A COMPARATIVE ANALYSIS OF THE ROMANIAN AND POLISH P&L INSURANCE MARKETS

Şerbănescu Cosmin

ACADEMIA DE STUDII ECONOMICE, Facultatea de Finanţe, Asigurări, Bănci şi Burse de Valori, Piata Romana, no. 6, sector 1, Room 1104, Zip Code 010374, Bucharest, Romania, serbanescucosmin@yahoo.com***, tel.0721.23.13.53***

Dragotă Mihaela

ACADEMIA DE STUDII ECONOMICE, Facultatea de Finanţe, Asigurări, Bănci şi Burse de Valori, Piata Romana, no. 6, sector 1, Room 1104, Zip Code 010374, Bucharest, Romania, mihaela.dragota@fin.ase.ro, tel.021/319.19.01/int.264

The insurance market represents a significant part of the economic development. The Romanian market, even it is an emergent one, have tried, for the last 10 years, to improve the expectations regarding the main indicators of welfare: gross written premiums for both mandatory, but especially facultative insurance policies, total assets, equity, the number of insurance brokers and agents. The progress can be viewed with eyes wide opened, but we address the question whether this trend is sufficient the decrease the gap between the Romanian market and the most important insurance ones from European Union. To achieve this goal, we summarize some correlations between Romanian and Polish market, and the results are promising.

Key words: Insurance, Pearson correlation, gross written premiums, equity.

1. The most important goals of the study

This study consists in a comparison between the Romanian and Polish insurance markets, for the period 2003-2005. The main goal of this study is to define if there are signs of improvement in the Romanian P&L insurance market by a detailed comparative analysis of a developed insurance market, the Polish one.

Even this seems to be inappropriate (in fact, there are more advanced insurance markets) the first step should be an intermediate level. However, this Polish market is enough for the moment. For example, gross written premiums in 2004 were 13602665 polish zlots (4 billions euros) for Poland and 26,975,746,721 lei (745,000 millions euros) for Romania. This is the starting point for the analyses and should be kept in mind for the following ideas, conclusions that can be drawn up as a result of our comparison.

2. The input data and the methodology of the study

The input data were provided by the Insurance Supervision Commission (ISC) yearly reports and Insurance and Pension Funds Supervisory Commission (KNUIFE), which were improved from one period to another, with more and more information. The analysis was made for P&L insurance market[190].

This study is based both on indicators provided directly by ISC and KNUIFE and on determined values of various elements, obtained from these insurance authorities reports, such as: equity, gross written premiums, gross paid claims and number of authorized insurance classes.

For both computational databases we eliminated those insurance companies with irrelevant activities (not diminishing gross written premiums, but ceasing activities, withdrawing authorisation, etc) and lack of technical information for the entire three years analysed period. From this point of view, the next insurance companies were eliminated: IF TU S.A. (liquidation), TUwRiGŻ Agropolisa S.A. (the lack of activity in 2004), FIAT Ubezpieczenia Majątkowe S.A. (the lack of activity in 2004), and HDI Asekuracja TU S.A. (the lack of activity in 2003)[191].

In the mean time, we excluded the main branches operating on Polish insurance market (Elvia Travel Insurance Company, COFACE AG, and Cardif-Assurances Risques Divers S.A.); due to insufficient

[190] This polish market is known as: Zakłady pozostałych ubezpieczeń osobowych i ubezpieczeń majątkowych.
[191] We presumed the Romanian insurance market to be a well-known one.

information on our market or the fact they are concluding business by new established insurance companies.

The Pearson correlation coefficients matrix was used as the statistical support of the dynamic analysis.

3. Empirical results

The following two tables illustrate the results, more specific, the values of the correlation coefficients for the P&L insurance classes, for the period 2003-2005.

Table no.1

Correlation coefficients between the financial variables for Romanian P&L insurance classes

YEAR	2005	2004	2003
Number of classes / Gross written premiums	0.8295	0.5954	0.8046
Number of classes / Equity	0.5444	0.343	0.5529
Number of classes / Gross paid claims	0.5862	0.503	0.571
Equity/ Gross written premiums	0.544	0.475	0.659

Table no. 2

Correlation coefficients between the financial variables for Polish P&L insurance classes

ANUL	2005	2004	2003
Number of classes / Gross written premiums	0.2524	0.2533	0.2481
Number of classes / Equity	0.4459	0.4652	0.3950
Number of classes / Gross paid claims	0.2459	0.2435	0.2307
Equity / Gross written premiums	0.1645	0.1733	0.2048

A more general conclusion from the comparative analysis between the two insurance markets is that The Polish market seems to be more stable than the Romanian one. The Pearson coefficients for the Polish insurance market had no significant changes during this period of time, but for Romania, with an emergent economy and an insurance market insufficient developed, the variation from one year to another are much more significant.

The second important conclusion is that the values for the Pearson coefficients are grater for the Romanian market, compared with the Polish one. This means a higher degree of dependency between all these variables, as a final remark of our particular insurance market. Even the lack of strong competition can be seen for many insurance classes, the higher the number of classes for an insurer, the bigger the turnover. After this short dissemination, it is the moment of a more detailed analysis.

Furthermore, it was performed a more specific analysis for this financial variables, for both countries.

The financial analysis for the period 2003-2005 revealed the following conclusions:

A. Correlation between the number of classes and the gross written premiums

For the Romanian insurance market, a strong correlation could be observed between these two variables, maybe too strong for an emergent market, as the Romanian one. Another argument for the emergent quality of the Romanian insurance market is the statistics revealing that only 4% of the whole number of buildings is insured. So, we could presume that this is acceptable for one insurance class, it will have some important clients and the effects in earned premium will pay off. The correlation could be much stronger if the Romanian insurance market had harsh competition[192]. A total different conclusion could be stated for the Polish insurance market. The values for the correlation coefficients are modest, around 24%, which emphasised a weak but positive relationship between these two financial variables. A grater number of classes, in Poland, do not have, as a direct consequence, a grater and significant level for revenues, such as gross written premiums. This is an expression for a more stable insurance market, with an intensive competition between underwriting companies.

It can be also stated that even the increasing competition won't be able to "squeeze" the coefficient. In fact, many foreign insurers have concluded mergers and acquisitions with or of Romanian insurance companies, but the market share for the P&L insurance market still remains the same. Indeed, some of them are hard to dethrone and their position is quite outstanding, but the hope is the last to die. If we want a certainty, we should demand the date when the strongest Romanian insurance companies shall collapse. The answer is difficult to predict, but we believe the answer to be "never". One way or another, the Romanian coefficient is at a high level, mainly due to the relative insufficient strength of the most important companies.

They aren't able to absorb the demand for insurance products, so they leave an important piece of the "cake" for the smaller ones. We intend to believe this reality to be a positive one, the concentration of a market being a point of start for a future duopoly or monopoly for a specified class of insurance.

Additionally, it can be easily concluded that this kind of markets tend to increase the insurance price due to the limited possibilities of an insured person. We have had, a few years ago, this kind of problem with the Romanian market, when many insurance companies developed a concerted practice regarding the price of green card[193], a type of insurance that is, nowadays, comprised in third party motor liability insurance.

From another point of view, this is considered to be the sign of a competition market, but what can we expect to happen the moment these less important insurance companies face the truth of bankruptcy? How this liaison can be possible? It's very simple. These companies are interesting from the insured point of view, because they often charge less than a powerful company. Yes, but what will happen with the claims, if the company has insufficient funds to pay the damages. Indeed, this is going to be a delicate phase of a company business cycle.

Despite this fact, everybody is considering lucky to have a "piece" of the Romanian market, to be recognised by the clients, till the moment they deal with his claim management problems, which they always pretend to be temporary.

B. Correlation between the number of classes and equity

The result was not very surprising because it is the result of the continuing efforts for the Romanian Insurance Supervision to increase the level of equity. This trend was much obvious in the year 2004, when the number of classes decreased from 8 to 5 and the medium level for equity raised from 22.43 million to 33 million Ron. However, it is not a reflex response to increase the equity when the number of insurance classes increased. Some Romanian insurance companies (e.g. Nationala), had 4 classes with an issued capital of 25 billions ROL, and, on the other hand, other companies (e.g. Petroas) had 15 billions ROL equity for 7 classes.

A weaker, but also positive correlation could be observed for the Polish case, due to different regulations and, again the same conclusion, a more stable insurance market: from 32 companies, analysed in the period 2003-2005, only one of them changed the number of insurance classes. Comparing to the previous correlation coefficients, it seems that the two countries are more similar.

C. Correlation between the number of classes and gross paid claims

For Romanian insurance market, the correlation coefficient revealed a strong link, as the result is, somehow, reasonable since the level of gross paid claims increased every time when ISC approved new insurance classes. The analysis must be performed for a minimum of 10 years together with the correlation between the number of classes and the financial result, since both theory and practice proved that the risk will be diminished and the portfolio will be diversified through the number of insurance classes.

[192] Dragota, Mihaela, Serbanescu, Cosmin, Pele, Dan, Traian, *Portfolio Diversification and Market Share Analysis for Romanian Insurance Companies*, publicata in volumul intitulat Risk Management and Value. Valuation and Asset Pricing, publicata in volumul 3 al Revistei *World Scientific Studies in International Economics*, 2008.

[193] The third party motor liability insurance for the foreign territory.

For the Polish insurance market, the correlation is positive, but weaker than for the Romanian P&L insurance one, which revealed that the grater level of claims is not significantly determined by the number of underwriting classes. The database showed a variation for the number of classes between 1 and 18, with an approximately average value of 14 classes and a median value of 17 and a standard deviation around 5. By the contrary, for the gross paid claims, the gap between minimum value and the maximum one are much more greater, from 1532 zlots to 4297311 zlots (for the year 2005), with an average value of 259966 zlots and a median value of 36151 zlots. The level for standard deviation was, for the same year 2005, around 775.600 zlots.

These values bring to light an insignificant change in the number of classes from the year 2003 to the year 2005, concomitant with major variation in gross paid claims. These data explained the unimportant role of number of classes on the changes in gross paid claims.

For the first two years of our analyses it can be concluded that the Romanian markets finds itself still at the beginning, because those values (0.503 and 0.571) explain a stronger correlation between gross paid claims and number of classes. Or, this is the proof for an emergent market, still searching for its ideal path. Otherwise, it is difficult, even impossible, to describe the pattern or this stronger correlation. In fact it shows that the greater the number of classes, the higher the amount of claims to be paid. The first cause is explained by the expansion of business and the increment of gross written premiums and consequently of indemnities. But, there is a second thought that this result was brought, has appeared due to bad management policies. Since there is no evidence of management distress for the chosen companies, we may conclude the first item to be the explanation for the mathematical conclusion.

As a comparison, the Polish market seems to be less inflexible, the coefficients ranging around 0.24. As an example, it can be found that PZU S.A., the biggest insurance company, with a share in non-life branch premiums of 60.55% has reached the highest level of claims paid: 4,443,207 polish zlots (approximately 1,315,000 euro), TUiR WARTA S.A. (market share – 13.32%) reported 900,000 polish zlots (approximately 266,000 euro) and STU Ergo Hestia S.A., the third polish insurer of the P&L insurance market (market share – 6.61%) an amount of 615,000 polish zlots (approximately 182,000 euro). Meanwhile, AIG Polska TU S.A., with a market share of only 0.24%, had chosen to practice all 18 classes and the result for the gross paid claims was 18,301 polish zlots (approximately 5,400 euro). The goal of this example cannot be fulfilled without an insurer with few classes, but relevant claim ratio: TU PZM S.A. 72.02%.

D. Correlation between equity and gross written premiums

The correlation is positive, but weaker, from the year 2003 to the year 2005 for the Polish insurance market.

The result is normal because the level of equity, it is not a guarantee for an appropriate level of the gross written premiums. If the specific regulation established by the Insurance Supervision Commission (ISC) is taken into consideration to increase the level of equity, the result could be easily understood. This indicator provided a greater stability, the image of a stable company, but some significant events could generate, even for these important insurers, a non-suitable level of gross written premiums.

The results for the Polish market revealed a weak correlation, mainly because of heterogeneity of these two variables. In practice it can be demonstrate a pattern for the equity level, depending on gross written premiums, the results for the Romanian market expressing rather the need to capitalize the insurance companies in order to achieve the legal framework, then the willingness to over capitalize the company.

4. Conclusions

The Romanian insurance market has more steps to achieve, in order to compete with the solid western markets, the existing gap between the countries analysed above being a living proof.

Even the foreign insurers have "invaded" our market, the poverty of many social categories represents a hand brake for the expected development, but for sure it will be easier with well capitalised insurers, much more classes and growing premiums.

The competition should not be hold guilty for the progress of the Romanian market. The Polish market proved to be highly developed, compared to the indigene one, even if the first three insurance companies had a market share of more than 80%. Mean while it can be stressed out that the Polish market has only 32 P&L insurance companies. As a final conclusion, the Romanian insurance market is able to improve its performances by a qualitative management, the number of foreign insurers penetrating our market being of real help, due to their experience on developed markets.

References

1. Dragota, Mihaela, Serbanescu, Cosmin, Pele, Dan Traian, *Portfolio Diversification and Market Share Analysis for Romanian Insurance Companies*, published in **Risk Management and Value. Valuation and Asset Priming,** edited by **Mondher Bellalah, Jean Luc Prigent, Annie Delienne** *(Université de Cergy-Pontoise, France)***, Georges Pariente** *(Institut Supérieur de Commerce, ISC Paris, France)***, Olivier Levyne, Michel Azria** *(ISC Paris, France)* **& Jean Michel Sahut** *(ESC Amiens, France)*, *World Scientific Studies in International Economics*, 2008.
2. Dragotă, M., "Coerențe şi corelații între indicatorii financiari ai companiilor româneşti ce practică asigurări generale", Scientific sessions "Finance and Inflation", Bucharest Academy of Economic Studies, 25-26 November 2005.
3. Green, W.H., 1993, *Econometric Analysis, 2nd Edition*, New York: Cambridge University Press.
4. Lee, S.H.; Urrutia, J.L., 1996, „Analysis and Prediction of insolvency in the Property-Liability Insurance Industry: A Comparison of Logit and Hazard Models", *The Journal of Risk and Insurance*, vol.63, No.1, pp. 121 – 130.
5. Şerbănescu Cosmin**,** *Piața asigurărilor auto din România*, Revista Finanțe, Bănci, Asigurări, Editura Tribuna Economică, Bucureşti, iulie 2007, pag 58-62
6. Şerbănescu Cosmin,*Influența reasigurărilor asupra primelor brute subscrise* - Revista Finanțe, Bănci, Asigurări, Bucureşti, noiembrie 2006, pag 63-64
7. Şerbănescu Cosmin, *Industria asigurărilor din perspectiva legislativă*, aprilie 2005, pag 58-62
8. Şerbănescu Cosmin, Dragotă Mihaela, Miricescu Emilian, *Analiza performanțelor societăților de asigurări*, Developpement durable, echange global et ecosystemes, Bucureşti, 2007, pag. 75-87, ISBN 978-973-594-898-6
9. Mihaela Dragotă, Cosmin Şerbănescu**,** Emil Miricescu, *Analiza statică a corelațiilor între indicatorii economico-financiari ai societăților de asigurări din România*, Studii Financiare (vol 1 2007), Sesiune de comunicări ştiințifice, 24 noiembrie, 2006, Bucuresti,361-371, pag. 337-341, ISSN 1582-8654
10. www.1asig.ro
11. www.csa-isc.ro
12. www.knuife.gov.pl