

# BAŞARISIZLIK RİSKİNİN DURDURULMASINDA DENETÇİNİN ROLÜ-AVRUPA DÜZEYİNDE SİGORTA ŞİRKETLERİ İÇİN FİZİBİL UYGULAMA BOYUTLARI

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## ÖZET

*Bütün dünyada etkisini gösteren ekonomik ve finansal krizin aksine sigorta şirketleri ve iş dünyasındaki diğer örgütler finansal istikrar için daha iyi bir denetim sistemi oluşturmak durumundadırlar. Özellikle başarısız olmamak ve iflastan korunmak için buna ihtiyaç vardır. Denetim yapanların bu konuda yaklaşımlar ortaya koyma noktasında kesin sorumlulukları vardır. Bu noktada risk unsuru taşıyan ödeme gücüne ilişkin yapı Avrupa Birliğinde oluşturulmuştur. Avrupa'daki sigortacılık sektöründe yapılabilir olan sigortacıların sigorta primlerin ispat etme yükümlülüklerinin olmasıdır. Sigorta şirketleri finansal istikrar için başarılı bir şekilde belirli bir portföyü yönetmeleri ve sürdürmeleri gereklidir. Çalışmamızda elde edilen bu sonuçların özellikle sigorta şirketlerinin tepe yönetimi açısından yararlı sonuçları ortaya koyduğu düşünülmektedir. Özellikle sigortacılık faaliyetlerinin iyileştirilmesini, başarısızlık riskinden uzak durmanın denetçiler aracılığı sigorta şirketlerinde alınan risklerin incelenmesinde ortaya konan analitik inceleme örneklerinde ele alınmıştır.*

**Anahtar Kelimeler:** Sigortacılık, denetim, portföy optimizasyonu, risk, inceleme, ödeme yeterliliği

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# THE AUDITORS' ROLE IN PREVENTING THE INSOLVENCY RISK – PRACTICAL ASPECTS FEASIBLE TO INSURANCE COMPANIES ON EUROPEAN LEVEL

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## **ABSTRACT**

*Against the background of the economic and financial crisis manifested all over the world, the insurance companies, as well as all business entities, are forced to account for a better control over their financial stability, in order to avoid the insolvency or even the bankruptcy, and the auditors have the obligation to enforce approaches which rely on great precision and loyalty. From this point of view, a solvency system oriented on risk was created within the European Union, feasible to European insurance companies, thus the insurers were obliged to analyze the ways of substantiating the insurance premiums and of taking up insurances in order to achieve an adequate structure of the portfolio at a certain level of financial stability. We consider that the result, deriving from the studies introduced in this paper, represents an useful instrument for the executive management of the insurance companies, which, by means of this paper, have the opportunity to improve the underwriting activity, preventing, thus, the risk of insolvency, and for their auditors, who may control the administration of risks undertaken by the insurance companies, taking into account the examples of analytical examination presented here.*

**Keywords:** *Insurances, audit, portfolio optimization, risk, examination, solvency.*

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## 1. Introduction

Starting with the second half of the year 2007, the international financial markets were influenced by the issues existing at that period on the high-risk mortgage market in the USA<sup>1</sup>, facing a serious deterioration of the perception on investors' risk and a liquidity diminution.

However, the Romanian insurance market, in full expansion and finalizing the stage of harmonization with the European legislation, was not very affected by the turbulences existing on the financial markets, due to the nature of insurances and the development and integration degree on the external financial markets. This situation does not involve the fact that the Romanian companies are protected against the effects of the ongoing crisis. On the contrary, managers and auditors should implement a careful observation of the activity of insurance companies. Considering these aspects, our paper, viewing possible examinations, may have a great contribution in improving the diagnosis made by the managers and auditors.

Thus, the main aspects requiring a special concern within the insurance area consist in the growth of the damage rating for general insurances and the dynamics of the rentability of personal asset portfolio for life insurances. A precise calculation of the premiums owed by insured persons is essential for an insurance company, in order to create a high insurance fund necessary for covering the indemnifications, reducing, thus, the insolvency risk.

The consumers' and eventually, the citizen's confidence in the financial stability of the insurance area is highly important, therefore, an indicator, called **solvency margin**, has been proposed within the European Union, meant to determine the solvency level specific to each insurance company and available for all member countries.

The solvency margin represents the extent to which an insurance company's assets exceed its liabilities<sup>2</sup> and expresses the *company's capacity of covering its liabilities making no use to its own capital*.

For each insurance category, general and life insurances, there are precise methods of calculation of the solvency margin and criteria concerning the valuation of an insurer's assets and liabilities and the assets and debt category which are not included in the determination of the insurer's solvency margin or which considered in a certain proportion.

In Romania, according to the enforced regulation<sup>3</sup>, the insurers have the obligation to determine regularly the **available solvency margin**, the **minimum solvency margin** and the **safety fund** taking into account the financial report data and to ascribe them to the ISC (Insurance Supervisory Commission), at the end of each financial year.

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<sup>1</sup> Known as the subprime crisis

<sup>2</sup> The insurer's net assets.

<sup>3</sup> Insurance Monitoring Commission (CSA), Norms concerning the calculation methodology for the solvency margin owned by the insurer dealing with general and life insurances, for the minimum solvency margin and for the safety fund, April 24<sup>th</sup>, 2008, OJ no 346 of May 6<sup>th</sup>, 2008.

The solvency margin held by the insurer represents the **available solvency margin** (the net assets) and it is compared to the minimum solvency margin, calculated on the basis of the norms issued by the CSA.

**The determination of the minimum solvency margin** is differently established for the general insurance activity and for the life insurance activity, after an algorithm used by the norms issued by the CSA for this purpose.

One third of the insurer's minimum solvency margin represents the **safety fund**. The minimum value of the safety fund for the companies dealing with general insurances, as well as for those dealing with life insurances is the equivalent in lei of 3.2 million euros. For those companies concerned with general insurances, exclusively civil liability insurance or credit and guarantee insurances, the amount of the safety fund reaches 2.2 million euros<sup>4</sup>.

The structure of the subscription portfolio should be elaborated by means of the return analysis and the financial stability analysis of the insurance activity. Thus, the insurers should find the adequate methods of substantiating the premium installments, the adequate ways of attracting insurances in order to achieve the right structure of the portfolio and the desired level of financial stability within the company.

The present paper views the analysis of the subscription portfolio within an insurance company considering the number of estates comprised by the insurance and the net premium installment in order to obtain a certain level of financial stability. This analysis represents an essential instrument for each insurer as the optimization of the subscription portfolio generates more important returns for the company; it also improves the financial stability and reduces the possibility of insolvency. Using mathematical calculation, different solutions may be given in order to optimize this portfolio, determining thus its adequate structure to a certain level of stability planned by the company.

On the other hand, we consider that the examples of analytical examination indicated in the paper may be employed by the auditors of the insurance companies as well, representing an adequate alternative for independent assessment of insurers' solvency and continuity.

## 2. Material and Method

The solvency represents an important aspect of the operational regulation within an insurance company, thus, for every year of the next period, auditors are concerned with the knowledge of certain aspects<sup>5</sup>:

- The level of the indemnifications to pay;
- The level of the indemnifications compared to level of the net premium paid for each estate category;
- The probability according to which the amount of indemnifications may exceed the amount of paid premiums.

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<sup>4</sup> Other prudential restrictions and details are mentioned in the Norms concerning the calculation methodology for the solvency margin, OJ no 346 of May 6th, 2008.

<sup>5</sup> These aspects are studied and analysed by the insurance companies' actuaries, as well.

Compared to the multiannual average of risk indicators, considered for the net premium, there are errors reflected by the dissimilarities between the values of indemnifications to pay currently and those belonging to the given period.

In order to establish the value of the difference between the indemnifications which ought to be paid currently and the indemnifications registered during the studied period, the **mean squared error** may be used:

$$\sigma = S \cdot \sqrt{n \cdot q(1-q)}, \quad (1)$$

Where:

S – insured sum of an insured estate;

n – number of insured estates;

q – probability of damage occurrence;

(1-q) - probability of having no damage occurring

The **interval meant for the indemnification variation** is given by the following relation:  $D : [Pnt - \sigma; Pnt + \sigma]$ . (2)

The **financial stability level** is given by the value of the K coefficient:

$$K = \frac{\sigma}{Pnt}. \quad (3)$$

As the K coefficient is lower, the financial stability level is higher (the error is less).

In order to establish the **number of years counted until an unpropitious year occurs**, “a” is determined as it follows:

$$a = \frac{100}{\frac{K}{2} \cdot 100} = \frac{1}{P_{(D > Pnt)}}. \quad (4)$$

The **improvement of the financial stability level** may be obtained by means of: a large number of insured estates; the increase of the net premium rate or the cession to reinsurance.

**For knowing if the cession for reinsurance is required**, the maximum insured sum for each insured risk (X) is determined. This calculation should be held by the insurer, in order to obtain an adequate stability level:

$$X = 2K^2 \cdot Pnt, \quad (5)$$

where K is the average coefficient of financial stability, for all risks, and Pnt is the net premium within the insurance company.

The insurance companies resort to reinsurance for protecting its clients, the insured persons, whenever the assumed risks are too high. Through reinsurance<sup>6</sup>, an insurance company gets a higher financial stability and, in addition to this, a higher ability of dealing with new risks. One of the reinsurance functions is constrained by the monitoring and control institutions of the insurance market in each country by imposing a minimum level of solvency.

<sup>6</sup> The reinsurance interferes whenever the insured sum allotted to a risk or a group of risks exceeds the limit that an insurance company is able to sustain without affecting the protection of the other insured persons.

In order to apply these "pillars" of the analytical examination, an insurance company, for which the financial stability level is determined taking into account the variation of the net premium rate level and the number of the insured estates, is considered. Thus, the company insured 2,400 estates specific to a certain category, for an insured average sum of 32,000 euros, with a premium share of 0.7%.

### 3. Results and Discussions

Considering these data, the insurance company's auditors are able to undertake an analysis of the company's financial stability variation, considering different situations that may occur in practice.

**1) When the net premium rate increases, for example to 1.1%, the financial stability level of the company will be changed in one way or another.**

Taking into account the relation (3), the calculation of the financial stability coefficient indicating the financial stability level can be obtained:  $K = \frac{\sigma}{Pnt}$ .

For the initial circumstance,

$$\begin{aligned} K_0 &= \frac{\sigma_0}{Pnt_0} = \frac{S \cdot \sqrt{n \cdot q_0 (1 - q_0)}}{q_0 \cdot S \cdot n} = \\ &= \frac{32,000 \cdot \sqrt{2,400 \cdot 0.007 \cdot (1 - 0.007)}}{0.007 \cdot 32,000 \cdot 2,400} = \frac{130,701.1}{537,600} = 0.24312. \end{aligned}$$

When the net premium rate increases, the coefficient of financial stability becomes:

$$\begin{aligned} K_1 &= \frac{\sigma_1}{Pnt_1} = \frac{S \cdot \sqrt{n \cdot q_1 (1 - q_1)}}{q_1 \cdot S \cdot n} = \\ &= \frac{32,000 \cdot \sqrt{2,400 \cdot 0.011 \cdot (1 - 0.011)}}{0.011 \cdot 32,000 \cdot 2,400} = \frac{163,512.17}{844,800} = 0.19355 \end{aligned}$$

The exchange index for the financial stability coefficient is determined as it follows:

$$\begin{aligned} I_K &= \frac{K_1}{K_0} \cdot 100 = \frac{0.19355}{0.24312} \cdot 100 = 79.61\% \Rightarrow \\ &\Rightarrow \% \Delta_K = |79.61 - 100| = 20.39\%. \end{aligned}$$

Therefore, the **increase of the net premium rate** from 0.7% to 1.1%, **considering the fact that the number of insured estates and the insured value remain constant, leads to a growth of the financial stability level** of 20.39%, this percentage is given by the diminution of the financial stability coefficient,  $K$ , from 0.24312 to 0.19355. Of course, this situation is recorded only if the market, respectively the competition agrees it. It is important to notice that, in the predictable future, investment and business decisions become more difficult to settle. At present, the companies are reserved, even reluctant, in investing, facing a period of incertitude, the consumers' demand, including the insurance demand, registering a 'free fall'. Considering the real situation determined by the auditors through effective tasks, the assessment of the companies' activity varies from reassuring to alarming.

**2) The financial stability level of the insurance company may be improved by increasing the market share. Assuming that the number of insured estates increases with 30%, and the net premium rate of 0.7%, as well as the insured value remain unchanged, the financial stability level may be determined.**

The initial number of insured estates,  $n_0$ , was 2,400; its growth to 30% is expected, obtaining thus  $n_1$ , which registers 3,120 estates.

The modification of the financial stability coefficient is given by the following formula:

$$\begin{aligned}
 I_K &= \frac{K_1}{K_0} \cdot 100 \Rightarrow \\
 \Rightarrow I_K &= \frac{S \cdot \sqrt{n_1 \cdot q \cdot (1-q)}}{q \cdot S \cdot n_1} \cdot \frac{q \cdot S \cdot n_0}{S \cdot \sqrt{n_0 \cdot q \cdot (1-q)}} \\
 \Rightarrow I_K^2 &= \frac{n_1 \cdot q \cdot (1-q) \cdot n_0^2}{n_1^2 \cdot n_0 \cdot q \cdot (1-q)} = \frac{n_0}{n_1} = \frac{2,400}{3,120} = 0.7692 \\
 \Rightarrow I_K &= \sqrt{0.7692} \cdot 100 = 0.877 \cdot 100 = 87.7\% \Rightarrow \\
 \Rightarrow \% \Delta_K &= |87.7 - 100| = 12.3\%.
 \end{aligned}$$

If the competition does not allow the increase of the net premium rate, the insurance company will make efforts for the growth of the number of customers, by raising the number of insured estates. **The underwriting of over 30% of the initial number of insured estates leads to an increase of 12.3% of the financial stability level**, creating thus a favorable situation for the insurance company.

**3) Further on, going deeply into the analysis, the experts wonder "in order to increase the financial stability level to a certain percentage, for example with 20%, compared to the initial situation, what is the number of estates needed to be underwritten?"**

The increase of the financial stability level with 20% implies the diminution of the  $K$  coefficient with 80%, resulting  $I_K$ :

$$I_K = 80\% \Rightarrow I_k = 0.80 \Rightarrow I_K^2 = 0.64 \Rightarrow \frac{n_0}{n_1} = 0.64$$

$$\Rightarrow n_1 = \frac{n_0}{0.64} = \frac{2,400}{0.64} = 3,750 \text{ bunuri.}$$

The result can be verified, using the relation:

$$\begin{aligned} K_1 &= \frac{\sigma_1}{Pnt_1} = \frac{S \cdot \sqrt{n_1 \cdot q \cdot (1-q)}}{q \cdot S \cdot n_1} = \\ &= \frac{32,000 \cdot \sqrt{3,750 \cdot 0.007 \cdot (1-0.007)}}{0.007 \cdot 32,000 \cdot 3,750} = 0.19449. \\ \% \Delta_K &= \left| \frac{K_1}{K_0} \cdot 100 - 100 \right| = \left| \frac{0.19449}{0.24312} \cdot 100 - 100 \right| = 20\%. \end{aligned}$$

**For increasing the financial stability level with 20%, the insurance company is forced to increase the number of insured estates about 1.5 times, from 2,400 insured estates, to 3,750 estates.**

When the insurance company assumes such an objective, and the results obtained by the company's auditors are not close enough to the given example, the error is significant and represents an alarm, a matter which requires new examinations. The auditors may need additional investigations in order to define the results as satisfactory or unsatisfactory, the verdict becoming available for the entire insurance 'universe'.

**4) If it is not possible to increase the number of insured estates<sup>7</sup>, in order to raise the financial stability level with 20% compared to the initial level, the insurer may resort to the increase of the net premium rate. *The question is then, which is the level of the net premium rate in order to provide a certain coefficient of financial stability?***

As in the previous case, the growth of 20% of the financial stability level implies a diminution of 80% of the  $K$  coefficient, given by  $l_k$ , as it follows:

$$I_K = 80\% \Rightarrow I_k = 0.80 \Rightarrow I_K^2 = 0.64.$$

When only the net premium rate is changed,  $l_k^2$  becomes:

$$\begin{aligned} I_K^2 &= \frac{n \cdot q_1 \cdot (1-q_1) \cdot q_0^2}{q_1^2 \cdot n \cdot q_0 \cdot (1-q_0)} = \frac{q_0 \cdot (1-q_1)}{q_1 \cdot (1-q_0)} = \\ &= \frac{0.007 \cdot (1-q_1)}{q_1 \cdot (1-0.007)} = 0.64 \Rightarrow q_1 = 0.01089 = 1.089\%. \end{aligned}$$

**So, in order to allow the growth of the financial stability level with 20%, the insurance company has to increase the net premium rate about 1.5 times, from 0.7% to 1.089%, fact that leads to a feasible value considering the market average. In**

<sup>7</sup> The market is saturated or other different reasons.

addition to this, one should add to the net premium rate, a certain sum which represents the insurer's expenses and profit, and the insurance company is not able to maintain the number of insured estates unchanged on a competitive market, in terms of an important growth of the net premium rate.

A synthesis of the four cases leads to the following results obtained by an insurance company, as shown in the Table 1.

**Table-1. Possible Cases Registered Within An Insurance Company**

Case	No of insured estates	Net premium rate	Value of the K coefficient
<i>Initial</i>	<b>2,400</b>	<b>0.7%</b>	<b>0.24312</b>
<b>1</b>	2,400	1.1%	0.19355
<b>2</b>	3,120	0.7%	0.213
<b>3</b>	3.750	0.7%	0.19449
<b>4</b>	2,400	1.094%	0.19449

Analyzing these cases, for a higher financial stability level, the insurer should choose either the increase of the net premium rate to a certain level, taking into account the competition on the market, or the increase of the number of insured estates belonging to the same category of risk.

In practice, the portfolio of insurance companies, for the same category of insured estates, includes several risk groups.

In addition to the initial case mentioned above, belonging to a certain category of risk (for example risk category type I), the insurance company disposes for the same class of three risk categories (see Table 2), thus the manager may adopt decisions according to a series of eventual situations.

**Table-2. The Portfolio Of An Insurance Company For A Class Of Three Risk Categories**

Risk category	No of insured estates	Insured average sum (euro)	Net premium rate (%)
<b>I</b>	2,400	32,000	0.7
<b>II</b>	2,100	34,000	1.1
<b>III</b>	2,600	25,000	0.6

In order to *establish the financial stability level for the whole insured class, respectively for the entire insurance company*, it is important to determine first the financial stability coefficient for the other risk categories (risk category type II and III).

For the risk category type II:

$$K_{II} = \frac{\sigma_{II}}{Pnt_{II}} = \frac{S_{II} \cdot \sqrt{n_{II} \cdot q_{II} (1 - q_{II})}}{q_{II} \cdot S_{II} \cdot n_{II}} =$$

$$= \frac{34,000 \cdot \sqrt{2,100 \cdot 0.011 \cdot (1 - 0.011)}}{0.011 \cdot 34,000 \cdot 2,100} = 0.207.$$

For the risk category type III:

$$K_{III} = \frac{\sigma_{III}}{Pnt_{III}} = \frac{S_{III} \cdot \sqrt{n_{III} \cdot q_{III} (1 - q_{III})}}{q_{III} \cdot S_{III} \cdot n_{III}}$$

$$= \frac{25,000 \cdot \sqrt{2,600 \cdot 0.006 \cdot (1 - 0.006)}}{0.006 \cdot 25,000 \cdot 2,600} = 0.252.$$

The **financial stability level for the whole class** or for the entire portfolio of the insurance company is determined as it follows:

$K_T = \frac{\sigma_T}{Pn_T}$ , where:  $\sigma_T = \sqrt{\sum_{i=1}^n \sigma_i^2}$ ;  $Pn_T = \sum_{i=1}^n Pnt_i$ ,  $i$  – number of risk categories.

Thus,  $K_T$  becomes:

$$K_T = \frac{\sqrt{\sum_{i=1}^n \sigma_i^2}}{\sum_{i=1}^n Pnt_i} = \frac{\sqrt{\sigma_I^2 + \sigma_{II}^2 + \sigma_{III}^2}}{Pnt_I + Pnt_{II} + Pnt_{III}} =$$

$$= \frac{\sqrt{130,701^2 + 162,511^2 + 98,445^2}}{537,600 + 785,400 + 390,000} = \frac{230,617}{1,713,000} = 0.135.$$

In addition, the insurance company may determine the **number of years (a) to which an unfavorable year is recorded for each risk category, respectively for the entire portfolio** of the insurance company, taking into account the relation (4).

$$a = \frac{100}{\frac{K}{2} \cdot 100} = \frac{1}{P_{(D > Pnt)}}$$

$$a_I = \frac{100}{12.156} = 8.22 \approx 8 \text{ ani};$$

$$a_{II} = \frac{100}{10.35} = 9.661 \approx 10 \text{ ani};$$

$$a_{III} = \frac{100}{12.6} = 7.93 \approx 8 \text{ ani};$$

$$a_T = \frac{100}{6.75} = 14.81 \approx 15 \text{ ani}.$$

In order to prevent losses hard to bear, the insurance company may cede a part of the concluded policies to the reinsurance company. **For knowing whether the cession to reinsurance is imperious or not, it is necessary to compare the maximum insured value for each insured risk (X) to the insured sum meant for each risk.** If the insured sum is lower than the maximum insured sum, the insurer is able to bear alone the insured risks and he is not forced to cede them to reinsurance (relation 5).

$$X_I = 2K_I^2 \cdot Pnt_I = 2 \cdot 0.24312^2 \cdot 537,600 = 63,552;$$

$$X_{II} = 2 \cdot 0.207^2 \cdot 785,400 = 67,307;$$

$$X_{III} = 2 \cdot 0.252^2 \cdot 390,000 = 49,533;$$

$$X_T = 2K_T^2 \cdot Pn_T = 2 \cdot 0.135^2 \cdot 1,713,000 = 62,439.$$

We notice that  $X_I > S_I$  ( $63,552 > 32,000$ ),  $X_{II} > S_{II}$ ,  $X_{III} > S_{III}$ ,  $X_T > S_T$ .

Therefore, the insurance company is not forced to cede the policies to reinsurance because it is able to undertake all the insured risks.

#### 4. Conclusions

Considering the crisis of the external financial markets, one of the insurers affected by the crisis, the American International Group (AIG), the most important insurer of the world, has announced considerable reductions in its assets. One of the methods meant to protect the AIG's financial stability was the diminution of the premiums for the insurance policies of the trade estates, as an attempt to gain market share. Prices for this type of insurances diminished with 11% since June 2007 till June 2008.

Starting from the basic assumption according to which insurances represent products which provide protection against risks having financial impact on insured persons, the auditors will consider the general background when making assessments. In July 2007, the European Commission launched an ample process meant to review the EU regulation regarding the insurances. This process is known as the initiative "Solvency II". According to the definition of the "Solvency II" process given by the CEIOPS<sup>8</sup>, it represents the balance between the financial stability and the capital cost improvement.

The most important characteristic of "Solvency II" consists in the fact that it relies on risk management, the capital demands being related to the insurer's risk profile, thus, high risks will lead to high capital requirements. The amended Solvency II proposal is currently being discussed in the European Union Council and the Parliament. The adoption of the Directive is foreseen for the year 2009, and its transposition into the legislation of the member States should be finalized before the beginning of the year 2012<sup>9</sup>.

The Solvency II system defines the regulators which are focusing on the capital adequacy- capital requirements, such as: SCR (Solvency Capital Requirement)

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<sup>8</sup> Committee of European Insurance and Occupational Pensions Supervisors.

<sup>9</sup> [http://ec.europa.eu/internal\\_market/insurance/solvency/index\\_en.htm](http://ec.europa.eu/internal_market/insurance/solvency/index_en.htm).

represents the level of prudence and reflects the level of capital that enables the insurer to absorb significant unforeseen losses produced by an event which may occur once in 200 years and the less important capital requirement - MCR (Minimum Capital Requirement) necessary for events which may occur in the following 12 months.

According to the directive project Solvency II, as it was approved by the European Commission in 2007, this solvency policy represents a **compulsory** condition for the companies which report subscribed gross premiums of over 5 million euros. Pursuant to the data registered in 2007, there were 25 companies which matched this criterion (18 small and 7 middle organizations) on the Romanian market<sup>10</sup>.

Following the European Commission request, the consulting company KPMG achieved a study concerning the assessment methodologies of the financial situation within an insurance company from the prudential supervision prospect. The main conclusion deriving from this study is that the solvency approach should be made according to three-pillar structure (similar to the approach adopted by the Basel Committee on bank system). The three sets of rules proposed by this approach refer to:

- Financial resources of the insurance companies (requirements of creating resources based on prudential principles, requirements concerning the structure and quality of insurers' holdings and the solvency margin); Procedures of internal control and management of the insurers' risks (including methods of monitoring the risk for the supervision authorities);
- Rules concerning financial reports with compulsory character for the insurers in order to obtain a higher degree of transparency of the activity and a stronger financial discipline.

The rules aiming the aspects mentioned above form together the three pillars of the solvency system.

In order to assess the right solvency system oriented on risk, feasible to European insurance companies, the European Commission requested the CEIOPS to develop several studies of quantitative impact (called QIS) meant to determine technical specifications on general and life insurances, to outline the solvency requirements using the standard method or internal models, to establish the capital requirements in a group or conglomerate context. These quantitative impact studies provided an internal approach of the new solvency system potential impact.

If there is no way to compensate the negative technical results with the profit resulting from investment activities, the insurance companies should increase the

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<sup>10</sup>Angela Toncescu – CSA Chairman, "The estimated impact of Solvency II process on the local market. Errata to QIS4, seminar „The Solvency II impact on the Romanian insurance market”, 26th of November 2008. The classification limits of insurance companies for insurers dealing with general insurances are, as it follows: big insurers, when dealing with subscribed gross premiums of over 1,000 million euros; middle insurers, when dealing with subscribed gross premiums between 100 million euros – 1,000 million euros; small insurers, for subscribed gross premiums less than 100 million euros.

capital in order to maintain their solvency. The main challenge on long and middle term for this financial market remains the premium adjustment, thus an adequate risk management will be provided meant to improve the technical results.

This paper, the result of elaborated studies and analysis, on one hand, and of the existing economic-financial background, on the other hand, represents an useful instrument for the insurance companies, which have the possibility of improving their subscription activity, investment activity, therefore their financial stability, as well as for their auditors who, considering these analysis and examinations, are able to establish and justify in a better way the diagnosis and the support given to these companies in managing the risks. The rigorous exercise, performance and consideration of such assessments provide inevitably a high public concern manifested by the managers and the auditors of the insurance area.

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