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VOLUNTARY HEALTH INSURANCE IN SERBIA

PROFESSIONAL PAPER

Abstract

The paper presents the evolution of health insurance from its origins in the 19th century to the present day. It highlights the differences between compulsory and voluntary health insurance, as well as the limitations of each model, the principles of solidarity and mutuality in compulsory health insurance, and the advantages of voluntary health insurance, which does not offer solidarity and mutuality but incurs lower costs. The paper also details the growth of voluntary health insurance in Serbia, which first appeared in 2005 and reached significant participation compared to the non-life insurance sector by 2022. The dependency of voluntary health insurance on the population's income and overall GDP is noted, as well as the connection between the non-life insurance sector and the life insurance sector. Additionally, the paper analyzes the participation of individual elements of voluntary health insurance in total premiums, as well as the number of contracts and insured persons.

***Keywords**: voluntary, health, insurance, complementary, supplementary, private.*

I. Introduction

The origins of health insurance can be traced back to the late 19th century when Germany enacted the Health Insurance Act to provide social and health security to certain segments of the population through the "sickness fund" principle.[2]

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[2] D.I. Mirković, „Proaktivan odnos obaveznog i dobrovoljnog zdravstvenog osiguranja u Republici Srbiji – faktor veće efikasnosti celokupnog zdravstvenog sistema osiguranja", *Vojno delo*, Beograd, No. 2/2018, pp. 374–393.

Over time, social protection, and consequently health protection, expanded across Europe and the world, adopting regional specificities while maintaining the fundamental principle of universality for all citizens. Today, health insurance coverage in European countries is nearly complete, with over 98% of the total population having some form of health insurance. The dominant sources of health care financing in Europe include employee health insurance contributions, private (voluntary) health insurance, and direct payment for health services. The health system is still largely funded by a centralized public financing system, which necessitates the development of suitable health insurance models that can provide universal health care to every individual. With the development of society, science, and health care, life expectancy has increased, posing a "burden" for the health system, as the older population requires more health care than the younger population, and medical procedures are becoming more complex and expensive. Throughout the history of health insurance, several models have developed, including the following:

- Bismarck model: based on employee contributions as insured persons, with contributions proportional to earnings, and founded on the principles of non-profitability and solidarity of funds, often referred to as "sickness funds";
- Beveridge model: based on funding health care from the state budget and rooted in solidarity and universality for all citizens, covering all types of health care in both public and private health institutions;
- Semashko model: the state is responsible for organizing and financing health care for all residents, excluding the possibility of private health institutions;
- Market model: health insurance is organized and implemented by profit-based organizations, without relying on solidarity and universality.[3]

II Compulsory Health Insurance and Voluntary Health Insurance in the Republic of Serbia

In the territory of the Republic of Serbia (hereafter: RS), until 2005, only the compulsory health insurance system (hereafter: CHI) functioned, as was the case in all former socialist states. CHI was based on:

- the principle of being compulsory, requiring a certain percentage of earnings to be allocated to CHI;
- the principles of solidarity and reciprocity;
- the principle of transparency and protection of the insured persons' rights;
- the principle of continuous quality improvement, along with cost-effectiveness and efficiency.

[3] D. Janković, „Zdravstveno osiguranje kao faktor troškova zdravstvene zaštite", Škola *biznisa,* Novi Sad, No. 4/2011, pp. 69–82.

The first two principles were completely fulfilled, but the other two principles were brought into question because the insured individuals often faced delays in receiving certain health services, thus challenging the principle of efficiency.[4]

In 2005, a new Health Insurance Act[5] (hereinafter: HIA) was enacted, which enabled two health insurance systems: compulsory health insurance (CHI) and voluntary health insurance (hereinafter: VHI). The common goal of these two systems is to provide individuals with comprehensive health protection, i.e. the best possible health care. VHI is thoroughly regulated by the Decree on Voluntary Health Insurance[6], which ceased to be valid with the amendments and supplements to the HIA[7] in 2019, which regulated VHI. These acts laid the foundations for VHI in Serbia, making it a supplementary form of compulsory social health insurance. VHI is in its early stages of development in Serbia and faces many unresolved or undefined issues, such as the regulation of the work of doctors and medical staff, the regulation of private health institutions, the status of state hospitals outside regular working hours, the tax treatment of VHI premiums, the habits of the population, economic capabilities of the population, etc.

VHI partially addresses issues faced by CHI, primarily the moral "hazard" where individuals abuse the health system by seeking unnecessary services when they have no costs.[8] The majority of CHI revenue comes from insured individuals' contributions (approximately two-thirds of total CHI fund revenue), with the remainder coming from pension and disability fund transfers and budget transfers.[9] Health care costs are high, and the available funds in this system are insufficient. However, there was a significant problem with evasion of CHI contribution payments. According to the Tax Administration's report for 2012, the debt for health insurance contributions exceeded 148 billion dinars, of which over 78 billion dinars, or more than 50%, was uncollectible.[10] This fact should be viewed in the context that a large portion of this debt accumulated until 2000, during the period of sanctions and disrupted market conditions, and another part after 2000 during the transition period. Amendments to the Law on Tax Procedure and Tax Administration (hereinafter: LTPA) in 2012 significantly improved the collection of taxes and contributions on wages, as it became impossible to pay wages without paying taxes and contributions.[11]

[4] D. I. Mirković, „Proaktivan odnos obaveznog i dobrovoljnog zdravstvenog osiguranja u Republici Srbiji – faktor veće efikasnosti celokupnog zdravstvenog sistema osiguranja", *Vojno delo*, No. 2/2018, pp. 374–393.

[5] Health Insurance Act – HIA, *Official Gazette of the RS,* No. 107/05, 109/05.

[6] Decree on Voluntary Health Insurance, *Official Gazette of the RS*, No. 108/08, 49/09.

[7] Health Insurance Act – HIA, *Official Gazette of the RS*, No. 25/19, 92/23.

[8] D. Janković, „Zdravstveno osiguranje kao faktor troškova zdravstvene zaštite", Škola biznisa, Novi Sad, No. 4, 2011, pp. 69–82.

[9] Republic Health Insurance Fund – RHIF, Financial Report of the Republic Health Insurance Fund for 2016, Belgrade, 2017.

[10] J. Kočović, T. Rakonjac Antić, V. Rajić, „Dobrovoljno zdravstveno osiguranje kao dopuna obaveznom zdravstvenom osiguranju u Srbiji", *Ekonomske teme*, No. 3/2013, pp. 541–560.

[11] Law on Tax Procedure and Tax Administration, *Official Gazette of the Republic of Serbia*, Nos. *80/2002, 84/2002, corr. 23/2003, corr. 70/2003, 55/2004, 61/2005, 85/2005, 53/2010, 101/2011, 2/2012, corr. 93/2012,*

The problem of insufficient funds in the CHI budget is caused by many factors, but one of the critical threats to the CHI budget is the so-called aging population, which is a trend throughout Europe, except in certain regions. The aging population is a complex sociological issue, resulting in an increase in the proportion of people over the age of 65 relative to the total population. On one hand, the population over 65 years old belongs to the category of retirees, for whom real contributions, i.e. contributions arising from economic activity, are not paid. On the other hand, the population over 65 uses healthcare services more than the younger population. In addition to the aging population, another trend is emerging, which is that fewer young people worldwide are being educated in the same manner as their parents were, and they behave indifferently and unambitiously. It is quite possible that a similar trend may occur in Serbia, with an increase in the number of powerful and wealthy individuals over the age of 55 who will be business leaders, have good earnings, but be more prone to illnesses. A characteristic of Europe today is that the elderly support the young, who face unemployment across the continent.[12]

Healthcare costs for the population are continuously rising. In EU countries, these costs can reach up to €4,000 *per capita* in Germany, while in most European countries, the costs range from €2,000 to €3,000. In Serbia, the cost is €1,049 per capita.[13] The revenues of the Compulsory Health Insurance (CHI) in Serbia are about €250 *per capita* annually, making it challenging to ensure the functioning of the healthcare system, which spends nearly €800 more than the CHI can cover from its revenues.

All countries strive to ensure maximum coverage of the population with healthcare protection, aiming to achieve a socially responsible society. The World Health Organization itself has issued the document "Health for All in the 21st Century," which obligates all member states to ensure solidarity and universal accessibility of healthcare while simultaneously managing costs.[14]

In developed countries, there exists a so-called positive competition between compulsory health insurance (CHI) and voluntary health insurance (VHI). This means that insurance systems compete not only for the number of insured individuals but also for the qualitative structure of the insured population. It is in their interest to attract the wealthiest insured individuals who can afford higher premiums. Consequently, both insurance systems compete in terms of the services offered and the quality of

47/2013, 108/2013, 68/2014, 105/2014, 91/2015 - authentic interpretation, 112/2015, 15/2016, 108/2016, 30/2018, 95/2018.

[12] M. Zekić, S. Šegrt, *Uticaj privatnog zdravstvenog osiguranja na makroekonomski ambijent Republike Srbije*, *Oditor*, Centar za ekonomska i finansijska istraživanja, Beograd, 2015, pp. 4–9.

[13] D. I. Mirković, „Proaktivan odnos obaveznog i dobrovoljnog zdravstvenog osiguranja u Republici Srbiji – faktor veće efikasnosti celokupnog zdravstvenog sistema osiguranja", *Vojno delo*, Beograd, 2018, pp. 374–393.

[14] D. Čepić, V. Avdalović, „Zdravstveno osiguranje", *Zbornik radova fakulteta tehničkih nauka Novi Sad,* Novi Sad, 2011, pp. 2136–2144.

those services, which ultimately leads to the improvement of services provided to all insured individuals. Once improved, these services become available to everyone.

One of the advantages of VHI is the very form of contract conclusion. During this process, the riskiness of the insured individual is assessed — those at higher risk pay higher premiums. This risk assessment, which can only be conducted through examinations and preventive check-ups, can significantly improve the healthcare protection of the population. Preventive check-ups can diagnose the risk of illness or early-stage disease when treatment is more certain and less costly. This approach, "prevention is better than cure", significantly eases the burden on the healthcare system overall, including both the CHI and VHI systems.[15]

Voluntary health insurance represents the pooling of insured individuals into risk communities. Within these communities, protection is provided against certain health risks based on the premiums paid, and this is done on a voluntary basis. With a larger risk community, the premiums for the insured are lower, meaning they represent a smaller burden compared to paying for healthcare services directly.[16]

III Voluntary Health Insurance as a Form of Insurance

Voluntary health insurance falls under the category of non-life insurance.[17] Alongside the Insurance Law, the provisions of the Health Insurance Law also apply, and until the enactment of the new Health Insurance Law, the Regulation on Voluntary Health Insurance was in effect. Voluntary health insurance (VHI) can be carried out by the Republic Institute for Health Insurance and legal entities engaged in insurance activities in accordance with the Insurance Law. In addition to this general formulation regarding who can conduct VHI, the law stipulates that the National Bank of Serbia (NBS) issues a special license to a legal entity engaged in insurance activities for VHI provided the Ministry has given a positive opinion on the fulfillment of the conditions for organizing and implementing VHI. The insurer manages VHI funds by type of insurance separately in special accounts, distinct from the funds and accounts of compulsory health insurance and other resources of the insurance company, in accordance with the law.[18] [19]

The Health Insurance Law is currently the only law regulating Voluntary Health Insurance (VHI), and as such, it defines the minimum period of insurance

[15] A. Gavrilović, D. Ugrinov, I. Radošević, M. Nikolić "Modern management in the function of increasing of health service quality in primary health care", *Serbian Journal of engineering management,* Belgrade, 5(1), 2020, pp. 14-28.

[16] T. Rakonjac Antić, M. Koprivica, "Specifičnost privatnih izvora finansiranja zdravstvene zaštite" *Revija kopaoničke* škole *biznisa prirodnog prava,* Beograd, 2020, pp. 83-97.

[17] Insurance Law, *Official Gazette of RS* 139/2014, 44/2021 (hereinafter: IL), Article 9.

[18] Regulation on Voluntary Health Insurance, *Official Gazette of the RS*, Nos. 108/08, 49/09.

[19] Health Insurance Law - HIL, *Official Gazette of the RS*, Nos. 25/19, 92/23.

coverage. The legislator, in Article 170, has specified that this period is 12 months, with exceptions allowing for shorter coverage in cases of temporary residence of the insured abroad, if the insured's status in the compulsory health insurance system lasts less than the specified 12 months, if the insured acquires the basis for insurance under collective agreements during the agreed period, and for foreign nationals during their temporary stay in the Republic of Serbia.

Article 171 of the Health Insurance Law[20] stipulates that VHI cannot be organized and implemented for rights already covered by the compulsory health insurance system (CHI), as well as for preventive immunization and chemoprophylaxis programs. Such a rigid stance of the Law excludes the possibility of choice for insured individuals who have contracts for VHI. For certain rights defined by the CHI system, insured individuals are forced to be on so-called "waiting lists", and there is a possibility that these rights could be addressed through VHI, allowing insured individuals who pay a premium covering such rights to access them in private healthcare facilities, or even in public ones, without waiting. On one hand, this places VHI insured individuals in a more favorable position compared to those covered by CHI, which is certainly undesirable as it constitutes a form of discrimination. However, besides the issue of discrimination, there is also the problem concerning individuals who are not part of the CHI system. The question arises regarding what happens to those who are not covered by the CHI system for any reason but are citizens of the Republic of Serbia. An illustrative example is the issue faced by farmers who have contracts with the Pension and Disability Insurance Fund (PDI) and the Republic Health Insurance Fund (RHIF), but due to changed financial circumstances, they were unable to continue paying contributions. Consequently, they find themselves with exceptionally high debts for unpaid contributions, such individuals cannot exercise the rights provided by the CHI system. In such situations, VHI through private health insurance programs could serve as a temporary solution until obligations are settled or another solution is found for the accumulated debts.

Types of Voluntary Health Insurance (VHI) according to the Health Insurance Law (HIL)[21], as per Article 174, are:

– **complementary health insurance**;
– **supplementary health insurance**;
– **private health insurance**.

Article 175 of the HIL[22] stipulates that the status of a VHI insured individual ceases simultaneously when their status also ends in the compulsory health insurance system (CHI).

[20] HIL, art. 171.
[21] HIL, art. 174.
[22] HIL, art. 175.

Articles 177–193 of the Health Insurance Law (HIL)[23] define the organization and implementation of Voluntary Health Insurance (VHI) detailing the conditions for its organization and execution, which are further regulated by bylaws, primarily by the National Bank of Serbia (NBS). The articles also specify the elements that must be included in the contract, as well as who can enter into the contract, and the requirement for written consent from the insured individual if the obligation to pay the premium fully or partially falls on them. In addition to the contract, the elements of the policy and coverage list are regulated, as well as the obligations of the insurer concerning the rights that the insured individual acquires under the contract or policy.

Problems arising with Voluntary Health Insurance (VHI) primarily concern citizens' awareness of the need to pay additionally for health insurance. For decades, people have been accustomed to health care being free and universally accessible. Now, as economic conditions are more challenging than a few decades ago, they are required to allocate additional funds for health care.

Voluntary health insurance should offer citizens the opportunity to choose, providing a system that ensures faster, higher-quality, and more accessible health services. This, in turn, should lead to better quality and longevity of life, reduced abuse (less overuse of health services), increased investment in health care, decreased corruption, financial risk coverage, and greater diversity and flexibility within the health insurance system.[24]

There is an interest among employers to offer Voluntary Health Insurance (VHI) to their employees as a form of incentive and employee retention. This is because VHI provided by an employer remains valid for the employee as long as they are with that particular employer. If the employee leaves the employer, they also lose the VHI provided by the employer. Although there is a possibility of receiving VHI with a new employer, it is uncertain whether the employee will get VHI from the same insurance company, making VHI a tool that ensures employee loyalty to the employer.

In addition to VHI provided through employment, an increasing number of citizens are becoming aware of the need and necessity of obtaining VHI individually. As a result, the number of individual insurance contracts with insurance companies is constantly rising. VHI offers citizens the opportunity to customize their insurance packages to suit their personal needs.

VHI was not regulated in the legal systems of the countries of the Socialist Federal Republic of Yugoslavia (SFRY) immediately after their independence, as the

[23] HIL, arts. 177–193.

[24] Detailed: T. Rakonjac Antić, *Penzijsko i zdravstveno osiguranje*, Centar za izdavačku delatnost, Ekonomski fakultet, Beograd, 2012.

old system of compulsory health insurance (CHI) was still in place. Only after the conflicts in the former SFRY and the alignment of the legal systems of the newly formed states with the principles of a free market economy were regulations concerning health insurance introduced. As time progressed and the newly formed states moved closer to the European Union (EU) and eventually joined the EU, regulations concerning health insurance in accordance with EU legislation were introduced. While compulsory health insurance does not represent a commercial activity, VHI does, as there is market competition among insurance companies providing VHI services. Accordingly, appropriate legal regulations concerning VHI must be enacted.[25] It must be taken into account that the EU has implemented a series of measures to deregulate the VHI market, which has removed the regulatory bodies' right to protect consumers in certain cases.[26]

IV Structure of Voluntary Health Insurance (VHI) in the Republic of Serbia

Voluntary health insurance (VHI) in the Republic of Serbia was established in 2005 with the initial regulation under the Health Insurance Law (HIL),[27] which was later detailed further.[28] Since the introduction of VHI into the insurance system in Serbia, it has taken considerable time and effort to educate both the population and employers about the benefits of VHI, and to shift the perception of insurance from a cost to an investment. Direct payment of healthcare expenses can lead individuals into poverty.[29] For many years, health insurance was viewed as a "duty of the state" and society, something that the state and society were obligated to provide and implement. This perspective is incorrect, as health insurance contributions during the socialist period were paid by employers based on employees' earnings. The state was responsible for organizing the healthcare system, financing it from compulsory health insurance contributions, and partially from the budget. The beginnings of VHI in Serbia, as in neighboring countries, were challenging, and VHI initially entered the insurance system timidly. Through educating the population and improving the healthcare system, VHI advanced as people began to understand its importance and

[25] T. Sokol, F. Stančić, „Pravila Europske unije o tržišnom natjecanju i državnim potporama i dopunsko zdravstveno osiguranje u Republici Hrvatskoj, krivo srastanje", *Pravni vjesnik*, Zagreb, 2021, p. 37.

[26] E. Mossialos, S. Thomson, „Voluntary health insurance in the Europian Union: a critical assessment", *International Journal of Health Service*, London, 2002.

[27] Health Insurance Law - HIL, *Official Gazette of the RS*, Nos.107/05, 109/05.

[28] Regulation on Voluntary Health Insurance, *Official Gazette of the RS*, Nos.108/08, 49/09.

[29] M. Tabaković, J. Todorović, U. Babić, Z. Terzić, M. Santrić Milićević, „Development of voluntary health insurance in Serbia: the insurance companies viewpoins", *Europian Journal of public health*, Utrecht, Netherlands, 2018, p. 445.

benefits. To achieve the desired participation of voluntary, particularly supplementary health insurance in the domestic insurance market portfolio, it is crucial to undertake initiatives aimed at increasing the population's health literacy. Health literacy is essential for the sustainability of health insurance. The World Health Organization defines health literacy as an individual's knowledge and ability to understand and apply health information to make informed health decisions, thereby impacting the maintenance and/or improvement of health throughout life. Individuals with higher health literacy are more likely to recognize the benefits of voluntary health insurance. Individuals with higher health literacy are more likely to recognize the benefits of voluntary health insurance.[30] VHI aims to provide users with a higher level of healthcare services compared to the compulsory health insurance system. Compulsory health insurance may lack certain services entirely or offer them to users with the requirement to share the costs of these services. The cost-sharing can be very high for certain services, which is precisely the advantage of VHI, where the user, through the paid premium, prevents potential expenses for health services.[31] The main advantage of the VHI system is the reduction of out-of-pocket expenses for health services, not only directly from individuals who have to pay for these services but also the general reduction of the burden on the budget system of the Republic of Serbia.

[30] N. Petrović Tomić, "Supplementary Health Insurance as a Contribution to Development of a Sustainable Healthcare System in the Republic of Serbia", *Insurance Trends*, No. 1/2024, pp. 7-39.

[31] Marija B. Kovačević, "Factors Affecting Development of Voluntary Health Insurance in the Republic of Serbia", *Insurance Trends*, No. 1/2023, pp. 75-102.

Table 1 Structure of Voluntary Health Insurance (VHI), Number of Insured Persons, and Premium per Insured Person for the Period 2017–2022

	2017						2020					
	number of contracts	number of insured	insured per contract	total premium (000) RSD	premium per insured (RSD)	% compared to total premium	number of contracts	number of insured	insured per contract	total premium (000) RSD	premium per insured (RSD)	% compared to total premium
complementary HI	3827	3839	1,0	26607	6931	0,92	428	429	1,0	14138	32956	0,26
supplementary HI	6583	1220215	185,4	729036	597	25,29	9233	2064640	223,6	1063985	515	19,64
private HI	2236	9189	4,1	232871	25342	8,08	8279	88861	1,1	228127	25745	4,21
combination of types of VHI	2570	45285	17,6	1265065	27936	43,88	17059	130657	7,7	3276509	25077	60,49
travel HI	29195	47539	1,6	42959	904	1,49	4699	6518	1,4	6895	1058	0,13
all other types of VHI	4658	147586	31,7	563016	3815	19,53	4549	166970	36,7	826531	4950	15,26
	49069	1473653	30,0	2859554	1904		44247	2378075	53,7	5416185	2278	
	2018						2021					
	number of contracts	number of insured	insured per contract	total premium (000) RSD	premium per insured (RSD)	% compared to total premium	number of contracts	number of insured	insured per contract	total premium (000) RSD	premium per insured (RSD)	% compared to total premium
complementary HI	5116	5116	1,0	35258	6892	1,02	471	488	1,0	16108	33008	0,23
supplementary HI	8132	2232026	274,5	7880566	353	22,74	9183	4462741	486,0	1303241	292	18,87
private HI	2512	5863	2,3	232171	39599	6,7	2627	7471	2,8	263208	35231	3,81
combination of types of VHI	9707	70696	7,3	1747507	24719	50,43	27174	193334	7,1	4405768	22788	63,81
travel HI	28202	45474	1,6	41813	919	1,21	12433	20011	1,6	22967	1148	0,33
all other types of VHI	5107	151902	29,7	620546	4085	17,91	5322	179108	33,7	893666	4990	12,94
	58776	2511077	42,7	3465351	1380		57210	4863153	85,0	6904958	1420	
	2019						2022					
	number of contracts	number of insured	insured per contract	total premium (000) RSD	premium per insured (RSD)	% compared to total premium	number of contracts	number of insured	insured per contract	total premium (000) RSD	premium per insured (RSD)	% compared to total premium
complementary HI	8278	8298	1,0	65597	7905	1,43	468	474	1,0	7142	15068	0,25
supplementary HI	8971	2450347	273,1	9448461	3816	20,62	9483	2960150	312,2	516984	175	17,93
private HI	2388	2793	1,2	157921	56542	3,45	4061	18606	4,6	108685	5841	3,77
combination of types of VHI	14371	103277	7,2	2665474	25809	58,18	41094	229816	5,6	1823143	7933	63,24
travel HI	27035	43157	1,6	39031	904	0,85	16492	26539	1,6	443	17	0,02
all other types of VHI	5225	160371	30,7	708600	4419	15,47	6744	101473	15,0	426379	4202	14,79
	66268	2768243	41,8	4581469	1655		78342	3337058	42,6	2882776	864	

(National Bank of Serbia, 2017,2018,2019,2020,2021,2022)[32]

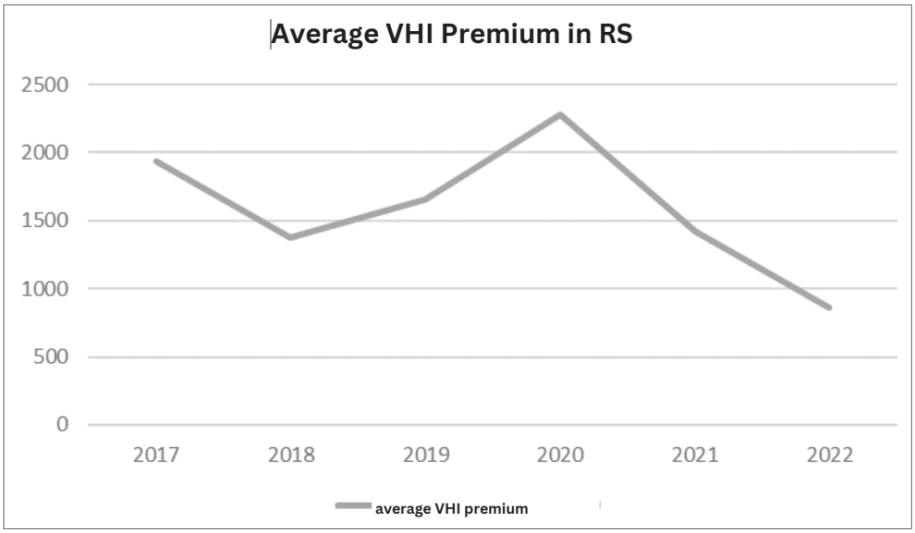
Table 1: Structure of Voluntary Health Insurance (VHI), number of insured persons, and premium per insured for the period 2017–2022. This table illustrates the trend of voluntary health insurance (VHI) in the Republic of Serbia from 2017 to 2022. The number of contracts increased from an initial 49,000 to over 78,000, while the number of insured persons grew from 1.47 million to nearly 3 million. It is noticeable that an increasing number of employers are entering into VHI agreements and including their employees in the VHI system, as evidenced by contracts involving a large number of insured persons, with the average number of insured per contract ranging from 185 to a maximum of 483. The dominant type of VHI is additional health insurance or a combination of additional health insurance with other forms of insurance, which constitutes over 70% of premiums paid during the period.

[32] National Bank of Serbia, Insurance Sector in the Republic of Serbia, Quarterly Reports, Belgrade 2017, 2018, 2019, 2020, 2021, 2022.

The COVID-19 period is characterized by a significant decline in travel insurance contracts, which is logical given the complete lockdown. On the other hand, in 2021, there was a significant increase in both the number of contracts and the number of insured persons utilizing VHI services, as people became more aware of the importance of health services that need to be available quickly and in a broader scope than what the compulsory health insurance system offers.

From the above, it is clear that VHI has established a foothold in the Republic of Serbia, especially after the COVID-19 pandemic, as evidenced by the increase in both the number of insured persons and premiums paid. The development of VHI has a promising future in the Republic of Serbia.

The trend of the average premium paid for VHI from 2017 to 2022 has fluctuated, as shown in Graph 1: Movement of Average VHI Premiums in RS from 2017 to 2022. A drop in the average premium in 2018 compared to 2017 can be explained by the nearly doubled number of insured persons under additional health insurance and a 23.5% increase in contracts, resulting in a decrease in the premium per insured person. Insurers offered additional health insurance under more favorable conditions, with lower coverage but wide acceptance. Consequently, the premium fell from 537 RSD to 353 RSD per insured person, a decrease of 45.4%. Given that additional health insurance is the most widespread form of VHI, this logically led to a decrease in the average premium. In 2019, there was a slight increase in the average premium, while 2020 recorded a peak, which can be explained by the population's health concerns during the pandemic, leading to the purchase of private health insurance policies with relatively high premiums, resulting in an increase in the average premium per insured person. In 2021 and 2022, additional health insurance reached nearly three million users, became widely available, but with low premiums, falling to a symbolic 175 RSD per insured person, leading to a low average premium. The fact that nearly three million people have some form of additional insurance is encouraging from the perspective of promoting VHI, as even with such symbolic premiums, people have some form of additional health insurance. This indicates that the population is aware of the importance of VHI and accepts it as a necessary investment in their security and as a safeguard for their standard of living against unforeseen health issues that may arise in the future. This fact is encouraging compared to the recent past, when health care was seen as a government obligation to its citizens.



Graph 1 Movement of the average VHI premium in RS for the period 2017–2022

V Participation of Voluntary Health Insurance in the Total Insurance Market in the Republic of Serbia and Factors Indicating Trends

The number of contracts related to voluntary health insurance (VHI) as a form of non-life insurance is increasing, but the share of VHI contracts and premiums paid remains relatively small. Table 1 illustrates the share of VHI paid premiums in relation to total insurance premiums and total non-life insurance premiums. It can be observed that the increase in VHI premiums, from an initial 7.87 million RSD in 2017 to 24.49 million RSD in 2022, represents a growth of 16.62 million RSD over a six-year period, or an increase of 311%, which translates to approximately 50% annual growth. Such data indicate that the VHI market has potential and highlights the need to focus on developing this segment of the insurance market.

Table 1 Overview of voluntary health insurance premiums in relation to total insurance premiums and non-life insurance premiums

	Total Premi-ums	Non-Life Insurance Premiums	VHI Premiums	VHI Premiums as % of Total Premiums	VHI Premiums as % of Non-Life Insurance Premiums
	mln.	mln.	mln.	%	
2017.	236946	186284	7878	3,32	4,23
2018.	247948	193565	9603	3,87	4,96
2019.	264736	205673	12701	4,80	6,18
2020.	273171	200167	15181	5,56	7,58
2021.	295620	230230	18348	6,21	7,97
2022.	317465	263117	24493	7,72	9,31
	272648	213173	14701	5,39	6,90

(National Bank of Serbia, 2017,2018,2019,2020,2021,2022)[33]

Table 2 Correlation of the amounts of TP, NLI premiums, and VHI Premiums

Correlations

		TP	NLI_premiums	VHI_premiums
TP	Pearson Correlation	1	,960**	,995**
	Sig. (1-tailed)		,001	,000
	N	6	6	6
NLI_premiums	Pearson Correlation	,960**	1	,964**
	Sig. (1-tailed)	,001		,001
	N	6	6	6
VHI_premiums	Pearson Correlation	,995**	,964**	1
	Sig. (1-tailed)	,000	,001	
	N	6	6	6

**. Correlation is significant at the 0.01 level (1-tailed).

[33] National Bank of Serbia, Insurance Sector in the Republic of Serbia, Quarterly Reports, Belgrade 2017, 2018, 2019, 2020, 2021, 2022.

Table 3 Correlation of paid VHI premiums and GDP

Correlations

		VAR00009	VAR00010
VAR00009	Pearson Correlation	1	,986**
	Sig. (1-tailed)		,000
	Sum of Squares and Cross-products	185957205,3	26205173,00
	Covariance	37191441,07	5241034,600
	N	6	6
VAR00010	Pearson Correlation	,986**	1
	Sig. (1-tailed)	,000	
	Sum of Squares and Cross-products	26205173,00	3796388,000
	Covariance	5241034,600	759277,600
	N	6	6

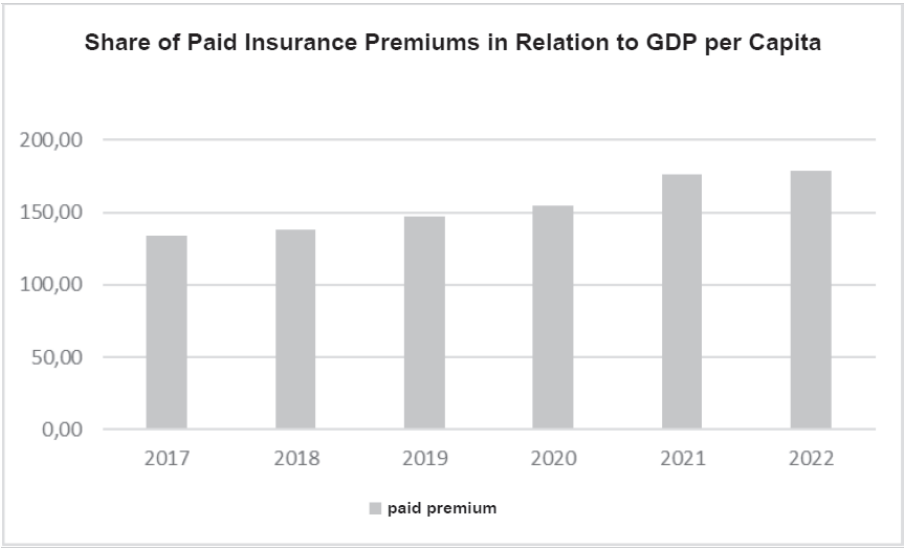
**. Correlation is significant at the 0.01 level (1-tailed).

Table 2 shows that there is a high correlation between the amounts of paid total premiums, non-life insurance premiums, and voluntary health insurance premiums.

Table 3 demonstrates a high correlation between the amounts of paid voluntary health insurance premiums and GDP.

From the above, it can be concluded that, in addition to the population becoming aware of the necessity for VHI coverage, the decision to purchase VHI is significantly influenced by GDP growth, i.e. GDP *per capita*. As income increases, opportunities arise to satisfy non-essential needs and invest in the future (investing in VHI during younger, active years represents a future-oriented investment, which will be beneficial when they need healthcare services later in life).

Although the amount of paid premiums *per capita* varied between 2017 and 2022, as illustrated in Graph 2, which ranged from a minimum of 134 euros *per capita* to a maximum of 179 euros, it is clear that as the paid premium amount increased, so did the payment of VHI premiums.



Graph 2 Paid premium per capita

VI Conclusion

The market for voluntary health insurance (VHI) in Serbia is promising and warrants further development. Increasing the number of contracts and the amount of VHI premiums will enhance the healthcare system, thereby improving the quality of life and extending life expectancy. A significant challenge facing the non-life insurance sector, particularly the VHI subsector, is the lack of awareness among the population. Therefore, efforts should be focused on informing the public about the existence and benefits of this service within insurance portfolios.

"An increase in the total income of individuals and families is expected to be a significant factor for the continued growth of the VHI market. This growth will contribute to improved population health due to better accessibility to healthcare, longer working lives, and improved quality of life."[34] "The extension of life expectancy is of considerable importance for the life insurance sector, given that over 50% of deaths in Serbia are due to cardiovascular diseases. By improving the healthcare system, it is likely that life expectancy will increase. From the perspective of insurance companies, this could result in a reduction in payouts for life insurance claims (e.g. death or severe illness)." Both compulsory and voluntary insurance systems that finance healthcare in Serbia need to adopt a more proactive approach to the healthcare

[34] OECD, „Health in glance-Europe 2012", *OECD publishing*, Brussels, Belgium, 2012.

market and build a mutually sustainable relationship. This will be fundamental for the overall sustainability of the healthcare system.[35]

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[35] Damir I. Mirković, „Proaktivan odnos obaveznog i dobrovoljnog zdravstvenog osiguranja u Republici Srbiji –faktor veće efikasnosti celokupnog zdravstvenog sistema osiguranja", *Vojno delo*, Beograd , 2018, pp.374–393.

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