

Covid-19 Shift in the Insurance Market Concentration in Bulgaria

Assoc. Prof. Stoyan Kirov, PhD
University of Economics - Varna, Varna, Bulgaria
kirov@ue-varna.bg

PhD candidate Milena Beneva
University of Economics - Varna, Varna, Bulgaria
m.beneva@ue-varna.bg

Abstract

The pandemic had a decelerating impact on the development of the insurance market in Bulgaria, but it did not significantly contribute to market consolidation. There is no reason to say that the pandemic years from 2020 to 2023 had a catalyzing effect on the processes in the long term. The direction and strength of the market concentration follows the trends since before Covid-19. All indices measuring insurance market power displayed fluctuations during 2020-2021 but these were insufficient to reverse the established trend. However, market concentration has the potential to become a tangible problem for Bulgaria and the main reason for that will not be the "post-covid syndrome" but the ongoing processes of business consolidation. Notably, life insurance has been affected to a much greater extent by the accumulation of market power.

Keywords: insurance market, life insurers, concentration, market power, pandemic, oligopoly.

JEL Code: G22, D43, L13

DOI: 10.56065/IJUSV-ESS/2023.12.2.58

1. The condition of the insurance market in Bulgaria

Until the early 1990s the insurance market in Bulgaria was entirely under state monopoly. It provided insurance services to the public through the branches of the State Insurance Institute and Bulstrad Insurance Company. The political and economic changes that began in the country after 1989 offered an opportunity for the growth of the private sector in insurance, creating a genuine competitive environment. Newly established domestic and reputable foreign insurers entered the market, leading to a complete transformation of the market structure. The insurance norms introduced by the Insurance Act (1996) and subsequently by the Insurance Code (2005), including its new edition in 2015, significantly specified, clarified, stabilized, liberalized, and stimulated the practice of risk management. They modernized regulations and supervision, enhancing trust in the insurance industry. All of this laid the groundwork for the successful integration of free market principles allowing the market to operate without entry barriers. Of course, the increased number of licensed insurers during the transition years is also attributed to the highly profitable nature of the insurance business, offering significant potential for expansion.

Despite the observed transformations in the market structure, shifting from state monopoly to free competition, some experts argue that the processes are unfolding relatively slowly and require more substantial reforms (Pye, 2005: 205–223). The non-life insurance market in Bulgaria maintains dominance, with the share of life insurance being insignificant in comparison and showing catching-up trends. This is commonly attributed to weak competition, with unequally distributed market power that fails to stimulate product innovation and does not contribute to business efficiency. Other impact factors include the low incomes of the population, high levels of inflation, and a demotivating public pension system that operates on a pay-as-you-go basis (Tipuric, Bach, Pavic, 2008: 99). Beyond these factors, one should also consider the unsatisfactory insurance literacy among Bulgarians, the lack of accessible information about savings insurance, negative experiences with the insurance compensations, and similar issues. For now, tax preferences remain the primary motivation for individuals, although these should only play a supporting role.

Fortunately, the Bulgarian insurance market was minimally affected by the Global Financial Crisis (2007-2008). And while its negative effect is well researched in the specialized literature (Kirov, 2010: 200), the impact of the Covid-19 pandemic (2020-2023) and the Ukraine war starting in 2022 are still pending analysis and evaluation. In order to monitor the condition of the insurance market in Bulgaria during the Covid-19 pandemic, various indicators can be used, such as gross premium income, the number of active insurers, etc. However, they present the situation in absolute terms which can sometimes be inconsistent and misleading. Therefore, it is reasonable to complement the analysis with ratios such as insurance density (gross premium income per capita) and insurance penetration (gross premium income to GDP).

The statistics of gross premium income show significant differences in the development of the Bulgarian and European insurance markets (Table 1). The gross premium income of non-life insurance companies in Bulgaria increased during the study period (2015-2021) from 887 million USD to 1655 million USD, i.e. by 86.6% in nominal terms. The real growth rate adjusted for inflation is 57.7%, but it remains positive. Exploring this matter on the EU scale unveils a distinctly different scenario. The nominal growth rate of non-life insurance business in the EU stands at a mere 4.6%, translating to a negative figure in real terms (-4.1%). In terms of growth rate, Bulgaria aligns more closely with Eastern European countries than with the leading German insurance market (30.4%). Furthermore, the share of our non-life insurance companies in the total EU gross premium income is on the rise, climbing from 0.16% in 2015 to 0.29% in 2021. Analysis of the data reveals an interesting fluctuation since the onset of the Covid-19 pandemic. The non-life insurance market in most EU countries experienced a slight contraction in 2020, with stronger economies undergoing this process a bit later. It's worth noting that these changes are both insignificant and short-term. Companies manage to restore their sales within just one year. Given the observed fluctuations are widespread, it can be assumed that they result from the worsening economic environment during the pandemic. It's unlikely that these changes are driven by customer frustration with the services provided by non-life insurance companies, especially considering that the Covid-19 risk is not covered by them and has minimal impact on insurance claims.

Table 1. Gross premium income in million US dollars and its percentage share (2015-2021)

Years	Non-life insurance				Life insurance			
	DE	DE/EU	BG	BG/EU	DE	DE/EU	BG	BG/EU
2015	118116	21.74%	887	0.16%	96378	11.59%	187	0.02%
2016	119709	22.52%	929	0.17%	95084	11.87%	205	0.03%
2017	134877	23.99%	1020	0.18%	92297	10.94%	213	0.03%
2018	145890	28.67%	1290	0.25%	98865	14.79%	205	0.03%
2019	144675	28.19%	1437	0.28%	104532	16.09%	200	0.03%
2020	153613	28.48%	1455	0.27%	106709	17.75%	197	0.03%
2021	154009	27.11%	1637	0.29%	118382	16.87%	298	0.04%

Source: Statistical data from the SwissRe, <https://www.swissre.com/institute/research/sigma-research>

The life insurance market in Bulgaria lags significantly behind the non-life insurance sector. This characteristic is common among most Eastern European countries. As illustrated in Table 1, the share of Bulgarian life insurers in the total gross premium income of the EU was a mere 0.04% in 2021, and it was even smaller at the beginning of the reporting period. Despite its underperformance, life insurance sales have demonstrated a positive growth rate. The companies' premium income increased by 59.4% in nominal terms from 2015 to 2021, equating to 34.7% in real terms. In comparison, the gross premium income of German life insurance companies increased by 22.8%, which amounts to 11.9% after adjusting for inflation. The trends in the overall European

life insurance market are completely opposite. It has been contracting for years, with gross premium income decreasing from 831892 million USD in 2015 to 701788 million USD in 2021. This signifies a decline of -15.6% in nominal terms or -22.6% in real terms. Notably, significant variations occurred during the study period, reaching a low of 601277 million USD in 2020. This was expected, given the span of the pandemic and its subsequent recession. Life insurance companies in the EU began experiencing reduced sales as early as 2019, a trend that continues to this day. Against this backdrop, the Bulgarian market remains stable, maintaining a consistent share in the total gross premium income of the EU. It remains at a constant level of 0.03% from 2016 to 2020 (Table 1).

The analysis is interested in the dynamics of the number of insurance companies operating in Bulgaria during the studied period. On one hand, this indicator reflects the characteristics of the market structure, and on the other hand, it reveals the sensitivity of the business to environmental shocks, including the declared pandemic. Covid-19 is one of the factors that can lead to increased insurance premiums, a shift in the demand curve, additional costs for insurers, and more. Frequently, an adverse environment prompts market participants to consolidate their activities or exit the market. However, the hypothesis lacks empirical confirmation for Bulgaria, primarily because the 'Covid-19' factor is not of a catastrophic nature and cannot push businesses into insolvency. There are reports of insurers exiting the domestic market for non-life and life insurance, but the overall number remains relatively stable during the pandemic period (Table 2). Out of the 30 non-life insurance companies in 2015, 23 continue to operate in the market. The reduction is slightly more significant in the life insurance sector, dropping from 15 to 10 companies. Regardless of the number of companies leaving, their presence stabilized in the last three years of the analysis (2020-2022).

Table 2. Number of insurance companies in Bulgaria (2015-2022)

	2015	2016	2017	2018	2019	2020	2021	2022
Non-life insurance	30	29	26	25	24	24	23	23
Life insurance	15	13	12	11	11	10	10	10

Source: Statistical data from the FSC, Bulgaria, https://www.fsc.bg/?page_id=22138

We'll utilize insurance density values in our analysis for improved data comparability. This indicator represents the average amount spent on insurance by each citizen. Table 3 shows that Bulgarians allocate significantly more funds to non-life insurance compared to life insurance. The investment in savings and/or risk life insurance never exceeded 45 USD on average per capita throughout the years under study. In contrast, Germans purchased such products for over 1400 USD on average. The amount is notably higher for some Eastern European countries - over 100 USD in Poland and Croatia, exceeding 200 USD in Hungary and the Czech Republic. Falling behind in the ranking are Romania and Serbia, while countries like Indonesia and El Salvador exhibit similar values to ours (Sigma, 2022: 42). It's no coincidence that Bulgaria holds the 54th position globally in terms of insurance density.

It's interesting that the pandemic influenced the behavior of Bulgarian consumers, albeit only in the short term. The allocation for life insurance hit a unique low of 28.41 USD per capita in 2020, but insurance density rebounded in the subsequent year, reaching its peak for the studied period at 43.33 USD. In this context, Bulgaria aligns with the trends observed in the European insurance market, which experiences similar fluctuations. In contrast to this trend, the German insurance market shows a consistent rise in density, whereas the Polish market reports a continual decline. It can be firmly inferred that the deteriorating indicators in Poland are not linked to Covid-19 but rather stem from the persistent social and demographic issues the country has faced over the past decade.

Table 3. Insurance density (2015-2021) in USD

Years	Non-life insurance				Life insurance			
	DE	PL	BG	EU	DE	PL	BG	EU
2015	1445.96	218.16	123.57	1221.90	1179.85	154.19	26.05	1871.23
2016	1453.68	238.24	130.33	1193.18	1154.65	122.75	28.76	1798.16
2017	1631.77	287.93	144.15	1259.96	1116.63	132.61	30.10	1890.23
2018	1759.70	321.29	183.63	1138.44	1192.50	115.08	29.18	1495.00
2019	1741.12	315.47	205.99	1147.26	1258.01	102.57	28.67	1451.96
2020	1847.18	313.75	209.84	1204.88	1283.16	95.52	28.41	1343.06
2021	1851.16	348.93	238.01	1270.37	1422.93	103.11	43.33	1569.37

Source: Author's calculations based on statistics from SwissRe and the World Bank (<https://data.worldbank.org/>).

The non-life insurance density in Bulgaria consistently shows an upward trend during the studied period (2015-2021). It increased from 123.57 USD to 238.01 USD per capita in 2021, marking a nominal rise of 92.6%, or 62.8% in real terms. The data indicates that Covid-19 has not impacted the willingness of Bulgarians to insure their property and liability risks. This pattern is also observed in the aggregated density of the European non-life insurance market. Germany also experiences a consistent growth rate, albeit with a weaker performance compared to Bulgaria - a 28% increase in insurance density. However, not all non-life insurance markets in the EU have been immune to the pandemic's effects. In Poland, for instance, there is a observed decrease in the allocated funds on average per capita in 2019 and 2020. This observed reduction doesn't align with the pattern of GDP development, suggesting the isolated influence of other factors.

The next relevant indicator for the present analysis is the insurance penetration rate. In this context, the data further validate the predominant significance of the non-life insurance market in Bulgaria. The non-life insurance penetration consistently exceeds 1.5 for all years, in contrast to life insurance, where the ratio does not surpass 0.4 throughout the entire period. It's crucial to note that this pattern isn't exclusive to our country because similar trends are observed in Germany and Poland. According to this indicator, Bulgaria closely mirrors the Polish experience and even outperforms it in certain years. Nevertheless, the higher property and liability insurance penetration in these countries should not be a reason to oversimplify the matter. This is because the accumulated gross premium income from life insurers in the EU, in relation to GDP, is higher. There are evidently EU countries with the opposite profile in their insurance markets.

Table 4. Insurance penetration (2015-2021) in percent

Years	Non-life insurance				Life insurance			
	DE	PL	BG	EU	DE	PL	BG	EU
2015	3.52	1.74	1.75	4.01	2.87	1.23	0.37	6.14
2016	3.45	1.92	1.72	3.83	2.74	0.99	0.38	5.77
2017	3.65	2.08	1.72	3.81	2.50	0.96	0.36	5.71
2018	3.67	2.07	1.94	3.18	2.49	0.74	0.31	4.18
2019	3.72	2.01	2.09	3.27	2.69	0.65	0.29	4.14
2020	3.95	1.98	2.07	3.51	2.74	0.60	0.28	3.91
2021	3.62	1.94	1.95	3.31	2.78	0.57	0.35	4.08

Source: Author's calculations based on statistics from SwissRe and the World Bank (<https://data.worldbank.org/>).

The pandemic has affected insurance penetration in both market segments. Lower values are being recorded in both non-life and life insurance since 2020, and these trends vary across different countries. The decline is modest in Bulgaria but appears to be intensifying, particularly in non-life insurance. This conclusion holds true for Poland as well. An exception is life insurance in Germany, which has gradually increased its penetration during the Covid-19 period. However, the rise is not substantial (2.78 for 2021), failing to surpass the values from the beginning of the study period (2.87 for 2015). Aggregated data for EU members indicate heightened volatility in the recent years of the dynamic order. It becomes evident that the future of insurance penetration is uncertain and unclear for most countries in Europe.

2. Impact of Covid-19 on insurance market concentration

The data analysis covering the years 2015-2021 reveals an indirect link between the pandemic and the development of both non-life and life insurance in Bulgaria. To a large extent, this mirrors trends observed in other EU members, albeit with its own unique characteristics. Beyond tracking the way the domestic market develops, it's crucial to delve into how its structure is undergoing change, particularly when considering its two distinct segments. The rationale is tied to the fact that factors like COVID-19 can result not just in a temporary shrinkage of the insurance industry but also in lasting changes to market concentration. The uneven distribution of market power is likely to exert a longer-term effect, necessitating government intervention. Evaluating market concentration in Bulgaria during the pandemic will involve the use of indicators such as the Three-firm and Five-firm Concentration Ratios (CR₃ and CR₅), the Relative Concentration Index (RCI), the Herfindahl-Hirschman Index (HHI), the Hall and Tideman Index (HTI), the Entropy Index (IE), and the Gini Coefficient (GC) (Peres, Maldonado, Candido, 2019: 398-399).

The concentration of the top three non-life insurance companies in Bulgaria has consistently been on the rise during the pandemic period (Table 5). Their total market share grows from 35.8% in 2015 to 41.6% in 2022. The announcement of the pandemic in 2020 slightly accelerates this concentration process. The same trend holds true for the leading five insurers in the market. Despite CR₃ values not indicating structural distortions (CR₃ < 45%), there is an observable inclination toward consolidating market power among the largest players. Concerns about this are also reflected in the low values of the relative concentration coefficients (RCI₃ and RCI₅) calculated for non-life insurance companies (Suslikov et al., 2021: 245). Across all years, these coefficients range from 0.28 to 0.39, which is a symptom of some kind of concentration.

Table 5. The Concentration ratio of the largest insurers in Bulgaria (2015-2022)

Years	Non-life insurance				Life insurance			
	CR ₃	RCI ₃	CR ₅	RCI ₅	CR ₃	RCI ₃	CR ₅	RCI ₅
2015	35.79%	0.28	55.82%	0.30	57.23%	0.35	78.77%	0.42
2016	35.11%	0.29	55.63%	0.31	58.53%	0.39	80.11%	0.48
2017	34.62%	0.33	55.24%	0.35	61.78%	0.40	84.04%	0.50
2018	35.94%	0.33	54.34%	0.37	66.09%	0.41	91.44%	0.50
2019	35.23%	0.35	54.53%	0.38	70.48%	0.39	92.38%	0.49
2020	36.53%	0.34	55.53%	0.38	75.53%	0.40	92.55%	0.54
2021	37.35%	0.35	56.10%	0.39	73.56%	0.41	90.63%	0.55
2022	41.59%	0.31	59.40%	0.37	74.98%	0.40	93.08%	0.54

Source: Author's calculations based on FSC statistics, https://www.fsc.bg/?page_id=22138.

Market concentration in life insurance in Bulgaria is not only high but also a cause for concern. The three largest insurance companies control nearly 75% of the market in 2022, and the

top five hold 93%. This categorizes it as a highly concentrated market (Dzhuha, Kuritsayn, Shtapova, 2014: 59). Interestingly, life insurance wasn't as concentrated at the beginning of the study period, with CR₃ standing at 58.5% in 2015. The trend, however, is moving in a positive direction, resulting in a 17.75% increase in total market share over eight years. The pandemic has accelerated this process, with CR₃ reaching its peak in 2020. The data is interesting because the number of life insurance companies remained constant during Covid-19 (Table 2). The dynamics in the total market share of the top five insurers is characterized by great volatility for the period 2020-2022, but the final result is eloquent – out of a total of ten companies, five completely dominate the market. Notably, only the RCI₅ has „more normal“ values, surpassing 0.5 and indicating a state of moderate concentration. What's even more curious is that the values of RCI₅ in life insurance are higher than those in non-life insurance. This could be attributed to an „unspoken“ redistribution of the market to favor „partnered“ competitors.

The Herfindahl-Hirschman Index can be used to confirm the findings derived from the concentration ratios. It broadens the analysis by incorporating the market shares of all insurers into its formula. According to this metric, non-life insurance outperforms the life insurance business. All HHI values in the non-life insurance segment are below 1000, whereas they exceed 1500 in life insurance (Table 6). That's logical, considering there are twice as many licensed non-life insurance companies compared to life insurers (23 versus 10 participants). The index takes this into account, categorizing the non-life insurance market as having low concentration, while the life insurance market is deemed moderately concentrated. A similar conclusion was reached earlier in the paper.

Table 6. Indices of market concentration in Bulgaria (2015-2022)

Years	Non-life insurance				Life insurance			
	HHI	HTI	IE	GC	HHI	HTI	IE	GC
2015	851.8	0.093	0.777	0.640	1499.0	0.157	0.789	0.575
2016	876.5	0.096	0.772	0.640	1534.5	0.165	0.811	0.533
2017	869.2	0.096	0.798	0.597	1613.0	0.178	0.800	0.531
2018	884.3	0.097	0.800	0.589	1860.0	0.201	0.768	0.548
2019	890.4	0.098	0.804	0.575	2008.1	0.217	0.749	0.580
2020	899.0	0.099	0.803	0.577	2192.0	0.234	0.750	0.573
2021	896.4	0.098	0.819	0.557	2117.7	0.225	0.766	0.556
2022	959.0	0.103	0.807	0.580	2112.4	0.229	0.755	0.564

Source: Author's calculations based on FSC statistics, https://www.fsc.bg/?page_id=22138.

The trends in HHI development suggest a potential rise in concentration. Non-life HHI values have consistently grown, reaching 959 in 2022, approaching the threshold for the market to be classified as moderately concentrated. Life insurance falls into the "red" zone since 2019, indicating high concentration (HHI > 2000). Examining the data in Table 6 reveals the significant impact of the pandemic on the uneven distribution of market power among life insurers. It causes a jump in the index in 2020, which then stabilizes in the subsequent years. When we interpret the results of both CR₃ and HHI collectively, we can assert with confidence that the life insurance market in Bulgaria has been highly concentrated since the onset of Covid-19.

The outcomes of the Hall-Tideman index tests closely mirror those of the previous analyses. Furthermore, they affirm the hypothesis that the life insurance market exhibits significantly higher concentration compared to the non-life insurance sector. Across all years, the HTI values for life insurance surpass those in the non-life segment. Moreover, they are multiples larger than their minimum thresholds (1/n). Although they are far from unity, they have a clear tendency to increase. Starting at 0.157 in 2015, the value increases to 0.229 in 2022, representing a growth of over 45%.

This increase for non-life insurance stood at 10.8% for comparison. Notably, both markets experienced a peak in 2020, coinciding with the pandemic year. This peak is more pronounced in the life insurance sector, reaching a value of 0.234. In fact, this market exhibits greater volatility, as evidenced by the standard deviation of the HTI at 0.031. Towards the end of the study period, both dynamic lines show an upward trend, with non-life insurance reaching its highest value of 0.103.

The values of Theil's entropy index are interesting for interpretation. In contrast to the concentration ratio, this indicator is positively evaluated at higher levels (Moreira et al., 2010: 211). As depicted in Table 6, the entropy index ranges from 0.772 to 0.819 for non-life insurance and from 0.749 to 0.811 in life insurance. To provide a more precise reference, the maximum possible values of IE will be utilized, calculated as the decimal logarithm of the number of active insurers over the years. This results in the ranges of [3.135; 3.401] and [2.303; 2.708]. Obviously, the data for the Bulgarian insurance markets indicate a departure from a scenario of competition with equal market shares. Simultaneously, the IE values are not quite approaching zero, leading us to conclude that both non-life and life insurance fall into the category of moderately concentrated markets. The relatively poorer performance of the non-life insurance sector in terms of entropy index can be attributed to the ratio's emphasis on smaller companies, which are more numerous in our sample. Another feature of the analyzed data is the lack of a distinct trend in the development of IE. The dynamic lines are characterized by very frequent and minor fluctuations. Unlike other concentration measures where the impact of Covid-19 was evident, here it is nearly absent.

The primary criticism of the insurance market in Bulgaria revolves around the uneven distribution of market shares among its participants. The indicator that illustrates the inequality is the Gini coefficient. The GI shows very similar values in both non-life and life insurance, indicating the same distribution of market power between insurers in both segments. All its values exceed 0.500, strongly indicating the presence of inequality. The coefficient ranges from 0.531 in life insurance to 0.640 in non-life insurance. These values categorize insurance market in Bulgaria as moderately concentrated. If we limit the analysis to only the initial and final values of the studied data, a reduction in the Gini coefficient is observed, indicating a tendency to address inequality. However, in practice, the data shows significant fluctuations, suggesting that the market's condition is unlikely to permanently improve in the future. The Gini coefficient recorded lower values during the pandemic, with a short-term effect and without a structure-determining response. The GI rises again in 2022 (Table 6).

3. Possible scenarios for insurance market concentration

The concentration of the insurance market in Bulgaria has been gradually increasing over the research period (2015-2022), transitioning from low to moderate and eventually reaching high values. This trend is particularly pronounced in life insurance, where market concentration indices have been entering the "red" zone since 2019. Overall, this segment of the Bulgarian market has shown weaker and more uneven development compared to non-life insurance. One factor contributing to the accumulation of market power among a select few life insurers is the consolidation of their business through mergers and acquisitions, resulting in a reduction of the total number of operating companies to ten. This creates conditions conducive to the establishment of a free oligopoly. The limited number of insurers allows them to coordinate with each other, leading to a form of "herd" behavior. The problem lies in the difficulty of accepting a free oligopoly as customer oriented.

The analysis of market concentration in Bulgaria indicates that the insurance business has not been significantly impacted by the pandemic. The direction of its development has not undergone permanent changes. There is no basis to assert that the pandemic years from 2020 to 2023 had a catalyzing effect on long-term processes. The development of market concentration has continued to follow the trends predating Covid-19 in terms of direction and strength. While there were some fluctuations in all indices reporting insurance market power between 2020 and 2021,

they were insufficient to reverse the established trend. The more notable shifts in market power during the pandemic are associated with the transfer of shares among the leading insurers. The largest non-life insurance company, Armeec Insurance JSC, is reducing its market share. In contrast, the third-largest insurance company, Lev Ins JSC, is expanding and emerges as the leader by the end of the period. On the other hand, the dynamics in life insurance are different. The top player, Allianz Bulgaria Life Insurance JSC, is strengthening its market positions amid the pandemic. Meanwhile, the second-ranked company, Bulstrad Life Vienna Insurance Group JSC, sustains growth in the pre-pandemic period but starts to lose momentum afterward.

The statistical data covering the development and concentration of the insurance market in Bulgaria from 2015 to 2022 enables us to make some conclusions regarding anticipated future trends:

- 1) Arguably, the non-life insurance market is expected to consistently outperform the life insurance industry across various metrics. Nearly all indicators employed in the analysis support this conclusion. The gross premium income of non-life insurers exhibits a clear and positive growth trend, with a rate of 87%, whereas the growth in life insurance stands at 39%, marked by frequent fluctuations. Similar patterns are observed in terms of insurance density and penetration.
- 2) Market concentration has the potential to pose a substantial challenge for Bulgaria. All concentration indices (CR₃, CR₅, HHI, HTI, and IE) show a positive growth trend. In relative terms, the life insurance segment has been considerably more impacted by the accumulation of market power.
- 3) The direct negative effects of the pandemic on the condition of the insurance market in Bulgaria have nearly been overcome. The short-term fluctuations triggered by Covid-19 haven't influenced the overall trends, including the acceleration of market concentration processes. In this regard, the future development of the market is not anticipated to be adversely affected by the resonance of this factor.
- 4) The uneven distribution of market power in insurance is set to intensify. Despite the Gini coefficient showing a favorable trend for the market, its values remain alarmingly high. Notably, the values have been closely aligned for both non-life and life insurance in recent years.

The prediction for the increase in market concentration is based on the assumption that the insurance markets will be unattractive for new entrants. If we anticipate a deceleration in the growth of GDP per capita in Bulgaria in the upcoming years (BNB, 2022: 9), then a contraction in the insurance business is likely because of the established positive correlation between them. In such a scenario, large insurance companies, operating without significant competition, may persist in growing and amassing market power at the expense of smaller entities. This trend is completely real and foreseeable, especially in the realm of life insurance. The likelihood of this scenario not happening hinges on the influence of digital innovations and the entry of Insurtech companies. Their competitive products have the potential to bridge the gap with leading insurers. Moreover, their resilience in crisis conditions suggests an increased capacity for survival. Additionally, it's worth considering the possibility of more experienced foreign insurers entering the market. However, this will require a reversal of the GDP trend.

The future development of the insurance market in Bulgaria is not an isolated occurrence and should be viewed in the context of global events and trends. Considering that consolidation processes in the insurance sector have swept across all of Europe, there's no way Bulgaria will remain outside this prevailing trend. Given that motivations for mergers and acquisitions involve reducing operating costs, expanding market share, and risk diversification, it's foreseeable that the count of insurance companies will keep decreasing. Consequently, this trend might contribute to an uptick in market influence for the top three or five companies. Consolidation is not a novel

occurrence for Bulgaria. This process has persisted throughout the entire study period and stands as one of the contributing factors to the deteriorated level of concentration.

References

1. BNB. (2023). Macroeconomic forecast. December 2022. Sofia.
2. Dzhuha, V., Kuritsayn, A., Shtapova, I. (2014). *Ekonomika otraslevayh raynkov*. Tretye izdanie. Knorus, Moskva.
3. FSC. (2015-2022). Insurance market statistics. [Online] Available from: https://www.fsc.bg/?page_id=22138 [Accessed 10/09/2023].
4. Insurance Code. (2005). OJ, Bulgaria: 103, 2005.
5. Insurance Law. (1996). OJ, Bulgaria: 86, 1996.
6. Kirov, St. (2010). Zastrahovatelniyat biznes v usloviyata na kriza - prosti resheniya v slozhni situatsii. Svetovnata kriza i ikonomicheskoto razvitie. *Yubileyna mezhdunarodna nauchna konferentsiya*, Varna: Nauka i ikonomika, T. 2.
7. Moreira, L. et al. (2010). Analysis of the Brazilian cellulose industry concentration (1998-2007). *Cerne*, Lavras, 16(2).
8. Peres, V., V., Maldonado, W., Candido, O. (2019). Automobile insurance in Brazil: market concentration and demand. *R. Cont. Fin. – USP*, São Paulo, 30(81).
9. Pye, B. (2005). The evolution of financial services in transition economies: an overview of the insurance sector. *Post-communist economies*, 17 (2).
10. Sigma. (2022). World insurance: inflation risks front and centre. Swiss Re Institute, 4.
11. Suslikov, A., et al. (2021). Market power and competitive policy on the market of tourist services insurance. *Financial and credit activities: problems of theory and practice*, 6 (41).
12. SwissRe. (2015-2022). Sigma Research. [Online] Available from: <https://www.swissre.com/institute/research/sigma-research> [Accessed 07/08/2023].
13. Tipurić, D., Bach, M., Pavić, T. (2008). Concentration of the insurance industry in selected transition countries of Central and Eastern Europe, 1998–2006. *Post-Communist Economies*, 20:1.
14. World Bank. (2015-2022). World Bank Open Data. [Online] Available from: <https://data.worldbank.org/> [Accessed 27/09/2023].