterly), in seven-year periods, converted into an equivalent annual rate of return, per mandatory pension fund, can be seen in Graph 5.26. This graph also shows the movement of the return in nominal and real amount of TRIGLAVz, for the respective periods in accordance with the regulation because it exists longer than 12 months however shorter than 84 months. In 2021, the return in nominal amount increased in both SAVAz (from 5.83% to 5.98%) and KBPz (from 6.11% to 6.29%). However, the return in real amount decreased in both SAVAz (from 4.99% to 4.48%) and KBPz (from 5.27% to 4.79%). Thereby, the lowest amount of return in nominal amount was registered in the first and third quarter of the pension funds that have existed for more than seven years. At the end of 2021, larger amounts are observed compared to 2020, however in SAVAz it is still not at the level of the seven-year return achieved at the end of 2019. In terms of the return in real terms, the lowest return is recorded in the last quarter of 2021. The return of the third mandatory pension fund that started operating in April 2019 increased in 2021 and for the period 30.06.2019 - 31.12.2021 it recorded a return in both nominal amount and real amount that solidly exceeds the realized return for the period 30.06. 2019 - 31.12.2020. In the reviewed period (2013-2021), the change in the level of the cost of living in the accounting periods, reduced to an annual level, until 2019, decreased, which affects the gradual approximation of the returns in real amount to the returns in nominal amount, while in the period after 2019, there was an increase that affects the gradual departure of returns in real amount from returns in nominal amount.

The seven-year return on the level of mandatory fully funded pension insurance for the period 31.12.2014 - 31.12.2021, calculated through the change of the weighted average<sup>16</sup> of the accounting units of the mandatory pension funds, reduced to annual level is 5.91% in nominal amount, that is, 4.41 % in real amount.

Graph 5.26. Return in nominal and real amount of the MPF, 2013-2021



## 5.7 Fees in mandatory pension funds

In order to perform its functions of management of the assets of the mandatory pension fund, assessment of the assets, membership registration, keeping individual accounts of the members and reporting to the members, as well as for payment of fees for MAPAS, the PDIFNM and the property custodian and for covering their own costs, the companies, in accordance with the Law, charge a fee from contributions, a fee from assets and a fee for transfer.

This way of financing the pension companies is common for the companies that operate in a pension system similar to the Macedonian one. The fee that is collected as a percentage of the contributions is paid once from the payment of the contribution, and then the same contribution is invested until the withdrawal of the funds, while the fee that is collected from the funds is collected at the end of each month, from the total funds that are managed. Fees, based on contributions, have a weight “at the beginning”, i.e., they are relatively high in the initial years. Asset-based fees weight at “the end”, as accumulated assets are much higher the closer they are to retirement<sup>17</sup>. In the long run, the contribution fee will not have a significant impact on the amount of the member’s pension, and the fee from assets will become more significant over the years.

The types and amount of fees charged by the companies that manage the mandatory pension funds in 2021 are shown in Table 5.12.

<sup>16</sup>The average value is calculated as a weighted average of the accounting units of the mandatory pension funds in relation to the net assets of the mandatory pension funds.

<sup>17</sup>Administrative Charges for Funded Pensions: An International Comparison and Assessment, Edward Whitehouse, June 2000.

Table 5.12. Fees charged by companies managing mandatory pension funds in 2021

Type of fee	SAVA	KB First	TRIGLAV***
Fee from contributions	2,00%*	2,00%*	2,00%
Monthly fee from the assets of the mandatory pension fund	0,030%**	0,030%**	0,030%
Transfer fee			
Number of days****	Amount of transfer fee	Amount of transfer fee	Amount of transfer fee
number of days ≤ 720	15 Euros	15 Euros	15 Euros
number of days > 720	Transfer fee not charged	Transfer fee not charged	Transfer fee not charged

\* The amount is equal to the legally determined maximum for 2020 (previously it was 2.25% for all MPFs).

\*\* The amount is equal to the legally determined maximum for 2019 (previously it was 0.035% for both SAVAz and KBPz).

\*\*\* The amount is equal to the legally determined maximum for 2019. From April 2019.

\*\*\*\* The number of days is calculated from the date on which the member acquired the status of a member of the existing mandatory pension fund (or from the first of the month for which the member acquired the right to contribute to the existing mandatory pension fund, in case of first membership) to the date of transfer of the funds to the individual account of the member in the future mandatory pension fund.

Initially, the fee from contributions was determined in a tender, and the initial fee, collected by SAVA and KB First, was 8.50%. Furthermore, with the development of the system and the reduction of the fees charged by state institutions from the companies, as well as the growth of the contributions and funds, which are the basis for calculating the fees, there was further continuous gradual reduction of this fee. The amount of fees from contributions, which were collected from the beginning of the system, until 2021, is shown in Table 5.13.

Table 5.13. Amount of the fees from contributions collected by the pension companies in the second pillar

Pension company	Amount	Date of application	Pension company	Amount	Date of application	Pension company	Amount	Date of application
SAVA	9,90%	In a tender	KB First	9,90%	In a tender	TRIGLAV	2,25%	From April 2019
	8,50%	From the beginning of the system (2006)		8,50%	From the beginning of the system (2006)		2,00%	From January 2020
	7,90%	From July 2007		7,90%	From July 2007			
	6,90%	From February 2008		6,80%	From February 2008			
	6,50%	From May 2009		5,50%	From January 2010			
	5,50%	From January 2010		4,50%	From January 2011			
	4,50%	From January 2011		4,00%	From January 2012			
	4,00%	From January 2012		3,75%	From June 2013			
	3,75%	From June 2013		3,50%	From January 2014			
	3,50%	From January 2014		3,25%	From January 2015			
	3,25%	From January 2015		3,00%	From January 2016			
	3,00%	From January 2016		2,75%	From January 2017			
	2,75%	From January 2017		2,50%	From January 2018			
	2,50%	From January 2018		2,25%	From January 2019			
	2,25%	From January 2019		2,00%	From January 2020			
	2,00%	From January 2020						

The compensation from assets was determined by law and, as of May 2013, it amounted to 0.05% per month of the value of the net assets of the mandatory pension fund, then as of December 2014, it amounted to 0.045%. From January 2015, the fee was 0.04%, until December 2016. From January 2017, the fee from assets was 0.035%. From January 2019 the compensation of funds is 0.030%.

Since 2013, the law has determined the maximum amount of the fee from contributions and the fee from assets was legally determined, which the pension companies will be able to collect, and their gradual further reduction was anticipated.

The collection of fees (in millions of denars) by the companies in 2021 is shown in Table 5.14.

Table 5.14. Collection of fees by companies, in 2020 (in millions of denars)

	Jan.	Feb.	March.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
SAVAz- total	17,68	19,90	19,91	20,09	20,62	20,44	21,75	20,72	20,89	21,08	21,74	24,01	248,84
From contributions	5,43	7,41	7,24	7,18	7,61	7,17	8,30	7,10	7,12	7,18	7,54	9,73	89,02
From assets	12,25	12,49	12,67	12,90	13,02	13,27	13,45	13,62	13,77	13,90	14,19	14,28	159,81
KBPz - total	19,83	22,19	22,16	22,43	22,94	22,75	24,17	23,13	23,32	23,52	24,29	26,73	277,45
From contributions	5,99	8,05	7,83	7,81	8,21	7,76	8,94	7,69	7,73	7,76	8,17	10,51	96,44
From assets	13,84	14,14	14,33	14,62	14,73	14,99	15,23	15,44	15,60	15,76	16,12	16,22	181,01
TRIGLAVz – total	0,72	0,88	0,94	1,02	1,12	1,20	1,37	1,35	1,42	1,50	1,63	2,03	15,18
From contributions	0,37	0,51	0,53	0,57	0,63	0,66	0,77	0,71	0,74	0,77	0,84	1,17	8,27
From assets	0,35	0,37	0,40	0,45	0,49	0,54	0,60	0,64	0,68	0,73	0,80	0,86	6,91

Transaction fees, in relation to the transactions for the acquisition or transfer of funds to a mandatory pension fund, are paid from the assets of the mandatory pension fund to selected legal entities that provide services with securities, at home and abroad. The transaction fees are calculated as a percentage of the value of each concluded transaction.

In 2021, a total of MKD 1.80 million denars of transaction fees were collected by SAVAZ, a total of 1.42 million denars was collected by KBPz and a total of 0.21 million denars of transaction fees were collected by TRIGLAVz.

## 5.8 Payment of pensions from mandatory fully funded pension insurance

The conditions for acquiring the right to a pension are the same for both the first and the second pillar: the age limit of 64 years for men, i.e., 62 years for women, with a minimum of 15 years of work experience.

From the first pillar, part of the old-age, family and disability pension is paid, as well as from the minimum pension. The pension from the first pillar is calculated as a defined pension according to a predetermined formula (a specific percentage, depending on the years of service, multiplied by the pension base, determined by valorized salaries from the entire working life).

From the second pillar, a part of the old age pension is paid, in a form chosen by the member:

- pension annuity with the entire amount of funds, accumulated on the individual account of the member; the annuity is paid for the rest of the member's life by an insurance company authorized for that purpose, or
- programmed withdrawals, from the accumulated funds on the individual account of the member and are paid by a company that manages a mandatory pension fund, or
- combination of the abovementioned methods.

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

If the insured person who has been entitled to a disability pension is a member of the second pillar, the total amount of funds on the account of that member is transferred to the PDIFNM and the full payment of the disability pension is paid by the PDIFNM. As an exception, if the accumulated funds on the member's account are more than the amount required for the payment of a disability pension, in accordance with the Law on Pension and Disability Insurance, then the member may choose to use a second pillar pension instead of that pension.

In the event of the death of a member of second pillar mandatory pension fund member, whose members are entitled to a family pension, the total amount of assets on that member's account is transferred to the PDIFNM and the full payment of the family pension is paid by the PDIFNM. As an exception, if the accumulated assets on the member's account are more than the amount required for payment of family pension, in accordance with the Law on Pension and Disability Insurance, then the user of family pension can choose to use a second pillar pension instead of that pension.

In 2021, 70 disability pensions and 286 family pensions were obtained by members of the second pillar, i.e., family members of a deceased member, therefore their accumulated funds were transferred to the PDIFNM, which pays the disability pension, i.e., the family pension. In 2021, 10 members of the second pillar will be paid an old-age pension from the second pillar, through programmed withdrawals. In 2021, a second pillar old-age pension was paid, through programmed withdrawals, for a total of 17 retired members (including members who started withdrawing funds in previous years).

There are also cases in which funds are paid from the individual account of the member, without exercising the right to a pension, as follows:

- when the deceased member of the mandatory pension fund does not have family members who are entitled to family pension, then the assets on the account of that member become part of the testator's estate and they are treated in accordance with the Law on Inheritance;

- when a member of a mandatory pension fund will not acquire the right to an old-age pension according to the Law on Pension and Disability Insurance, because he has not completed a length of service of at least 15 years required for retirement, he/she can earn pension only from the assets of the second pillar, if the pension is greater than or equal to 40% of the minimum amount of the pension, and if the calculated amount of the pension is less than 40% of the minimum amount of pension, the mandatory pension fund will pay the accumulated funds to the member's account all at once. Pension can be earned only from the assets from the second pillar and the payment of the total accumulated funds in these cases can be made after the person has reached 65 years of age.

In 2021, assets as inheritance were paid from the individual accounts of 75 deceased members. In addition, one-time payment of assets was made to 1 person.

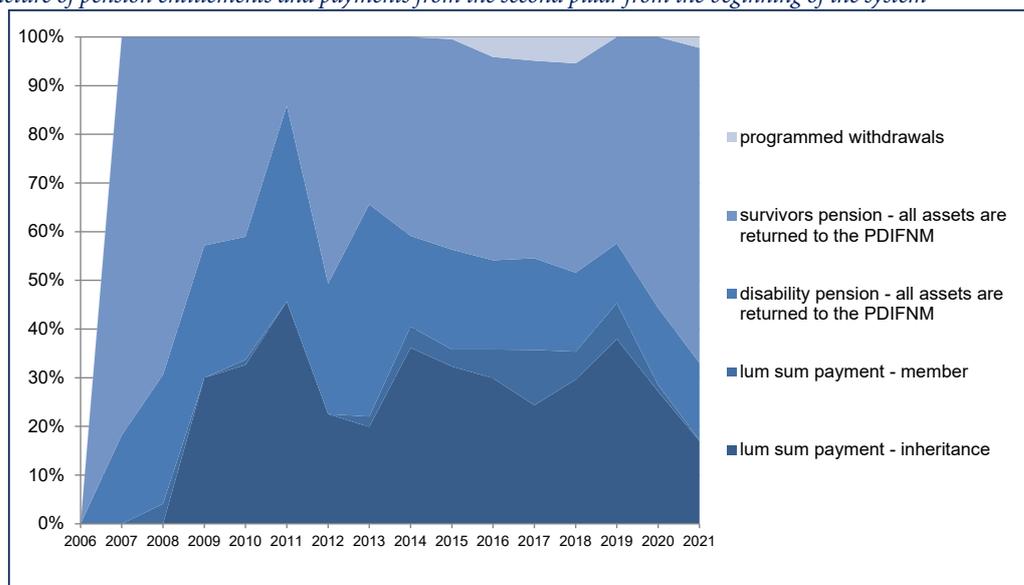
A detailed overview of the earned pensions and payments for members of the second pillar in 2021, by mandatory pension funds, is presented in Table 5.15.

Table 5.15. Pension entitlements and payments for the second pillar members in 2021

Type of pension and payment / Mandatory pension fund	SAVAz	KBPz	TRIGLAVz	Total
Disability pension	34	33	3	70
Family pension	130	149	7	286
Old age pension – programmed withdrawals	4	6	0	10
One-time payment – member	0	1	0	1
One-time payment – inheritance	45	30	0	75
Total	213	219	10	442

Graph 5.27. shows the structure of pension entitlements and payments from the second pillar, in the fourteen years of existence of the second pillar, until 2021, is shown. The number of payments is very low, because the members are young people. Most of the payments are in cases of death of a member, through an earned family pension, or payment of inheritance, then payments based on an earned disability pension, and the lowest is the number of one-time payments to members and payments to members through programmed withdrawals.

Graph 5.27. Structure of pension entitlements and payments from the second pillar from the beginning of the system



## 6 Information on voluntary pension funds

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- 6.1 Purpose of voluntary fully funded pension insurance
- 6.2 Membership in voluntary pension funds
- 6.3 Member account transfer in the same or another voluntary pension fund
- 6.4 Contributions in voluntary pension funds
- 6.5 Investment and portfolio structure of the voluntary pension funds
- 6.6 Net assets, accounting unit and rate of return of voluntary pension funds
- 6.7 Fees in voluntary pension funds
- 6.8 Payment of pension benefits from voluntary fully funded pension insurance

## 6. Information on voluntary pension funds

In 2021, compared to 2020, a growth of the membership in the third pillar can be noted. The voluntary fully funded pension insurance, as of 2021, has a total of 27,772 members, which means an increase of the membership per year by about 6.75%. Out of the total number of members in the third pillar, about 44% are members with a voluntary individual account, while about 56% are participants in a pension scheme with a professional account. The new voluntary pension fund made a modest movement in the transitions of members from one voluntary pension fund to another in 2021.

During 2021, a total of about 407.71 million denars were paid into the voluntary pension funds.

The total assets of the voluntary pension funds increased by 25% and reached about 2.87 billion denars, which is about 0.40% of the GDP of the Republic of North Macedonia. The structure of the investment portfolio of voluntary pension funds also does not differ significantly compared to last year. The start of operation of the third voluntary pension fund did not affect much the overall structure of the investments of the voluntary pension funds, given the fact that in the initial years of operation, the new fund still disposes of assets that are small compared to the total assets of the voluntary pension funds.

In 2021, the value of the accounting unit of SAVAv increased by 10.22%, of KBPv by about 10.48%, while the value of the accounting unit of TRIGLAVv increased by 3.48% from the start of operation.

At the level of the third pillar, in the seven-year period 2015 – 2021, an average income of 5.85% was realized at the annual level in nominal amount or 4.35% in real amount, calculated on the basis of the change in the weighted average of the accounting units of the voluntary pension funds.

In 2021, 264 pension benefits and payments from the third pillar were realized.

### 6.1 Purpose of voluntary fully funded pension insurance

The primary purpose of voluntary fully funded pension insurance is to provide higher income after retirement, for insureds who are already insured in the single-pillar and/or two-pillar pension system, to provide pensions to persons who are not covered by mandatory pension insurance for themselves or from others and to provide preconditions for establishing occupational pension schemes in the process of harmonization of the social security system in the Republic of North Macedonia with the EU systems. The basic principles of voluntary fully funded pension insurance include: provision of additional funds in case of old age, voluntary membership, capital financing on the principle of defined contributions, investing funds on the basis of security, risk diversification and maintaining adequate liquidity, as well as transparency.

Voluntary pension insurance enables coverage of a large group of persons from the population of the Republic of North Macedonia, as well as persons who are not citizens of the Republic of North Macedonia. This provides additional savings for old age, which increases material security in old age. Furthermore, in accordance with the common practices in many European countries, where there are occupational pension schemes, through which employers, or citizens' associations, organize and finance additional pension insurance for their employees, i.e., members, this is also provided in the Republic of North Macedonia. Since European social security systems are subject to increasing pressure, occupational pensions, in the future, will increasingly play a role in supplementing revenues after retirement. For those reasons, occupational pensions, in addition to social security, should be developed in order to provide safe, permanent and effective social insurance, which should guarantee a decent standard of living in old age. In the third pillar, an employer, or a citizens' association (insurer), can organize and finance an occupational pension scheme and pay contribution to a voluntary pension fund for its employees and members. Multiple employers, or multiple civic associations, can co-organize and fund occupational pension schemes. The insured signs an agreement with the company he/she has chosen to manage the voluntary pension fund, which will include the occupational pension scheme.

Voluntary fully funded pension insurance is expected to have an additional significant impact on the economy as a whole, by increasing the savings of the population, increasing the power of investment and encouraging the development and deepening of the capital market, by investing the funds of voluntary pension funds, by increasing demand for new instruments and through new financial services, etc.

Voluntary fully funded pension insurance became operational in the second half of 2009, whereby the existing companies were granted licenses to manage voluntary pension funds. The Open Voluntary Pension Fund "NLB Penzija Plus" - Skopje started operating on 15.07.2009, while KB First Open Voluntary Pension Fund - Skopje, on 21.12.2009. In June 2018, MAPAS gave an approval to change the name of the pension fund Open Voluntary Pension Fund – "NLB Penzija Plus" Skopje to Open Voluntary Pension Fund Sava Penzija Plus. Triglav Open Mandatory Pension Fund - Skopje started operating on 01.03.2021.

## 6.2 Membership in the voluntary pension funds

A person can become a member of a voluntary pension fund in three ways:

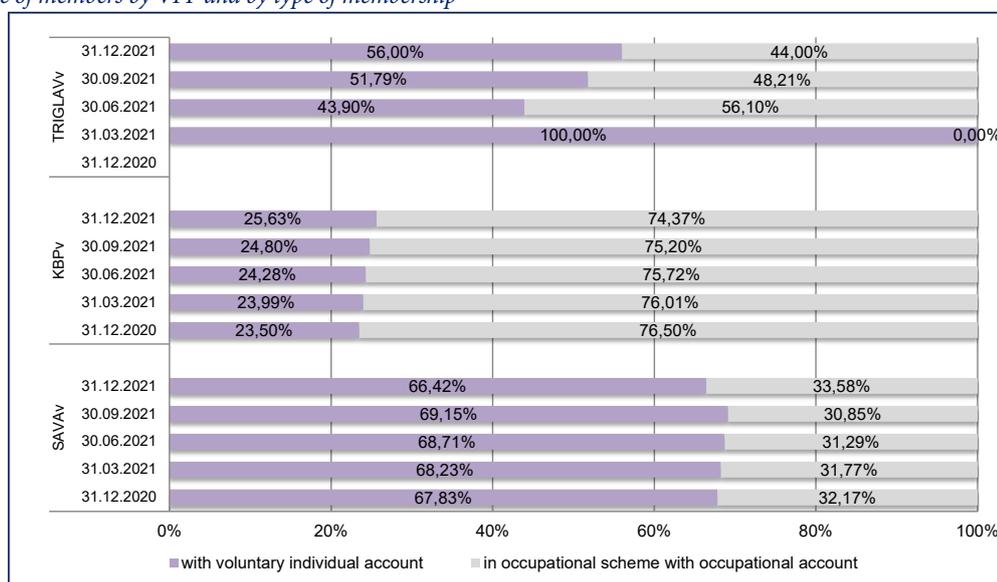
- 1) by signing an agreement on membership in a voluntary pension fund between the person and the company and by opening a voluntary individual account,
- 2) by signing an agreement on membership in a voluntary pension fund between the person, the natural person who pays on behalf and for the account of the person (payer) and the company and by opening a voluntary individual account,
- 3) by participating in an occupational pension scheme, organized by his employer or by an association in which he is a member, and by opening a professional account.

A person can have only one voluntary individual account and one professional account. These accounts can be in the same or in a different voluntary pension fund.

In 2021 compared to 2020 we can observe increased growth of the membership in voluntary pension funds. In voluntary fully funded pension insurance, with a status on 31.12.2021, there are a total of 27.772 members, which means there are additional 1.756 members compared to 31.12.2020, i.e., the membership increased by approximately 6.75%. Of the total number of members in the third pillar, 12.088 or approximately 44% are members with a voluntary individual account, while 15.684 or approximately 56% are participants in a pension scheme with a professional account. Since the new voluntary pension fund has a relatively low number of members (0.35% of the members are in TRIGLAVd), in terms of the distribution of members by voluntary pension funds, with a status on 31.12.2021, in the voluntary pension funds operating since 2009 there wasn't a significant change compared to the previous year, i.e., approximately 43.67% of the members are in SAVAd, while approximately 56.06% are in KBPd.

Graph 6.1. shows the structure of members by voluntary pension funds and by type of membership, in 2021, on a quarterly basis, a significant difference can be observed in terms of the type of membership of the three voluntary pension funds. Namely, SAVAd has more members with voluntary individual accounts (66.42%), KBPd has more members in pension schemes with professional accounts (76.37%), while TRIGLAVd has the most equitable distribution of membership although a slightly larger number are members with voluntary individual accounts (56.00%). Regarding the structure of members by type with a status on 31.12.2021, in both SAVAD and KBPd there is no significant change compared to the previous year.

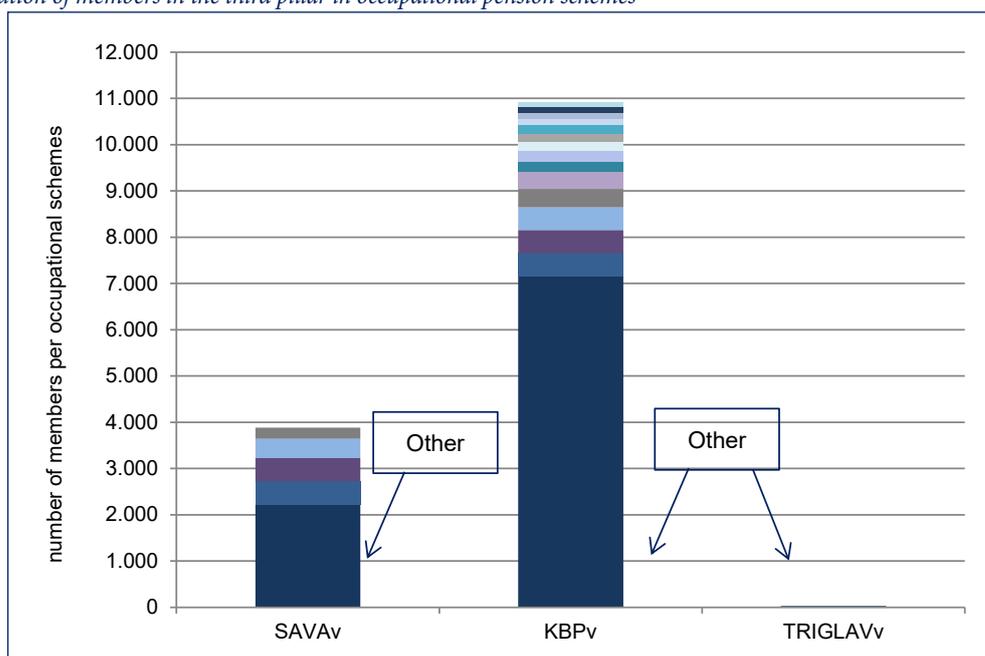
Graph 6.1. Structure of members by VPF and by type of membership



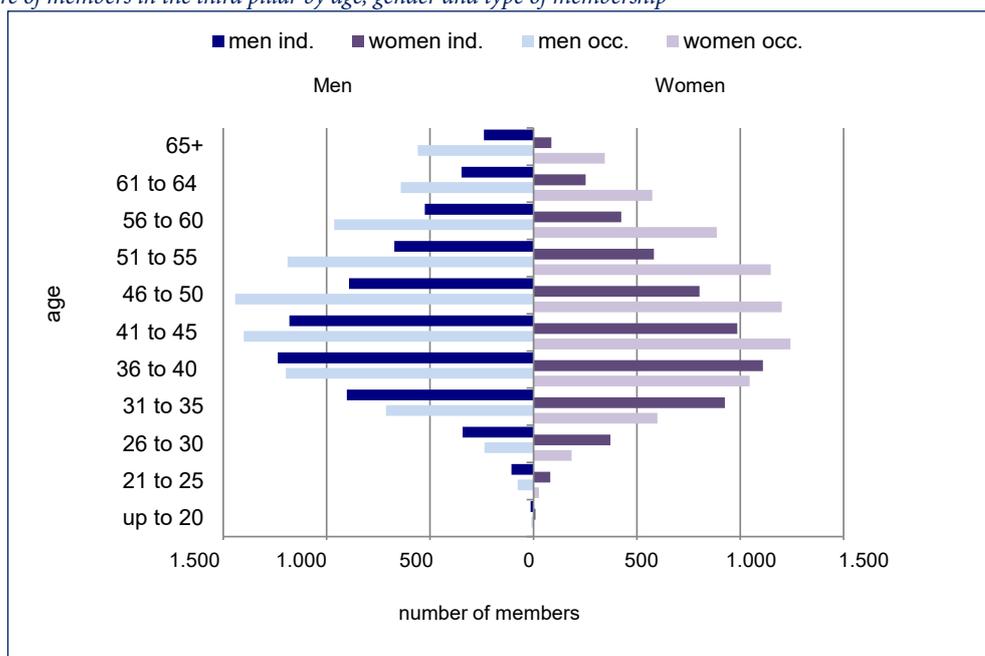
From the experience so far, usually, members who have individual accounts pay the assets themselves, and rarely there are members whose contribution is paid by a payer (out of a total of 12.088 members who have individual accounts, only 621 members or 5% have a payer). Voluntary fully funded pension insurance enables membership of persons who are not citizens of the Republic of North Macedonia. In the existence of the third pillar so far there are very few members who are foreign nationals (0.02% of the total number of members).

Regarding the participation of members in occupational pension schemes, in SAVAd, 4,072 members are participants in 1.205 occupational pension schemes, in KBPd, 11.579 members are participants in 2.910 occupational pension schemes, and in TRIGLAVd, 33 members are participants in 5 occupational pension schemes. There are occupational pension schemes with several dozen members and occupational pension schemes with only 1 to 2 members. Out of the total number of schemes, 19 occupational pension schemes have over 100 members, four schemes have over 500 members, one of which has over 1,000 members. The distribution of members in the occupational pension schemes by funds is presented in Graph 6.2., which individually shows only the schemes that have more than 100 members, while the other schemes are included in the item "others".

Graph 6.2. Distribution of members in the third pillar in occupational pension schemes



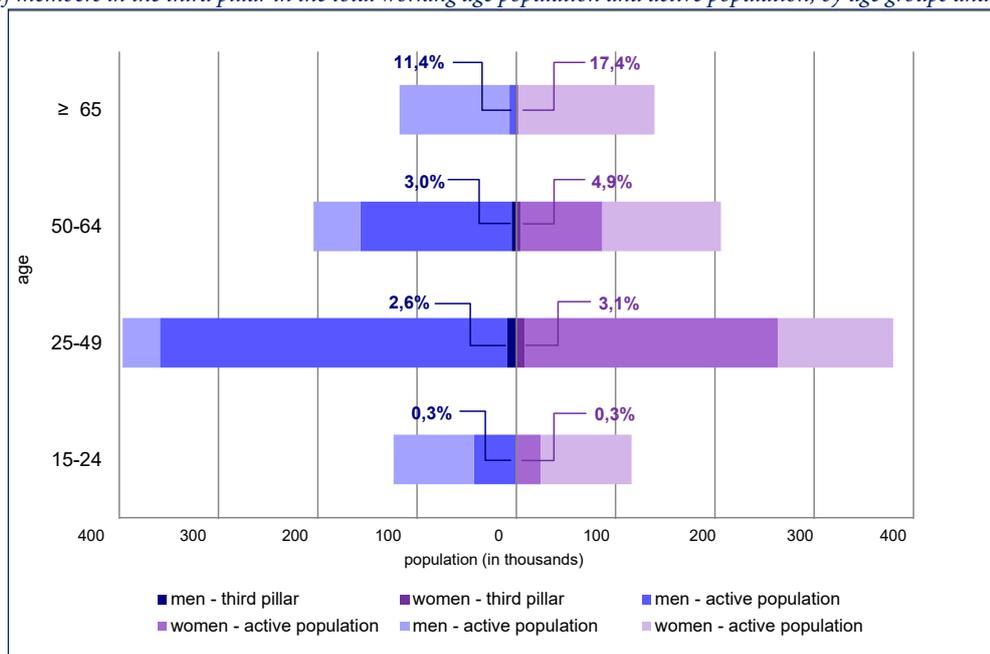
Graph 6.3. Structure of members in the third pillar by age, gender and type of membership



The structure of the members in the third pillar, by age, gender and type of membership, is presented in Graph 6.3. This graphical representation shows that in the third pillar compared to the second pillar there are more older members. About 60% of the members with a voluntary individual account are up to 45 years of age, while about 60% of the members with a professional account are up to 50 years of age. Members who have a professional account are older than members with an individual account. The average age of the members with an individual account is 44 years for men and 43 years for women, and the average age of the members with a professional account is 48 years for men and 48 years for women, while the average age of all members in total is 46 years.

The portion of the total number of members of the third pillar in the total working age population and in the total active population is modest. At the end of 2021, only about 1.7% of the total working age population in the Republic of North Macedonia are members of the third pillar, i.e., about 2.9% of the total active population in the Republic of North Macedonia are members of the third pillar. The structure of the members in the third pillar, in the total working age population and active population in the Republic of North Macedonia, by age groups and by gender, with a status on 31.12.2021, is shown in Graph 6.4.

Graph 6.4. Structure of members in the third pillar in the total working age population and active population, by age groups and gender

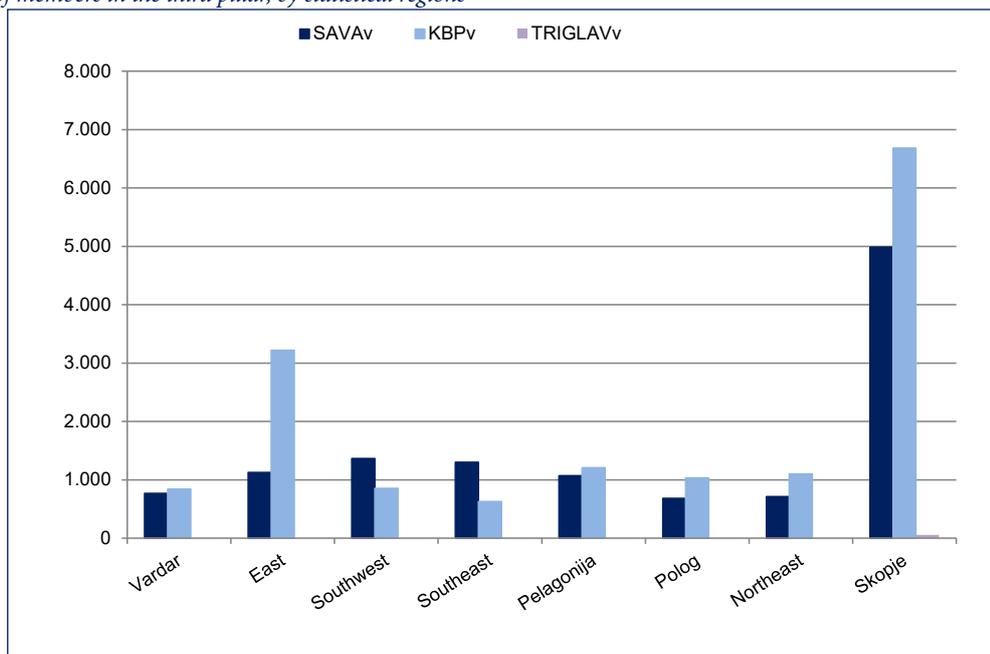


This graphical representation shows that by age groups the largest portion in voluntary fully funded pension insurance belongs to the active population over 65 years of age (about 11% men and about 17% women). This result shows that there is significant potential for the development of the third pillar.

The structure of the members in the voluntary pension funds by statistical regions<sup>18</sup> in the Republic of North Macedonia is presented in Graph 6.5.

Most members in the two voluntary pension funds are from the Skopje region, 6.685 members in KBPv, 4.984 members in SAVAd and 57 members in TRIGLAVd. The lowest number of members in SAVAd are from the Polog region (682 members in SAVA), the smallest portion of the members in KBPv are from the Southeast region (627), while TRIGLAVd has no members from the East region at all.

Graph 6.5. Structure of members in the third pillar, by statistical regions



<sup>18</sup>The statistical regions are defined according to the State Statistical Office - territorial units. The nomenclature of the territorial units is based on the territorial organization of the local self-government in the RNM and is harmonized with the EU classification.

### 6.3 Member account transfer in the same or another voluntary pension fund

The persons have the right to choose a voluntary pension fund and the right to change the selected voluntary pension fund, at their own discretion, at any time. If the member is a member of the existing voluntary pension fund for less than 12 months, he/she should pay a transfer fee upon transfer. Otherwise, the transfer is free. During the transfer, the total funds from the member's account are also transferred. In addition, in case of transfer of a participant in an occupational pension scheme from one insurer to another, he has the right to transfer the funds saved in the occupational scheme to a professional account or to a voluntary individual account, if the other insurer has not organized an occupational pension scheme or has not included the person in it. The member, who is a participant in an occupational pension scheme, has the right to transfer the funds to a voluntary individual account, if he/she is not employed or is not a member of a citizens' association. Table 6.1. contains data on the number of members who transferred from one voluntary pension fund to another and on the amount of transferred funds from one voluntary pension fund to another, on that basis, in 2021.

The new voluntary pension fund made a modest move in the transfers of members from one voluntary pension fund to another in 2021. Namely, in 2021, the total number of members in the voluntary pension funds, who transferred from one voluntary pension fund to another, is 75, which is 0.27% of the total number of members. Although the percentage share of members who made a change in the voluntary pension fund in the total number of members is still minimal in 2021, the number of members who made a change in the voluntary pension fund is significantly higher compared to 2020. In addition, 24 members transferred to SAVAd, 24 transferred to KBPv and 27 members transferred to TRIGLAVd. During the transfer, about 3.24 million denars were transferred to SAVAd, about 2.79 million denars were transferred to KBPv and about 1.27 million denars were transferred to TRIGLAVd. Furthermore, in 2021, there were transfers within the same pension fund from one professional scheme to another and from a professional to a voluntary individual account.

Table 6.1. Transfers of members from one voluntary pension fund to another

2021		VPF to which members have transferred, i.e., in which funds have been transferred			Total
		SAVAv	KBPv	TRIGLAVv	
Members who transferred from a VPF	SAVAv	-	24	7	31
	KBPv	24	-	20	44
	TRIGLAVv	0	0	-	0
	Total	24	24	27	75
Assets that have been transferred from a VPF (in denars)	SAVAv	-	2.787.277	356.665	3.143.942
	KBPv	3.244.009	-	917.856	4.161.865
	TRIGLAVv	0	0	-	0
	Total	3.244.009	2.787.277	1.274.521	7.305.807

### 6.4 Contributions in voluntary pension funds

The payment of a voluntary contribution can be made only for a person who meets the requirements for membership in a voluntary pension fund, in accordance with the Law on Voluntary Fully Funded Pension Insurance. The payment of a voluntary contribution, on behalf and for the account of a member who has a voluntary individual account, can be made by the member and/or the payer. The payment of voluntary contribution, on behalf and for the account of a member who has a professional account, can be made only by the insured. Payments are made from the transaction account of the member and/or the payer or insured. The voluntary contribution is paid to a special cash account of the voluntary fund, which is kept with the property custodian and is distributed to a voluntary individual account, or to a professional account of the member, depending on the manner of membership registration and after fulfilling the membership requirements.

The member, the payer and the insured have the right to freely determine the amount of the paid voluntary contribution and the dynamics of the payment, and the change of the payment amount, or the termination of the payment, do not affect the right to membership in the fund, i.e., do not imply termination of membership. The amounts of voluntary contributions are determined by the insurer, for all participants in the occupational pension scheme, which he organizes and finances and determines as a percentage of the salary of the member, who is included in the occupational pension scheme.

In 2021, a total of about 407.71 million denars were paid to the voluntary pension funds, which is about 0.06% of the GDP of the Republic of North Macedonia. The detailed paid contributions by months (in millions of denars) are presented in Table 6.2.

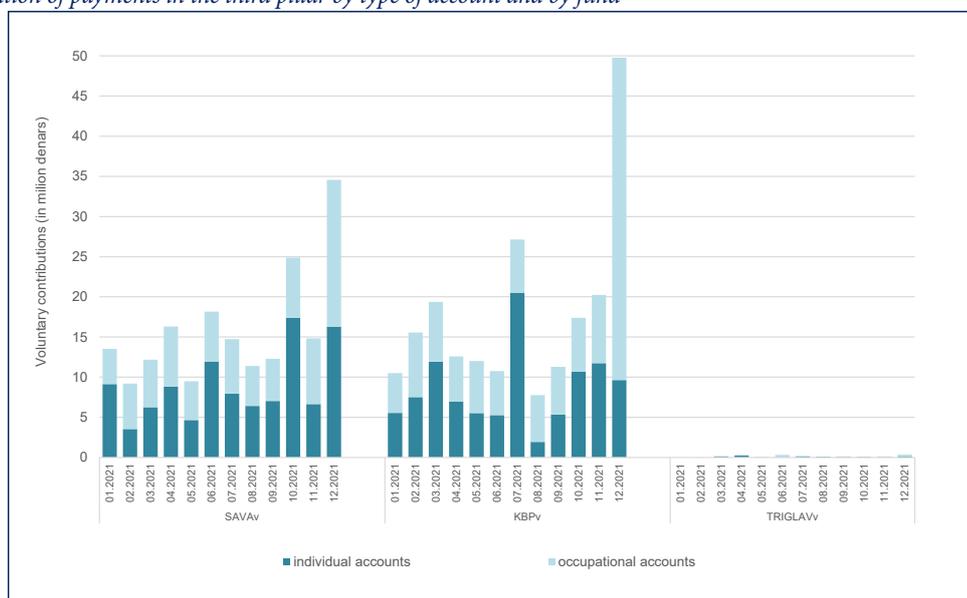
Table 6.2. Contributions in the third pillar by months and funds

(in million of denars)

	Total 2020	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total 2021
SAVAd	161,68	13,52	9,21	12,17	16,32	9,48	18,16	14,73	11,40	12,28	24,87	14,83	34,55	191,52
KBPd	155,07	10,52	15,57	19,37	12,59	12,01	10,75	27,15	7,76	11,28	17,39	20,23	49,78	214,39
TRIGLAVd				0,13	0,24	0,05	0,31	0,18	0,12	0,14	0,12	0,13	0,37	1,80
Total	316,76	24,03	24,77	31,54	28,91	21,49	28,92	41,87	19,16	23,56	42,26	35,07	84,33	407,71

In 2021, the total paid voluntary contributions in the third pillar increased by 28.71% compared to 2020. Thereby, compared to the previous year, the amount of total paid voluntary contributions in SAVAd increased by about 18.45%, while KBPd marked an increase in the amount of total paid voluntary contributions by about 38.25%. In 2021, a higher amount of voluntary contributions was paid to KBPd than to SAVAd. In 2021, the portion of voluntary contributions in the three voluntary pension funds, paid to professional accounts is 49%, while the portion of voluntary contributions paid on voluntary individual accounts is 51%. There is a small difference in this distribution in terms of funds, i.e., in SAVAd and TRIGLAVd 55% of the total voluntary contributions are paid on voluntary individual accounts, and 45% on professional accounts, while in KBPd, 52% of the total voluntary contributions are paid on professional accounts, and 48% on voluntary individual accounts. The distribution of payments by type of account to which they are paid and by fund, on a monthly basis, is presented in Graph 6.6.

Graph 6.6. Distribution of payments in the third pillar by type of account and by fund



## 6.5 Investment and portfolio structure of the voluntary pension funds

In voluntary fully funded pension insurance, same as in mandatory fully funded pension insurance, in the initial phase, proactive control and quantitative and qualitative restrictions on investments are used. However, unlike mandatory fully funded pension insurance, voluntary pension insurance has more liberal investment terms.

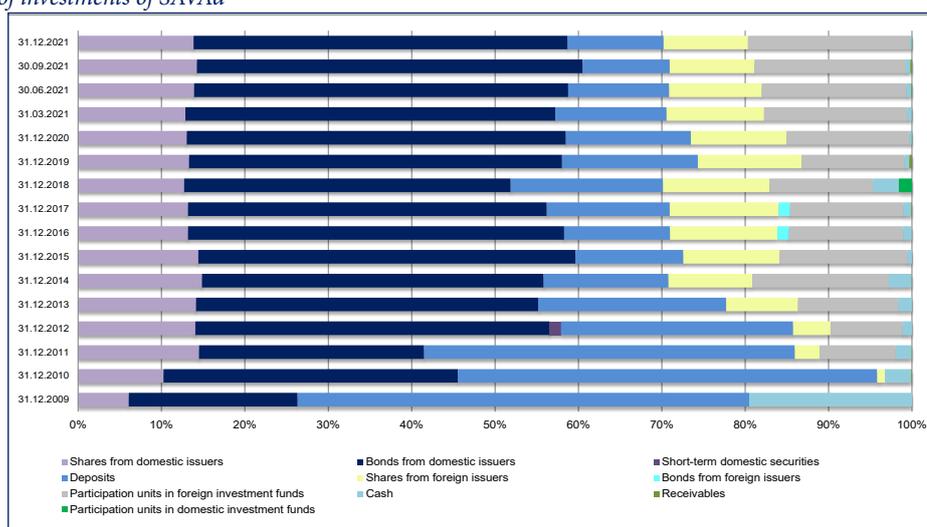
In addition to the instruments allowed in mandatory pension funds, in the voluntary pension funds, for investments abroad, it is also allowed to invest in debt securities, issued by the European Central Bank, the European Investment Bank and the World Bank, as well as debt securities, issued by local self-government units. Because it is necessary to achieve proper diversification between different types of investments and voluntary pension funds, maximum constraints are provided for investing in a certain company and in a certain economic group and maximum constraints on the amounts that can be invested in certain types of instruments. In order to prevent investments in instruments that are not suitable for investing in voluntary pension funds, the law prohibits investments in shares, bonds and other securities, which are not listed on the official market or which are not traded publicly, instruments that cannot be legally available, multiple forms of assets that cannot be immediately assessed and items of uncertain value. The maximum investment constraints are shown in Table 6.3.

The structure of investments of the voluntary pension funds SAVAd and KBPd, from the initial operation of the voluntary pension funds (for the period 2009 - 2020, on an annual basis, and for 2021, on a quarterly basis), is shown in Graph 6.7. and Graph 6.8. The structure of investments of the voluntary pension fund TRIGLAVd from the initial operation of the fund (01.03.2021) on a quarterly basis for 2021 is shown in Graph 6.9.

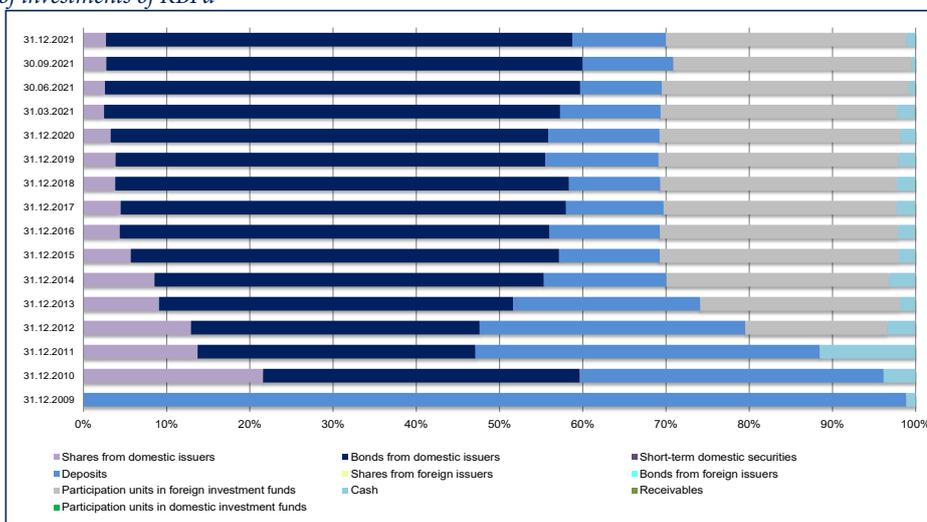
Table 6.3. Maximum investment limits

Type of instrument	Maksimum limit
Investments abroad (EU, OECD)	50%
<ul style="list-style-type: none"> <li>bonds and other securities issued by foreign governments and central banks of foreign countries and debt securities issued by the European Central Bank, the European Investment Bank and the World Bank</li> </ul>	50%
<ul style="list-style-type: none"> <li>debt securities issued by local self-government units, non-state foreign companies or banks, shares issued by foreign companies or banks and share documents, shares and other securities issued by investment funds</li> </ul>	30%
Securities issued or guaranteed by RNM on the domestic market or NBRNM	80%
Bank deposits, deposit certificates, commercial papers, bonds and mortgage backed 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%
<ul style="list-style-type: none"> <li>bonds issued by local self government units</li> </ul>	10%
Bonds issued by domestic joint stock companies	30%
Participation units and shares in Macedonian investment funds	5%

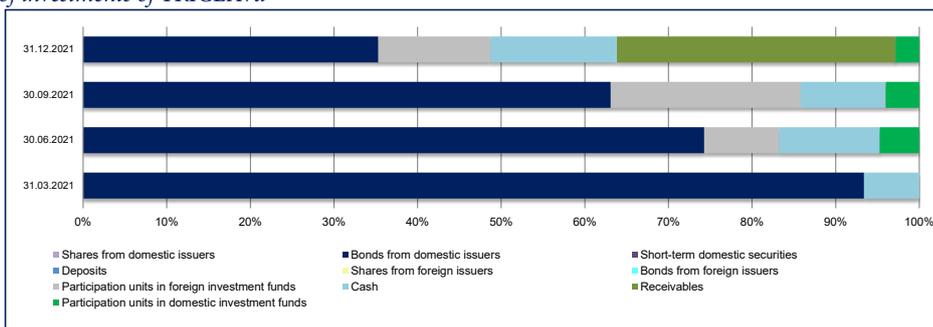
Graph 6.7. Structure of investments of SAVAd



Graph 6.8. Structure of investments of KBPd

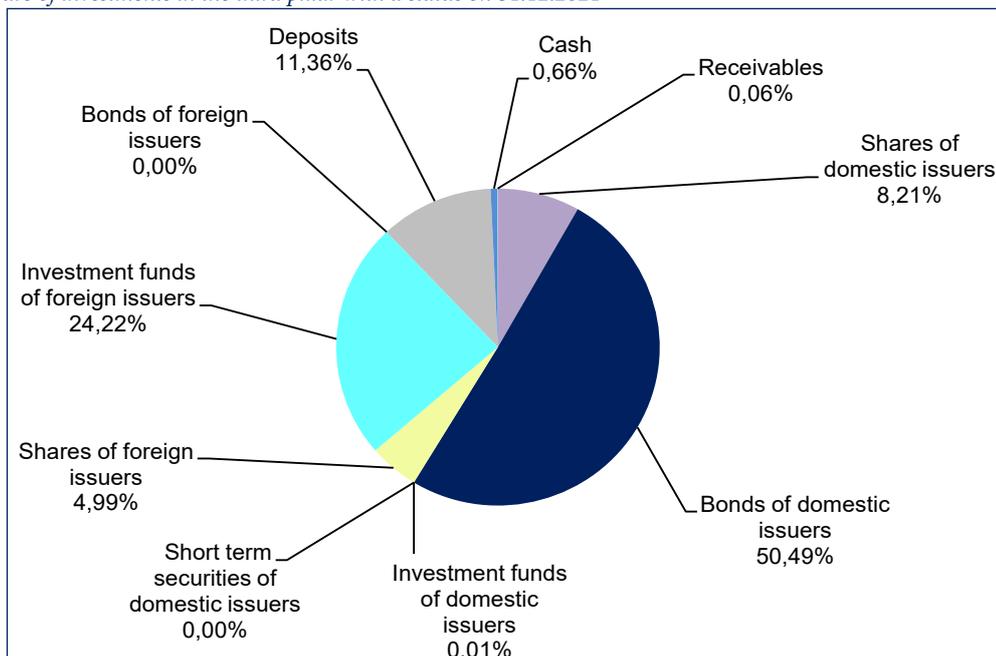


Graph 6.9. Structure of investments of TRIGLAVd



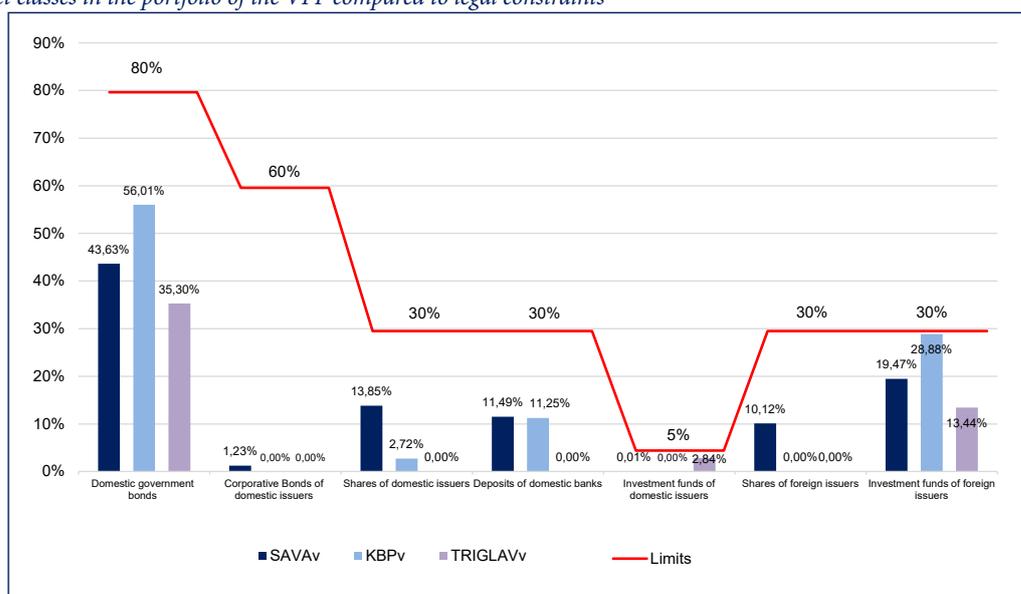
The structure of investments of voluntary pension funds, with a status on 31.12.2021, does not differ much compared to the structure of investments of voluntary pension funds, with a status on 31.12.2020 and it is shown in Graph 6.10. The initial operation of the new voluntary pension fund did not have much impact on the overall investment structure of the voluntary pension funds, considering the fact that in the initial years of operation the new fund disposed of small-scale assets that represent a small share in the total assets of the voluntary pension funds. In 2021, the portion of bonds from domestic issuers, which include domestic government bonds (49.88%) and a corporate bond (perpetual bond issued by a bank - 0.61%), compared to the previous year, increased slightly and amounted to 50.49%. The portion of deposits in domestic banks decreased compared to the previous year and amounted to 11.36%. The portion of shares from domestic issuers remains almost at the same level, compared to the previous year and it is 8.21%. A very small part of the investments of the voluntary pension funds belong to investments in shares of domestic investment funds (0.01%). In 2021, the share of investments abroad increased, compared to the previous year, and amounted to 29.21% (24.22% in shares of investment funds and 4.99% in shares). The remaining part of the assets of the voluntary pension funds consists of cash 0.66% and receivables 0.06%.

Graph 6.10. Structure of investments in the third pillar with a status on 31.12.2021



In 2021, the three voluntary pension funds invested within the maximum investment constraints. Graph 6.11. shows the percentage share in the portfolio by asset classes in SAVAd, KBPd and TRIGLAVd and the legal constraints with a status on 31.12.2021.

Graph 6.11. Asset classes in the portfolio of the VPF compared to legal constraints



Voluntary pension funds have higher exposure to assets in shares of domestic issuers (8.21%) compared to mandatory pension funds. Thereby, the exposure of shares in domestic issuers is significantly higher at SAVAd (13.85%) compared to KBPd (2.72%). TRIGLAVd in the first year of its operation has no investments in shares of domestic issuers.

In comparison, the movement<sup>19</sup> of the value of MBI10, OMB and the value of the accounting unit of the voluntary pension funds, in 2021, is shown in Graph 6.12. The value of the accounting unit of SAVAd increased by 10.22%, and the value of the accounting unit of KBPd increased by 10.48%, and the value of the accounting unit of TRIGLAVd from the beginning of its operation increased by 3.48%. MBI10, in 2021 compared to 2020, increased by about 30.79%. OMB, recorded an increase of 0.46% in 2021.

Graph 6.12. Comparative movement of the value of MBI10, OMB and the value of the accounting unit of the VPF, 2021

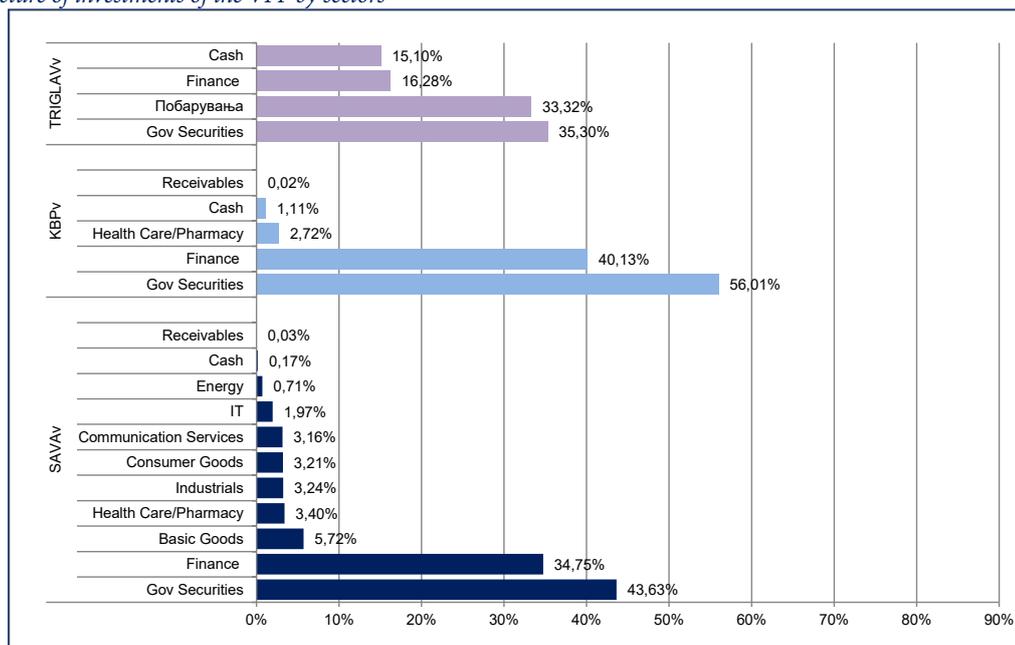


Source: MAPAS and Macedonian Stock Exchange AD Skopje - Annual Statistical Bulletin 2021

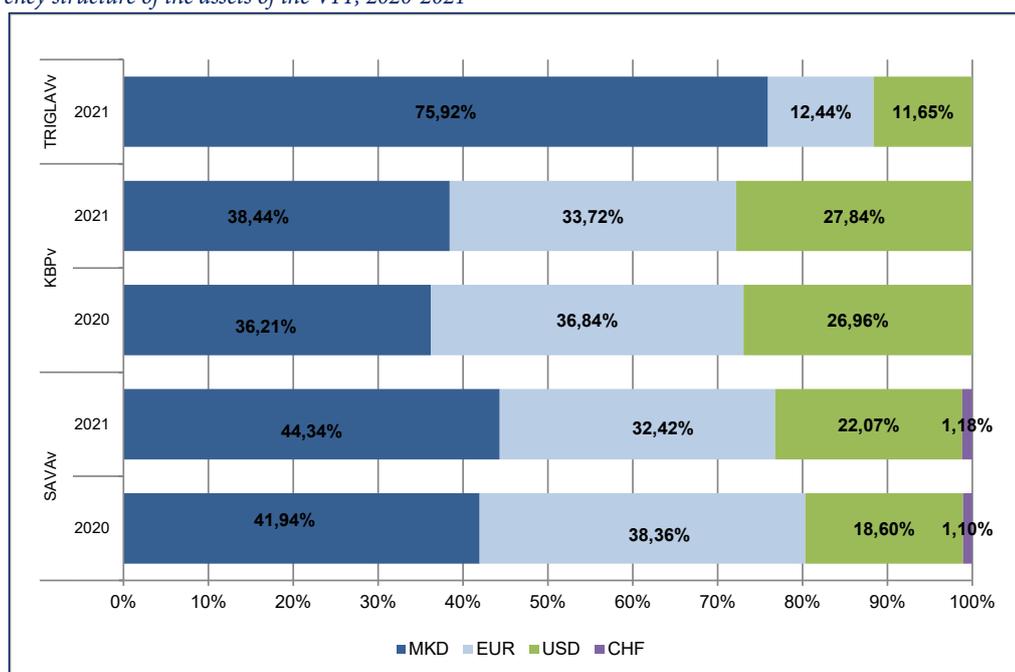
<sup>19</sup>The movements are shown through the change of the indices/units in relation to the initial index equal to 100, on 31.12.2021.

In the voluntary pension funds as well, most of the assets in 2021 were invested in domestic government securities (43.63% in SAVAd, 56.01% in KBPd and 35.30% in TRIGLAVd). This is immediately followed by investments in instruments by issuers/joint stock companies from the financial sector (34.75% in SAVAd and 40.13% in KBPd). In TRIGLAVd, the portion in instruments of issuers/joint stock companies in the financial sector is lower and amounts to 16.28%. Within this sector, SAVAd has the largest portion of shares in foreign and domestic investment funds (56.0%) and domestic bank deposits (33.1%) and a smaller portion of shares in domestic banks (4.3%), bonds issued by domestic banks (3.5%) and financial services (3.1%). The portion of foreign investment funds (72.0 %) is dominant in KBPd within the financial sector, and the rest belongs to domestic bank deposits (28.0%). The portion of foreign and domestic investment funds (100%) also prevails in TRIGLAVd within the financial sector. In addition to the abovementioned sectors, voluntary pension funds invest in other sectors as well: basic goods, pharmacy, consumer goods, industry, information technology, communication services and energy, however with a much smaller portion (from 0.71% to 5.72%). The structure of investments of voluntary pension funds, by sectors, is presented in Graph 6.13.

Graph 6.13. Structure of investments of the VPF by sectors



Graph 6.14. Currency structure of the assets of the VPF, 2020-2021

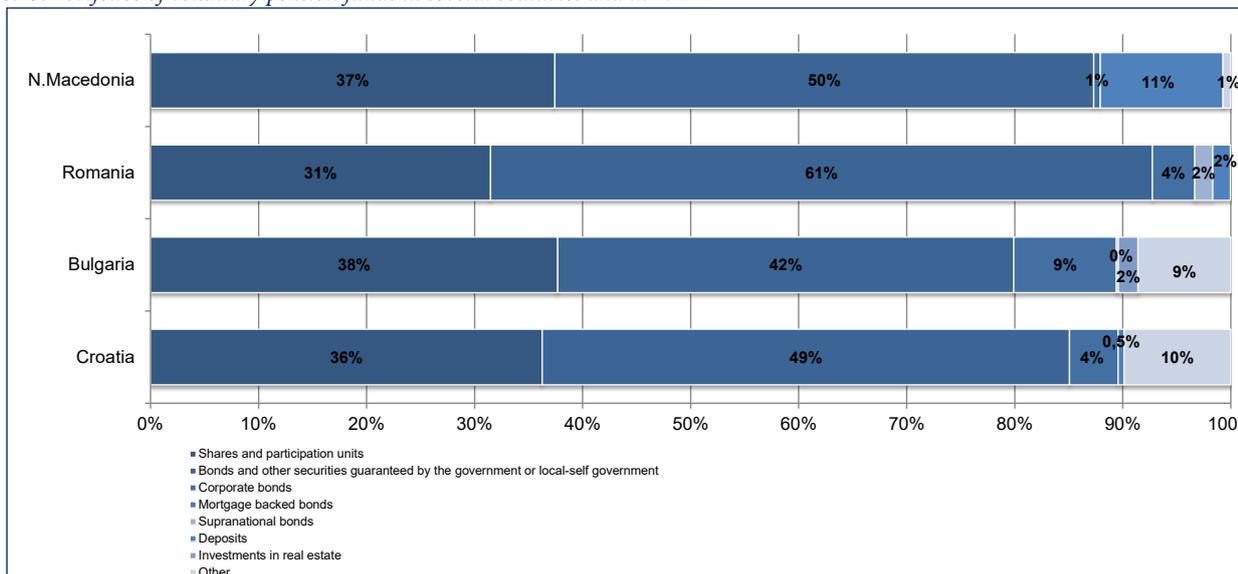


In regard to the currency structure of the assets of voluntary pension funds, presented in Graph 6.14, we can see that most of the assets of SAVAd are invested in instruments in domestic currency (44.34%), while the portion in instruments in euros is 32.42%. In 2021, compared to last year, in SAVAd there is an observable increase in the portion of instruments in denars and a decrease in the portion of instruments in euros. In KBPd, most of the funds are invested in instruments in domestic currency (38.44%), while the portion in instruments in euros is 33.72%. In 2021, compared to last year, in KBPd the portion in instruments in denars increased, while the portion in instruments in euros decreased. The portion of investments in US dollars (22.07% in SAVAd and 27.84% in KBPd) increased compared to the previous year. SAVAd's currency structure includes a small portion of instruments invested in Swiss francs, 1.18%. The currency structure of TRIGLAVd differs from that of SAVAd and KBPd. The weight of the assets of TRIGLAVz is on the side of the assets invested in denar instruments (75.92%) which is expected for a pension fund that is still at the beginning of its operation. Then, 12.44% of the assets of TRIGLAVd are invested in instruments in euros, and 11.65% of the assets are invested in instruments in US dollars.

If a comparison is made with the countries that have similar pension systems with the Macedonian one, there are observable similarities, but also differences in the investment portfolios of the voluntary pension funds. Graph 6.15. shows a comparison of the investments, with a status on 31.12.2021, of the voluntary pension funds in the Republic of North Macedonia, with the investments of the voluntary pension funds in some of the countries in the region that have implemented voluntary fully funded pension insurance.

If the portfolios of voluntary pension funds are reviewed by instruments, it can be noticed that pension funds in almost all countries have the highest exposure to bonds and other securities guaranteed by the country or local government (61% in Romania, 50% in North Macedonia, 49% in Croatia, and the lowest percentage in Bulgaria, 42%). Exposure to bank deposits is highest in North Macedonia and amounts to 11%. Unlike North Macedonia, in other countries the exposure to deposits is significantly lower: Romania (2%), Croatia and Bulgaria (less than 1%) and in terms of investments in stocks and shares, the largest percentage of assets in shares and stocks are invested in the pension funds in Bulgaria (38%), North Macedonia (37%), followed by Croatia (36%), and Romania (31%). Pension funds also invested in corporate bonds, 9% in pension funds in Bulgaria, 4% in Croatia and Romania. Compared to the pension funds in other countries, the share of investments in corporate bonds in the pension funds in North Macedonia is significantly lower, 1%. Only in Bulgaria the pension funds invested in real estate (2%), and in other countries, usually, this instrument is not allowed. In terms of foreign investments<sup>20</sup>, pension funds in North Macedonia have the highest exposure to foreign investments with 29%, followed by pension funds in Croatia with 21% and Romania with 9%<sup>21</sup>.

Graph 6.15. Portfolios of voluntary pension funds in several countries and in RNM



Sources: [www.hanfa.hr](http://www.hanfa.hr); [www.fsc.bg](http://www.fsc.bg); [www.asfromania.ro](http://www.asfromania.ro) and own calculations.

<sup>20</sup>The data on foreign investments for Bulgaria dated 31.12.2021 were not available.

<sup>21</sup>The data on foreign investments for Romania are dated 30.11.2021.

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

The method of calculation of the net assets, the accounting unit and the return of the voluntary pension funds is the same as for the mandatory pension funds.

The changes in the assets of the voluntary pension funds, from the beginning to the end of the year, occur due to:

- inflow of contributions,
- outflow due to fees and transaction fees,
- inflow due to personal income tax refund,
- outflow due to incorrect payment of converted contributions,
- inflow due to transfer from the other voluntary pension fund (for persons who were members of another fund and then transferred to the current fund),
- outflow due to transfer to the other voluntary pension fund (persons who were members of the respective fund, and then transferred to the other fund),
- outflow due to payment of inheritance,
- outflow due to payment of pension benefits (single and multiple payments),
- un(realized) gains/losses from investments.

Starting from the value of the net assets at the end of the previous year and taking into account all the above-mentioned changes, we come to the value of the net assets at the end of the year (which is shown in Table 6.4.).

Table 6.4. Changes in the assets of the voluntary pension funds (in millions of denars)

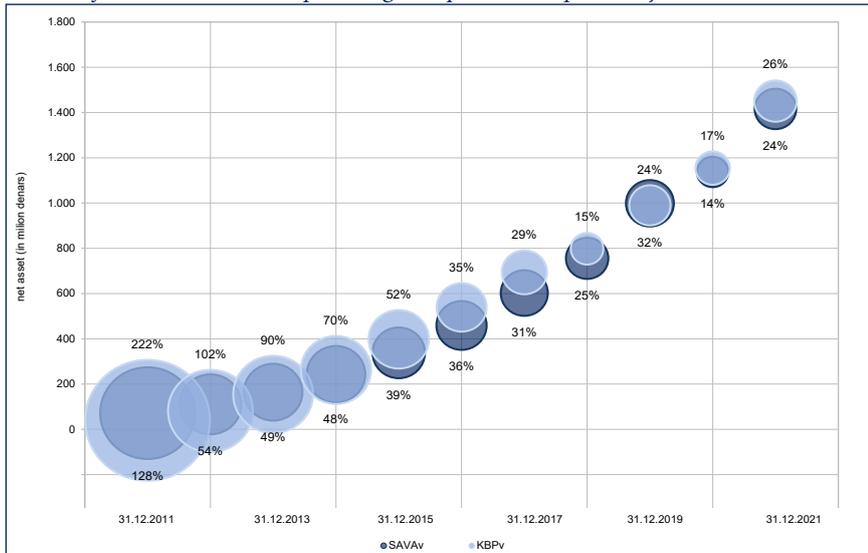
	SAVAd	KBPd	TRIGLABd
Net assets on 31.12.2020 / 1.3.2022	1.137,61	1.154,52	0,00
Contributions	191,52	214,39	1,80
Fees from contributions	4,57	5,91	0,05
Contributions reduced for fees from contributions	186,95	208,48	1,75
Payment on an individual account from personal income tax refund	0,00	0,00	0,00
Outflow for incorrect payment of converted contributions	0,02	2,79	0,00
Compensation from assets	12,57	11,58	0,01
Expenditures for intermediary commissions	0,13	0,06	0,00
Transfer from the other fund	3,24	2,79	1,27
Transfer to the other fund	3,14	4,16	0,00
Inheritance payment	2,82	1,96	0,00
Payment of pension compensation - one-time payment/multiple payment	27,45	33,33	0,00
Gross return on investment	134,47	138,50	0,05
Net return on investment	121,76	126,86	0,04
Net assets on 31.12.2021	1.416,14	1.450,40	3,06

The total net assets in the voluntary pension funds, with a status on 31.12.2021, amounted to approximately 2.87 billion denars or approximately 46.66 million euros, which is about 0.40% of the GDP.

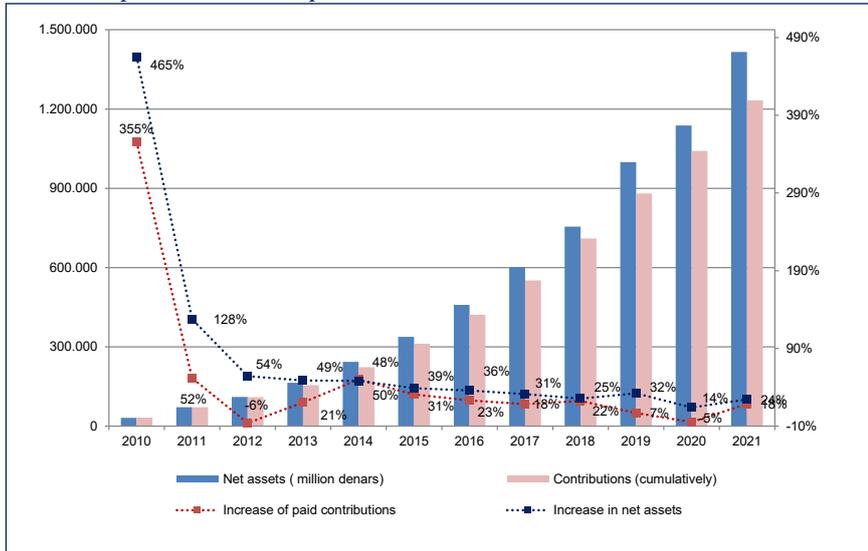
Graph 6.16. shows the values of net assets at the end of all years and their increase in percentage compared to net assets in the previous year. Thereby, it can be noticed that the net assets of the two voluntary pension funds are growing at a similar pace. The biggest growth is observed in 2011 compared to 2010. In 2021, compared to 2020, there has been an increase in the growth of net assets of both SAVAd and KBPd.

The movement of the value of net assets and cumulative contributions, as well as the increase of paid contributions and the increase of net assets in SAVAd and KBPd, are presented in Graph 6.17 and Graph 6.18. The increase of the net assets of the voluntary pension funds is implied by the increase of the paid contributions and the investment results. For 2021, about 70% of the growth of net assets is due to the paid contributions. The portion of cumulative contributions in the total net assets during the first years is significantly large, and then decreases.

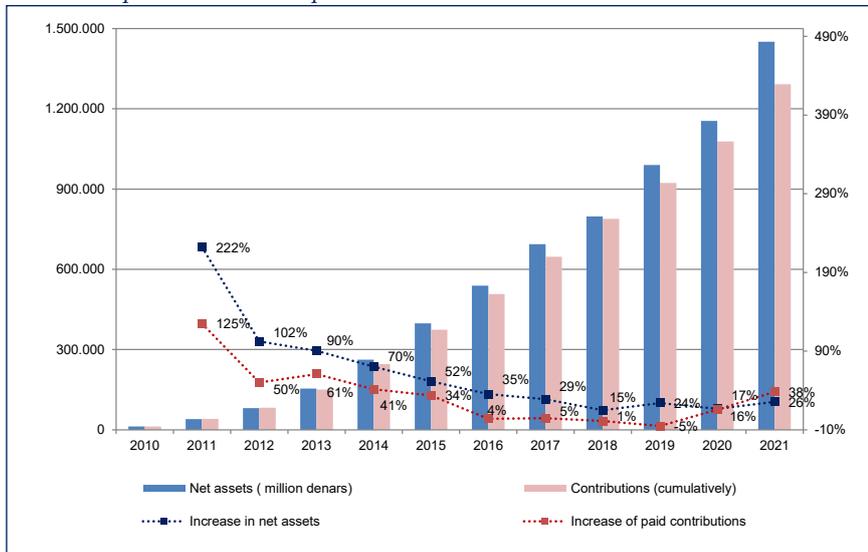
Graph 6.16. Increase in net assets of SAVAd and KBPd in percentage compared to the previous year



Graph 6.17. Increase in net assets compared to increase in paid contributions in SAVAd



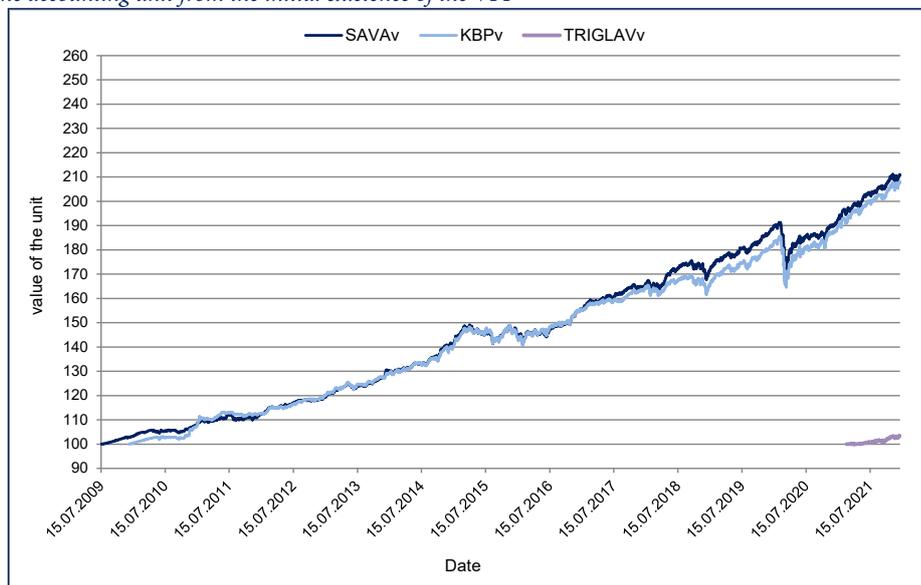
Graph 6.18. Increase in net assets compared to increase in paid contributions in KBPd



In SAVAd, in the initial period (2009-2011), there is an observable large increase in net assets and paid contributions. In 2012, compared to 2011, the increase in net assets was 54%, while in paid contributions a decrease of 6% can be noticed. In the next six years, the growth of the net assets of SAVAd will gradually decrease from 49% to 25% in 2018 compared to 2017. In 2019, there is a 32% increase. In 2020, the growth of the net assets of SAVAd slowed down again and amounted to 14%. The growth of the net assets of SAVAd in 2021 increased and amounted to 24%. While, in the paid contributions in 2014, there is an observable bigger increase, in the amount of 50%, and in the following years, the increase of the paid contributions gradually reduced until 2017. In 2018, compared to 2017, the increase of paid contributions additionally increased amounted to 22%, while in 2019 the increase declined to 7%. In 2020, there is an evident decrease of paid contributions by 5% compared to 2019. In 2021, the paid contributions increased by 18%.

In addition, also in KBPd, in the initial period (2010 - 2012), there is an observable large increase in net assets and paid contributions. In 2013, compared to 2012, the increase in net assets amounted to 90%, while the increase in paid contributions was around 61%. In the following years, the growth of net assets and paid contributions in KBPd began to decline gradually. In 2018, compared to 2017, in KBPd, the net assets increased by 15% and the paid contributions increased by 1%. In 2019, compared to 2018, in KBPd, the increase in net assets additionally increased to 25%, however the amount of paid contributions decreased by 5%. In 2020, there is again a reduced growth of net assets, i.e., the net assets increased by 17% compared to 2019. The growth of the net assets of KBPd in 2021 increased and amounted to 26%. The amount of paid contributions in 2020 increased by 16%. In 2021, there is an observable increased growth of paid contributions in KBPd, by 38% compared to 2020.

Graph 6.19. Value of the accounting unit from the initial existence of the VPF



Graph 6.20. Value of the accounting unit of the VPF in 2021

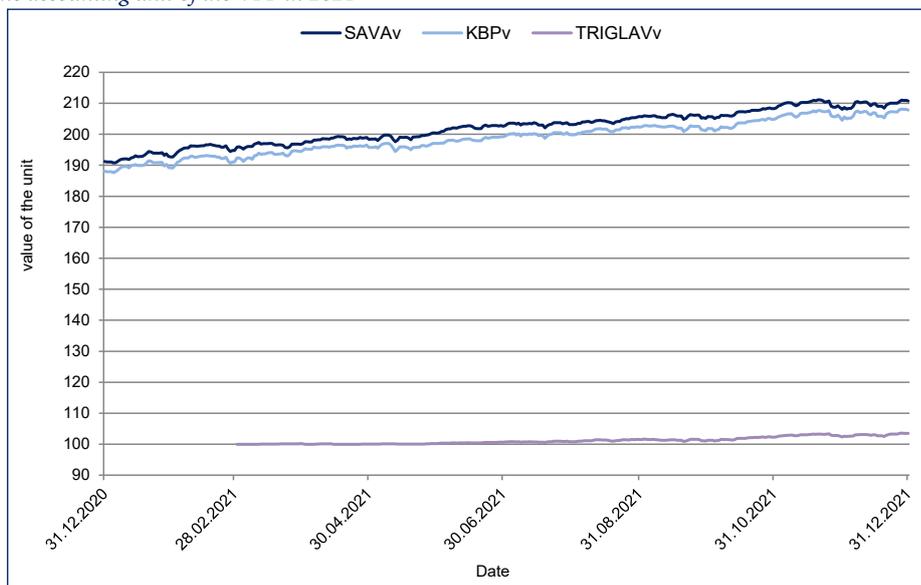


Table 6.5. Value of the accounting unit from the initial existence of VPF

Date	Value of accounting unit		
	SAVAd	KBPd	TRIGLABd
15.09.2009	100,000000	0,000000	
21.12.2009	102,815757	100,000000	
31.12.2009	103,061825	100,204385	
31.12.2010	107,592926	106,891617	
31.12.2011	111,854726	112,639593	
31.12.2012	118,742851	119,129537	
31.12.2013	130,511147	129,015451	
31.12.2014	140,946772	139,908803	
31.12.2015	147,535595	146,709341	
31.12.2016	154,578083	154,465341	
31.12.2017	164,155073	162,989756	
31.12.2018	169,649887	163,696595	
31.12.2019	188,197689	181,404697	
31.12.2020	191,209810	188,085163	
31.03.2021	196,947885	194,717556	100,106385
30.06.2021	202,615997	199,186973	100,674110
30.09.2021	205,157852	201,140977	101,030855
31.12.2021	210,750156	207,793725	103,476074

The movement of the value of the accounting units of the voluntary pension funds, from the initial operation of the voluntary pension funds, until 31.12.2021, is presented in Table 6.5, Graph 6.19 and Graph 6.20. Since the beginning of the operation of SAVAd and KBPd, there has been a growing trend of accounting units. On 01.03.2021, a third voluntary pension fund, TRIGLAVd, started operating. In 2021, the value of the accounting unit was more stable in relation to the movements in 2020 that were caused by the unfavorable conditions in the financial markets in the conditions of the corona virus pandemic. In 2021, the accounting units of the three voluntary pension funds increased. Thereby, at the end of the year, the value of the accounting unit of SAVAd increased by 10.22%, compared to 2020, the value of the accounting unit of KBPd increased by about 10.48%, while the value of the accounting unit of TRIGLAVd increased by 3.48% from the initial operation.

The return of the voluntary pension funds by periods, reduced on an annual basis, is presented in Table 6.6. The return on the voluntary individual and/or professional account is variable and depends on the return of the voluntary pension fund and the fees charged by the company. The return, i.e., the profit, is a parameter that cannot be realistically predicted, because it depends on the conditions of the capital market and the overall economy.

The return of the voluntary pension funds is calculated in the same way and according to the same formula as the return of mandatory pension funds.

Considering the long-term nature of pension insurance, it is good to calculate the return of voluntary pension funds from the beginning of their existence, reduced to an annual level, which for SAVAd amounts to 6.17% in nominal amount, i.e., 4.34% in real amount, and for KBPd it amounts to 6.26% in a nominal amount, i.e., 4.40% in real amount.

Table 6.6. VPF yield\*

Period*	SAVAd		KBPd	
	in nominal amount	in real amount	in nominal amount	in real amount
31.12.2009-31.12.2010	4,40%		6,67%	
31.12.2009-31.12.2011	4,18%		6,02%	
31.12.2009-31.12.2012	4,83%		5,93%	
31.12.2009-31.12.2013	6,08%	3,00%	6,52%	3,42%
31.12.2009-31.12.2014	6,46%	4,09%	6,90%	4,52%
31.12.2009-31.12.2015	6,16%	4,25%	6,56%	4,64%
31.12.2009-31.12.2016	5,96%	4,36%	6,37%	4,77%
31.12.2010-31.12.2017	6,22%	4,72%	6,21%	4,71%
31.12.2011-31.12.2018	6,13%	4,91%	5,48%	4,27%
31.12.2012-31.12.2019	6,80%	6,22%	6,19%	5,62%
31.12.2013 - 31.12.2020	5,60%	4,90%	5,53%	4,82%
31.03.2014 - 31.03.2021	5,97%	5,13%	5,84%	5,00%
30.06.2014 - 30.06.2021	6,17%	5,07%	5,90%	4,80%
30.09.2014 - 30.09.2021	6,05%	4,76%	5,80%	4,52%
31.12.2014 - 31.12.2021	5,91%	4,41%	5,81%	4,31%
Start** - 31.12.2021	6,17%	4,34%	6,26%	4,40%

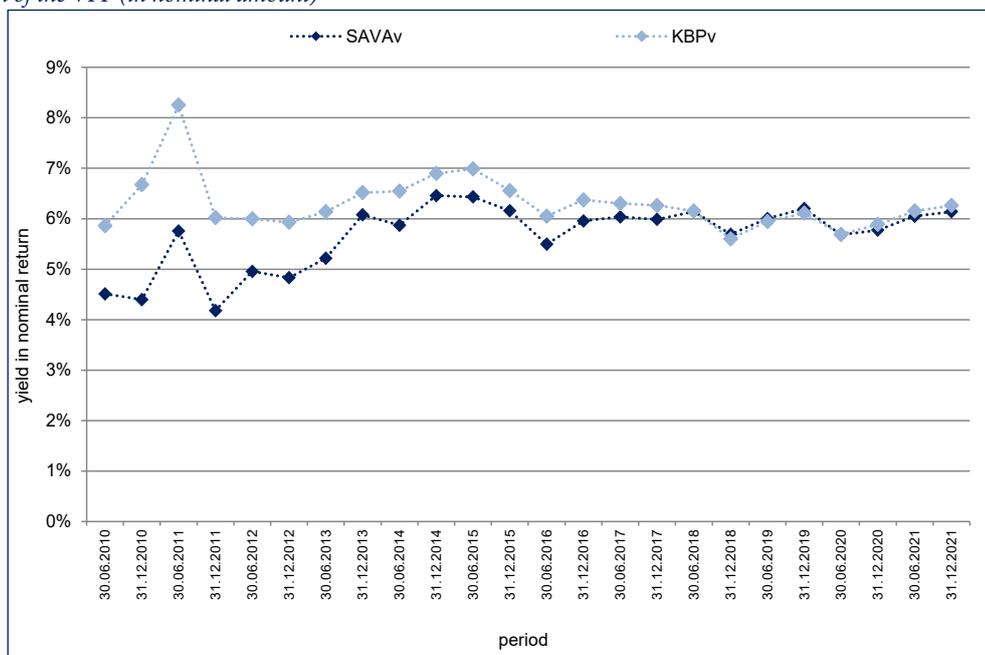
\*Until 31.12.2021, no return is calculated and published for TRIGLAVd because it has been operating less than 12 months.

\*\*Until the adoption of the amendments to the Law on Voluntary Fully Funded Pension Insurance, from January 2013, the return of a voluntary pension fund was calculated for a period of 3 years, only in nominal amount.

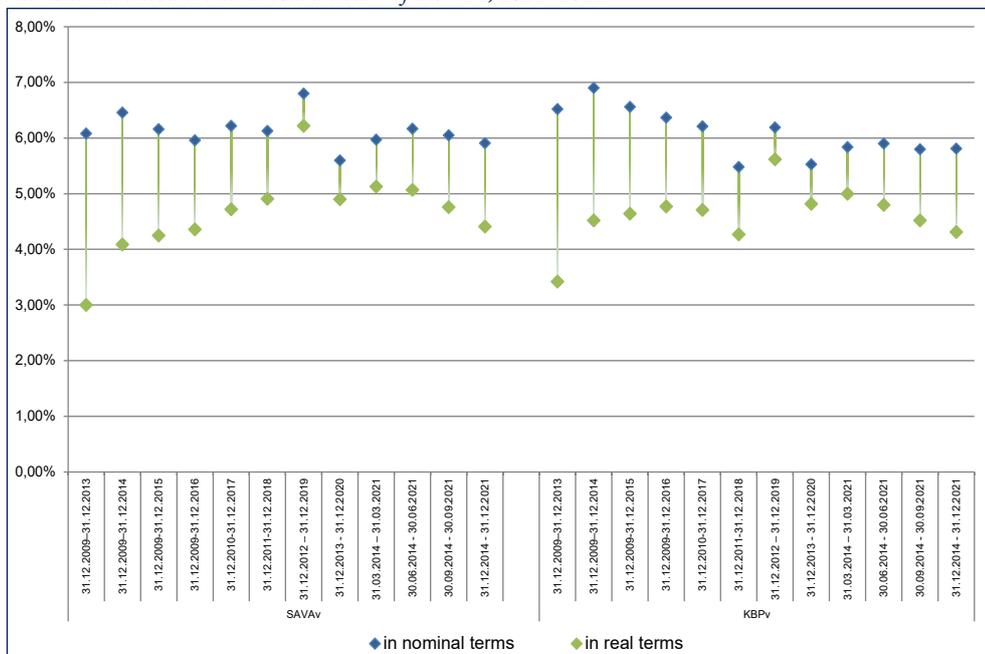
\*\* The start is 15.07.2009 for SAVAd and 21.12.2009 for KBPd.

The movement of the return in nominal amount, by periods, can be seen in Graph 6.21., where the returns by periods are shown, from 31.12.2009 to 31.12.2021, by funds. At the beginning, one can notice an increase in return, so at the end of the first half of 2011, high returns are observed in both voluntary pension funds, while at the end of 2011, there was a decrease in returns. Then, in the following years, there was a gradual increase in returns until mid-2015, followed by a decline in returns until mid-2016, and then again there is an increase in return, until the end of 2016. In 2019, there is an observable increase in return compared to the return at the end of 2018. In 2020, lower returns are recorded compared to 2019 in SAVAd and KBPv, mostly due to the unfavorable conditions on the financial markets in conditions of a coronavirus pandemic. In 2021, there is an observable increase in the returns in both pension funds.

Graph 6.21. Return of the VPF (in nominal amount)



Graph 6.22. Return in nominal amount and in real amount of the VPF, 2014- 2021



The movement of the return in nominal and real amount, in the period from 2013 to 2021 (annually) and in 2021 (quarterly), according to appropriate legally defined periods, converted into an equivalent annual rate of return, per voluntary pension fund, can be seen in Graph 6.22. In 2021, the return in nominal amount and real amount decreased in SAVAd (from 5.97% to 5.91% in nominal amount and from 5.13% to 4.41% in real amount) and KBPd (from 5.84% to 5.81% in nominal amount and from 5.00% to 4.31% in real amount). Thereby, the highest amount of return in nominal amount was registered in the second quarter in both SAVAd and KBPd. At the end of 2021, larger amounts are observed in a nominal amount compared to 2020, however in both SAVAd and KBPd, the amount are still not at the level of the seven-year return achieved at the end of 2019. In regard to the return in real amount, the highest return is recorded in the first quarter of 2021. In the reviewed period (2013-2021), the change in the level of cost of living in the accounting periods, reduced to an annual level, until 2019 decreased, which affects the gradual approximation of the returns in a real amount to the returns in a nominal amount, while in the period after 2019, there was an increase that affects the gradual departure of yields in real amount from yields in nominal amount.

The seven-year return at the level of voluntary fully funded pension insurance for the period 31.12.2014 - 31.12.2021, calculated through the change of the weighted average<sup>22</sup> of the accounting units of the voluntary pension funds, reduced on an annual level, is 5.85% in nominal amount, that is, 4.35% in real amount.

## 6.7 Fees in voluntary pension funds

In order to perform its functions of management of the assets of the voluntary pension fund, assessment of the assets, membership registration, keeping voluntary individual and professional accounts of the members and reporting to the members, as well as for payment of fees for MAPAS and the property custodian, the companies, in accordance with the Law on Voluntary Fully Funded Pension Insurance, charge a fee from contributions, a fee from assets and a fee for transfer.

The fee from contributions is charged as a percentage of each paid contribution to a voluntary pension fund, before its conversion into accounting units. This compensation is charged by the company in the same percentage, from all members of the voluntary pension fund, except in the case of members who are participants in an occupational pension scheme or in the case of a multi-year membership. The monthly fee from assets is a percentage of the value of the net assets of the voluntary pension fund, which is calculated on each date of assessment of the assets of the voluntary pension fund (in accordance with applicable bylaws, the date of assessment is every day) and is charged once a month. The fee for transfer is charged in case of transfer of a member from one voluntary pension fund to another voluntary pension fund, provided that the transferring member has been a member of the existing voluntary pension fund for less than one year.

The law determines the maximum amounts, and the companies are free to determine the amounts of certain types of fees within the legal maximum.

The fees charged by the companies managing the voluntary pension funds in the Republic of North Macedonia, for 2021, are shown in Table 6.7.

Table 6.7. Fees charged by companies managing voluntary pension funds in 2021

Type of fee	SAVA	KB First	TRIGLAV
Fee from contributions*	2,50% <sup>23</sup>	2,90% <sup>24</sup>	2,90%
Monthly fee from the assets of the voluntary pension fund	0,075% <sup>25</sup>	0,075% <sup>26</sup>	0,075%
<b>Transfer fee</b>			
Number of days**	Amount of transfer fee	Amount of transfer fee	Amount of transfer fee
number of days ≤ 360	10 Euros	10 Euros	10 Euros
number of days > 360	Transfer fee not charged	Transfer fee not charged	Transfer fee not charged

\* For members who are participants in an occupational pension scheme, the company may set a lower amount of this fee.

\*\* The number of days is determined based on the number of days from the date when the member acquired the status of a member of the existing voluntary pension fund to the date of signing the membership agreement with the future voluntary pension fund.

<sup>22</sup>The average value is calculated as a weighted average of the accounting units of the voluntary pension funds in relation to the net assets of the voluntary pension funds.

<sup>23</sup> As of 1 May 2021 (previously it was 2,90%).

<sup>24</sup> As of 1 June 2013 (previously it was 4,00%).

<sup>25</sup> As of 1 May 2021 (previously it was 0,100%).

<sup>26</sup> As of 1 January 2011 (previously was 0,15%).

The amount of fees from contributions, which were collected from the initial operation of the third pillar, until 2021, is shown in Table 6.8.

Table 6.8. Fee amount from the contributions charged by the pension companies in the third pillar

Pension company	Amount	Date of application
SAVA	5,25%	From the initial operation of the fund (July 15, 2009)
	3,80%	From March 1, 2011
	2,90%	From January 1, 2017
	2,50%	From 1 May 2021
KB First	5,50%	From the initial operation of the fund (December 1, 2009)
	4,00%	From April 24, 2010
	2,90%	From June 1, 2013
TRIGLAV	2,90%	From March 1, 2021

Since the initial operation of the voluntary pension funds, the pension companies have reduced the fee from contributions, SAVA reduced it three times, while KB First reduced it twice. The fee from assets from the initial operation of the third pillar was 0.15% per month of the value of the net assets of the voluntary pension fund. In addition, in 2011, both companies reduced the fee to 0.100% in SAVA and 0.075% in KB First. In 2021 SAVA once again reduced the fee and now it is 0.075%.

The collection of benefits (in thousands of denars), by the companies that manage the voluntary pension funds, in 2021, by months and by type of compensation, is shown in Table 6.9.

Table 6.9. Collection of fees in companies in 2019

(in thousands of denars)

	Jan.	Feb.	March	April.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
SAVAd- total	1.510	1.408	1.502	1.628	1.137	1.370	1.298	1.234	1.270	1.593	1.365	1.830	17.145
From contributions	360	231	314	419	218	427	340	264	286	591	336	787	4.572
From assets	1.150	1.177	1.189	1.209	919	943	959	969	984	1.001	1.029	1.043	12.573
KBPd-total	1.163	1.320	1.457	1.283	1.271	1.254	1.743	1.204	1.315	1.503	1.605	2.368	17.488
From contributions	287	424	545	352	334	300	771	213	316	491	563	1.312	5.907
From assets	876	896	912	931	938	954	972	991	1.000	1.013	1.042	1.057	11.581
TRIGLAVd - total			4	7	1	9	6	4	5	4	5	12	57
From contributions			4	7	1	9	5	3	4	4	4	11	51
From assets			0	0	0	0	1	1	1	1	1	1	6

The transaction fees, in regard to the transactions for acquisition or transfer of the assets of the voluntary pension fund, are paid from the assets of the voluntary pension fund, and are collected by selected legal entities that provide services with securities, at home and abroad. The transaction fees are calculated as a percentage of the value of each concluded transaction.

In 2021, a total of about 134 thousand denars of transaction fees were collected from SAVAd, while a total of about 64 thousand denars of transaction fees were collected from KBPd. In 2021, a very small amount of transaction fees was collected from TRIGLAVd.

## 6.8 Payment of pension benefits from voluntary fully funded pension insurance

The requirements for acquiring the right to a pension fee and the manner of payment of the pension fee from the third pillar are more liberal compared to the second pillar, however one should bear in mind that these are savings for the period after retirement. Namely, the funds can be withdrawn at the earliest ten years before the age for acquiring the right to old age pension, in accordance with the Law on Pension and Disability Insurance, which at the moment would imply the earliest at the age of 54 for men and 52 for women. Funds may also be withdrawn in the event when the Work Ability Assessment Commission within the PDIFNM has established that a member is generally incapable to work, regardless of age. In case of death of a member of a voluntary pension fund, the funds from the account of the member become part of the person's estate and they are treated in accordance with the Law on Inheritance.

The funds from the third pillar are used at the choice of the member in the following types of pension benefits:

- single or multiple payment of funds;
- pension annuity paid by an insurance company authorized for that purpose;
- programmed withdrawals paid by the company managing a voluntary pension fund, or
- a combination of the above options.

The provision of pensions and pension benefits, which are paid from the second and third pillars, is regulated by the Law on Payment of Pensions and Pension Benefits from Fully Funded Pension Insurance.

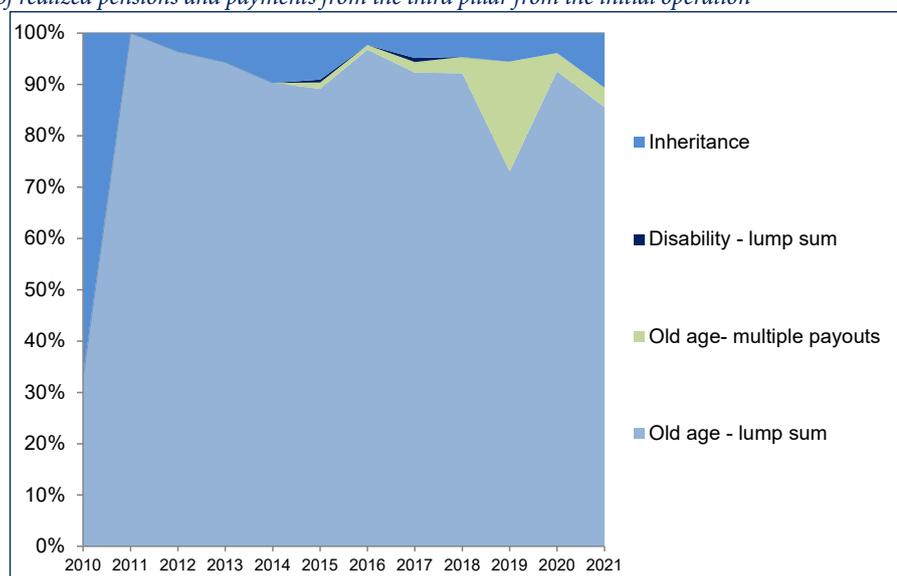
In 2021, 264 pension benefits and payments from the third pillar were realized. Most of the realized pension benefits were in cases of fulfilled age criteria, mostly as one-time payments, and a small part as multiple payments. A small part of the payments in the third pillar were in case of death of a member, with payment of inheritance. A detailed overview of the realized pension benefits and payments for members of the third pillar, by voluntary pension funds and type of account for 2021, are presented in Table 6.10.

Table 6.10. Realized pension benefits and payments to members of the third pillar

Type of pension benefit and payment/ Voluntary pension fund	SAVAd		KBPd		Total
	Individual account	Professional account	Individual account	Professional account	
Lump sum	58	31	24	113	226
Multiple payment	2	1	0	7	10
Inheritance	8	12	2	6	28
Total	68	44	26	126	264

Graph 6.23. shows the structure of realized pension benefits and payments to members of the third pillar from the beginning of the operation of the third pillar, by years, until 2021. The number of payments is low, because the system is still young and the members are relatively young persons. Most of the payments are one-time payments in case of fulfilled age criteria, followed by payments in cases of death of a member as inheritance payment. There is also a small number of one-time disability payments as well as multiple payments based on age criteria.

Graph 6.23. Structure of realized pensions and payments from the third pillar from the initial operation



# 7

## Marketing and agents of pension companies

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## 7. Marketing and agents of pension companies

In order to protect the interests of the existing, future and retired members of the fully funded pension insurance and provide fair and objective information to the public, the marketing is realized in a regulated environment, governed by law and bylaws.

During 2021, an exam for agents was organized and conducted, in three exam sessions, whereby 49% of the present candidates passed the exam. Also, registration and annual renewal of the registration of the agents were made on an ongoing basis, and some of the agents lost their agent status.

The increase in the average number of concluded contracts per agent continues in 2020 and 2021, mostly due to the increase in the average number of concluded contracts per agent at the new pension company. Regarding the number of agents who concluded contracts, there is an increase in the case of the three pension companies.

In order to protect the interests of current and future members and retired members of the fully funded pension insurance and to provide fair and objective information to the public, marketing is carried out in a regulated environment, governed by law and bylaws.

Marketing activities imply all activities aimed at advertising the pension companies and the mandatory and voluntary pension funds and provision of information and conclusion of membership agreements in the mandatory and voluntary pension funds and for the payment of funds from the mandatory and voluntary pension funds. These activities include: advertising the operation of pension companies and the pension funds they manage, provision of information about the characteristics of mandatory and voluntary fully funded pension insurance, provision of information about fees and transaction fees, provision of information about the returns of mandatory and voluntary pension funds, provision of information about the investment portfolios of the mandatory and voluntary pension funds, provision of information about individual accounts, voluntary individual accounts and professional accounts, membership and transfer of members from one mandatory pension fund to another, membership and transfer of members from one voluntary pension fund to another, conclusion of agreements for programmed withdrawals, agreements on one-time payment and agreements on multiple payments and other activities for the purpose of advertising and provision of information related to the operation of pension companies and pension funds. The pension company can perform marketing activities of a pension fund, in its premises, in the premises of its business associates for marketing or outside them, directly or through an appropriate type of communication (telephone, fax, internet). The marketing premises must meet certain legally prescribed requirements.

In order to enable MAPAS to exercise the control function over the marketing materials, the pension company is obliged to submit to MAPAS, in a photocopy or on an appropriate external medium, any published marketing material, within three days after its publication. In the event when MAPAS considers that an advertisement, or other written material, may be misleading, it may adopt a decision to prohibit further publication, or distribution, and order the publication of an amendment to that material, within a period that it will determine.

A person who works on marketing, i.e., agent, may be a person employed in a pension company or another person who is contractually engaged by a pension company. The agent may perform marketing activities of pension funds and/or conclude membership or payment agreements, only for pension funds managed by the pension company where he is employed or contractually engaged. The agent must be present at the conclusion of the membership agreement of the pension fund, the transfer agreement, the programmed withdrawal agreement, the one-time payment agreement and the multiple payment agreement and is obliged to sign such an agreement. The agent is obliged to personally make all contacts with the member, the retired member or the persons who have the right to become members and retired members of a pension fund, personally and must not conclude agreements through another person. The agent also has a significant role in choosing the type of pension payment from the fully funded pension insurance, by the member, and is obliged to personally present the offers on projected future pensions of the member who submitted a request for listing, with a detailed explanation of the characteristics and the used assumptions for all types of pension payments.

The person can perform marketing activities, only after his/her registration in the Register of Agents maintained by MAPAS. MAPAS prescribes the manner and procedure for taking the exam for agents and the manner and procedure for registering the person in the Register of Agents.

In 2021, an exam for agents was organized in three exam sessions for a total of 138 present candidates who registered to take the exam, whereby 67 or 49% of the present candidates passed the exam. Detailed data on the present candidates who took the exam for agents in 2021, by pension company, are presented in Table 7.1.

In 2021, a total of 89 agents were registered, of which 18 were agents from SAVA, 30 were agents from KB First and 41 were agents from TRIGLAV. Re-registration<sup>27</sup> was performed for 4 agents of TRIGLAV. An annual renewal of the registration of agents was also performed, for a total of 529 agents, of which 284 agents from SAVA, 160 from KB First and 85 from TRIGLAV. In 2021, the agent status terminated for a total of 13 agents, of which 6 agents from SAVA, 6 agents from KB First and 1 agent from TRIGLAV. An overview of the number and average values of registered, renewed and terminated statuses of agents from 2015 to 2021 per pension company is presented in Graph 7.1. It can be noticed that the number of registered agents from SAVA, KB First and TRIGLAV in 2021 is almost at the same level as in 2020.

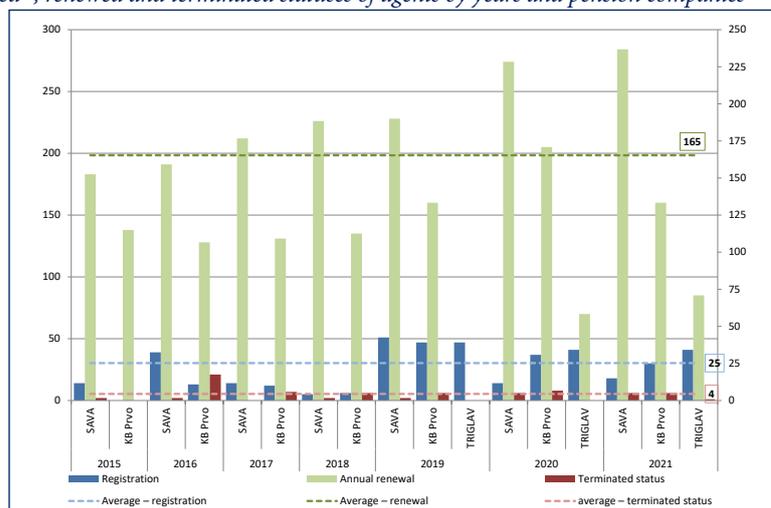
<sup>27</sup>Re-registration of an agent for a pension company is performed for an agent who was previously an active agent of another pension company.

Table 7.1. Present candidates who took the exam for agents by pension company

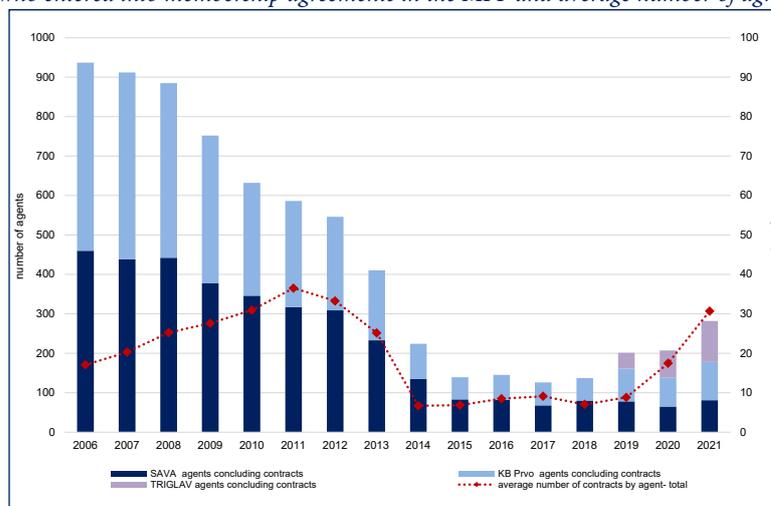
Pension company	Present	Passed	Passed (in %)
SAVA	30	13	43%
KB First	65	29	45%
TRIGLAV	43	25	58%
Total	138	67	49%

In regard to the number of membership agreements in the mandatory pension funds, which are concluded by the agents from the initial operation of the system, Graph 7.2. shows that in 2005 the number of agents was highest, on average they concluded the most membership agreements, as this was the beginning of the system, and 31.12.2005 was the deadline for voluntary members to choose whether to join the two-pillar system and sign an agreement. In the following years, the number of agents who conclude agreements was continuously decreasing from one year to another, and at the same time the average number of concluded agreements per agent was increasing, until 2011. Then, by 2014, the average number of agreements per agent dropped significantly. In the following years, the number of agents who signed agreements and the average number of agreements per agent remain at approximately the same level. In 2019, when the third pension company started operating, there is again an observable increase in the number of agents who signed agreements as well as a minimal increase in the average number of concluded agreements per agent compared to 2018. The increase in the average number of concluded agreements per agent continued in 2020 and 2021, mostly due to the increase in the average number of concluded agreements per agent in TRIGLAV. In regard to the number of agents who signed agreements, there was an increase in the three pension companies.

Graph 7.1. Number of registered<sup>28</sup>, renewed and terminated statuses of agents by years and pension companies



Graph 7.2 Number of agents who entered into membership agreements in the MPF and average number of agreements per agent



<sup>28</sup>The number of re-registered agents is included in the number of registered agents.