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Abstract
The article aims at evaluating development of insurance companies over the time period 2005 – 2015 from the vantage point of an insurance activity and consequently it tries to discover whether or not business production development corresponds to the expense-to-revenue ratio of an insurance activity. The subjects of my research are the insurance groups Vienna Insurance Group and Generali CEE Holding which both operate in the Czech Republic. The object being evaluated is an insurance activity. Evaluation is conducted through an analysis and comparison of selected ratio indicators in the time period 2005 – 2014. The insurance activity is evaluated first by the market position (thus by the market share), development of gross written premium and product diversification. Consequently, the insurance market is evaluated by expense-to-revenue ratio indicators, specifically by the expense ratio and loss ratio. The expense-to-revenue ratio and product diversification are evaluated within a non-life insurance segment. Finally, a comparison will let us discover whether or not the development of the position in the market corresponds to the development of running costs and expenses spent on insurance payouts.

Keywords: gross written premium growth rate, costs/expenses spent on arranging insurance, expenses on insurance management, expenses on insurance payouts
JEL codes: G22

1. Introduction

This article will ponder upon the current way of evaluation of insurance companies operating within insurance groups in the Czech insurance market. Various statistics and annual reports evaluate the insurance market primarily from the vantage point of business production, i.e. market share and growth of written premium. This situation is aptly depicted by Lhotská (2012, p. 23) who says: “We are witnesses of a competition focused on maximizing one’s market share in the volume of premium written.” Lhotská (2013) consequently warns that insurance companies should rather concentrate on the quality of their insurance portfolio and thus make an effort to improve results of their own insurance activity. Insurance companies should achieve what can be described as a quality insurance portfolio and a proper product structure. It is recommended to evaluate loss ratio and expense-to-revenue ratio of the portfolio management. Lhotská (2015) emphasizes that market share has become sort of a magic formula and she points out that each insurer is happy when their insurance company has simply a bigger market share than the competitors.

However, the article also deals with the development of insurance companies in the Czech insurance market in the time period 2005 – 2014. The research focuses on insurance groups Vienna Insurance Group (hereinafter referred to as VIG) and Generali CEE Holding (hereinafter referred to as GENERALI CEE). VIG insurance group is formed by Kooperativa pojišťovna, a. s., Vienna Insurance Group (hereinafter referred to as KOOP), Česká podnikatelská pojišťovna, a. s., Vienna Insurance Group (hereinafter referred to as ČPP) and Pojišťovna České spořitelny, a.s., Vienna Insurance Group (hereinafter referred to as PCS). GENERALI CEE insurance group is formed by Česká pojišťovna a.s. (hereinafter referred to as ČP), Generali Pojišťovna a.s. (hereinafter referred to as GENERALI) and Česká pojišťovna ZDRAVÍ a.s. (hereinafter referred to as ČP ZDRAVÍ). Both insurance companies started operating in this constitution in 2008. Each insurance group incorporates three insurance
companies, each of which has approximately equal market share in the Czech insurance market. Each insurance group’s market share is roughly similar as well. This article aims at evaluation of development of both insurance groups in the time period 2005 – 2014 from the vantage point of an insurance activity and it tries to discover whether or not the business production development corresponds to the expense-to-revenue ratio of the insurance activity.

The establishment of the insurance groups demonstrates current trends on the insurance markets. It is a manifestation of globalization tendencies connected with how much insurance companies cooperate with one another within groups on the basis of banc assurance and other strategic treaties. According to Daňhel et. al (2009) the financial crisis caused that trends of inter-sectoral integrations and implementation of more effective regulation projects commenced in the nineties have been recently undergoing serious corrections. According to Ducháčková and Daňhel (2009), fusions and acquisitions in the, relatively fragmented, Czech insurance market, are taking place outside the inter-sectoral integration. The development of the insurance groups cannot be foreseen and there is no telling in what ways the holding is going to develop.

KOOP was founded in 1991 as the first commercial insurance company in the former Czechoslovakia and since its inception it has been part of the VIG. In early 2004 a strategic partnership agreement was concluded between KOOP and Česká spořitelna, a.s. (hereinafter referred to as ČS)\(^1\).

Strategic partnership of KOOP and ČS is connected with the historical development, which started with the creation and development of ČS-Živnostenská pojišťovna, a. s., founded in 1992 by ČS’s Czech private capital. In 2000, ČS-Živnostenská pojišťovna, a.s., welcomed a new shareholder, the largest Austrian life insurer Sparkassen Versicherung, a member of the financial group Erste Bank. Since 2001, the insurer began using the new name Pojišťovna České spořitelny (PČS). This was soon followed by development of banc-assurance through the sale of PČS’s insurance products offered in the ČS’s branch network. Because ČS and Erste Bank specialized in life insurance and banc-assurance, in 2003, stockholders sold the PČS’s non-life insurance segment to KOOP. Since 2004, the PČS has specialized only in selling life insurance through ČS’s network and selected external networks.\(^2\)

KOOP is owned by three companies. These are: VIENNA INSURANCE GROUP AG Wiener Versicherung Gruppe (96.32%), VLTAVA majetkoprávni a podílová spol. s r. o. (2.07%) and Svaz českých a moravských výrobních druzstev, Praha (1.61%).\(^3\)

ČPP is a universal insurance company operating in the Czech insurance market since 1995. The ČPP has historically had a strong position in car insurance, especially in compulsory insurance. With more than a million insured vehicles in the Czech Republic it is the third largest provider of this type of insurance in the Czech market. Since 2005, the ČPP has been part of the insurance group VIG. The insurance company is owned by a single company, Kooperativa pojišťovna, a.s., Vienna Insurance group.

The abovementioned evolution is essential for characterizing PČS. In 2004, PČS began to specialize in selling life insurance through the ČS’s network and selected external networks (see information on KOOP). Since 2001, the insurance company has operated under the name PČS developing banc-assurance. In 2008, the insurance company became part of the insurance group VIG. The insurance company focuses on premium life insurance products and it is one of the largest insurers in banc-assurance in the Czech market. PČS is owned by three companies. These are VIENNA INSURANCE GROUP AG Wiener Versicherung Gruppe (90%), Kooperativa pojistovna, a. s., Vienna Group (5%) and Česká spořitelna, a.s. (5%) (KOOP’s annual report, 2012).

ČP is the oldest insurance institution in the Czech Republic. It was established in 1827. It used to belong to the National insurance company but in 1969, based on the territorial principle, it was divided into the Czech national insurance company and Slovakian national insurance company. ČP was founded by the National property fund of the Czech Republic by a deed of incorporation and obtaining a certificate of incorporation in 1992. Since ČP was founded, it has been a universal

\(^1\) Kooperativa. Available at: www.koop.cz. [cit. 20. 9. 2015].
\(^2\) Pojišťovna České spořitelny. Available at: www.pojistovnacs.cz. [cit. 20. 9. 2015].
\(^3\) Kooperativa. Available at: www.koop.cz. [cit. 20. 9. 2015].
insurance company offering both life-insurance and non-life insurance products. In 1996, the financial group PPF entered ČP (ČP’s annual report 2005).

In 2008, into effect came the Joint Venture Agreement signed by Assicurazioni Generali and PPF Group N.V., which established the Generali PPF Holding B.V., owned by the Generali Group (51%) and the PPF Group (49%). Based on a mutual agreement of both owners concluded in 2013, ČP and its subsidiaries started to be owned solely by the Generali group in 2015. The group changed its name to Generali CEE Holding B.V. Generali CEE Holding is part of the insurance group Assicurazioni Generali S. p. A. Trieste (ČP’s annual report 2014).

GENERALI started operating in Czech lands in 1832 when the first branch of the Generali Assicurazioni was opened in Prague. In 1993, Generali returned to the Czech Republic, then represented by the Austrian insurance company Erste Allgemeine. In 1995 it transformed into a public limited company named Generali Pojišťovna a.s. In 2008 it became part of Generali PPF Holding B. V. Since 2005, the GENERALI group has been owned by the insurance company Generali CEE Holding B.V.4

ČP ZDRAVÍ is the first insurance company in the Czech Republic which specializes in private life insurance and health insurance. It has operated in the Czech insurance market since 1993. ČP ZDRAVÍ was founded in 1992 and it started operating in 1993 as a subsidiary of ČP (50% share) and Vereinte Krankenversicherung AG Munich (50% share). In 1993, following negotiations about the future of ČP ZDRAVÍ, ČP bought the share of Vereinte Krankenversicherung AG Munich and in 1997 it became the only shareowner of ČP ZDRAVÍ.5

2. Methodology and Data

This article aims at evaluation of development of insurance companies over the time period 2005 – 2014 from the vantage point of an insurance activity and it also tries to discover whether or not the development of business production corresponds to the expense-to-revenue ratio and costs spent on the insurance activity within the insurance company VIG and GENERALI CEE in the Czech Republic. To be able to achieve this, this article calculates and consequently analyses and compares selected ratio indicators in the time period 2005 – 2014 and it tries to discover whether or not the position in the market corresponds to the development of running costs and expenses spent on insurance payouts. The indicators are stated for VIG and GENERALI CEE from 2005 onwards. It is important to realize that since 2008, all assessed insurance companies have belonged to the respective group. The article reflects this.

Ratio indicators used in the insurance industry are based on general ratio indicators used in corporate financial analyses. However, in the world of insurance they must be adapted because of the distinctions (Vávrová, 2014). According to Vávrová (2014), the aim of commercial insurers’ activities is not only the insurance or reinsurance business but also investing funds that are temporarily available. Commercial insurers must set the price of insurance protection without their exactly knowing the costs associated with the services provided. The insurance company must be able to manage a portfolio of insurance contracts, i. e. the insurance portfolio and investment portfolio.

The first part of the research focuses on an analysis of gross written premium (GWP) and indicators that are normally used to calculate it. We first calculate market shares by GWP within the insurance companies in the monitored period. Then we analyze a year-on-year growth of GWP, where this indicator should show some growth whilst the recommended value according to Korobczuk (2007) is between -10% up to +30%. According to Vávrová (2014), new insurance companies try to reach a higher growth rate in their initial years and this indicator thus needs to be considered marginal in new insurance markets.

Another part of the research focuses on the non-life insurance segment. The reason for this concentration is primarily reporting of statistics and the type of selected indicator. We will analyze the distribution of insurance products. Product diversification is also assessed by the rating agency Moody’s (www.moodys.com) and insurance products are evaluated by whether or not they achieve at least 10% of premiums written.

4 Generali. Available at: www.generali.cz. [cit. 20. 9. 2015].
5 ČP Zdravi. Available at: www.zdravi.cz. [cit. 20. 9. 2015].
Furthermore, we also calculated and assessed the cost items of non-life insurance. I calculated the ratio indicator “expense ratio” (ER), which is very often used in evaluating costs of insurance activities (Pulchart, 2002; Korobczuk, 2007; Gestel et al., 2007; Vávrová, 2014). It is the proportion of operating costs and premiums written. For the calculation we took into account gross operating expenses (GOE) and gross premiums written (GWP). This indicator should reach an amount lower than 30% (Vávrová, 2004; Korobczuk, 2007). The formula for calculation is:

\[ ER = \frac{GOE}{GWP} \]  

(1)

The last indicator is the loss ratio (LR) (Pulchart, 2002). This is the share of insurance benefits costs (GBC) and premiums written. For the calculations I worked with gross values. The lowest values are most favorable for insurance companies. The formula for calculation is:

\[ LR = \frac{GBC}{GWP} \]  

(2)

Data used for calculations of ratio indicators were collected from the following Internet sources. GWP was found in the financial section of annual reports of all insurance companies. The total GWP was found in the statistics of the Czech National Bank (hereinafter referred to as ČNB), specifically in the chapter named Fundamental indicators of sectors of the financial market. To specify insurance products and values of GWP we used the statistics made by the Czech Insurance Association (hereinafter referred to as ČAP). The reason we chose ČAP’s statistics is that ČAP categorizes by products and focuses on GWP connected with these products. Insurance products within the non-life insurance segment are divided into compulsory motor insurance (MI), property insurance (PI), liability insurance (LI), motor vehicle insurance (MVI) and motor vehicle liability insurance (MVLI). Then we sort property insurance and liability insurance. Gross written premium is then divided into civic insurance (CI) and business insurance (BI). Gross running costs and gross expenses on insurance payouts were found in financial sections of the insurers’ annual reports.

3. Comparison of the Insurance Groups VIG and GENERALI CEE in the Czech Republic

3.1 Basic Characteristics

Table 1 contains a summary of significant characteristics of both insurance groups which are described in the initial part of this article. Comparing data in Table 1 makes it clear that there are some similar attributes between insurance companies belonging to insurance groups. These are connected to the size of market share, specialization and market share.

Table 1: Summary of Characteristics of Insurance Companies Belonging to VIG and GENERALI CEE

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>VIG</th>
<th>GENERALI CEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurers belonging to insurance groups Their majority owner</td>
<td>KOOP VIG AG Wiener Versicherung Gruppe (96.32%), ČP</td>
<td>Generali CEE Holding (100.00%)</td>
</tr>
<tr>
<td></td>
<td>ČPP KOOP (100.00%)</td>
<td>ČP ZDRAVI ČP (100.00%)</td>
</tr>
<tr>
<td></td>
<td>PČS VIG AG Wiener Versicherung Gruppe (96.00%), GENERALI</td>
<td>Generali CEE Holding (100.00%)</td>
</tr>
<tr>
<td>Specialization of insurers</td>
<td>KOOP Universal insurer</td>
<td>ČP Universal insurer</td>
</tr>
<tr>
<td></td>
<td>ČPP Motor vehicles insurance</td>
<td>ČP ZDRAVÍ Commercial health insurance</td>
</tr>
<tr>
<td></td>
<td>PČS Life insurance, Bancassurance</td>
<td>GENERALI Universal insurer</td>
</tr>
<tr>
<td>Market share in the Czech Republic as of 2014</td>
<td>KOOP 20.1%</td>
<td>ČP 18.6%</td>
</tr>
<tr>
<td></td>
<td>ČPP 4.9%</td>
<td>ČP ZDRAVÍ 0.3%</td>
</tr>
<tr>
<td></td>
<td>PČS 7.6%</td>
<td>GENERALI 5.5%</td>
</tr>
</tbody>
</table>

Source: author’s own work based on ČNB’s statistics and insurers’ annual reports
Further comparison reveals that each insurance group contains one insurance company with the largest market share in the Czech Republic; KOOP within VIG and ČP within GENERALI CEE. VIG contains another two insurance companies specializing in life-insurance (PČS) and motor vehicle insurance (ČPP). Both of these insurance companies reach an approximately equal market share around 5%. GENERALI CEE contains one insurance company specializing in commercial health insurance (ČP ZDRAVÍ) with a market share of a very low 0.2%. The other insurance company is a universal one with a market share of 5% (GENERALI). It is interesting to see how similar property links within each insurance group are. Each group contains one subsidiary (100% share) which is in both cases owned by a larger insurance company belonging to the group. The remaining insurance companies within the group are owned by the insurance group holding almost a 100% share.

3.2 Market share and growth rate

The following Figure 1 shows growth of market shares of both insurance groups. Time development shows a contrary tendency. VIG shows growth whilst GENERALI CEE shows decline. In 2010, market shares of both groups were equal. The reason for GENERALI CEE’s market share’s decreasing is a decline in the market share held by ČP (by 15.5% - absolute decline) during the monitored time period. The insurance company GENERALI shows a subtle growth in the period 2005 – 2009 and from 2009 it also continues to decline. In 2014, the market share reaches approximately the same figures which were achieved in 2005. On the contrary, insurance companies operating within the VIG insurance group show a growth tendency. Only KOOP shows a slight absolute decline by 2.5% in the monitored period. Average values reached by respective insurance companies in the monitored period are shown in Table 2.

![Figure 1: Development of VIG’s and GENERALI CEE’s Market Share by GWP](image)

Source: author’s own work based on ČNB’s statistics and insurers’ annual reports

Figure 2 shows the growth rate development of the total GWP in both insurance groups. VIG shows, in the entire monitored period, a positive growth rate. On the contrary, GENERALI CEE, except for the time period 2006 – 2008, shows a negative growth rate. All insurance companies belonging to VIG show a positive growth rate. The average growth rate of VIG over the time period 2005 – 2004 is higher by 5.13% and GENERALI CEE is lower by 1.92%. Average values reached by respective insurance companies in the monitored time period are shown in Table 2.
Figure 2: Development of GWP Increase within VIG and GENERALI CEE

Source: author’s own work based on ČNB’s statistics and insurers’ annual reports

Figure 2 also shows a comparison of growth rates in non-life insurance (see Figure 3). The reason for adding this into the figure was that calculation of expense indicators was made only for the segment of non-life insurance. Figure 3 shows development of GWP’s growth rate of both insurance groups in non-life insurance. Comparison of both figures makes it clear that the growth rate of GENERALI CEE develops in accordance with the total GWP. Only in the period 2005 – 2006 we can see that non-life insurance reached a positive growth rate. VIG’s non-life insurance shows a negative growth rate in the time period 2010 – 2012. The average value in the time period 2005 – 2014 for VIG reached 2.63%. GENERALI CEE reached -2.01%.

Table 2 summarizes average values of a market share and growth rate of GWP of respective insurance companies belonging to the insurance group VIG and GENERALI CEE. Average values are calculated for the time period 2005 – 2014 and for 2008 – 2014.
Table 2: Average Values of the Market Share and Growth Rate of Insurance Companies Belonging to VIG and GENERALI CEE

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>VIG</th>
<th>GENERALI CEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average values of the market share</td>
<td>KOOP</td>
<td>21.0%</td>
</tr>
<tr>
<td></td>
<td>ČPP</td>
<td>4.09%</td>
</tr>
<tr>
<td></td>
<td>PČS</td>
<td>5.47%</td>
</tr>
<tr>
<td>GWP Average values of the growth rate</td>
<td>KOOP</td>
<td>2.04%</td>
</tr>
<tr>
<td>of GWP</td>
<td>ČPP</td>
<td>7.88%</td>
</tr>
<tr>
<td></td>
<td>PČS</td>
<td>21.52%</td>
</tr>
</tbody>
</table>

Source: author’s own work based on ČNB’s statistics and insurers’ annual reports

3.3 Product Diversification

Figure 4 focuses on comparing development of the share of life and non-life GWP on the total GWP. We can see that both insurance groups’ share declined in the non-life insurance. A more significant decline can be observed in VIG. A factor responsible for this may be found in the growth tendency of PČS’s life insurance.

Figure 4: Development of Life and Non-Life GWP Ratio within VIG and GENERALI CEE

Source: author’s own work based on ČNB’s statistics and insurers’ annual reports

Sorting products by non-life GWP in the monitored time period is shown by Figure 5. If we do not include compulsory motor insurance (MI) in this comparison, in both groups three insurance products reach a 10% share. It is namely motor vehicle insurance (MVI), motor vehicle liability insurance (MVLI) and property insurance (PI). Shares in both groups are similar. A more significant difference can be observed in property insurance (PI). GENERALI CEE shows 36% in 2014; VIG shows only 22%.

Source: author’s own work based on ČNB’s statistics and insurers’ annual reports

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Figure 5: Development of Product Diversification of the Instance Portfolio of Non-Life Insurance within VIG and GENERALI CEE

Source: author’s own work based on ČNB’s and ČAP’s statistics

Figure 6 adds civic insurance (CI) and business insurance (BI) to the product diversification. Both of these insurance products are significant in the non-life segment. GWP is excluded from the values of GWP for property insurance and liability insurance. A more significant growth in these products is recorded in the insurance group GENERALI CEE which is connected to its larger market share in the category of property insurance.

Figure 6: Development of Business Insurance and Civil Insurance within VIG and GENERALI CEE

Source: author’s own work based on ČNB’s and ČAP’s statistics
3.4 Cost ratio indicators

The first monitored cost ratio indicator is the expense ratio (ER). Insurance companies or insurance groups should not exceed the level of 30%. The following Figure 7 clearly shows that in the time period 2005 – 2014, neither of the two insurance groups exceeded this level. In 2009, ER values in both insurance groups were equal. Having compared values in the monitored period, it is important to point out that the insurance group VIG reached lower values in the time period 2008 – 2014.

![Figure 7: Development of Expense Ratio within VIG and GENERALI CEE](source)

Source: author’s own work based on ČNB’s statistics and insurers’ annual reports

The other cost ratio indicator is the loss ratio (LR). The lower this value is, the better for the insurance company and the whole insurance group. Having analyzed and compared values in Figure 8, we can conclude that in the time period 2008 – 2014, the lowest values were reached by the insurance group GENERALI CEE. In 2008 and in 2009, values achieved were very similar. Only in 2012, VIG’s value was lower. The reason for a lower loss ratio of GENERALI CEE may be the structure of insurance products (see Figure 5 and 6), namely in property insurance in which GENERALI CEE shows a higher share compared to VIG.

![Figure 8: Development of Loss Ratio within VIG and GENERALI CEE](source)

Source: author’s own work based on ČNB’s statistics and insurers’ annual reports
4. Conclusion

The article aims at evaluating development of insurance companies over the time period 2005 – 2015 from the vantage point of an insurance activity and consequently it tries to discover whether or not business production development corresponds to the expense-to-revenue ratio of an insurance activity. The insurance groups VIG and GENERALI CEE were evaluated by the position in the insurance market, by running costs and expenses spent on insurance payouts over the time period 2005 – 2014. Within VIG operate insurers KOOP, ČPP and PČS. Within GENERALI CEE operate ČP, GENERALI and ČP ZDRAVÍ. Both insurance groups have operated in this constitution since 2008.

The market share determined by gross written premium in both insurance groups shows a contrary growth tendency. VIG, in the monitored period 2005 – 2014, shows a growing tendency as far as its market share is concerned, whereas GENERALI CEE shows a descending tendency. We can also observe a contrary development in a growth rate of gross written premium. VIG shows a positive rate whilst GENERALI CEE shows a negative rate. Comparing growth rates of non-life gross written premium in 2010/2011/2012 makes it clear that VIG reached a negative growth rate. However, in general VIG reached higher values in the growth rate indicator.

Comparing the non-life and life share of gross written premium in the time period of 2005 – 2014, we can observe a more significant decline of life insurance in VIG. As of 2014, VIG’s life and non-life share on gross written premium are roughly balanced. Product diversification within the non-life segment is similar in both insurance groups. If we do not take compulsory motor insurance in account, both insurance groups have three products exceeding 10% share on the total gross written premium of non-life insurance. It is important to point out the discovered difference in the share of property insurance where GENERALI CEE shows 36% and VIG only 22%. This fact is consequently reflected in the comparison of civic insurance and business insurance where GENERALI CEE shows a higher difference again.

The expense-to-revenue ratio in the segment of non-life insurance is evaluated as follows. Over the time period 2005 – 2014, VIG achieved better results in the ratio indicator called expense ratio. On the contrary, in the period 2005 – 2014, GENERALI CEE showed better results in the ratio indicator called loss ratio. The reason for better results of GENERALI CEE in the loss ratio indicator can be found in a higher share of gross written premium in property insurance.

The insurance group VIG shows a growth tendency in gross written premium and also in its market share. The ratio indicator expense ratio which evaluates running costs on arranging insurance has been in case of VIG stable since 2008 and shows values around 23%. It is thus possible to summarize that VIG’s business production corresponds to running costs spent on arranging non-life insurance. The ratio indicator loss ratio fluctuated in the monitored period.

The insurance group GENERALI CEE shows a declining tendency of its market share and its growth rate reaches negative values. The ratio indicator expense ratio in case of GENERALI CEE has been slowly increasing since 2008 and as of 2010 it reached around 27%. It is thus possible to summarize that GENERALI CEE has been raising running costs on arranging non-life insurance. The ratio indicator loss ratio fluctuated in the monitored period.

We can finally conclude that the insurance group VIG, in comparison with GENERALI CEE, reached better results as far as all evaluated indicators are concerned. VIG is an insurance group with a growth tendency of market share and it corresponds to running costs spent on arranging insurance. Only in case of costs spent on insurance payouts, it shows higher values which might have been caused by product diversification. To find out more about this issue, it would be desirable to conduct further analysis of costs spent on insurance payouts.

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References


