

„BABEȘ-BOLYAI” UNIVERSITY
FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION
CLUJ-NAPOCA
DOCTORAL SCHOOL OF ECONOMICS AND BUSINESS
ADMINISTRATION

**Financial management of insurance
companies from Romania – critical analysis
and improvement measures**

SCIENTIFIC COORDINATOR:

Prof. Univ. Dr. Ioan Nistor

PhD CANDIDATE:

Raluca Meda Șumandea-Simionescu (căs. Antal)

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THE SUMMARY OF THE PhD THESIS - TABLE OF CONTENTS

PhD THESIS - TABLE OF CONTENTS	3
KEYWORDS.....	5
INTRODUCTION.....	6
THE PRESENTATION OF THE CHAPTERS OF THE PhD THESIS.....	9
CONCLUDING REMARKS AND RESEARCH PERSPECTIVES	16
BIBLIOGRAPHY	21

PhD THESIS - TABLE OF CONTENTS

Introduction

1. The insurer- the functional fundamental entity in the insurance sector

1.1. The formation of the insurance company

1.2. The operation mechanism of the insurance company

1.3. The organizational concepts in regard to the insurance company

2. Financial Management - from general to the particulars of the insurance company

2.1. Theoretical fundamental principals in regard to the financial management of the economic entity

2.2. Financial situation which are the basis of the financial management of the insurance company

2.3. Particulars of the financial management of the insurance company

2.3.1 The problematics of the company's capital

2.3.1.1. *The social capital*

2.3.1.2. *The safety fund*

2.3.2. The management of constitution and fulfillment of the technical reserves

2.3.3. The management of the insurance company's investments

2.3.4. The liquidity and solvability of the insurance company - monitoring conditions

2.3.4.1. *Liquidity*

2.3.4.2. *Solvability*

3. Foray in the management of the assets and liabilities of the Romanian insurance companies

3.1. Research group

3.2. Research methodology

3.3. T-test analysis regarding the significant differences existent in the management of assets and liabilities in insurance companies from Romania

3.4. The main directions of the management of assets and liabilities on the Romanian insurance market between 2008-2012

3.4.1. The evolution of the solvability of the Romanian insurance companies under the factors of influence

3.4.2. Tendencies and determinants in decision-making in regard to insurance companies

3.4.3. Retrospective in regard to the underwriting profitability and its factors of influence

4. Empirical study regarding the solvability and profitability of insurance companies from Romania

4.1. The analysis of the solvability's factors of influence in regard to the Romanian insurance market

4.1.1. The description of the variables

4.1.2. The description of the regression

4.1.3. The empirical results

4.2. The analysis of the underwriting profitability's factors of influence in regard to the Romanian insurance market

4.2.1. The description of the variables

4.2.2. The description of the model

4.2.3. The empirical results

Concluding remarks and research perspectives

Bibliography

Annexes

List of tables

List of figures

List of graphic figures

KEYWORDS

insurance companies, financial management, liquidity and solvability - monitoring methods, underwriting profitability, determinants, panel model

INTRODUCTION

This paper chooses to tackle a broad topic, namely the optimization of financial management of the Romanian insurance companies. It substantiates the relevance of the topic in that the subject is of great importance considering that Romanian insurance companies have been exposed to high market demands in a business environment that becomes increasingly more difficult to navigate .

Thus through this study based on the relevant opinions of its academic predecessors, we chose as our research object the identification of variables of influence and intensity with which affect the key elements of asset and liability management of Romanian insurance companies. Thus, this analysis seeks to determine the main methods by which insurance companies can optimize their economic activity. Our approach is both integral and integrated, in the sense that, on the one hand, it allows for a forward-looking analysis of the financial management, with all its components, permitting for the integration of this discussion in the broader context of the existing changes in the Romanian, European and international markets.

Regarding research methodology, we focused our scientific pursuit on the approach brought forth by Rafael La Porta, in his Law and Finance, which empirically examines investor protection laws in 49 different countries, focusing on how quality of implementation of these laws vary, and if changes in corporate ownership models in the world matters. This analysis is conducted using a statistical test by which the three categories of countries: common law, civil law and German civil law, are compared to determine the above analysis. We thus mention that this type of analysis is adopted in our study, in which the Romanian insurance companies are grouped into three categories: non-life insurance companies, civil liability insurance companies and life insurance companies.

The rationale for choosing this type of model is twofold, namely the vast area of the case study analysis conducted by La Porta in his work and the fact that the analysis is a comprehensive and integrated in which investor protection is analyzed from the perspective of the whole legislation of the country. Our current study, namely *The financial management Romanian insurance companies - critical analysis and improvement measures* is aimed at an analysis of the entire insurance market in Romania from a wide area of discussion at the management of assets and liabilities in the economic entities operating on the market.

In this context we have identified, starting from the works of our academic predecessors , the key variables influencing the management of assets and liabilities i.e. *the financing decision, solvency and underwriting profitability*, considering that effective management requires increased profitability by optimizing the structure and allocation of capital, in solvency conditions. This analysis covers a period between 2008-2012, through which we compare the three categories of companies grouped by business object. The analysis is undertaken by means of a statistical T -test, which helps us to determine if two data sets differ significantly.

After completing the analysis through which we identified the variables that creates an image of effective management of assets and liabilities of insurance companies, I have attempted to transfer the findings into a regression. From tests carried out, either because of the absence of the influence of the Romanian insurance market makers select, either because of an inadequate calculation method, two directions of the analyzed directions have been validated, i.e. the solvency and profitability of underwriting models (panel models).

I believe that this kind of analysis can be achieved by selecting two lines of research, i.e. by outlining the practical elements and by direct application of the main theoretical conclusions to the practical problems outlined. For this reason, I believe that the appropriate research method is the dualist structure with both a theoretical component analysis and a case study to validate the main theoretical findings.

The paper ends by presenting relevant conclusions towards the optimizing the financial management of insurance while also underlining the perspectives of the research we have undertaken.

THE PRESENTATION OF THE CHAPTERS OF THE PhD THESIS

In Chapter 1 entitled *The insurer - functional fundamental entity in the insurance sector*, we have conceived a description of the insurance companies, as a economic entity, in terms of how it is set up, organized and how it functions, in other words, a description of the subject of the present work. In this first chapter, we have traced the formation pattern of insurance companies focusing on regulations covering this issue, considering that insurance companies are companies that must follow the stipulations of the Law no. 32/2000 and have a obligation to organize and run their accounts in accordance with the Accounting Law no. 82/1991, republished, with the subsequent amendments and supplements.

Since the organization aims towards high usage of resources, enabling better communication and understanding at work by setting up an information system, establishing the necessary mutual links between elements of the system, introducing order in the course of actions and the components and functions of the organization constitute a basis for developing or improving of both the structural and informational organization of the entity, in this first chapter we discussed the concept of organization at the level of the Romanian insurance company as well as aspects of their operation through a theoretical approach from general to particular.

The second chapter of this thesis, entitled *Financial Management - from general to the particulars of the insurance company*, is the foundation of the entire study. It starts from the definition of financial management, and then focuses on those elements of asset and liability management of insurance companies, which give a specific note to these economic entities. Based on the approach of researchers in scientific literature, we have addressed financial management as part of economic management, specifying the relevant notions regarding the definition and scope thereof. Subsequently through a

financial approach we arrive at the particularity of those financial documents related to insurance companies underlying the shape of financial management. Relying on its systemic characteristics, we have opted, in the pursuit of optimization, for the redefinition of the management of the insurance activity, thorough the problematics of the management of the insurance companies' capital, their process of constitution and fulfillment of reserves, through the management of investments, and lastly through the issues of solvability and liquidity of insurance companies.

Regarding the issue of insurance capital, based on the legislative incursion that I completed, one can notice a trend of increase of the minimum capital until 2005, when a sudden fall occurred, coinciding with the introduction of the safety fund. Opting for a safety fund, calculated by reference to the real financial situation of the company, the undertaking in question ensures solvability considering that it is using a method adapted to its internal structure and that this method is perceived by investors as a real mechanism of protection favored by them as a promoter of stability of the company.

In this chapter we have given due consideration to the technical reserves of insurance companies. Fair value of technical reserves will allow the insurer at any time, to honor its commitments arising from insurance contracts.

It is well known that due to the nature of the business of insurance, i.e. the gap created between the time of receipt of payment for insurance premiums and claims payment, it becomes possible to manage resources through investing activities, namely investments. Starting from the legislative support regarding the fonds' placement directions as well as its dispersion rules, we have synthesized this evolution in time. By this approach we could observe changes that have taken place since 2001 to present in regard to the accepted categories. The conclusions arising from this sub-chapter have given me a further insight in regard to the empirical results we obtained from the analysis of the investment decision of insurance companies from Romania.

We also attempted, in the current chapter, to follow up on the changes that have taken place since 2001, in regard to liquidity monitoring as part of the activity of the Romanian insurance companies alongside solvency. From this summary, we have found that the requirements in regard to liquidity have been increased because of, on one hand, the modifying elements in the calculation of the liquidity ratio and on the other, the increase of its minimum limit, which in our opinion is beneficial in a framework characterized by instability in many ways. Note that for general insurance companies liquidity requirements are more easily satisfied than those who have life insurance as an business interest.

Our attention has been drawn to the solvency issues of the Romanian insurance companies, which is currently the subject of concern for most national and international control bodies and researchers in the field. Considering the context of the common market, unique in Europe, a robust and efficient system of prudential supervision of the insurance sector is particularly important and necessary. This is the opinion of the European bodies that develop a model for Solvency - Solvency II - which takes into consideration the risks to which an insurer is subjected to, the degree of market liabilities related to asset management and the issue of reinsurance.

Considering that financial management can be seen as the method through which the elements discussed in previous chapters are put in motion, I have tried, through a practical approach applied on the Romanian insurance market in the time period of 2008-2012, in chapter three of this study, entitled *Foray in the management of the assets and liabilities of the Romanian insurance companies*, to present and analyze this peculiar interaction. Thus I will define the reference area for analysis and the research methodology.

Starting from the consideration that effective management requires increased profitability by optimizing the structure and allocation of capital under Solvency requirements, we identified variables of influence for key elements of asset and liability management.

In terms of *capital allocation*, we focused on the investment decision based on the study of the life insurance sector, authored by Brenda Wells. In her analysis on asset-liability management, she evaluates replacement of high risk assets in the life insurance industry from a historical perspective to determine whether the form of organization, or other factors could be the reason for which the management decides to engage in asset substitution. From this analysis we determine that the stock insurer director is more likely than their counterparts to engage mutually in this type of high risk asset replacement. This issue is incorporated in this thesis starting from the foundation provided by the literature on the key variables used for Wells' analysis.

The *solvency* analysis can be traced back to the theory and arguments proposed by Kielholz (2000). According to him, the insurer's capital is derived from the investors which means that there is a cost attached to it. Also it considers that, in the insurance business, there is a tendency towards simplification. In this regard we can state that insurance companies do not consider risk of insolvency in their management pursuits. However the purpose of maintaining the level of capital to a certain degree is to avoid insolvency. Thus insurers who face a high risk of insolvency bear higher costs of capital.

In the *profitability* analysis, we started from the study presented by Michael Adams and Lars Frederik Andersson which examines strategies for risk and underwriting profitability management of different forms of organization present in the fire insurance market in Sweden between 1903 and 1939. The main conclusion which the text brings forth is that publicly listed insurance companies act as intermediaries between policyholders and reinsurers in order for them to function effectively in segments with high potential risk in the fire insurance market. However, mutual insurance companies kept larger reserves in order to balance fluctuations in the payment of damages.

Also in this chapter we have inserted a *t-test analysis regarding the significant difference existent in the asset-liability management of the insurance companies from Romania*. The t-test analysis carried out by us on the Romanian insurance market regarding solvency, capital allocation (in terms of the investment decision), the structure of financial

resources and underwriting profitability, on the basis of which we identified significant differences between the three groups of Romanian insurance companies in the before mentioned timeframe of 2008-2012.

The final component of the thesis, namely the fifth chapter entitled *Empirical study regarding the solvability and profitability of the Romanian insurance companies*, underlines, through a panel model, the existing links between solvability and profitability and the factors of influence. Based on the analysis carried out in previous chapters in which we identified those variables that creates an image of an effective and efficient management of assets and liabilities in the case of insurance companies, only two of the directions we analyzed were validated, i.e. the model for solvency and the underwriting profitability (both panel models).

In regard to the *profitability* analysis, I found that on the Romanian insurance market between 2008 - 2012, according to the following panel model :

$$\text{Profsubit} = C + a\text{Gradsit} + b1\text{Reasigit} + b2\text{Märimeit} + b3\text{Riscaf়it} + b5\text{Exanteit} + b6\text{Lichiditit} + b7\text{Randinvit} + b7\text{Transit} + \mu + \text{Eit}$$

cu $i=1,2,\dots,45$;

$t=1,2,\dots,5$.

μ - individual non-observable effect specific to each economic entity

Eit – residual variable

Dependent variable

Profsubit – underwriting profitability for insurer i in year t

Independent variables

Gradsit - the degree of underwriting for insurer i in year t

Reasigit – reinsurance level for insurer i in year t

Marimeit – firm size for insurer i in year t

Riscaf়it – business risk for insurer i in year t

Exanteit – ex-ante underwriting profitability for insurer i in year t

Lichiditit – the liquidity of for insurer i in year t

Randinvit – net investment return for insurer i in year t

Tranpsit – the degree of disclosure for insurer i in year t

The following variables are considered, as independent variables for underwriting profitability, are considered statistically relevant:

- with a probability of 99% we have *premiums exposure degree, reinsurance, company size, claims, liquidity*;
- with a probability of 95%, we have *disclosure*;
- with a probability of 90% we have *the investment return*.

We also found that ex-ante result of underwriting with a probability of 95% is not significant in terms of the influence it may manifest on the underwriting profitability. We interpret this result either by a mismatch in the Romanian insurance market variable or by assigning it to an inappropriate formula.

The study of solvability form the perspective of the degree of solvability of the insurance company is based on the following panel model:

$$Gexpsolvit = C + aGradsit + b_2Riscait + b_3Stactit + b_5Lichiditit + b_6Marimeit + b_7Afilit + \mu + \epsilon_{it}$$

cu $i=1,2,\dots,45$;

$t=1,2,\dots,5$.

μ - individual non-observable effect specific to each economic entity

ϵ_{it} – residual variable

Dependent variable

Gexpsolvit – the solvability of insurer i for year t

Independent variables

Gradsit - the degree of the underwriting activity of insurer i for year t

Riscait – the business risk of insurer i for year t

Stactit – the structure of the shareholder group of insurer i for year t

Lichiditit – the liquidity of insurer i for year t

Marimeit – the firm size of insurer i for year t

Afilit – the affiliation of insurer i for year t

The empirical results we have obtained indicate that the following variables are considered statistically significant:

- with a probability of 95%, we have *reinsurance, business risk, firm size and liquidity*;
- with a probability of 90% we have *affiliation*.

We also found that the degree of the underwriting activity, with a probability of 95%, are not significant in terms of the influence they may manifest on the solvability of the insurer. We interpret this result either by a mismatch of the variable with the specifics of the Romanian insurance market or by assigning it to an inappropriate formula.

CONCLUDING REMARKS AND RESEARCH PERSPECTIVES

Through the research conducted on the Romanian insurance market evolution from 2008 to 2012, I have tried to identify the variables that influence key elements of asset and liability management namely *solvency, underwriting profitability and the investment decision*.

Thus we find that the evolution of degree of exposure of the solvency level present in the studied interval is not uniform and even similar for the three categories of companies chosen as the sample for our analysis. General and life insurance companies, up to 2011, seem to converge towards similarity at least concerning the evolution of solvency. However after 2011, the two evolution patterns follow different directions. The general insurance spectrum recorded, from 2010, a decline a decline of the debt - equity ratio which indicates an increase in the solvency of these economic entities. Life insurance provides a development characterized by a constant alternation between increases and decreases of solvency from year to the next, the lowest solvency value was recorded in the year 2012. General and civil liability insurance companies, are characterized by an almost continuous decrease of the solvency of the company, as a result of the increase in the debt to total equity ratio.

Regarding the factors that will influence the solvency of Romanian insurance companies I found based on the empirical analysis undertaken, that:

- my initial hypothesis is confirmed, i.e. that diversification through reinsurance reduces the insolvency risk;
- *liquidity* problems can be noticed in insurance companies in cases when the companies invest heavily in fixed assets or are unable to control debtors, which could affect their ability to meet their obligations to third parties;
- in regard to the Romanian insurance market, with expansion of the company size we notice the increases the risk of insolvency of insurance companies;

- insolvency, generated by the increase of debts in the debts to total equity capital ratio, grows with the increase in affiliation of the Romanian insurance companies;
- a high level of claims in the total insurance premiums determine an increase of the presence of debts in the total equity capital and the increase of the risk of solvency.

Regarding the analysis of underwriting profitability on the Romanian insurance market, I have a decrease in the underwriting activity up to 2010, followed by an increase up to 2012, general insurance companies, of the three categories that were analyzed, generated the highest results in this regard.

Regarding the determining factors of the evolution of *underwriting profitability* in Romanian insurance companies I have concluded, based on the empirical analysis undertaken, the following:

- A high value of leverage will determine managers to increase the underwriting activity in order to avoid the risk of increasing insolvency;
- A good liquidity value protects the capital status and increases the profit from the underwriting activity;
- the existence on the Romanian insurance market of a positive relation between reinsurance and the underwriting activity which proves that in the Romanian insurance market, reinsurance can be regarded as a technique to reduce the underwriting and solvency risk;
- that a high investments return rate motivates the insurer to increase the underwriting activity and the solvability of the company;
- That by providing clear and relevant information regarding the financial situation of insurers, the insured receive an increased guaranty regarding the insurer's ability to honor its debts, thus increasing the underwriting activity;
- A negative relation between the claims ratio and the underwriting profitability on the Romanian insurance market;
- That an insurance company of bigger size does not record higher underwriting profitability levels on the Romanian insurance market.

In terms of capital allocation, I focused on the *investment decision* pattern in regard to the Romanian insurance companies and I have concluded, based on the conducted empirical analysis, the following:

- A tendency to increase, with some fluctuations, the quota that assets with a high level of risk, i.e. land, hold in the total of investments;
- That although it is a risky asset, in the contexts of the economic crisis, Romanian companies are not afraid to purchase land and place it their portfolios, even to some impressive degrees;
- that on the Romanian insurance market, the decrease of solvability in life insurance companies indicates a cautious behavior in regard to investment in land, in other words an increase of solvability has reduced the quota of investments in land in total investments. This positive relation could not be identified in regard to the general and general and civil liability insurance companies where at first glance the two indicators, solvency and the investment decision, do not appear to be mutually conditional;
- for general and civil liability insurance, the growth of the firm size determined and firm size increase of the presence in total investments;
- in the case of life insurance companies, firm size is not the determining factor in the investment decision;
- in the case of general and civil liability insurance companies, increased leverage determinate the declining share of land in total investments. This conclusion is not validated for general insurance, because I noted an increase in the business decision in regard to leverage.
- affiliation to a group boosts investment activity and confers a certain level of safety for all three of insurance companies with few exceptions which is due to the actions of certain factors with a greater influence than that of affiliation in regard to the business investment.

Many decisions that are taken continuously by undertaking economic entity at all its organizational levels, in order to ensure its survival, make up the management of the company, its pilotage. It is important to consider, however, how this happens pilotage

takes place since effective management requires increased profitability by optimizing capital structure and allocation, in a state of solvency.

Thus in order to maximize the value of the insurance company, taking into account the above conclusions and the results of the empirical analysis of profitability, we consider it pertinent to focus on the following aspects: insurance companies with a turnover high, but with a growing damages rate, leans towards unprofitability. In this regard, in order to improve underwriting profitability of the business insurance company one should pay special attention to the growth of the firm's liquidity, increased reinsurance and an increase in its transparency.

By increasing the profitability of underwriting one aims to maximize the value of the entity, without, however, ignoring the requirements for solvency. Taking into account the results of empirical analysis in regard to the degree of exposure of solvability I developed, namely the significant factors influencing it, I consider it appropriate, in order to avoid the risk of insolvency, for the insurance supervisory body to monitor the insurance business carried on by companies, by considering, in addition to capital adequacy and liquidity ratio, the following: the company size correlated with the loss ratio and reinsurance level. Warning signs displayed by insurance companies in distress should include: the increase of the firm size correlated with decreased liquidity, increased damage rate, and decreased reinsurance.

The analysis of the financial management of insurance companies in Romania regarding optimization is a broad one, reaching different economic and legal aspects as noted above. As our subject is so comprehensive, there may be some research perspectives to consider. By way of example I would like to mention the main lines of progress that can be addressed using this analysis as a pin point. The main issue that can be addressed in future scholarly work is the possibility of *widening the variables' group*, which could focus on redefining certain indicator, with reference to the process they describe and define.

In addition I believe it possible to expanding the empirical research by correlating the *dependent variables with macroeconomic factors* (this possibility was one I considered in my doctoral research but because of the scope of the proposition, and thus sheer magnitude of the research, it was not possible to include it in the present research project). .

Another worthy research perspective may be the *identification of the relation existing between financial management*, as discussed in this analysis, and other performance indicators.

Considering the possible developments of the subject addressed, as mentioned above, it can already be deduced how this analysis can have a real and worthwhile impact on the current analysis of the financial management of insurance companies aimed at optimizing this field of study.

BIBLIOGRAPHY

1. M. Best Company (1992), *Best's Insolvency Study, Life-Health Insurers 1976-1991*, Special Report. Ed. A. M. Best Company, Oldwick New Jersey
2. ACAM (2008), Solvabilité II – De la 3ème à la 4ème étude quantitative d'impact, *Institut des actuaires - 31 janvier 2008*, Autorité de Contrôle des Assurances et des Mutuelles: 1-140
3. ACAM France, *The French Insurance Market in numbers*, Annual Report 2008, 2009
4. Adams, M. B., (1996), Investment Earnings and the Characteristics of Life Insurance Firms: New Zealand Evidence, *Australian Journal of Management* 21, no. 1, pp. 41-55
5. Adams M.B., Hardwick P. (2002), Actuarial surplus management in United Kingdom life insurance firms, *Journal of Business Finance and Accounting*, nr. 30 (5), pp. 891-904
6. Adams, M. B., and Hardwick, P. (2003), Claims Estimation in Life Insurance Firms: United Kingdom and New Zealand Evidence, *Risk Management: An International Journal* 5, no. 1, pp. 51-63
7. Adams, M., Andersson, L.,F.(2012), Competing Models of Organizational Form: Risk Management Strategies and Underwriting Profitability in the Swedish Fire Insurance Market Between 1903 and 1939, *The Journal of Economic History*, Volume 72, Issue 04, pp.990 - 1014
8. Albrecher, H., Boxma, O. (2004), A ruin model with dependence between claim sizes and claim intervals, *Insurance Mathematics and Economics*, vol. 35 (2): 245–254
9. Albrecher, H., Teugels, J. (2004), Exponential behavior in the presence of dependence in risk theory, *EURANDOM Research Report*, vol. 2004–011, TU Eindhoven Modeling and Simulation. Gordon & Breach, Newark: 177–196
10. Alexandru, F. (2003), *Asigurări de bunuri și persoane*, Editura Economică, București
11. Altman, E. (1998), *The fair value of Insurance Liabilities*, Editura Springer Science, New York

12. Arellano, M. & Bond, S., (1991), Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations, *Review of Economic Studies*, Wiley Blackwell, vol. 58(2), pp. 277-97
13. Artzner, P., Delbaen, F., Eber, J.M., Heath, D. (1997), Thinking coherently, *Risk*, nr. 10(11): 68–71
14. Artzner, P., Delbaen, F., Eber, J.M., Heath, D. (1999), Coherent measures of risk, *Math Finance*, nr. 9(3): 203–228
15. Artzner, P., Delbaen, F., Koch-Medina, P. (2009), Risk measures and efficient use of capital, *ASTIN Bull*, nr. 39(1): 101–116
16. Artzner, P, Eisele, K.T. (2010), Supervisory insurance accounting: mathematics for provision- and solvency capital-requirements, *ASTIN Bull* nr. 40(2): 569–585
17. Babbel, D. (2001), *Financial Markets, Instruments and Institutions*. Ed. McGraw-Hill, 2001
18. Badea, D. (2001), *Asigurările de persoane și reflectarea lor în contabilitate*, Editura Economică, București
19. Banks, E. (2004), *Alternative Risk Transfer*, Editura Wiley, Chichester
20. Basse., T. (2008), Solvency II, asset liability management, and the European bond market – theory and empirical evidence, *ZVersWiss*, nr. 97: 155–171
21. Bărbulescu, C. (1995), *Economia și gestiunea întreprinderii*, Editura Economică, București
22. Beekman, J.A. (1974), *Two Stochastic Processes*, Ed. Almqvist & Wiksell, Stockholm
23. Bistriceanu, G. D. (2002), *Sistemul asigurărilor din România*, Editura Economică, București
24. Black, F. (1973), The Pricing of Options and Corporate Liabilities, *Journal of Political Economy*, nr. 84: 637-659
25. Blum, P. and Dacorogna, M., (2004), DFA—Dynamic Financial Analysis, în Teugels, J. and Sundt, B. (eds.): *Encyclopedia of Actuarial Science*, John Wiley & Sons, New York et al.: 505–519

26. Blundell, R., Blond, S. (1998), Initial conditions and moment restrictions in dynamic panel data models, *Journal of Econometrics*, nr. 87, pp. 115-143
27. Bodie, Z. & Merton R. (2001), *Finance*, Ed. Prentice – Hall, Paris
28. Bogdan, M. D. (2004), *Sistemul informațional în societățile de asigurări*, Ed. Antet, Prahova, ISBN 973-636-065-2
29. Boose, M. A., (1990), Agency Theory and Alternative Predictions for Life Insurers: An Empirical Test, *Journal of Risk and Insurance*, nr. 57: 499-518
30. Borch, K. (1991), *Risk, information and insurance*, Editura Kluwer Academic Publisher, Norwell
31. Bran, P. (2004), *Finanțele întreprinderii*, Editura Economică, București.
32. Briys, E. (1997), On the Risk of Life Insurance Liabilities: Debunking Some Common Pitfalls, *Journal of Risk and Insurance*, nr. 64 (4): 673-694
33. Brooks, D. (2009), Actuarial Aspects of Internal Models for Solvency II, *Institute of Actuaries*, 23 February 2009: 1-112
34. Bühlmann, H., Merz, M. (2007), The valuation portfolio, *Bull Swiss Assoc. Actuar.*, nr. 2007(1), nr. 69–84
35. Butsic, R.P. (1999), Capital Allocation for property-liability insurers: a catastrophe reinsurance application, *Casualty Actuarial Society Forum*, Spring: 1-70
36. Campbell, T. S., William A., Kracaw (1990), Corporate Risk Management and the Incentive Effects of Debt, *Journal of Finance*, nr. 45: 1673-1686
37. Campbell, J.Y., Lo, A.W., MacKinlay, A.C. (1997), *The Econometrics of Financial Markets*, Ed. Princeton University Press, Princeton, New Jersey
38. Chan, B. (1990), Ruin probability for translated combination of exponential claims, *ASTIN Bulletin*, vol. 20: 113-114
39. Charissiadis, P. (2013), Group-Wide Risk and Capital Management of Internationally Active Insurance Groups— Current Practices and Challenges, *The Geneva Association (The International Association for the Study of Insurance Economics)*: 4-51

40. Charpentier, P. & Deroy, X. (2002), *Organizarea și gestiunea întreprinderii*, Editura Economică, București
41. Charreaux, G. (2000), *Gestion financière*, Ed. Litec, Paris
42. Charron J.L. & Separi S. (2001), *Organization et gestion de l'entreprise*, Ed. Dunod, Paris
43. Chen, A. H., (1977), Portfolio Selection with Stochastic Cash Demand, *Journal of Financial and Quantitative Analysis*, 12(2): 197–213.
44. Chen, X., Doerpinghaus, H., Lin, B.-X. and Yu, T. (2008), Catastrophic losses and insurer profitability: Evidence from 9/11, *Journal of Risk and Insurance*, nr. 75(1): 39–62
45. Cistelecan, L. (2002), *Economia, eficiența și finanțarea investițiilor*, Editura Economică, București
46. Cistelecan, L. (2009), *Risc și Asigurare în coordonate manageriale și financiare*, Editura Universității Petru Maior, Târgu-Mureș
47. Ciumas, C. (2003), *Asigurări internaționale*, Ed. Casa Cărții de Știință, Cluj Napoca
48. Ciumas, C. (2003), *Economia asigurărilor*, Ed. Casa Cărții de Știință, Cluj Napoca
49. Ciurel, V. (2011), *Asigurări și reasigurări. O perspectivă globală*, Editura Rentrop și Straton, București
50. Coană, F. (2001), *Economia asigurărilor*, Editura Gutenberg, Arad
51. Coană, F. (2001), *Tehnici de asigurare și reasigurare*, Editura Gutenberg, Arad
52. Coffee, J. (2009), Enhancing Investor Protection and The Regulation of Securities Markets, *Working Paper No. 348*: 1-71
53. Cohen, E. (1989), *Epistémologie de la gestion*, Ed. Economica, Bucuresti
54. Cohen, E. (1991), *Gestion financière de l'entreprise et développement financier*, Ed. EDICEF, Paris
55. Colquitt, L. (1997), Determinants of Corporate Hedging Behavior: Evidence from the Life Insurance Industry, *Journal of Risk and Insurance*, nr. 64: 649-671

56. Conger, R. (2004), Fair Value of P&C Liabilities: Practical Implications, *Causality Actuarial Society*: 1-177
57. Constantinescu, D. A. (2000), *Contractul de asigurare*, Editura Colecția Națională, București
58. Constantinescu, D. A. (2004), *Tratat de asigurări – vol.I,II*, Editura Economică, București
59. Cosma, D. (2011), *Elemente de drept public si privat*, Ed. Eurostampa, Timișoara
60. Cummins, D. et al. (2000), Derivatives and Corporate Risk Management: Participation and Volume Decisions in the Insurance Industry, *Journal of Risk and Insurance*, nr. 68: 51-91
61. Cummins, J. D., (1994), "Risk-Based Capital Requirements for Property-Liability Insurers: A Financial Analysis," în Edward Altman and Irwin Vanderhoof (eds.), *The Financial Dynamics of the Insurance Industry*, Ed. Irwin Professional Publishers, Homewood, Illinois
62. Cummins, J., Sommer D., (1996), Capital and Risk in Property-Liability Insurance Markets, *Journal of Banking & Finance*, nr. 20: 1069-1092
63. Cummins, D. J., and Danzon, P., (1997), Price, Financial Quality, and Capital Flows in Insurance Markets, *Journal of Financial Intermediation* 6, nr. 1, pp. 3-38
64. Cummins, J., Phillips, R., Smith, S. (1998), Derivatives and Corporate Risk Management: Participation and Volume Decisions in the Insurance Industry, *Center for Financial Institutions Working Papers*, pp. 98-19, Wharton School Center for Financial Institutions, University of Pennsylvania
65. Cummins, J. D. (1999), Regulatory Solvency Prediction in Property-liability Insurance: Risk-based Capital, Audit Ratios, And Cash Flow Simulation, *Journal of Risk and Insurance* nr. 66: 417-458
66. Cummins, J. (2000), Allocation of Capital in the Insurance Industry, *Risk Management and Insurance Review* nr. 3: 7-28
67. Darooneh, A. H. (2003), Proceedings of 18th Annual Iranian Physics Conference
68. Darooneh, A. H. (2004), Non-life insurance pricing: multi-agent model, *The European Physical Journal B*, nr. 42

69. De Jong, P. (2008), *Generalized Linear Models for Insurance Data*, Ed. Cambridge University Press, Cambridge
70. De Vylder, F. E. (1997), *Life Insurance Theory*, Editura Kluwer Academic Publishers, New York
71. Decebal, B., *Sistemul informațional în societățile de asigurări*, Editura Antet, Prahova
72. Doffou, A. (2005), New perspectives in Asset-Liability Management for Insurers, *Journal of Business and Behavioral Sciences*, Vol. 12, No 2: 1-25
73. Dufresne, F., Gerber, H.U. (1989), Three methods to calculate the probability of ruin, *ASTIN Bulletin*, vol 19: 71-90
74. Duizabo, S., Roux, D. (2005), *Gestion et management des entreprises*, Ed. Hachette Livre, Paris
75. École Nationale d'Assurance de Paris (1998), *Manuel Internatioanl de l'Assurance*, Ed. Economica, Paris
76. Eling, M., Schmeiser, H., and Schmit, J. T., (2006), The Solvency II Process: Overview and Critical Analysis, *Working Papers on Risk Management and Insurance*, nr. 20, University of St. Gallen, St. Gallen, Risk Management and Insurance Review
77. Eller, W.S. (1966), *Introduction to Probability Theory and its Applications*, Vol. II. Ed. Wiley, New York
78. Financial Service Authority, *Insurance Risk Management: The path to Solvency II*, Discussion Paper 2008
79. Gatzert, N. (2008), Enterprise risk management in financial groups: analysis of risk concentration and default risk, *Financ Mark Portfolio Manag*, nr. 22: 241–258
80. Gerber, H.U., Shiu, E.S.W. (1994), *Transaction of the Society of Actuaries* XLVI, nr. 99
81. Gisler, A. (2009), The insurance risk in the SST and in Solvency II: modelling and parameter estimation, *Conference paper ASTIN colloquium 2009*
82. Goovaerts, M.J., deVylder, F. (1984), *Insurance Premium*, Ed. North Holland, Amsterdam
83. Gourieroux, C. (1999), The Econometrics of Risk Classification in Insurance, *The Geneva Papers on Risk and Insurance Theory*, nr. 24: 119–137

84. Grace, F. (1998), Identifying Troubled Life Insurers: An Analysis of the NAIC FAST System, *Journal of Insurance Regulation*, nr. 16 (3): 249-290
85. Grace, M. (1998), Risk-Based Capital and Solvency Screening in Property-Liability Insurance: Hypotheses and Empirical Tests, *Journal of Risk and Insurance*, nr. 65(2): 213-243
86. Green, R. C. (1986). Asset Substitution and the Agency Costs of Debt Financing, *Journal of Banking and Finance*, nr. 10: 391-399
87. Grøn, A. (1994), Capacity Constraints and Cycles in Property-Casualty Insurance Markets, *RAND Journal of Economics* 25, nr. 1, pp. 110-127.
88. Grosen, A. (2000), Fair Valuation of Life Insurance Liabilities: The Impact of Interest Rates Guarantees, Surrender Options, and Bonus Policies, *Insurance Mathematics and Economics*, nr. 26: 37-57
89. Haiss, P. (2008), The relationship between insurance and economic growth in Europe: a theoretical and empirical analysis, *Empirica*, nr. 35: 405–431
90. Heller, G.Z., de Jong, P. (2007), Mean and dispersion modelling for policy claims costs, *Scandinavian Actuarial Journal*, nr. 2007(4)
91. Hicks, J. (1939), *Value and Capital: An Inquiry into Some Fundamental Principles of Economic Theory*, Ed. Clarendon Press, Oxford.
92. Hoffman, W. (2013), Challenging Times Demand Strong Capital Management: Lessons Learned From European Insurers, *Towers Watson Report* - Emphasis: 1-6
93. Hoyt, R. (1989), Use of Financial Futures by Life Insurers, *Journal of Risk and Insurance*, nr. 56: 740-749
94. Hurley, L. R. (1973), Commercial Fire Insurance Ratemaking Procedures, Proceedings of the *Casualty Actuarial Society*, vol. LX: 208-257
95. Hussels, S., Ward, D., and Zurbrugg, R. (2005), Stimulating the Demand for Insurance, *Risk Management and Insurance Review*, 8(2): 257–278
96. Hutin, H. (1998), *La gestion financiere*, Ed. Les editions des organisations, Paris

97. Jurkonyte, E. (2011), Insurance Companies' Solvency Management within de Framework of Logistic Capital Management Theory, *European Journal of Interdisciplinary Studies*, Volume 3, Issue 1
98. Kader, A., et.al (2010), The Determinants of Reinsurance in the Swedish Property Fire Insurance Market During the Interwar Years: 1919-1939, *Business History* 52, nr. 2, pp. 268-284.
99. Kass, R. (2001), *Modern actuarial risk theory*, Ed. Kluwer Academic Publishers, Boston
100. Kast, R. (2004), *Analyse economique et financiere des nouveaux risques*, Editura Economica, Paris
101. Kielholz, W. (2000), The Cost of Capital for Insurance Companies, *The Geneva Papers on Risk and Insurance*, Vol. 25, nr. 1: 4-24
102. Klein, R. W. (1995), Solvency Monitoring in the Twenty-First Century, *Journal of Insurance Regulation*, nr. 13, pp. 256-301
103. Krouse, C. (2013), Portfolio Balancing Corporate Assets and Liabilities with Special Application to Insurance Management, *Journal of Financial and Quantitative Analysis*, 1: 77-104
104. La Porta, R. (2001), Law and Finance, Journal of Political Economy și în Schwalbach, J. ed., *Corporate Governance; Essays in Honor of Horst Albach*, Publications of the Society for Economics and Management at Humboldt-University Berlin, Berlin, Springer
105. Lamb, R.P., Kennedy, W.F. (1997), Insurer stock prices and market efficiency around the Los Angeles earthquake, *Journal of Insurance Issues*, nr. 20(1): 10–24
106. Lamm-Tennant, J., Starks, L.T. (1993), Stock versus mutual ownership structures: The risk implications, *Journal of Business*, nr. 66(1): 29–46
107. Lassegue, P. (1981), *Qu'est ce que la gestion tout? Qu'a-t-elle été juqu'à présent a rien. Que veut-elle devenir quelque chose*, Ed. IPA, Toulouse
108. Le Vallois, F. & Palaskz, P. (2003), *Gestion Actif Passive en assurance vie*, Ed. Economica, Paris

109. Leblanc, M. (2010), Constats, opinions et incertitudes sur Solvency II, *Draft presentation Juin-Juillet 2010*
110. Liebenberg, A. P. and Hoyt, R. E. (2003), The Determinants of Enterprise Risk Management: Evidence From the Appointment of Chief Risk Officers, *Risk Management and Insurance Review*, 6(1): 37–52
111. Lochard, J. (1997), *Initiation à la gestion*, Ed. Les éditions d'organisation, Paris
112. Macaulay, F. (1938), *The Movements of Interest Rates. Bond Yields and Stock Prices in the United States since 1856*, Ed. National Bureau of Economic Research New York
113. MacMinn, R., (1999), On Corporate Risk Management and Insurance, *University of Nottingham Working Papers*, University of Nottingham, Nottingham, England
114. Makarov, G.D. (1981), Estimates for the distribution function of the sum of two random variables with given marginal distributions, *Theory Probab. Appl.*, vol. 26(4): 803–806
115. Mayers, D. (1990), On the Corporate Demand for Insurance: Evidence from the Reinsurance Market, *Journal of Business*, nr. 63: 19-40
116. McNeil, A.J., Frey, R., Embrechts, P. (2005), *Quantitative risk management: concepts, techniques and tools*, Ed. Princeton University Press, Princeton
117. Meyers, G. (2001). *The Cost of Financing Insurance*, Spring 2001, CAS Forum
118. Mikosch, T., Samorodnitsky, G. (2000), Ruin probability with claims modeled by a stationary ergodic stable process, *Annals of Probability*, vol. 28 (4): 1814–1851
119. Müller, A., Pflug, G. (2001), Asymptotic ruin probabilities for risk processes with dependent increments, *Insurance: Mathematics and Economics*, vol. 28 (3): 381–392
120. Mulvey, J. (1999), Linking strategic and tactical planning systems for asset and liability management, *Annals of Operations Research*, nr. 85: 249–266
121. Myers, M. D. (1997), Critical Ethnography in Information Systems, in A. S. Lee, J. Liebenau, and J. I. DeGross (Eds.) *Information Systems and Qualitative Research*, London: Chapman and Hall, pp. 276-300.

122. Negoită, I. (1998), *Asigurări și reasigurări în Economie*, Editura Polsib, București
123. Nistor, I. E. (2002), *Finanțele întreprinderii*, Editura Presa Universitară Clujeană, Cluj-Napoca
124. Nistor, I. (2004), *Teorie și practică în finanțarea întreprinderilor*, Editura Casa Cărții de Știință, Cluj-Napoca
125. Nistor, I. (2005), *Finanțele firmei*, Editura Risoprint, Cluj – Napoca
126. Oprețescu, M., Popescu, J., Spulbar, C. (2008), *Monede, Credit, Bănci*, Ed. Sitech, Craiova
127. Panjer, H.H. (2006), *Operational risk modeling analytics*, Ed. Wiley, NewYork
128. Pierrat, C. (2006), *La gestion financière de l'entreprise*, Editura La Découverte, Paris
129. Politis, A. (2001), *Managementul agenției de asigurare*, Editura All Beck, București
130. Purcaru, I. et. al. (1998), *Asigurări de persoane și de bunuri*, Editura Economica, București
131. Redington, F. M. (1952), Review of the Principles of Life Office Valuations, *Journal of the Institute of Actuaries*, vol. 78, pp. 286-340
132. Rolski, T., Schmidli, H., Schmidt, V., and Teugels, J. (1999), *Stochastic Processes for Insurance and Finance*, John Wiley & Sons, Chichester
133. Rosen, D., Zenios, A., (2002) "Enterprise-wide Asset and Liability Management: Issues, Institutions, and Models ", *Handbook on Asset and Liability Management*, S.A. Zenios, W.T. Ziemba (eds.), Elsevier Science B.V.
134. Samuelson, A., (1947), *Foundations of Economic Analysis*, Ed. Harvard University Press, Harvard.
135. Sandström, A. (2006), *Solvency: models, assessment and regulation*, Ed. Chapman & Hall/CRC Press, London/Boca Raton
136. Siems, M. (2007), Shareholder protection: a leximetric approach, *Journal of Corporate Law Studies*, nr. 7: 17-50
137. Spamann, H. (2008), "Law and Finance" Revisited, *Discussion Paper*, nr. 12: 1-52

138. Staking, K. (1995), The Relation Between Capital Structure, Interest Rate Sensitivity, and Market Value in the Property-Liability Insurance Industry, *Journal of Risk and Insurance*, nr. 63: 690-718
139. Stancu, I. (2002), *Finanțe*, Editura Economică, București
140. Swiss Re (2009), Solvency II Standard Formula: Consideration of non-life reinsurance, *Swiss Re Focus Report 2009*: 1-12
141. Swiss Re (2010), Solvency II and life insurance: Solutions for managing risk and capital, *Swiss Re Report 2010*: 9-10
142. Swiss Re (2010), The balancing act of capital management: Non-life insurance under Solvency II, *Swiss Re Report 2010*: 1-2
143. Swiss Re (2011), How reinsurance impacts non-life insurers under Solvency II – a case study, *Swiss Re Focus Report 2011*: 1-4
144. Swiss Re (2011), Private equity investments in a changing regulatory environment, *Swiss Re Report* September 2011: 1-4
145. Swiss Re (2011), Recognition of reinsurance under Solvency II, *Swiss Re Report 2011*: 1-4
146. Swiss Re (2011), Retrospective solutions under Solvency II: passing the non-life loss reserves hurdle, *Swiss Re Report* September 2011, pp. 11-12
147. Swiss Re, Capital drivers for the marine insurance industry under Solvency II, *Swiss Re Report 2011*
148. **Șumandea-Simionescu, R. (2004)**, Income taxation of physical person – comparative study, *Proceedings of International Conference on Economics, Law and Management – ICELM -I*, Tîrgu – Mureș, Romania, ISBN 973-7794-001
149. **Șumandea-Simionescu, R. (2004)**, New aspect concerning the focus of insurance companies on clients, *Proceedings of the Scientific Communication Session with international participation: “Financial World – present and perspectives”*, Cluj-Napoca, Romania, ISBN 973-686-660

150. **Şumandea-Simionescu, R. (2005)**, The compatibility of the Romanian insurance market with the European insurance market – possibilities and limits, *The Annals of the University of Oradea, Seria Stiinte Economice, Romania*, ISSN 1582 – 5450, with Prof. univ. dr. Cistelean Lazar
151. **Şumandea-Simionescu, R.M., Spătăcean, O. (2005)**, Insurance- an alternative in the system of protecting risks, *The Annals of the University of Brasov, Series Stiinte Economice, Romania*, ISSN 1582 – 5450,
152. **Şumandea-Simionescu, R.M, Ştefan, D., Spătăcean, O. (2005)**, Audit – methods of prevention of risks in the financial management of insurance companies, *The Annals of the University of Oradea, Series Stiinte Economice, Romania*, ISSN 1582 – 5450
153. **Şumandea-Simionescu, R.M. (2009)**, New Concept of Careful Surveillance - a Real Challenge for Insurance Firms, *ISI Proceedings of the World Multiconference on Applied Economics, Business and Development, Tenerife, Spain*, ISSN 1790-5109
154. **Şumandea-Simionescu, R., Cistelean, R., Ştefan, A. B. (2006)**, Accountability of insurance companies between general and particular, *Annales Universitatis Apulensis, Series Oneconomica, Finante – Contabilitate, Alba – Iulia, Romania*, ISSN 1454 – 9409
155. **Şumandea-Simionescu, R., Ştefan, D., et al. (2008)**, A cost-volume-profit model for a multiproduct situation with variable production structure, *Proceedings of The 20th International Conference EURO Conference „Continuous Optimisation and Knowledge-Based Technologies”*, Vilnius , Lithuania, ISBN 978-9955-28-283-9349 353
156. **Şumandea-Simionescu, R., Mihalca, G. (2009)**, An Empirical; Investigation On Trade-off and Pecking Order Hypotheses on Romanian Market, *Proceeding of The XIII International Conference*, Vilnius, Lithuania, ISSN 978-9955-28-463-5
157. **Şumandea-Simionescu, R., Mihalca, G. (2010)**, “Liquidities and solvability - instruments of surveillance of the insurer for the realization of an financial management in the context of European integration”, *Economic Papers, Sibiu, Romania*, ISSN 1582-6260
158. **Şumandea-Simionescu, R., Şumandea-Simionescu, I. (2012)**, The Directive 2008/88/CE: an uncertain future? Comparative study, *Studia Universitatis Petru Maior, Series Oeconomica (RePEc)*, FASCICULUS 1, anul VI: 99-118

159. **Șumandea-Simionescu (Antal), R.M.**, Șumandea-Simionescu, I. (2012), Capital in Insurance Companies – efficient creditor protection or outdated concept?, *Elsevier Procedia Economics and Finance*, nr. 3: 843 – 851
160. **Șumandea-Simionescu (Antal), R.M.**, (2012) *The Premium for Mandatory House Insurance in Romania – Considerations Regarding its Financial Solvability*, Elsevier Procedia Economics and Finance
161. **Șumandea-Simionescu (Antal), R.M.**, Șumandea-Simionescu, I.,(2013) *Underwriting profitability in the Romanian insurance market*, Elsevier Procedia Economics and Finance, Elsevier Procedia Economics and Finance, nr. 3
162. Trenca, I. (2005), *Fundamente ale managementului financiar*, Casa Cărții de Știință, Cluj Napoca
163. Văcărel, I. & Bercea F. (2007), *Asigurări și reasigurări*, Editura Expert, București
164. von Bomhard, N. (2005), Risk and Capital Management in Insurance Companies, *Geneva Papers on Risk and Insurance—Issues and Practice*, 30(1): 52–59
165. Wang, S.S. (2000), A class of distortion operators for pricing financial and insurance risks, *Journal of Risk and Insurance*, Vol. 67, No. 1: 15-36
166. Wang, S.S. (2002), Pricing of Cat Bond, capitol în *Alternative Risk Transfers*, Ed. De Morton Lane, Risk Publications, May 2002
167. Wang, S. (2006), A Set of New Methods and Tools for Enterprise Risk Capital Management and Portfolio Optimization, *SCOR Reinsurance Co*: 43-78
168. Wells B. (2009) Asset-Liability Management Problems in the Life Insurance: Lessons from the Past, *Journal of Insurance Regulation*, nr. 6-21-2009: 1-33
169. Wu, D. (2011), *Quantitative Financial Risk Management*, Editura Springer, New York
170. Wüthrich, M.V.(2006), Premium liability risks: modeling small claims, *Bull Swiss Assoc. Actuar.*, nr. 2006(1): 27–38
171. Wüthrich, M.V., Merz, M. (2008), *Stochastic claims reserving methods in insurance*, Ed. Wiley, New York

172. Wüthrich, M. V. (2010), Run off of the claims reserving uncertainty in non-lifeinsurance: a case study, Zavarov Horiz, *Journal Solvency Insurance Assoc.*, nr. 6(3): 5–18
173. Wüthrich, M.V. (2010), Accounting year effects modeling in the stochastic chain ladder reserving method, *North America Actuarial Journal*, nr. 4(2): 235–255
174. Wüthrich, M. V. (2011), An academic view on the illiquidity premium and market-consistent valuation in insurance, *European Actuarial Journal*, nr. 1(1): 93–105
175. Wüthrich, M.V., Embrechts, P., Tsanakas, A. (2011), Risk margin for a non-life insurance run-off, *Stat Risk Model*, nr. 28(4): 299e–317
176. Wuthrich, M. (2013), *Financial Modeling, Actuarial Valuation and Solvency in Insurance*, Ed. Springer, New York
177. Wuthrich, M. (2013), *Financial Modeling, Actuarial Valuation and Solvency in Insurance*, Ed. Springer, New York
178. Zorțelan, T. & Burduș, E. (1998), *Managementul organizației - Vol. I, II*, Editura Economică, București
179. Zurich Financial Services (2009), *Investment Management – a creator of value in an insurance company*, Zurich Financial Services Report – March 2009:1-19
180. Zvi, B., Merton, R., International Pension Swaps, *Journal of Pension Economics & Finance*, nr. 1, pp. 77–8
181. *** Legea contabilității nr.82/1991
182. *** Legea 32/2000 privind societățile de asigurare și supravegherea asigurărilor
183. *** Legea 571/2003 privind Codul fiscal¹
184. ***Directiva 2009/138/CE a Parlamentului European și a Consiliului din 25 noiembrie 2009 privind accesul la activitate și desfășurarea activității de asigurare și de reasigurare (Solvabilitate II)
185. *** Ordonanța de urgență 201/2005 pentru modificarea și completarea Legii 32/2000

186. *** *Ordinului nr.3111/2005* pentru punerea în aplicare a normelor privind metoda de calcul a marjei de solvabilitate de care dispune asiguratorul care practică asigurări generale, al marjei de solvabilitate minime și al fondului de siguranță
187. *** *Ordin 3129/2005* pentru aprobarea reglementări contabile conforme cu directivele uniunii europene specifice domeniului asigurarilor, publicat în Monitorul Oficial, Partea I, nr.1187, din 29 decembrie 2005
188. *** *Ordinului nr. 3112/2005* pentru punerea în aplicare a Normelor privind metodologia de calcul al marjei de solvabilitate de care dispune asiguratorul care practică asigurări de viață, al marjei de solvabilitate minime și al fondului de siguranță
189. *** *Ordinul nr. 3124/2005* pentru punerea în aplicare a Normelor privind redefinirea structurii activelor lichide ale asiguratorilor și a calculului coeficientului de lichiditate
190. *** *Ordinul nr. 113131/2006* pentru punerea în aplicare a Normelor privind rezervele tehnice pentru asigurările de viață, activele admise să le acopere și dispersia activelor admise să acopere rezervele tehnice brute
191. *** *Ordinul nr. 113130/2006* pentru punerea în aplicare a Normelor privind activele admise să acopere rezervele tehnice brute pentru asiguratorul care practică activitatea de asigurări generale, dispersia activelor admise să acopere rezervele tehnice brute, precum și coeficientul de lichiditate,
192. *** *Ordinul nr.113117/2006* privind principiile de organizare al unui sistem de control intern și management al riscului la asiguratorii
193. *** *Ordinul nr. 4/2008* pentru punerea în aplicare a Normelor privind metodologia de calcul al marjei de solvabilitate de care dispune asiguratorul care practică asigurări de viață, al marjei de solvabilitate minime și al fondului de siguranță
194. *** *Ordinul nr. 3/2008* pentru punerea în aplicare a Normelor privind metodologia de calcul al marjei de solvabilitate de care dispune asiguratorul care practică asigurări generale, al marjei de solvabilitate minime și al fondului de siguranță

195. *** *Ordinul nr. 12/2009* pentru modificarea și completarea unor acte normative privind calculul marjei de solvabilitate de care dispune asigurătorul/reasigurătorul, al marjei de solvabilitate minime și al fondului de siguranță
196. *** *Ordinul nr. 8/2011* pentru punerea în aplicare a Normelor privind rezervele tehnice pentru asigurările de viață, activele admise să le acopere și dispersia activelor admise să acopere rezervele tehnice brute
197. *** *Ordinul nr. 9/2011*, pentru punerea în aplicare a Normelor privind activele admise să acopere rezervele tehnice brute pentru asigurătorul care practică activitatea de asigurări generale, dispersia activelor admise să acopere rezervele tehnice brute, precum și coeficientul de lichiditate
198. *** *Ordinul nr. 8/2011* pentru punerea în aplicare a Normelor privind rezervele tehnice pentru asigurările de viață, activele admise să le acopere și dispersia activelor admise să acopere rezervele tehnice brute
199. *** *Ordinul nr. 9/2011*, pentru punerea în aplicare a Normelor privind activele admise să acopere rezervele tehnice brute pentru asigurătorul care practică activitatea de asigurări generale, dispersia activelor admise să acopere rezervele tehnice brute, precum și coeficientul de lichiditate
200. *** *Ordinul nr. 18/2012* pentru modificarea unor acte normative privind calculul marjei de solvabilitate de care dispune asigurătorul/reasigurătorul, al marjei de solvabilitate minime și al fondului de siguranță
201. *** *Ordin nr. 88/2012* privind aplicarea de către societățile comerciale ale căror valori mobiliare sunt admise la tranzacționare pe o piață reglementată a standardelor internaționale de raportare financiară
202. www.csa.ro
203. www.swissre.com
204. www.iii.org
205. www.iaisweb.org

- 206. www.asitokapital.com
- 207. www.ateinsurance.ro
- 208. www.cedrtasig.ro
- 209. www.ceasigurari.ro
- 210. www.efgeurolife.ro
- 211. www.eureko.ro
- 212. www.eximasig.ro
- 213. www.fata-asigurari.ro
- 214. www.fortetasig.ro
- 215. www.garanta.ro
- 216. www.gerroma.ro
- 217. www.gothaer.ro
- 218. www.grawe.ro
- 219. www.liginsurance.ro
- 220. www.onix.eu.com
- 221. www.aegon.ro
- 222. www.alico.ro
- 223. www.allianztiriatic.ro
- 224. www.asirom.ro
- 225. www.metropolitanlife.ro
- 226. www.axa-asigurari.ro
- 227. www.bcrasigviata.ro

- 228. www.brdasigurarideviata.ro
- 229. www.ergo.ro
- 230. www.generali.ro
- 231. www.groupama.ro
- 232. www.ing.ro
- 233. www.signal-iduna.ro
- 234. www.uniqa.ro
- 235. www.euroins.ro
- 236. www.omniasig.ro
- 237. www.carpaticaasig.ro
- 238. www.cityinsurance.ro