UDC 3.33 (497.11) Original scientific paper Recived: -

Acceptee: March 23, 2021.

Coresponding author: milan.radosavljevic@fpsp.edu.rs

# MANAGEMENT OF PENSION SYSTEMS AT THE GLOBAL LEVEL WITH REFERENCE TO SERBIA

### Milan Radosavljević, Dragana Radosavljević, Aleksandar Anđelković

Faculty of Business Studies and Law, Union-Nikola Tesla University in Belgrade

**Abstract:** The pension system is one of the most important segments of any national economy. It absorbs, that is, disposes of large financial resources and is considered an important financial institution, since often through the quality of the pension system one can relatively well see the orderliness of society itself, ie the quality of living standards and general satisfaction of the population.

On the other hand, the number of pensioners on a global level is constantly increasing. The reasons are the increased life expectancy of the population, ie the improvement of living standards and quality of health care, reduced fertility, declining interest in marriage as an institutional and traditional community in which children are born, economic, demographic, health, immigration and other factors that objectively contributed an increasing number of the elderly, ie pensioners. This expressed increasing pressure on pension funds as a central institution, and thus on the status, ie life of pensioners.

The old population, in which the majority are pensioners, have more or less become vulnerable groups that face the three biggest challenges: poverty, old age and illness. Of course, loneliness could be added here, where retired men or women find it difficult to live the last days of their lives in their advanced years. Countries at the global level, especially countries in transition, are not committed to retirees and often see them as a burden to society and the state. Economic crises have also led to moral crises in which traditional family ties have been broken and the moral obligation for heirs to provide assistance to their ancestors. And not only that. In modern conditions, the elderly and pensioners not only support their own, but also the families of their children, and even the third generation, ie grandchildren.

Analyzes show that numerous crises have actually reduced pension funds, and pensions as well, as an exercised and acquired right, which in legally regulated systems represent inviolable right, meaning that pensions cannot be questioned, ie reduced, not paid, or redirected to other budget funds. items or expenses. In other words, today pension systems and pensioners on a global level face two problems, namely: reduction of pension rights, ie funds in pension funds, and on the other hand increased need of elderly people, ie pensioners, such as medical needs, need for special nutrition, medicines, consumption of special needs such as recreation, rest, respect and the same treatment with other parts of society.

The paper also deals with the issue of the pension system and pensioners in Serbia. The crisis of the Covid-19 pandemic also contributed to the further deterioration of the status and material security of pen-

sioners. This group has experienced numerous discriminations, restrictions and often deprivation of basic human needs which are guaranteed by the documents of the international community.

The aim of this paper is to address the issue or problem of pension systems at the global level, in order to determine the ranking of successful or quality pension systems, as well as the basic elements on which annual value indices are calculated, as well as the pension system in Serbia.

**Keywords:** Pension systems, Old people, Global pension system quality index, Pension podcasts, Pensioners of Serbia.

### 1. GENERAL APPROACH TO THE RESEARCH PROBLEM

Pensioners, as part of the global population, represent a vulnerable group, both because of their age and because of their status, material security and participation in social life. Most countries in the EU classify pensioners as vulnerable groups, in addition to the disabled, children, women, national minorities, etc. At the global level, they have small pensions, belong to the group of the poor part of the population, they often get sick and suffer from occupational diseases, they are lonely and without sufficient material resources to provide for themselves and their families. In addition to losing their ability to work and health, retirees often experience isolation from society, but also from their families and descendants. Domestic violence, where retirees are most often exposed to numerous coercion, insufficient respect and recognition for what they have done during their working life. A regular companion of economic, natural and health crises is also moral, which is almost the cause of all previous crises. With more frequent and devastating crises, the status of people in general, and vulnerable groups in particular, is deteriorating, leading to social and other problems.

Analyzes show that Serbian pensioners, although old, in poor health and impoverished, have experienced numerous dramatic events such as: interethnic conflicts in the former SFRY, economic crisis of the 1990s, disappearance or destruction of pension funds, economic crisis at the end of the first decade of this century, political crises until the crisis of the Covid pandemic - ie general poverty that affected the elderly and pensioners.

A large number of pensioners in Serbia support their children, but also the third generation, either because of their unemployment, or because of their lack of interest in doing certain jobs with low salaries. This situation is also present in other transition countries, with little chance of improving it and bringing it to the level of pensioner status in the EU in a shorter period of time. However, it is difficult to say that at the level of Europe, there are countries in which the position and status of pensioners is worse than in Serbia. The consequences of previous events will be especially felt,

especially when the pandemic ends, there will be post-pandemic economic, ie psychological crises that will lead to an even more difficult situation of the old, poor and sick groups.

However, it turns out that pensioners in the Republic of Serbia are particularly affected by the humiliation they experience when they begin their retirement, where their basic human rights are endangered, although they are guaranteed by the documents of the United Nations, but also by the Constitution of Serbia. Experience shows that pensioners, after finishing their working life, are not given enough attention, but also that they are not prepared for a different way of life than decades ago. The families of pensioners are not ready to accept the radically different functioning of the family, which leads to mutual psychological and other problems. The micro environment of pensioners is also not prepared to accept pensioners, whether it is about institutional organizations, ie associations of pensioners, and socially useful activities, volunteering, humanistic work, etc. In short, pensioners in the Republic of Serbia are left to themselves and represent a burden rather than a group that has given results in the past that are enjoyed by future generations. It turns out that every society has progressed so that each succeeding generation left more to its descendants than it inherited, and because of that, the society should show more understanding and care for the older population, ie for pensioners. This is necessary, because the relationship with pensioners and the elderly is in fact a relationship with the future, since sooner or later every individual will be old and retired and should not behave in a way that would be unacceptable to him.

We should bear in mind that there is a small number of papers dealing with socially vulnerable groups, ie pensioners, although the problems and challenges that pensioners face are increasing. The problem of pensioners is much broader than social care and the provision of regular pensions. People have been fighting for centuries to shorten working hours and working life, so that they can enjoy the fruits of their former work for a part of their lives. That situation is still present today in developed countries, where retirement is a happy event, that is, it is the day when a person can get rid of technical, technological and organizational regimes. He then gains the opportunity to do whatever he wants, that is. He can enjoy freer behavior and conduct.

In the Republic of Serbia, the day of retirement is one of the saddest days. A large number of pensioners would like to work even after the legal deadline, even under worse conditions than in regular work. It is a question of a bad, ie worse material condition of pensioners, but also psychological problems that are accompanied by radical changes. It turns out that the conditions for retirement from the last century

are legally defined and that in poor countries, working life could be extended, either due to extended life expectancy, or due to the introduction of new technologies that do not exhaust people and do not endanger their health. It would be useful for retirees, but also for society as a whole, to leave the freedom to choose whether someone wants to retire after fulfilling the legal conditions, especially if they feel psychophysically well and if greater efforts do not require a suitable job. We should even consider whether partial employment, ie working for a few hours or on certain days of the week would reduce their fear and stress because they have radically severed ties with work, the organization in which they had worked and the people with whom they have often spent their working lives.

Pensioners are an important source of learning for management, ie the organizations from which they leave, which is one of the most effective sources of learning. Pensioners have gained work experience in a specific organization, they know the organization, management, but also business culture and behavior. They know "weak points" or foreign organizations, which they could not or did not dare to express during their employment. By retiring, retirees can provide important information about their bosses, work organization, challenges they have encountered in their work, and in particular, make suggestions on how the organization can successfully continue its work in the fight for the market and better competitiveness. This practice is almost never applied in Serbian organizations and as such represents a great and untapped chance.

That is why every paper on this topic deserves special attention. A special challenge is how to create a favorable environment for future retirees to prepare in the organizations where they work for retirement, to prepare the company from which retirees leave, but also the environment, ie the family in which retirees return with new challenges, relationships and lifestyle changes. In the Republic of Serbia, the National Aging Strategy for the period 2006-2015 was adopted, but it was not implemented, especially since the events after its adoption dramatically changed the national, but also micro, and even family environment and climate in relation to the time of the Strategy, so it almost remained useless. (Mitrović, oktobar, 2010)

### 2. PENSIONS AND RETIREES GLOBALLY

The attitude towards pensioners, that is, towards old people, is the attitude towards the future. Although at first glance this is a controversial statement, because the thing that leaves or goes out cannot express perspective, it can still be seen in the

attitude towards pensioners and the elderly, ie ancestors, what the heirs' attitude will be towards them when they get pensioner status, or the status of elderly people. Experiencing long old age is a value in itself, but it can also be a problem, both for the individual and for the family, and society as a whole. This is especially true, if there are no stronger institutional, legal, sociological, cultural, and even ethical bases and norms that protect or help the elderly, ie pensioners.

Therefore, pensions and pension funds, ie pensioners, are an important segment of every country. This term should mean the monthly amount of compensation paid to individuals on the basis of insurance in case of old age, disability and death. It can also be paid after the death of the pension beneficiary, when the heirs or other dependent persons are not able to support themselves. In this context, there are three types of pensions: old-age, disability and survivors' pensions. (Grupa autora, 1976)

Pension funds are in effect financial institutions and are formed by paying contributions, ie by paying a certain amount of money during the length of service, in order to receive financial compensation after the end of the length of service, in accordance with the payments made. Sometimes pension beneficiaries are also given certain benefits. Some developed countries have legally regulated that pensions are paid beyond pension funds, ie that all citizens receive a pension when they reach the prescribed number of years of age. For example, Germany and Australia have prescribed an old-age pension.

Pension funds as financial institutions represent a significant potential of the country, because the money from these funds is used for investments, ie investments in securities, in order to preserve their substance, ie value. However, pensions and pensioners represent a great burden for states, due to long-term obligations that need to be settled regularly, given that this is a vulnerable group. Each state regulates its own pension system. It is estimated that today about 10% of the global population is retired, and that by 2070 about 20% of the global population will be retired.

These statements are derived from the indisputable and generally known fact that the population is getting older, life expectancy is significantly extended, and the rate of reproductive ability, ie fertility, tends to fall. On the other hand, the needs of pensioners are increasing, especially in the need for medical services, aids, medicines, support, or help. It turns out that pension funds, especially in transition countries, are often exposed to state pressure to use the funds for non-purpose, or that their adequate security is not provided.

Just how much doubt there is about pension funds and pension policy can be partly deduced from the well-known fact that one of the conspiracy theories about the C-19 pandemic crisis was that the virus was produced to biologically destroy the elderly population and thus reduce the pressure on pension funds, that is, to make the state profit from it. Regardless of the probability of the stated theory, the fact is that it created or increased the existing mistrust among the citizens, which created an anti-vaccination lobby, promoting the idea that it is a sophisticated fraud. If we add to this the influence of the pharmaceutical industry, as well as the approach of a large number of countries, ie political elites, to use the C-19 pandemic for political and economic purposes, ie enrichment, it can be stated that the biggest challenge in the future will be to regain trust into existing institutions.

With this in mind, the Melbourne Mercer Global Pension Index (MMGPI) has been formed at the global level, which measures the quality of pension systems in individual countries. "It was created in collaboration with Melcer and the Australian Center for Financial Studies, a research center with Monash Business School with funding from the Victorian government as part of its ongoing support for leadership in the financial services sector." Mercer Melbourme Global Pension Index, www.mercer.ca/content/mercer/north-america/ca/en/our-thinking/mercer-n).

The global pension index is based on 7 degrees, ie rank, as follows: A, B +, B, C +, C, D, E. The gradation of individual degrees is given in the following table:

Rang	Score		
A	More than 80		
B+	75-80		
В	65-75		
C+	60-65		
С	50-60		
D	35-50		
Е	Less than 35		

In 2019, the Melbourne Mercer Global Pensions Index classified countries according to the values of the pension system into three groups: groups A, B and C. The Netherlands and Denmark have the best regulated pension systems in the world and are rated with a score of A. In third place is Australia with a grade of B +, while in the top ten countries in the world were: Finland, Sweden, Norway, Singapore, New

Zealand, Canada and Chile, which were rated with a grade of B. With a grade of C + were evaluated countries in the group lower than tenth place in which for example include the United Kingdom, USA, and in the group rated D is Japan, which ranks 31st out of 37 countries surveyed. (Melborurne Mercer, 2019)

For evaluating the quality of the state pension system, 40 criteria are taken into account, the most important of which are: the amount of minimum pensions, age, ie the age at which one retires, security and regularity of pension payments, their valorization taking into account the increase in life expectancy, etc.

Research has shown that "there is a high level of correlation between the level of pension assets, ie the size and stability of pension funds and their placements and net household debt. Namely, the larger the debt of the households in developed countries tha larger the assets within the pension funds. "In other words, "data suggest that as pension assets increase, individuals feel more affluent and are likely to borrow more." (Rachel, 2021)

Having in mind the above, the value of pension systems for 27 countries in 2016 and 2020 will be further compared in order to establish their rank, ie tendencies and pace of improvement of the value of pension systems. Other countries up to 37 were not considered, due to the small score of pension systems, which can be seen from the following table: (Melborurne Mercer, 2019), www.mercer.ca/content/mercer/north-america/ca/en/our-thinking/mercer-n).

Country rank	Country	Score in points 2016	Score in points 2020	Difference*
1.	Denmark	80,5	81,4	+ 0.9
2.	Holland	80,1	82,6	+ 2,5
3.	Australia	77,9	74,2	- 3,7
4.	Finland	72,9	72,9	0,0
5.	Sweden	71,4	71,2	- 0,2
6.	Switzerland	68,6	67,0	- 1,6
7.	Singapore	67,0	71,2	- 4,2
8.	Canada	66,4	69,3	- 3,1
9.	Chile	66,4	67,0	+ 0.6
10.	Ireland	62,0	65,0	+ 3.0
11.	UK	60,1	64,9	+ 4,8
12.	Germany	59,0	67,3	+ 8,3

13.	USD	56,4	60,3	+ 3,9
14.	Francw	56,4	60,0	+ 3,6
15.	Malaysia	55,7	60,1	+ 4,4
16.	Brazil	55,1	54,5	- 0.6
17.	Poland	54,4	54,7	+ 0,3
18.	Austria	51,7	52,1	+ 0,4
19.	Italy	49,5	51,9	+ 2,4
20.	South Africa	48,6	52,8	+ 4,2
21.	Indonaysia	48,3	51,4	+ 3,1
22.	South Korea	46,0	50,5	+ 4,5
23.	China	45,2	47,3	+ 2,1
24.	Mexico	44,3	44,7	+ 0,4
25.	India	43,4	45,7	+ 2,3
26.	Japan	43,2	48,5	+ 5,3
27.	Argentina	37,7	42,5	+ 4,8
Average		56,5	60,4	+2,28/- 0,50=1.39

\* The source for 2020 is taken from: Global Pension Index uncovers impact of Covid - 19 on future pensions, October 20, 2020.

The table shows that out of 37 countries ranked on the Global Index, 27 countries in 2016 had a higher score of 35 points, while countries with a lower score of 35 were not even ranked in this paper. It is shown that the average value of the pension system of these countries is 56.6. It is also evident that no country had a value of the pension system of 100, and that more than half, ie 15 countries, or 50% have a score lower than the average.

The average value of pension systems in the analyzed countries in 2016 is 55.7 points. Their distribution shows that 15 countries are below average, and 12 countries are above average, including some developed countries in the EU such as Austria, Italy, as well as Japan, which holds next-to-the-last place out of the 27 countries analyzed.

It is evident that in 2016, Denmark and the Netherlands were in group A, occupying the first and second place with values of 80.5 and 80.1. These are countries that have a strong system and that deliver useful values to their clients and the environment and have a high level of integrity.

In third place in 2016, ie in group B +, was Australia with a score of 77.9. This score implies a pension system that has a stable structure, with a very good perspective, but there are also some limitations that are important and distinguish them from the score of pension systems that are in the A rank.

The fourth and fifth place in the value of the pension system at the global level in 2016 was occupied by Finland and Sweden. These two countries are in group B + and are on the same value scale, but Finland is valued at 72.9 while Sweden is valued at 71.4. These two countries, ie this rank implies value as for rank three.

Group B includes countries whose pension funds are valued in the range of 65-75.

When it comes to the value of pension systems of these 27 countries in 2020, it is evident that the average value of pension funds was 60.4, which is an increase compared to 2016 by 7%. The first three places were taken by: the Netherlands, Israel (which was not ranked in 2016) and the third place by Denmark, with scores: 82.6 .. 81.4. It is shown that in 2020, 20 countries out of the analyzed 27 showed a certain increase in the value of pension funds, one country (Finland) remained at the same level, while 6 countries had a lower value of pension systems in 2020 compared to 2016.

The largest increase in the value of pension systems in 2020 compared to 2016 was achieved by Germany with a score of 8.3, followed by Japan with 5.3, the UK 4.8, Argentina 4.8. These countries have carried out significant reforms of the pension system in the previous period. Countries that worsened their score on the pension system in 2020 compared to 2016 achieved: Singapore with a negative score of 4.2, Australia 3.7, Canada 3.1, while the smallest decrease in the value of the pension system was achieved by Brazil with 0.6.

What is it that ranked the pension system of Holland first in the Global Ranking in 2020?

Holland has state, supplementary and private pension funds in its structure. Every Dutchman who reaches old-age pension from the state receives the so-called general old-age pension. Everyone who works in the Netherlands is entitled to this pension and it gradually changes until he reaches the age of 67 in 2024. A person can acquire an additional pension if he has an entrepreneurial activity, ie if he is an entrepreneur and pays into the so-called additional pension fund, which is a matter for each individual. The amount of the pension depends on the number of years of insurance within the general old-age pension. The amount of the pension depends

on whether it is a single pensioner or has a family, but also whether someone worked abroad, which is why contributions or premiums were not paid, so in accordance with the above, the old-age pension is reduced.

Holland has supplementary pensions. They are realized through a system of so-called group pensions, ie through the sectoral pension fund, such as: the construction sector, the logistics sector, transport activities, with the possibility for entrepreneurs to join the general pension fund. In the Netherlands, there is also a survivor's pension earned by the partner after the death of the husband and wife. There is communication between pension funds and pensioners and the funds often take on the role of advisors in choosing ways to earn pensions with clear financial indicators. It is characteristic that from January 1, 2021, the temporary exemption from the levy for early retirement was abolished. (Pensions, Netherlands Enterprise Agency, 2020)

The above data show that there was strong pressure on pension funds caused by the crisis of the Covid-19 pandemic in 2020 compared to 2016. Regarding the above, David Knock states: "The economic recession caused by the global health crisis has led to reduced pension contributions, reduced return on investment and higher government debt in most countries. This has inevitably reduced pensions, and with the continuation of the C-19 crisis, this tendency will continue. This means that some individuals will have to work longer, while others may accept a higher level of investment risk for their savings or will have to settle for a lower standard of living in retirement." (Mercer, 2020)

The ranking list from the mentioned Global Index shows the impact of the rapid aging of the population and the readiness of pension systems to face the challenges that this situation brings. It shows that it is necessary to continue working on improving pension systems, primarily through moving the retirement age, the introduction of private pension funds as a special branch of insurance. If the above does not happen, there is an objective assessment that there will be increasing pressure on pension funds, which will ultimately imply that pensions will be less and less from year to year. The reasons for this should be sought in the decreasing inflow of funds into pension funds, increased life expectancy of the population and reduced fertility, as well as the reduction in the number of marriages as traditional institutions in which births, ie new generations, occur.

## 3. THE ELEMENTS OF THE QUALITY OF THE PENSION SYSTEM AT THE GLOBAL LEVEL IN 2020

Pension systems are complex and conditioned by various internal and external influences and factors. The basis and core of the pension system is the institutional and legal framework that protects, ie ensures the security of pensions, its organizational and management structure. These factors are permanently complicated, because the number of pensioners is increasing, the population is getting older with increased needs, and pension funds, especially in times of crisis, are under pressure to use them for other purposes. Having in mind the above, the priority obligation is: "Introducing the issue of population aging in all policy areas with the aim of harmonizing society and the economy with demographic changes and developing a society that suits every age." This is a logical statement, bearing in mind that "the consequences of population aging are significant and reach deep into all areas of society." (Politika starenja, 2009)

Related to the previous are the elements (podcasts) of the values of national pension systems at the global level, which largely determine the quality of life of pensioners, as the largest part of the elderly population, and they are: adequacy, sustainability, integrity. These are partial elements, but their integration provides a partial picture of the quality of pension systems, ie the quality of life of most older people. In doing so, it should be borne in mind that it is necessary to clearly define certain terms and define what a pension really is, what social benefits and payments are. These are dynamic phenomena, which are changing, with Scandinavian developed countries leading the way and permanently harmonizing the quality of life of old people with changed circumstances and situations.

The adequacy of pension systems can be interpreted differently. This term should mean the assessment and evaluation of the pension system from the point of view of suitability and convenience, ie whether it is appropriate and equivalent in a certain country. In the pension system, adequacy means the way in which the state prepares and ensures pensioners to live with dignity when they reach a certain age, based on the contribution they have had during their working life. We should also mention here those who have fulfilled the appropriate life benefits, have not worked and as such are entitled to a social pension. Adequate are those pension systems with which its users are satisfied. The adequacy sub-index in the mentioned ranking and scoring of pension systems is quantified with 40% of the total value of the index, which is the highest in relation to the other two podcasts and includes an assessment of whether

and to what extent pension funds or pension system are available to the poor system and the possibility of saving, ie the percentage of pensioners who own a house, ie whether pensioners are provided with safe accommodation, as a basic human need.

(Non) sustainability of pension systems is one of the basic elements, ie the performance of the pension system. This sub-index takes into account the level of coverage by private pension funds, economic growth and government debt and is valued at 35% of the country's overall index. In a broader context, this element of quality is conditioned by the size and regularity of the inflow of financial resources into pension funds, and on the other hand by the outflow, ie the amount and regularity, ie the regularity of payments to pensioners. Countries usually combine these elements and through legislation and sanctions against employers seek to ensure a regular inflow, and a legal basis below which pension benefits cannot be calculated, and on the other hand through appropriate standards and legislation to ensure that pensions are paid regularly, given that these are vulnerable groups.

The integrity of the pension system as an element is valued at 25% in relation to the total value of the index in the country. The integrity of the pension system, ie pension funds includes communication, the costs of managing the pension system and its parts, the legal framework regarding the protection of pension funds in the country. In a broader sense, integrity means whether and to what extent pension funds are independent in making decisions regarding the management of the pension system. Countries that treat pension funds as independent financial institutions, which have clear legal and institutional regulations, are also able to ensure their stability and protection from state influence. Countries that have regulated pension funds as state, have a majority in the governing bodies, so that they can manage them, redirect funds, ie by reducing or increasing them. A significant aspect within this sub-index is also given to pensions in the private sector, in order to avoid great influence of the state on them. In this way, the state pension funds are partly relieved.

Bismarck "predicted retirement at the age of 70 and 30 years of insurance experience, while the average duration of exercising the right to a pension would be around 7.5 years." Bismarck once determined that pension funds are sustainable "as long as the number of employees and pensioners is in a 4: 1 ratio. "Difficulties arise if less than 3 employees make contributions for one pensioner." (Reljanović, 2015)

Applied to the current situation, the ratio between employees and pensioners in the Republic of Serbia is about 1: 1.1, which means that 1.1 employees support one pensioner. During the crisis of the C-19 pandemic, this relationship is even more unfavorable, from which it can be concluded that Serbian pension funds have been called into question and that their sustainability is greatly challenged.

If we consider the above elements, ie the values of successful pension systems at the global level for 27 countries in 2020 in terms of adequacy, sustainability and integrity, it is possible to form the following table: (*Kreacija autora*).

No	Countries	Adequacy	Sustainability	Integrity
1.	Denmark	79,8	82,6	82,4
2.	Holland	81,5	79,3	88,9
3.	Australia	66,8	74,6	85,5
4.	Finland	71,0	60,5	93,5
5.	Sweden	65,2	72,0	79,8
6.	Switzerland	59,5	64,2	83,1
7.	Singapore	74,1	59,9	82,5
8.	Canada	68,2	64,4	77,8
9.	Chile	56,5	70,0	79,6
10.	Ireland	74,7	45,6	68,7
11.	UK	59,2	58,0	83,7
12.	Germany	78,8	44,1	81,4
13.	USD	58,7	62,1	59,9
14.	France	78,7	40,9	57,0
15.	Malaysia	50,1	58,6	78,0
16.	Brazil	72,6	22,3	70,7
17.	Poland	59,9	40,7	65,9
18.	Austria	64,4	22,1	74,6
19.	Italy	66,7	18,8	74,4
20.	South Africa	43,0	46,7	78,3
21.	Indonaysia	45,7	45,6	68,7
22.	South Korea	48,0	53,4	50,3
23.	China	57,4	36,2	46,7
24.	Mexico	36,5	55,8	42,2
25.	India	38,8	43,1	60,3
26.	Japan	52,9	35,9	59,2
27.	Argentina	54,5	27,6	44,4
Average		61,6	51,3	71,0

It can be seen from the previous table that individual countries had different individual scores, ie different values of pension systems.

When it comes to adequacy, the average value for this element is 61.6. The leading position in 2020 was taken by Holland with a score of 81.5, while the second and third place belongs to Denmark and Germany with a value of 79.8 and 78.8. In the last and penultimate place are Mexico with a score of 36.5 and India with a score of 38.8. Of the 27 countries analyzed for this element, 14 countries or slightly more than 50% have a lower score than the average, which indicates the potential for this element of the quality of pension systems to improve.

The second element of the total value of pension systems at the global level is sustainability. According to this element, the average value of pension systems is 51.3, which is slightly more than 50% of the possible number. It turns out that 13 countries or slightly less than 50% have a lower score than the average, which is extremely small, ie this element is the least valued of the three elements, which means that the pension systems of these countries are sustainable with about 50%. The first place in 2020 was taken by Denmark with almost 82.6, followed by the Netherlands with 79.3 and Australia with 74.6 points. The last three places out of 27 analyzed countries in 2020 are occupied by: Italy with almost 18.8, Argentina 27.6 and Australia with 22.1. This means that developed countries, such as Italy and Austria, can also be found in the group of unsustainable systems, and that there is no significant causal link between the country's development and the sustainability of pension systems.

Of all the elements, the integrity of the pension system was evaluated with the highest scores. The average value of this element for the analyzed countries is 71 and as such is the highest in relation to the other two elements. This means that there is a high level of integrity of pension systems and that they are reliable for financing pensioners. In this element, too, 12 countries have a lower score than the average. In this regard, the first three places belong to: Finland, the Netherlands and Australia with values of 93.5, 88.9 and 85.5. Mexico has the lowest value of pension systems in terms of integrity with almost 42.2, Argentina with 44.4 and China with 46.7.

Although these are relatively good estimates of the value of pension systems of individual countries, as well as their elements, it should be borne in mind that a holistic understanding of the value of pension systems is assessed according to "whether existing and projected pension values cover real living costs of the elderly and their families. ? Are survivors' pensions taken into account? How are pensions calculated - as a percentage of the last salary indexed with the average income or with the cost of living? Are pensions calculated accurately and paid on time? If there is no quality

answer to one of the above questions, for example that pensions are not paid on time, the quality of the pension system as a whole is called into question. (Vodič za nacionalnu implementaciju Madridskog internacionalnog plana akcije o starenju, 2008, str. 55)

### 4. THE PENSION SYSTEM IN THE REPUBLIC OF SERBIA

The pension system of the Republic of Serbia in modern conditions shares the fate of pension systems on a global level. Numerous adverse events and influential forces occurred simultaneously. This is confirmed by the following statement: "Around the world, pension systems are under greater pressure than ever before due to increased life expectancy, increased government debt, uncertain economic conditions, inflation risks and the movement of defined contribution pension funds." (Folger, 2020)

In the past, the Republic of Serbia was additionally burdened by numerous war or interethnic conflicts with war destruction, bombing of Serbia by NATO forces in the 1990s, the introduction of United Nations economic sanctions, and certain financial, economic, political issues, including alleged pension system reforms.

The Republic of Serbia is not on the Global List, which measures the quality index, ie the performance of the pension system. The mentioned list measures the index of 39 countries, with over three quarters of the world's population, but it does not include a large number of even developed countries. However, the very interest of the world community in the pension systems of certain countries deserves attention, especially the monitoring of changes related to their improvement.

The Republic of Serbia has had a pension institute for almost two centuries. According to the data, "the first pension in Serbia was paid in 1833 by Prince Miloš Obrenović. This is a relatively long period of time from which it could be concluded that there was enough time to provide enough elements to improve it and bring it closer to the pension systems of developed countries. However, the above did not happen, so the pension system of Serbia is subject to numerous reforms, which were mostly inconsistent or focused on pension users, ie pensioners. The system of organizing pension funds in Serbia is organized through state pension funds, and partly through private, ie voluntary pension funds with the maximum burden on employers and employees to voluntarily pay contributions or compensations to private voluntary pension funds. Of course, the long-term presence of state or social property additionally burdened employees and future pensioners to place their trust in private pension funds, but also insufficient financial literacy. In other words, there is no

culture of aging and treatment of the elderly, ie pensioners, which was proclaimed by the EU at the beginning of the new millennium in Madrid, which means "culture of work and learning and intergenerational connection, based on gerontology medical science. (Mitrović, oktobar, 2010, str. 1)

The ratio of pensioners and employees in the Republic of Serbia is unfavorable. As stated, the sustainability of the pension fund, and thus the sustainability of the pension system, is endangered if a smaller number of employees support a larger number of pensioners. While in the 1950s in Yugoslavia the ratio between pensioners and employees was 1: 5, and in 1987 the ratio was 1: 3.05, today the ratio is 1: 1.1. This means that pension funds in Serbia have been permanently improving, because fewer and fewer retirees came to one employee. The main factor of the above is in "prolonging life expectancy, negative birth rate, as well as lowering the working age population. All factors have a trend that will continue to have a negative impact on the pension system." (Nedeljnik, 2016)

The adequacy of the Serbian pension system as an element of overall performance is not satisfactory. Beneficiaries of all types of pensions are dissatisfied, both because of their amount and because of the non-adjustment of pensions with the growth of the cost of living and (or) the growth of the Gross Domestic Product. Pension funds have been spent for other purposes, the life expectancy of pensioners is getting longer, as well as the needs for medical services, medicines, aids and other basic needs. The criteria according to which pensions are paid have changed, which has led to a reduction in the acquired rights of pensioners, and the state has even resorted to reducing pensions in order to provide the so-called macroeconomic stability. Thus, pensions in Serbia have become more social than a category of realized, acquired and guaranteed rights.

The sustainability of the pension system of Serbia is also connected with the above. Reduced economic activities and reduced inflow of funds into the pension fund, but also the budget of Serbia, given that pensions are largely financed from the budget, the departure of skilled labor from the country, as well as the crisis of the Covid pandemic – 19, all this has led to the pension fund becoming increasingly empty. The program for the sale of property belonging to retirees, such as spas, spa facilities, resorts, etc. will further complicate the life of pensioners, but also the sustainability of the pension system.

The integrity of the pension system in Serbia has been called into question for several years, because the management structures of the pension fund are dominated by state structures that are able to make a decision that is not in the interest of pensioners through re-voting. Thus, the pension fund, as one of the most powerful financial institutions, is in fact a state fund that is used for current needs, often without a plan and systemic solutions. The extent to which this institution is under the jurisdiction of the state can be seen in part by the fact that during the Covid-19 crisis, money from the pension fund was directed to road infrastructure, although during health crises the priorities were towards old, sick and poor pensioners.

From the above, it can be concluded that the pension system of Serbia - and especially the pension fund - is neither adequate nor sustainable, ie that there is no integrity. Changing the criteria for pension payments often jeopardize the security and protection of pensions, and thus the quality of life of pensioners. The state is not ready to introduce the second pillar of insurance more liberally, while the third pillar of insurance is not even mentioned. Private pension funds, such as status and other private institutions, are marginalized or legally restricted. In a word, the perspective of pensions is being questioned, and pensioners are perceived as a burden on society.

Pensioners in the Republic of Serbia, in addition to the aforementioned disadvantages in material terms, have numerous problems in terms of discrimination, disparagement, impoverishment, because the amount of pensions is not accompanied by rising costs. Pension funds are often used to finance other political needs related to the rulling party promotion, elections, etc.

A way out of the above can be found, ie the issue of the pension system in Serbia can be solved if the practice of the best ranked countries on the Global ranking list, such as the Netherlands, Denmark, Australia, Israel, etc., is applied. In the future, these countries also diagnosed the measures that need to be introduced in order for their pension systems to be even more successful. It is about the following:

- Increasing the working life of pensioners, given the increase in the life expectancy of the population,
- Stimulate those who want to work even after the acquired conditions for retirement, instead of sanctioning those who retired early,
- Raise standards and procedures for disability pensions, given that in the past a significant number of retirees retired on a regular or disability pension through the use of corrupt mechanisms,
- Reducing the burden on pensioners on the basis of various levies, taxes and other benefits, in order to increase savings as an additional source for providing life in old age,

- Ensuring the security of pensions through legal and budgetary regulations, especially to ensure a minimum subsistence,
- Introduction of private voluntary pension funds with clear regulation and control by the National Bank of Serbia,
- Raise the minimum amount of pensions for low-income pensioners and introduce a social pension for persons who have not been employed and are over 65,
- Increase the inflow of funds into the pension fund through a greater burden with the contributions of those who have above average earnings,
- Improve the payment system for those who retire in 5 or ten years, in order to provide funds for retirement use.

The mentioned measures, ie mechanisms, should be applied selectively and as a priority by the Republic of Serbia. The problem of reduced pensions for pensioners remains, where the state has reduced pensions by legal regulations, in order to establish macroeconomic stability. This will additionally burden the pension system of Serbia, because probably before the international courts, the state will be obliged to return the confiscated, ie reduced pensions with interest.

However, it should be borne in mind that the problem of pensioners in the Republic of Serbia is not only in material or minimum income, although over 50% of pensioners have a smaller pension than 20,000 dinars (about 180 euros), but also discrimination that objectively exists globally, but which is especially pronounced in the Balkans. People older than sixty-five and more are marginalized and discriminated against, both from society and from the organizations from which they retired to their families and even their loved ones. This could be clearly seen in the crisis of the Covid 19 pandemic where many pensioners were left alone and forgotten.

All of the above imposes the need to involve other institutions in resolving material and social issues. It must be borne in mind that the process of discrimination is long and requires the involvement of all actors in society, that it actually begins in primary education and never ends. The National Strategy on Aging adopted by the Republic of Serbia in 2006 for the period up to 2015 raised this issue relatively well, but its implementation was lacking, as well as its connection with other strategies, primarily with the Strategy for Childbirth and Family Support, as would reduce the aging trend of the population. It should be borne in mind that the time for which the Strategy was adopted is a long period of time, especially if it is extended, and the goals set in it are not achieved. (Nacionalna strategija starenje Republike Srbije za period 2006-2015, 2006)

The evaluation of the implementation of the mentioned National Strategy showed that the set goals related to aging are in accordance with the recommendations of the relevant EU bodies and that it should be extended until 2022, since the EU has defined strategic goals until this year. In parallel, it is necessary to adopt new legal frameworks that will accompany the adopted strategy as tools, given that the period of 16 years since the adoption of the Strategy is long and that changes that are constantly increasing change the living conditions of the elderly and pensioners. (Kozarčanin & Milojević, 2016)

### 5. RESUME

The paper presents the problem of pension systems and pensioners at the global level, with reference to the Republic of Serbia. It turns out that the population over the age of 65, ie pensioners, is one of the most sensible ie vulnerable groups on a global level and that together with inclusive persons, national minorities they present a large problem even for developed countries.

Globally, the quality of pension systems is monitored for 37 countries from different continents, which make up more than two thirds of the world's population. The paper analyzes the countries that had the highest value of pension systems in 2016 and 2020, respectively, and their progress over a period of five years. It turns out that in 2020, Holland had the highest value of the pension system, while Denmark took the second place. In 2019, these two countries were at the very top of the value of pension systems, with Denmark in first place in the first place, and the Netherlands in second place. The paper also states the reasons that have kept this country in the leading positions on the issue of the pension system for several years.

The paper also gives sub-indices, ie analytics of individual values, the sum of which leads to the total value of pension funds. Three factors were analyzed: adequacy, sustainability and integrity of pension systems, ie funds, which is the most important element of national pension systems. Of these three elements, it is shown that the most valued adequacy is 40%, ie. the relationship of the pension system to the poor and the availability of the pension fund to poor pensioners, especially singles and those who are: old, sick and poor. It is considered that these are the three most sensitive factors that endanger the quality, ie the length and quality of life of pensioners.

The pension system of the Republic of Serbia is not on the Global ranking lists on which the value of pension funds is measured. Undoubtedly, it can be said that numerous external and internal factors have had an unfavorable impact on the quality of the pension system, and thus on pensioners. The wars of the 1990s, the sanctions of the international community, the economic crisis at the end of the first decade of this century, as well as the crisis caused by the Covid 19 pandemic, and certain political decisions in the second half of this century called into question the survival of the pension fund. Pension funds have disappeared due to the financing of wars and interethnic conflicts, so they are now supported, ie paid in large part from the budget, ie by paying contributions from employees, which will jeopardize the sustainability of the future pension system of Serbia.

All of the above imposes the need for a deeper reform of pension systems, in order to provide a sufficient material basis for the life of the elderly, which means that the problem of pension funds and pensioners far exceeds only the material framework. The number sixty-five plus has become so unpopular, that it will remain in the memories of present and future generations for a long time. The new Strategy on Aging can play a significant role in that, especially in the part related to the integration of institutions and harmonization of attitudes towards the elderly with demographic changes, changes in the labor market, education and the recommendations of the UN European Commission for Europe.

EU countries are reforming pension funds, providing security primarily through placements in securities, ie in other investment values. Serbia should study the experiences of the developed countries and, above all, free the pension system from state influence and management, because pension funds are the property of those who paid into it from their salaries through contributions, fees, etc. It is necessary for all actors who adopt appropriate policies to deal with this issue, and this process is permanent, starting from childhood and practically never ending.

### 6. REFERENCES

- [1] Folger, J. (2020). Best Countries for Pensions and Retirement. Investopedia.
- [2] Grupa autora. (1976). Popularna enciklopedija. Beograd: BIGZ.
- [3] Kozarčanin, L., & Milojević, S. (2016). *Evaluacija primene nacionalne strategoje o starenju*. Beograd: Republički zsvof za socijalnu zaštitu.
- [4] Melborurne Mercer. (2019). *Global Peutvrdile nsions Inde*. Australija: Monash University.
- [5] Mercer. (2020). What makes a world class pension system in 2020. . Australija: CFA Institut.

- [6] Mitrović, M. (oktobar, 2010). *Nacionalna strategija starenje-dokument koji se ne poštuje*. Beograd: Penzin.
- [7] *Nacionalna strategija starenje Republike Srbije za period 2006-2015.* (2006). Beograd: Službeni glasni Republike Srbije.
- [8] Nedeljnik. (2016). (Ne) Održivost penzionog sistema. Beograd: Moj Nedeljnik.
- [9] Pensions, Netherlands Enterprise Agency. (2020, decembar). RVO.
- [10] Politika starenja. (2009). Ekonomska komisija UN za Evropu.
- [11] Rachel, F. (2021, maj). Netherlands, Denmark first class in Melbourne Mercer pension index. *IPE magazin*.
- [12] Reljanović, M. (2015). Uporedna analiza osnovnih elemenata funkcionisanja sistema penzionog osiguranja. *Strani privatni život*, 102.
- [13] Vodič za nacionalnu implementaciju Madridskog internacionalnog plana akcije o starenju. (2008). New York: Ujedinjenje nacije.