

ТОВ “Консалтингово-видавнича компанія
“Ділові перспективи”

**Страхові ринки та компанії:
дослідження та актуарні розрахунки
Міжнародний науковий журнал
Том 1, №3, 2010**

Журнал засновано у 2010 році
Видається щоквартально
ISSN 2078-2454
ISSN онлайн 2078-2462

Головний редактор
Ольга Козьменко

Основна мета журналу – розкрити теоретичні та методичні положення, беручи до уваги статистику страхування та математику страхової справи, а також відобразити практичне використання статистичних та математичних засобів у діяльності страхових компаній.

Головні теми: статистичне дослідження ринку страхування, методологія статистики страхування, демографічна статистика та її використання у страхуванні, методика актуарних розрахунків, страхування ризику, актуарні розрахунки ризикованих видів страхування, актуарні розрахунки страхування життя, актуарні розрахунки пенсійного страхування, управління фінансовою діяльністю страхових інвестиційних фондів.

Адреса:
ТОВ “КВК
“Ділові перспективи”
пров. Дзержинського, 10
м. Суми, Україна, 40022

E-mail: head@businessperspectives.org
URL: <http://www.businessperspectives.org>

За достовірність інформації, що міститься в опублікованих матеріалах, відповідальність несуть автори.

© ТОВ “КВК “Ділові перспективи”, 2010

Закон про авторське право: Усі права захищено. Жодну частину даного видання не можна відтворювати, зберігати, передавати, рекламувати, демонструвати, адаптувати, переробляти, перекладати в будь-якій формі та будь-яким способом. Це також стосується розповсюдження, відчуження, здання в майновий найм, комерційний чи будь-який інший прокат, передрукування, розміщення на сайтах, імпортування та публічного показу. У випадку передрукування та відтворення матеріалів попереднє письмове узгодження з видавцем є обов’язковим. Усі вищевказані вимоги стосуються і некомерційних засад, а також будь-якого вільного доступу до попередніх, теперішніх та майбутніх випусків публікації.

Publishing Company
“Business Perspectives”

**Insurance Markets and Companies:
Analyses and Actuarial Computations
International Research Journal
Volume 1, Issue 3, 2010**

Issued from 2010
Published quarterly
ISSN 2078-2454
ISSN online 2078-2462

Editor-in-Chief
Olha Kozmenko

The main purpose of the journal is to develop both theoretical and methodical provisions with regard to insurance statistics and insurance mathematics, to illustrate the practical use of statistical and mathematical tools in the insurance companies’ activity.

Key topics are: statistical investigations of insurance market, insurance statistics methodology, demographic statistics and its use in the insurance, actuarial computations methodology, underwriting of insurance risks, actuarial computations in hazardous types of insurance, actuarial computations in life assurance, actuarial computations in retirement insurance, financial management of insurance investment funds.

Address:
Publishing Company
“Business Perspectives”
Dzerzhynsky lane, 10
Sumy 40022 Ukraine

E-mail: head@businessperspectives.org
URL: <http://www.businessperspectives.org>

The authors are responsible for the reliability of information which materials published contain.

© Publishing Company “Business Perspectives”, 2010

Copyright: All rights reserved. No part of this publication may be reproduced, stored, transferred, advertised, demonstrated, adapted, rearranged, translated in any form or bought by any means. This also concerns the distribution, disposition, property renting, commercial renting, or any other kind of renting, reprinting, siting, importing or public demonstration. In case of reprinting and reproduction of the materials the prior written permission of the Publisher is required. The above-named requirements should be also referred to non-profit basis as well as any free access to the previous, current and future issues of the publication.

Head of the Board

O. Kozmenko, Dr., Professor, Ukrainian Academy of Banking of the National Bank of Ukraine (Ukraine)

Editorial Board

S. Adams, Associate Professor, Dean of School of Business, Taylor University (USA)

Y. Anagnostopoulos, Senior Lecturer and Programme Leader in Business Finance, Royal Docks Business School, University of East London (UK)

E. Anoruo, Ph.D., Professor, Chair of Economics and Finance, Department of Accounting, Managerial Economics and Finance, Coppin State University (USA)

E.G. Baranoff, Ph.D., FLMI, Associate Professor of Insurance, Risk Management and Finance, Virginia Commonwealth University (USA)

R.J. Butler, Professor, Department of Economics, Brigham Young University (USA)

D. Chen, Dr., Associate Professor, Chair of the Department of Insurance, Fudan University, Shanghai (China)

B. Chen, Professor, Chair of the Department of Business Administration, University of the West (USA)

J. Danbolt, Professor of Finance, Department of Accounting and Finance, Faculty of Law, Business and Social Sciences, University of Glasgow (UK)

J. Falzon, Ph.D., Professor, Head of the Department of Banking and Finance, Faculty of Economics, Management and Accountancy, University of Malta (Malta)

M. Guillen, Chair Professor, Departament d'Econometria, Estadística i Economia Espanyola, RFA-IREA, Universitat de Barcelona (Spain)

J. Gustafsson, Senior Manager, PriceWaterhouseCoopers (Denmark)

I. Jindrichovska, Head of the Department of Business Economics, University of Economics and Management (Czech Republic)

M. Kelly, Associate Professor of Finance and Insurance, Chair of Insurance, School of Business and Economics, Wilfrid Laurier University (Canada)

M. Kennedy, Professor, Faculty of Business, London South Bank University (UK)

R. Kinsella, Professor of Banking and Finance, UCD Michael Smurfit Graduate School of Business, UCD (Ireland)

D.G. Konstantinides, Assistant Professor of Actuarial Science, Department of Statistics and Actuarial Science, University of the Aegean (Greece)

P. Kostov, Dr., Senior Lecturer in International Finance, Lancashire Business School, University of Central Lancashire (UK)

R.J.A. Laeven, Associate Professor, Department of Econometrics and Operations Research, Tilburg University (The Netherlands)

J. Lawla, Head of the School of Business Administration, University of Technology (Jamaica)

R.D. MacMinn, Ph.D., Professor, Edmondson-Miller Chair of Insurance and Financial Services, Katie School of Insurance, College of Business, Illinois State University (USA)

A. El-Masry, Dr., Senior Lecturer in Finance, Fellow of the Higher Education Academy, Plymouth Business School (UK)

B.L. McManis, Ph.D., Professor, Head of the Department of Finance and Economics, College of Business, Nicholls State University (USA)

G.R. Niehaus, Professor, Associate Dean of Research and Academics, Moore School of Business, University of South Carolina (USA)

R.A. Parsa, Professor of Actuarial Science, College of Business and Public Administration, Drake University (USA)

D. Petmezas, Ph.D., Senior Lecturer in Finance, School of Management, University of Surrey (UK)

E. Pitacco, Full Professor of Actuarial Mathematics, Faculty of Economics, University of Trieste; Academic Director of the Master in Insurance and Risk Management, MIB School of Management of Trieste (Italy)

L.S. Powell, Ph.D., Associate Professor and Whitbeck-Beyer Chair of Insurance and Financial Services, University of Arkansas-Little Rock (USA)

T.K. Siu, Associate Professor of Actuarial Studies, Faculty of Business and Economics, Macquarie University (Australia)

C.W. Smith, Louise and Henry Epstein Professor of Business Administration, Professor of Finance, William E. Simon Graduate School of Business Administration, University of Rochester (USA)

Q. Tang, Associate Professor, Department of Statistics and Actuarial Science, University of Iowa (USA)

S. Tennyson, Associate Professor, Department of Policy Analysis and Management, Cornell University (USA)

E.A. Valdez, Professor of Actuarial Science, Department of Mathematics, University of Connecticut (USA)

P. Wang, Professor of Finance and Monetary Macroeconomics, Principal of IÉSEG, School of Management (France)

M.A. Weiss, Professor of Risk, Insurance and Healthcare Management, Fox School of Business and Management, Temple University (USA)

H. Wolthuis, Emeritus Full Professor of Actuarial Mathematics, Faculty of Economics, University of Amsterdam (The Netherlands)

S.B. Wyatt, Ph.D., Professor, Chair of the Department of Finance, Farmer School of Business, Miami University (USA)

H. Yang, Professor, University of Hong Kong (China)

Contents

Papers' abstracts / Анотації до статей	4
Olha Kozmenko, Hanna Kravchuk	
Consequences of the financial crisis for the insurance markets of the world and Ukraine	7
Oliver Musshoff, Norbert Hirschauer	
A survey of simulation-based methods for pricing complex American type options	16
Andrei Salem Gonçalves, Aureliano Angel Bressan	
Ruin probability: a flexible approach for measuring portfolio risk	32
Gabriela Pesce, Antonio Terceño, Hernán Vigier, Regina Durán	
Environmental insurance analysis from an economic approach	40
Gene C. Lai, Yenyu (Rebecca) Huang	
The unresolved tax deductibility issues: a firm value maximization approach	49
Wojciech Mucha, Abeer Hassan	
Private equity performance measurement dilemma – implications for insurance companies' investments activity at the break of the Volcker rule	59
Rickard Olsson	
Tracking error minimization under varying sustainability criterion stringency: environmental ratings and U.S. stock portfolios	67
Renaud Beaupain, Lei Meng, Romain Belair	
The impact of volatility on the implementation of the relative strength index: evidence from the Shanghai stock exchange	73
Raj K. Kohli	
Homework assignments and use of technology comparison of F301 and F260 classes at Indiana University South Bend	79
Raquel M. Gaspar, Hugo Sousa	
Liquidity risk and Solvency II	87
Authors of the issue	99
Submission guidelines for authors	100
A joint subscription form 2011/2012	101

Papers' abstracts / Анотації до статей

Ольга Козьменко (Україна), Ганна Кравчук (Україна)

Наслідки фінансової кризи для страхових ринків світу та України

У статті представлені аналітичні дані про вплив світової фінансової кризи на діяльність страхового ринку в деяких країнах. Особлива увага приділяється динаміці розвитку страхового ринку в Україні, проблемам і перспективам українського ринку страхування.

Олівер Мусхоф (Німеччина), Норберт Хіршауер (Німеччина)

Огляд методів на основі моделювання для ціноутворення комплексу опціонів американського типу

У даній статті подано огляд методів на основі моделювання, які були розроблені для оцінки «комплексу» опціонів американського типу, що не можуть бути оцінені аналітично. Особлива увага приділяється одному з найбільш перспективних підходів, який отримав назву «обмежене рекурсивне стохастичне моделювання» (BRSS) після вилучення на деякий час використаних але несуттєвих робочих етапів. Потім, у роботі перевірено BRSS-підхід, порівнюючи його з трьома іншими методами на основі моделювання. Завдяки своїм перевагам з точки зору точності, обчислювальних витрат і гнучкості, в даній роботі в деталях описаний BRSS-підхід, таким чином, сприяючи впровадженню наукового ноу-хау для численного ефективного ціноутворення опціонів.

Андре Салем Гонсалвес (Бразилія), Ауреліано Анжел Брессан (Бразилія)

Імовірність розорення: гнучкий підхід до вимірювання ризику портфеля

У статті представлено простий та гнучкий підхід, оснований на розрахунках, для вимірювання ризику портфеля. За його допомогою вимірюється імовірність для однієї або декількох конкретних небажаних подій, що визначені як «розорення», протягом певного інвестиційного періоду. Метод оснований на теорії розорення та є досить гнучким для надання інформації про декілька фінансових подій, що їх стосуються. У даній роботі також проведено аналіз моделювання, використовуючи методи «Бутстреп» та Монте Карло, для того, щоб пояснити як за допомогою даного підходу можна вирішити деякі практичні проблеми управління ризиком.

Габрієла Песце (Аргентина), Антоніо Терцено (Іспанія), Хернан Вігієр (Аргентина), Регіна Дюран (Аргентина)

Аналіз екологічного страхування на основі економічного підходу

Мета даного дослідження – визначити які функції в екологічному страхуванні краще стимулюють його агентів, до вживання заходів щодо розповсюдження практики гарного догляду за навколишнім середовищем та природними ресурсами. У другому розділі даної роботи представлена модель, основана на теорії інформації, з метою вивчення поведінки агентів, коли вони ознайомлюються зі стимулами, що представлені в полісах екологічного страхування. Потім представлено емпіричний аналіз, що описує діючі правила та поточні ситуації екологічного страхування у конкретному випадку, наприклад, Аргентині. Нарешті, функції, що визначаються за допомогою теоретичної моделі, порівнюються з тими, що спостерігаються на ринку. Одні результати дозволяють припустити, що існує велика схожість у тому як розглядаються деякі поняття, інші – свідчать про відмінність. Визначено, що пропозиції зазначені у полісі можуть бути направлені на поліпшення ситуації екологічного страхування.

Жене К. Лай (США), Енью (Ребека) Хуан (Тайвань)

Невирішені питання податкового відрахування: підхід максимізації вартості фірми

В даній статті розглядається питання податкового відрахування, пов'язаного з випадком дочірньої компанії Хумана, використовуючи підхід максимізації акціонерної власності. Аналіз даного дослідження показує, що страхові премії, які виплачуються дочірньою компанією Хумана на відшкодування медичного обслуговування не повинні бути відраховані. У даному дослідженні оцінюється поточний податковий режим страхового ринку, самостійного страхування, а також кептивного страхування, використовуючи: (1) основу максимізації акціонерної власності або вартості фірми; та (2) критерій соціального благоустрою. Автори приходять до висновку, що страховий ринок має порівняльну економічну перевагу над кептивним страхуванням, запропонованим у документі кептивної страхової компанії щодо зовнішнього бізнесу; такий вид кептивного страхування має порівняльну економічну перевагу над самостійним страхуванням або кептивним страхуванням, коли суб'єктами страхування є філіали компанії, або кептивним страхуванням враховуючи лише ризик материнської компанії. Висновки, отримані за підходом максимізації акціонерної власності, відрізняються від результатів, отриманих Хедом і Поратом (1990) і Поратом і ін. (1991).

Войцех Муха (Великобританія), Абір Хассан (Великобританія)

Дилема продуктивності вимірювання акціонерного капіталу – наслідки для інвестиційної діяльності страхових компаній при відмові від правила Волкера

Автори досліджують чи загальне переконання про вищий рівень оцінки акціонерного капіталу (PE) є точним і якими є наслідки для страхових компаній, що інвестують акціонерний капітал відповідно до положення правила Волкера. По-перше, в даній роботі представлений термін акціонерний капітал. По-друге, пояснюється бізнес-модель PE з метою забезпечення необхідної основи для критичного аналізу класу активів PE. Після цього, розроблені основні характеристики вимірювання PE на відміну від теорії на загальних підставах. Крім того, проаналізовано та пояснено вісім комплексних досліджень продуктивності PE, а також визначені наслідки для інвестиційної діяльності страхових компаній за правилом Волкера.

У роботі визначено, що PE перевищує суспільні акції, однак, не до такої міри як зазвичай вважається. Крім того, залишається невідомим рівень, до якого цей повернений страховий внесок компенсує додатковий ризик PE. Найбільш важливим фактором після рівня продуктивності є якість управління фондами. Крім того, спостерігається вища дисперсія між найбільш ефективними прибутками фондів та менш ефективними прибутками фондів, ніж у суспільних акціях. Встановлено, що згідно з правилом Волкера, буде збільшуватися конкурс на участь у найбільш продуктивних фондах а, отже, страховим компаніям рекомендується зосередитися на фінансовій експертизі управління компаній PE при прийнятті рішень щодо розподілу капіталу.

Дане дослідження сприяє написанню великої кількості літератури про продуктивність вимірювання акціонерного капіталу.

Рікард Олссон (Швеція)

Відстеження помилки мінімізації при різній точності критерію стійкості: екологічні оцінки та портфелі акцій США

У даному дослідженні представлені емпіричні дані про те, як змінюється мінімальна похибка, в залежності від зміни точності критерію стійкості. Критерій стійкості оснований на екологічних (EV) оцінках генеральної сукупності великої капіталізації компаній США. Все частіше стійкі портфелі створюються від менших підсистем, кожна з яких містить акції з вищими EV оцінками. Мінімальна похибка стандартного відхилення зростає з точністю стійкості і коливається від 0,4% на рік для портфеля, що складається з 400 акцій з найвищими EV оцінками, до 4,6% на рік для портфеля, що складається з 20 акцій з найвищими EV оцінками. Ці стійкі похибки портфелів скоріш за все є рівними або менші за ті, що існують у стійких фондах визначених за подібними сукупностями.

Ренауд Беаупаін (Франція), Лей Мен (Франція), Ромаін Белаір (Франція)

Вплив нестабільності на використання індексу відносної сили: дані з фондової біржі Шанхаю

У даній роботі розглядається вплив нестабільності (що вимірюється як експоненціально-зважене ковзаюче середнє) на впровадження торговельного правила, оснований на індексі відносної сили (RSI) на фондових ринках Китаю. Зокрема, використовуючи дані з фондової біржі Шанхаю, у даній роботі досліджено наскільки чутливим є вибір меж RSI для різних режимів нестабільності. У даній статті представлені емпіричні докази того, що прибуток і ризик даних портфелів, у режимах високої та низької нестабільності, суттєво не змінилися в межах, визначених для цього технічного індикатора. Однак, у роботі показано, що в кожному режимі нестабільності деякі методи забезпечують більш бажану схему прибуток-ризик ніж інші.

Радж К. Колі (США)

Домашні завдання та використання технології порівняння класів F301 і F260 в університеті Індіани Саут-Бенд

У даній статті порівнюється використання технології та важливості виконання домашніх завдань студентами з дисципліни "Особисті кошти та фінансове управління" в університеті Індіани Саут-Бенд в США. У даному дослідженні, з весняного семестру 2006 р. по осінній семестр 2008 р. було опитано 112 студентів про використання технологій як зовні, так і всередині класів. Результати даного дослідження свідчать про відсутність статистичної різниці між студентами чоловіками і жінками в класах. Однак, з даного аналізу очевидно, що студенти з вищим середнім академічним балом використовують більше технологій ніж студенти з нижчим середнім академічним балом.

Ракуль М. Гаспар (Португалія), Хуго Соуза (Португалія)

Ризик ліквідності та міжнародна угода Солвенсі II

У даній статті обговорюється важливість ризику ліквідності при оцінці ризику портфеля фінансових активів, яку проводять страхові компанії. До недавнього часу за міжнародною угодою Солвенсі II, ризик ліквідності розгляда-

вся лише в рамках Рівня II, тобто, суть полягала в тому, що страхові компанії повинні проводити його просту якісну оцінку. На даний момент, можлива якісна оцінка ризику ліквідності обговорюється, але до цих пір неясно, чи вона буде застосовуватись тільки до зобов'язань або також до активів портфеля.

Автори стверджують, що ліквідність є важливим джерелом ринкового ризику, тому вона має бути виміряна кількісно при доступі до інформації про загальний ринковий ризик активів портфеля. Основуючись на джерелах, в яких вивчається питання фінансової ліквідності, вони пропонують спосіб кількісного вимірювання ризику ліквідності. Запропонований метод простий, розраховується за загальнодоступними даними, та узгоджується з підходом VaR, основуючись на угоді Солвенсі II.

В даній роботі реалізується запропонований метод у страховому секторі Португалії, використовуючи діючі активи портфеля. Основні емпіричні дані підтверджують, що ризик ліквідності є важливим ризиком, що складає, в середньому, більше ніж 10% від загального ринкового ризику, якому піддаються страхові компанії.

Olha Kozmenko (Ukraine), Hanna Kravchuk (Ukraine)

Consequences of the financial crisis for the insurance markets of the world and Ukraine

Abstract

The article presents analytical data regarding the influence of the global financial crisis on the activity of the insurance market of some countries. Special attention is given to the dynamics in the development of the insurance market of Ukraine, problems and perspectives of Ukrainian insurance market.

Keywords: financial crisis, insurance market, insurance market of Ukraine, life insurance, non-life insurance.

Introduction

As a result of the global financial crisis almost every branch of the economy has experienced serious losses. In the field of insurance the majority of insurance and reinsurance companies possessed rather conservative investment portfolios, therefore, in spite of the high level of losses in the economy and instability of the financial market in 2008-2009 they did not incur heavy losses. However, the crisis made a considerable impact on their activity.

The goal of the paper is to investigate the state of insurance in some countries and compare the consequences of the financial crisis in this sector of the Ukrainian economy with the situation in other countries. During the investigation we use such methods of research as methods of empirical and theoretical research (analysis and synthesis, modeling) formalization.

1. Main results

1.1. Situation on the global insurance market and insurance markets of different countries. The economic crisis had different consequences for the insurance and reinsurance markets, life and non-life insurance markets, and depending on the regional location of insurance companies and the level of a country's economic development.

First of all, the financial crisis had a negative impact on the growth of the insurance premiums. According to the data of Swiss Re, in general in the world the nominal volume of insurance premiums in 2008 amounted to 4270 bln. dollars (or 2903 bln. Euro), while the same indicator for 2007 was 4128 bln. dollars. The growth rate of the nominal value of insurance premiums for the period fell and amounted to 3,4% while in 2007 its value was 11,2%. In spite of the growth of the nominal value of insurance premiums, the calculation of the real sums of premiums (with consideration of the changes in the exchange rates and inflation) showed their general reduction in the world by 2% in 2008 and by 1,1% in 2009.

As regards the previous years, the reduction of the real size of insurance premiums on the world market took place in 1980 (Figure 1).

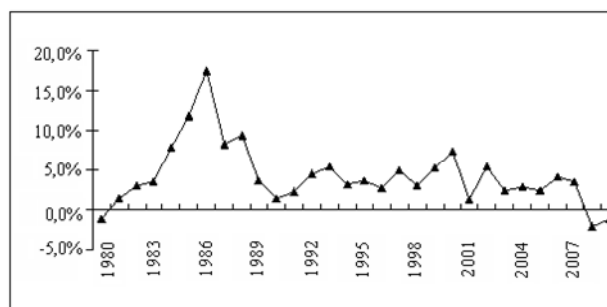


Fig. 1. Growth rates of the gross insurance premiums during the period of 1980-2009

In the structure of the global insurance market the biggest share belongs to life insurance premiums, namely 58,3% of the volume of general premiums in 2008 and 57,3% in 2009. Among the major types of insurance the dynamics of changes of the real gross insurance premiums varied considerably (Table 1).

Table 1. Growth rates of the world gross insurance premiums according to the types of insurance in the period of 2005-2009, per cent.

Indicators	Years				
	2005	2006	2007	2008	2009
General insurance premiums, including:	2,5	4,2	3,6	-2,0	-1,1
life insurance	4,5	4,3	5,1	-3,5	-2,0
non-life insurance	-0,3	4,0	1,5	-0,8	-0,1

On the whole, in 2008-2009 the decrease of the gross premiums for life insurance took place quicker than for non-life insurance. For example, in 2008 the gross premiums fell by 3,5% for life insurance and by 0,8% for non-life insurance. In 2009 the decrease of the gross premiums in the life insurance slowed down and the growth rates for them was -2,0%. As regards gross premiums for non-life insurance, in 2009 their level was stable and compared to the level in 2008 they decreased by only 0,1%.

The general dynamics of the global insurance market development differs significantly from the trends, which are characteristic for the insurance markets of individual countries. This difference is

especially huge in the dynamics of insurance markets of the developed and developing countries (Figure 2). The developed countries include North America, Western Europe, Japan, new industrial countries such as Hong Kong, Singapore, South Korea and Taiwan, as well a group of countries in Oceania and Israel. The group of developing countries includes countries of Latin America, Central and Eastern Europe, South and East Asia, Middle East, Central Asia, Africa and Turkey.

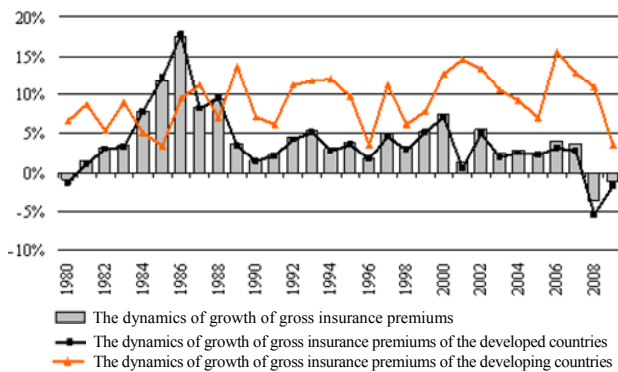


Fig. 2. The dynamics of growth of gross insurance premiums of the developed and developing countries in 1980-2009

As we see from Figure 2, the dynamics of changes of the gross insurance premiums in the world follows the situation on the insurance markets of the developed countries. In 2008-2009 the general reduction of the insurance premium volumes in the world was caused by the slowing down on the insurance markets of the industrially developed countries. In its turn, the changes in the volumes of insurance premiums on the insurance markets of the developing countries follow quite different rules. In particular, in 2008-2009 the insurance markets of these countries experienced the growth of the gross premiums. However, the trends on the insurance markets of the developing countries do not have a considerable impact on the general world dynamics because of the very small volumes of these markets.

In spite of their quicker growth compared to the developed countries (the growth rate for the period was on average 9,2% while for the developed countries this indicator was 3,9%) their share in the structure of the world insurance market remains insignificant: 12% in 2008 and 13,1% in 2009 (Table 2).

The developing countries are lagging behind the developed countries in such parameters as the share of insurance premiums in the GDP and per capita volume of insurance premiums. For example, in 2009 the volume of the gross insurance premiums per capita amounted to 3404,9 dollars, which is 37,2 times higher than the corresponding indicator of the developing countries. In the developing countries the volume of the gross insurance

premiums in 2009 was 91,5 dollars. Regarding the share of the gross insurance premiums in the GDP, it is almost 3 times higher in the developed countries (8,6% in 2009) compared to the developing countries (2,9% accordingly).

It should be noted that in the development dynamics of life and non-life insurance there also certain differences between the developed and the developing countries. In 2008 the biggest reduction in the insurance premiums (by 5,3%) took place in the life insurance of the industrialized countries, which can be explained by the strong connection to the share market in these countries. The biggest decrease of premiums was observed in the second half of 2008 as a result of the financial crisis.

Table 2. Major indicators of the insurance markets of the developed and developing countries in 2008-2009

Indicators	Developed countries		Developing countries	
	2008	2009	2008	2009
Life insurance				
Gross premiums, bln. dollars	2 168,1	2 046,7	271,2	284,6
Real growth rate, %	-5,3	-2,8	14,6	4,2
Share of the world market, %	89,1	87,8	10,9	12,2
Share of the insurance premiums in the GDP, %	5,2	5,0	1,4	1,5
Per capita insurance premiums, US dollars	2 174,4	1 979,9	47,4	48,8
Non-life insurance				
Gross premiums, bln. dollars	1 538,7	1 485,8	242,0	248,8
Real growth rates, %	-1,9	-0,6	7,1	2,9
Share of the world market, %	86,5	85,7	13,5	14,3
Share of the insurance premiums in the GDP, %	3,6	3,6	1,3	1,3
Per capita insurance premiums, US dollars	1 481,0	1 424,9	42,0	42,7
Total for the insurance branch				
Gross premiums, bln. dollars	3 706,8	3 532,7	513,3	533,4
Real growth rates, %	-3,4	-1,8	11,1	3,5
Share of the world market, %	88,0	86,9	12,0	13,1
Share of the insurance premiums in the GDP, %	8,8	8,6	2,7	2,9
Per capita insurance premiums, US dollars	3 655,4	3 404,9	89,4	91,5

In the non-life insurance of the developed countries the decrease of the insurance premiums in 2008 was much smaller (1,9%). In the first half of the 2009 the negative tendencies on the financial market in general remained, which also led to the shrinking of the insurance market. However, from the middle of 2009 there began a rapid growth in the business activity on the insurance market and the results for the developed countries in 2009 were better than in 2008. In particular, the growth rate of the gross premiums was -2,8% in the life insurance and -0,6% in the non-life insurance.

In 2008 in the developing countries there was also a decline in the investment life insurance, although in general in 2008 the level of life insurance growth reached 15%. In 2009 the growth rate in this segment of the insurance market in the developing countries was about 4%. In the non-life insurance the growth rates of the gross premiums in the developing countries were 7,1% and 2,9% in 2008 and 2009. In some regions of the world the difference in the dynamics of the gross premiums on life insurance and non-life insurance was even higher.

The biggest fall in the life insurance premiums in 2008 took place in the countries of Western Europe, in particular, in Great Britain (-25,7%), Ireland (-31,5%), Italy (-11,2%) and France (-10,6%), as these countries have a lot of insurance products with one-time premiums. Markets, where regular premiums dominate, have turned out to be the most stable.

The rapid growth of life insurance premiums in Central and Eastern Europe was determined by their quick growth in Poland (52,8%), which leveled the reduction in the volumes of premiums in other countries of the region.

In 2009 the decline of the life insurance premiums by 2,8% in the developed countries was explained by the fall in the volumes of gross premiums in the USA (-14,6%) and Great Britain (-11,8%). In other countries of the group the reduction of insurance premiums was also observed, especially in the first half of 2009. The only exceptions were Germany, Italy, France and some other countries, where the growth in demand for the traditional life insurance policies was behind the general growth of the gross life insurance premiums in 2009.

In the developing world the growth of gross life insurance premiums was quite high in the countries of the South-East Asia (11,4%), especially in India and China. The positive growth remained in the countries of Latin America and the Caribbean basin (7,8%) having surpassed this figure for 2008 (6,8%). At the same time, in countries of Central and Eastern Europe there was a sharp decline in the life insurance branch, when the growth rate of gross premiums for the period was -20,1%.

The changes in the volume of gross premiums in non-life insurance were less radical than on the market of life insurance.

The biggest decline in the non-life insurance in 2008 took place in the United States, while, in general, the reduction of premiums for this type of insurance was characteristic for all industrialized countries.

In 2008 on the developing markets the process of growth continued, but compared to 2007 its rate had

slowed down in all the countries of this group, except Latin America. The region of Central and Eastern Europe was characterized by the biggest slowing down of the growth rate in 2008, as these countries were significantly influenced by the changes in the Western Europe.

In 2009 the insurance markets of the developed countries experienced only a brief reduction of the gross premiums compared with 2008: -1,5% for North America and -0,5% for the countries of Western Europe.

In the developing countries the market of non-life insurance experienced different tendencies. In the majority of countries of this group the growth of gross premiums continued. In the region of the South-Eastern Asia the growth of gross premiums reached even 13,9%. At the same time, in the countries of Central and Eastern Europe the market of non-life insurance shrank rapidly with the growth rate of gross premiums -7,5%.

Regarding the reinsurance transactions on the global insurance market, as a result of the financial crisis the volume of the gross premiums received by the reinsurance companies fell sharply (Table 3).

Table 3. Global volume of the gross reinsurance premiums in 2004-2009

Indicator	2004	2005	2006	2007	2008	2009
Gross reinsurance premiums, bln. dollars	186,3	190,8	190,8	209,4	168,4	165,5
Gross rates, %	x	2,4	0,0	9,7	-19,6	-1,7

In 2008 the general volume of gross reinsurance premiums amounted to 168,4 bln. dollars, which is 19,6% less than in 2007. In 2009 the gross reinsurance premiums declined to 165,5 bln. dollars. Therefore, the reduction of the gross premiums in 2009 was only 1,7%, which testifies to the stabilization of the situation on the reinsurance market and makes ground for cautious hopes for the beginning of growth of reinsurance volumes in 2010.

Dynamics of changes on the global reinsurance market is shown on Figure 3.

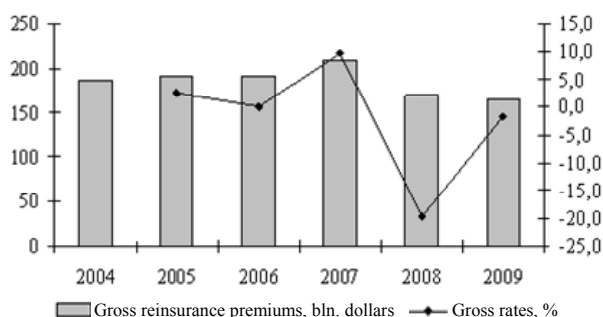


Fig. 3. The dynamics of gross reinsurance premiums in the world in the period of 2004-2009

Considering the peculiarities of the functioning of the insurance and reinsurance markets the influence of the crisis on them was somewhat different. As a result of the crash on the securities markets and the reduction in the profitability of investment portfolios the majority of experts were forecasting the growth of rates on the market of non-life reinsurance in 2009. In reality, the European insurance market did not see a considerable growth of the reinsurance costs. In the USA, on the contrary, there was a huge leap in the price on reinsurance services in the regions prone to natural and industrial disasters. As a result of this the reinsurance rates for property risks were set at the level of 15-20%. Therefore, along with crisis on the financial markets the main factor for the growth of reinsurance costs in 2009 were the losses from the natural and industrial disasters and sizable expenditures of reinsurers on the repayment of compensations.

Contrary to the expectations that the growth of reinsurance costs and the decline of insurance companies' capitalization would lead to the increases in the cost of initial insurance, this did not happen. The insurance market went through the growth of competition, because, as a result of the economy's slowing down the demand for insurance services reduced, which kept the insurers from raising the insurance rates.

The growth of rates for different types of insurance services was observed in some countries. In spite of the fact that the decline of the economy stopped, its renewal has not begun. According to the forecasts, long-term consequences of the economic recession will be keeping insurance rates from growing at least till 2011.

The insurance companies are very restricted in the instruments of influence on the formation of their services' value, therefore the main method for the regulation of the insurance activity's profitability is underwriting.

Unlike non-life insurance, tendencies on the insurance and reinsurance markets in the area of life insurance were similar. As a result of the crisis the general reduction of the demand for the traditional life insurance services cut the size of insurance rates and reduced the volumes of sales of this insurance product. Accordingly, the size of reinsurance premiums was also reduced.

On the life insurance market reinsurance companies are influenced by the same factors as first hand insurers. This explains the common trends on both the insurance and reinsurance markets in the area of life insurance. At the same time the position of reinsurance companies is relatively better. The range of services provided by reinsurance companies is much narrower than first hand

insurers, which makes it possible to reduce the volatility of the market. A lot of companies offer reinsurance coverage on various types of insurance, thus diversifying their risks. Besides, the reinsurance companies are able to form more conservative investment portfolios compared with first hand insurers.

In general, the companies engaged in life insurance were the ones that suffered the most from the financial crisis. The situation of reinsurance companies is relatively better and can become one of the sources of the further development of this sector of the insurance market, as the general reduction of capital of the life insurance companies can cause the growth of their demand for reinsurance services. Another way to expand the activities of life insurers is the search of non-traditional risks, which are not directly connected to the death insurance and pension insurance.

The main results of the financial crisis for the insurance and reinsurance companies became the increased attention to the processes of price formation and underwriting aimed at preserving the capital.

The financial crisis and the decline in the economy forces most insurance companies to reconsider the system of risk assessment and risk management. Although some insurers continue to view the risk management of their activity as a necessity to correspond to certain norms, the majority of them are actively using risk management on all stages of the formation of costs for insurance services.

From the point of view of insurance companies risk management can be viewed in two aspects. On the one hand, risks, which occur in the activity of other companies are the objects of insurance. On the other hand, insurance companies in order to maintain the stability of their activity must manage their own risks in an effective way.

At present there is a good system of management by means of insuring financial risks, market volatility, untimely payments, etc. At the same time there is a need in creating an efficient system of managing new risks. These risks are connected with the use of information technologies, human capital, climate and other environmental changes, etc. The management of these risks is a huge potential for both risk-managers and insurance companies.

The performance of insurance companies is influenced by a huge number of factors, which carry additional opportunities or threats. Considering the volatility of the internal and external environment of companies' activities it is necessary to study and analyze these changes. An important phase in risk

management is the assessment of their impact on the companies' performance and focusing on the most important factors.

According to the results of the study conducted by the Munich Reinsurance America Inc., among 40 managers of the insurance companies in the USA, who were surveyed 85% emphasized weak economic situation as the most negative factor influencing the external environment in 2009. Another problem is low interest rates and income per capital as pointed out by 41% of the respondents. An important factor is also the impact of the restrictive state policy mentioned by 23% of the respondents.

Insurance companies, which carry out an efficient management of risks, are the most reliable: they can fulfill their duties towards the insured in case of unexpected situations. For this reason, while assessing insurance companies, the majority of the rating agencies pay special attention to their programs of risk management.

The use of risk management in the process of decision-making contributes to the improvement of market, price and investment policies, underwriting criteria, reinsurance policies and capital management.

The application of complex technologies and modeling in risk management gives an insurance company an opportunity to use more flexible price policy. The capital of an insurance company is used to cover unexpected losses, therefore the cost of capital can be considered as a loss changes function. In such a way, an insurance company can offer a lower price of services. On the contrary, insurers with excessive fluctuation of losses receive higher costs of services.

For modern insurance companies risk management is one of the key sources of competitive advantages. The effective risk management must help not only defend companies from possible financial losses, but support their business reputation.

One of the consequences of the financial crisis has been the reduction of profits of insurance companies from investment activities. This has drastically diminished the companies' solvency both in life and non-life insurance sector.

The analysis of the major aggregate indicators of the solvency of the leading insurance companies in the field of life insurance makes it possible to formalize the main tendencies during 1999-2009. In 2008 the profitability and risk capital of life insurance companies decreased. Because of the low investment profits, high cost of guarantees and low level of rewards for asset management, the profitability of life insurers fell in 2008 after the constant growth in

the period from 2002 to 2007. Analysts say that the risk capital of insurers was reduced to 30-40%, although in some companies the reduction reached 70%. In the second half of 2008 the access to capital became more difficult. The same was true for 2009. In 2008 the solvency of life and non-life companies fell almost to the level of 2003, which had also been a crisis year in the activity of financial institutions. At that time the European insurance companies suffered the most. The crisis of 2008 began in the USA as its market of credit resources received the biggest negative impact while European companies did not focus their activities on shareholder capital as they did in 2000-2001.

It is necessary to emphasize that the level of solvency in the world before the crisis was quite high. In 2002-2007 shareholder capital was growing quicker than the income from premiums which also increased the paying capacity of insurance companies. But in the beginning of the financial crisis the shareholder capital and financial assets began to lose their value. This collapse could not be compensated by the increase in the value of state bonds (considering the lowering of interest rates on state bonds). As a result, the industry of non-life insurance lost 15-20% of their shareholder capital, while the indicator of paying capacity fell by 100%. The indicator of paying capacity returned to the level of 2003. In 2008 one witnessed a dramatic reduction in the solvency of non-life insurance companies, which was caused by the falling rates on financial assets. However, it is important to point out that in 2009 the solvency level of the insurance companies of the United States, Canada, United Kingdom, Germany, Italy, the Netherlands, Japan and Australia began to grow, which was explained by the speedy formation of shareholder capital by insurance companies. These trends play a positive role in the post-crisis activity of global insurance companies and make it possible to forecast the renewal of the efficient functioning of financial institutions.

The level of capitalization has an impact on the stability of an insurance company and its paying capacity. One of the steps to raise the stability of a company, increase its capital and improve its competitive position on the market is the merger or acquisition with other companies possessing a stable portfolio.

In the recent years one observes a tendency towards the growth of concentration on the insurance market. The leading companies are expanding their activity, acquiring small and medium insurers. In Europe the wave of mergers and acquisitions began in 2000, which was the result of liberalization and deregulation processes in the European Union at the end of 90s. It brought a

gradual reduction of the number of insurance companies in the last decade. However, in 2008 this trend discontinued. The number of insurance companies in 33 European countries grew from 5150 in 2007 to approximately 5170 in 2008. The growth of the number of insurance companies in Europe in 2008 was explained by their increase in the United Kingdom from 1017 to 1096 companies. Great Britain is a leader in Europe according to the number of insurance companies, which is about 21% of their general number. Germany and France have also a big share of insurance companies (606 companies or 12% in Germany and 460 companies or 9% in France). Sweden and the Netherlands occupy the fourth and the fifth positions according to the number of insurance companies (7% and 6%), although regarding the volume of insurance premiums Sweden is behind many countries having only 2% of the market. Moreover, in Sweden and in the Netherlands the number of insurance companies was dramatically reduced in 2008. The decreasing number of insurers was also typical for Poland while in other European countries their number was more or less stable.

The processes of capital concentration on the insurance market have both positive and negative consequences. On the one hand, the financial stability of companies goes up. On the other hand, the declining number of companies leads to smaller competition on the market. A considerable monopolization of the market can lead to overpriced insurance services and insufficient satisfaction of customers' needs.

1.2. Situation on the insurance market of Ukraine.

The global financial crisis has taken a lot of advantages and potential opportunities away from the insurance market of Ukraine. For example, the general economic situation has considerably deteriorated, the GDP growth rates slowed, the inflation increased, the national currency rate destabilized, the income of the population reduced, the number of profitable enterprises fallen.

The global insurance market trends in 2004-2007 were stable, but in 2008 as a result of the negative influence of the financial crisis they somewhat changed:

- ◆ Developing countries have demonstrated rapid growth rates of their national markets, while stagnation prevailed on the markets of the industrialized countries.
- ◆ The decrease of the world insurance premiums in 2008 was 2%, life insurance premiums – 3,5%, risk insurance – 0,8%. The quickest growth

took place in the countries with developing economies.

- ◆ The profitability of insurance in 2008 compared to 2007 decreased both for life insurance and risk insurance.
- ◆ Shareholder capital was reduced by 15-20% in risk insurance and 30-40% in life insurance.

In 2009 the majority of these trends remained, but they were less pronounced. The general volume of insurance premiums in 2009 was reduced by 1,1% while in 2008 it was reduced by 2,0% (Table 4).

Table 4. Annual global growth rates of insurance premiums in 2008-2009, per cent

Indicators	Life insurance		Non-life insurance		General premiums	
	2008	2009	2008	2009	2008	2009
Developed countries	-5,3	-2,8	-1,9	-0,6	-3,4	-1,8
Developing countries	14,6	4,2	7,1	2,9	11,1	3,5
World	-3,5	-2,0	-0,8	-0,1	-2,0	-1,1

Moreover, the improvement on the stock market and credit market has made it possible to increase the capitalization of the insurance companies in 2009. This is especially true for non-life insurers. This had a positive influence on the renewal and growth of insurers' solvency.

In 2009 Ukraine occupied the 52nd place in the world (46th place in 2008, 48th place in 2007, 47th place in 2006, 45th place in 2005 and 42nd place in 2004) according to the collected insurance premiums as well as the ratio of insurance premiums to GDP and insurance premiums per capita.

In 2008 the insurance market of Ukraine occupied 0,10% of the world insurance market while it had only 0,06% in 2009; in the risk types of insurance it had roughly 0,23% in 2008 with the same indicator for 2009 – 0,00%; the share of life insurance was 0,01% in 2008 with 0,09% in 2009.

According to such indicator as the ratio of insurance premiums to GDP per capita the Ukrainian insurance market belongs to the group of countries such as Russia, Hungary, Slovenia, Romania and Serbia.

In 2002-2009 the average growth rate of insurance market in Ukraine was 46,6% of the authorized funds of insurance companies. The volume of authorized funds of insurers grew by 6,5 times compared with the year 2002. In 2009 the volumes insurance payments fell by 14,9%. These data is shown on the background of macroeconomic indicators in Table 5.

Table 5. Major macroeconomic indicators of Ukrainian insurance market in 2002-2009

Indicators	2002	2003	2004	2005	2006	2007	2008	2009
GDP, mln. gryvnas	225 810,0	267 344,0	345 113,0	441 452,0	544 153,0	720 731,0	949 864,0	914 720,0
GDP index of actual volume, %	105,2	109,6	112,1	102,7	107,3	107,3	102,3	84,9
GDP, mln. US dollars	42 392,9	50 133,0	64 880,6	86 142,0	107 753,1	142 719,0	180 335,7	122 000
Exchange rate, USD/UAN	5,3	5,3	5,3	5,1	5,0	5,5	5,3	7,9
Insurance payments, mln. gryvnas	4 442,10	9 135,20	19 431,30	12 826,10	13 830,20	18 008,20	24 008,60	20 442,1
Rates of growth+/ decline -, %	46,6	105,6	112,7	-34,0	7,8	30,2	33,3	-14,9
Insurance payments, mln. US dollars	568,9	1 713,1	3 653,0	2 502,8	2 738,7	3 280,1	4 558,1	2 624
Insurance payments to GDP, %	2	3,4	5,6	3	2,6	2,50	2,53	2,1
Insurance payments per capita, gryvnas	92,5	191,8	411	273,3	296,5	359,3	520,3	447,3
Insurance payments per capita, US dollars	11,9	36	77,3	53,3	58,7	70,7	98,8	57,4

The study of the main patterns of insurance market's functioning is possible not only on the basis of absolute indicators, which characterize only general tendencies, but also by considering their relationship with relative indicators showing the aspects of a deeper structural analysis. For example, the indicator of insurance market profitability in Ukraine should be studied as correlation of gross insurance premiums to GDP. This indicator characterizes the importance of the insurance branch for the country's economy in general.

One more indicator is the ratio of gross insurance premiums and gross insurance payments to GDP. This indicator reflects the share of premiums earned by the insurance companies to GDP. If insurers have

paid off more insurance premiums than they collected this indicator will be zero or negative.

The indicator of the ratio of insurance companies' general assets to the number of companies characterizes the average size of assets of one insurance company, which makes it possible to determine the concentration of capital on the insurance market.

The correlation of the companies' number to the quantity of the population shows the number of the population for one insurance company. In other words, this reflects the extent to which insurance services are popular among the population.

The indicators making time series are shown in Table 6.

Table 6. Indicators of insurance market activity in Ukraine

Indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009
Gross insurance premiums/GDP	0,015	0,020	0,034	0,056	0,029	0,025	0,025	0,025	0,022
(Gross insurance premiums – Gross insurance payments)/GDP	0,013	0,017	0,031	0,052	0,025	0,021	0,019	0,018	0,015
Assets/number of companies (mln. gryvnas/companies)	9,169	15,767	29,292	51,713	52,563	58,381	72,226	89,404	93,18
Number of companies/Population (companies/mln. people)	6,799	7,068	7,525	8,216	8,514	8,845	9,655	10,204	9,85

The influence of the global financial crisis on the economy of Ukraine can be shown with the following data:

- ◆ The negative trade balance in 2009 was 2,022 bln. US dollars (against 8,2 bln. US dollars in 2007 and 14,3 bln. US dollars in 2008). We should also pay attention to the fact that in the first quarter of 2010 the deficit of the balance of payments reached its lowest value since the beginning of the crisis – 780,0 mln. US dollars. This was caused both by the balancing of the current operations (the deficit was reduced to 184,0 mln. US dollars in comparison to 654,0 mln. US dollars for the same period in 2009) and the reduction of financial outflows, which testifies to positive trends in the foreign economic activity of the country.
- ◆ As regards the tendencies in the formation of the gross foreign debt, in 2008 it increased by 25,6% and on January 1, 2009 and reached 103,2 bln. US dollars (56,7% of the GDP). In conditions of the

limited access to external financial resources caused by the global financial crisis the growth rate of this indicator during 2009 slowed down significantly and was only 2,3%. The volume of the foreign debt of Ukraine was 104,0 bln. US dollars (88,9% of the GDP) as of January 1, 2010. It is also interesting to have a look at the structure of debt in different sectors of the country's economy: in 2009 the debt of the banking sector was replaced by the debt of state management sectors and monetary regulation authorities. The share of the latter increased from 16,4% to 23,1%, while the share of the banking sector fell from 38,8% to 29,6%. As of April 1, 2010 the foreign debt of Ukraine was 102,8 bln. US dollars, 29,4 bln. of which were the debts of banks.

- ◆ In 2008 the exchange rate of gryvna to dollar decreased by 52,2%. In the first quarter of 2010 it was somewhat revalued by 0,75% from 7,985 gryvnas for one US dollar at the end of 2009 to 7,925 gryvnas for one US dollar in March 2010.

Considering the devaluation of hryvna in 2008-2009, we can say that it had a significant impact on the insurance market, in particular, on the growth of insurers' losses, reduction of insurance agreements and a sharp decrease of the insurers' solvency.

The results of the year 2009 show that according to most indicators of insurance activity the decline was bigger compared to 2008. The dynamics of indicators for the period reflects the following trends:

- ◆ The number of signed agreements fell by 2,1%, while the number of agreements signed with physical persons grew by 2,7% (with the exception of agreements of the compulsory insurance from accidents in transport: their number in 2009 was 552 628 982 and declined by 15,4%).
- ◆ The volumes of gross insurance premiums fell by 14,9%, while the net insurance premiums fell by 20,8%.
- ◆ Gross insurance payments decreased by 4,4%, net insurance payments – by 7,5%.
- ◆ Reinsurance volumes decreased by 1,9%, including the volumes of premiums paid on the internal market – by 3,0% and premiums paid on the external market – by 6,4%.
- ◆ Insurance reserves decreased by 7%.
- ◆ Gross assets decreased by 0,1%, including legally determined costs for insurance reserves – by 0,9%.
- ◆ The number of insurance companies fell by 4,1% (19 companies). By the end of 2009 the total number of insurance companies was 450, including 72 life insurance companies (decrease by one company) and 378 non-life insurance companies (increase by 18 companies).

Experts of the State commission on the regulation of financial markets say that in 2009 the insurance market encountered the following problems:

- ◆ Collapse of the stock market.
- ◆ Growth of risks connected with investing into assets of financial institutions and bad loan risks.
- ◆ Increase of distrust of the population to financial institutions because of the refusal of some of them to carry out their obligations.
- ◆ Currency and exchange-rate instability.
- ◆ Lack of cooperation between banks and non-banking financial institutions aimed at insuring the access of non-banking financial institutions to resources on deposit accounts.
- ◆ Continuation of negative inflationary expectations of the population.
- ◆ Deepening of the shadow economy.

- ◆ Reassessment of the value of investment assets through currency, credit and other risks, which can lead to the reduction of financial institutions' net assets.

We can forecast two ways of insurance market development in Ukraine: pessimistic and optimistic. If only insignificant changes in the legislature take place and the existing conditions for the insurance companies continue the insurance market of Ukraine will develop only when the premiums grow faster than payments, which will be possible only with the extension of the customer base, dumping tariffs on insurance services and introduction of some types of compulsory insurance (medical insurance). But in case the economy does not grow the above mentioned policy will be impossible and would result in the insurers' failure on their obligations.

Such scenario will not lead to significant transformations on the insurance market, which will worsen the crisis even more. The growing volumes of non-payment on insurance compensations and the bankruptcy of insurance companies will lead to the loss of trust to insurance in general.

It is necessary to emphasize, though, that the insurance market of Ukraine has a huge potential for development. The success will depend on the solution of problems dealing with increasing demands to the organization of insurance activity. Harsh regulation of the liquidity level and justifiable assets of insurance companies will contribute to increasing capitalization of Ukraine's insurance market.

Conclusions

The research has shown that instability of the financial system in 2008-2009 had a negative impact on the development of the world insurance market, but did not lead to catastrophic losses. The consequences of the financial crisis influenced the activity of life and non-life insurance companies in a different way (the level of a country's economic development also played a role). Life-insurance companies found themselves in the worst circumstances. In the developing countries in spite of the difficult situation the growth of the insurance sector continued, although the rate of development was slower than in the previous years. Beginning from the second half of 2009 there began a renewal and stabilization of the insurance market in the developed countries, which is proved by the increased levels of capitalization and solvency of insurance companies.

It is necessary to emphasize that the global financial crisis deprived the Ukrainian financial and insurance markets of a significant part of its advantages and potential opportunities.

Reference

1. World insurance in 2007: emerging markets leading the way [Electronic resource] / Swiss Re, Economic Research & Consulting // Sigma, 2008. – №3. – 44 p., Access mode: <http://www.swissre.com/>.
2. World insurance in 2008: life premiums fall in the industrialised countries – strong growth in the emerging economies [Electronic resource] / Swiss Re, Economic Research & Consulting // Sigma, – 2009. – № 3. – 46 p., Access mode: <http://www.swissre.com/>.
3. World insurance in 2009: premiums dipped, but industry capital improved [Electronic resource] / Swiss Re, Economic Research & Consulting // Sigma, 2010. – № 2. – 44 p., Access mode: <http://www.swissre.com/>.
4. World insurance in 2008: life premiums fall in the industrialised countries – strong growth in the emerging economies [Electronic resource] / Swiss Re, Economic Research & Consulting // Sigma, 2009. – № 3. – 46 p., Access mode: <http://www.swissre.com/>.
5. World insurance in 2009: premiums dipped, but industry capital improved [Electronic resource] / Swiss Re, Economic Research & Consulting // Sigma, 2010. – № 2. – 44 p., Access mode: <http://www.swissre.com/>.
6. Reinsurance Industry Profile: Global [Electronic resource] // Datamonitor, 2010. – 37 p., Access mode: <http://www.datamonitor.com/>.
7. Simon Challis Patchy reinsurance renewals reveal little sign of market turnaround [Electronic resource] // Business Insurance, 2009, Access mode: <http://www.businessinsurance.com/article/20090208/ISSUE99/100027061>.
8. Sally Roberts Recession's effects to suppress insurance rates in 2010: Report [Electronic resource] // Business Insurance, 2009, Access mode: <http://www.businessinsurance.com/article/20091021/NEWS/910219997>.
9. Colleen McCarthy Financial crisis reduces life reinsurance premium volume [Electronic resource] // Business Insurance, 2009, Access mode: <http://www.businessinsurance.com/article/20091025/ISSUE03/310259996>.
10. ACE Report: Good Risk Management = Competitive Advantage [Electronic resource] // Insurance Journal, 2007, Access mode: <http://www.insurancejournal.com/news/international/2007/06/05/80409.htm>.
11. Judy Greenwald Insurer executives rank economy as top worry [Electronic resource] // Business Insurance, 2009, Access mode: <http://www.businessinsurance.com/article/20090510/ISSUE01/100027616>.
12. Офіційний сайт Державної комісії з регулювання ринків фінансових послуг [Електронний ресурс] / Режим доступу: <http://www.dfp.gov.ua>.

Authors of the issue

- Olha Kozmenko** – Dr., Professor, Ukrainian Academy of Banking of the National Bank of Ukraine (Ukraine)
- Hanna Kravchuk** – Ph.D., Assistant Professor, Ukrainian Academy of Banking of the National Bank of Ukraine (Ukraine)
- Oliver Musshoff** – Dr., Professor, Farm Management, Department of Agricultural Economics and Rural Development, Georg-August-University Göttingen (Germany)
- Norbert Hirschauer** – Dr., Professor, Agribusiness Management, Institute of Agricultural and Nutritional Sciences, Martin-Luther-University Halle-Wittenberg (Germany)
- Andrei Salem Gonçalves** – Actuarial Sciences Undergraduate Student at the Federal University of Minas Gerais (UFMG) Belo Horizonte, Brazil, Researcher of the Finance Lab at UFMG (Brazil)
- Aureliano Angel Bressan** – Dr., Associate Professor at the Economic Sciences Faculty of the Federal University of Minas Gerais (UFMG), Belo Horizonte (Brazil); Researcher of The National Council for Scientific and Technological Development (Brazil)
- Gabriela Pesce** – Ph.D., Assistant Professor of Corporate Finance and Farm Management, Universidad Nacional del Sur., Buenos Aires (Argentina)
- Antonio Terceño** – Ph.D., Professor of Financial and Economic Mathematics, Department of Business Management, Faculty of Economic and Business Science, University of Rovira i Virgili, Tarragona (Spain)
- Hernán Vigier** – Ph.D., Professor of Entrepreneur Education and Financial Economy, UPSO, Universidad Nacional del Sur., Buenos Aires (Argentina)
- Regina Durán** – Professor of Farm Management, Universidad Nacional del Sur., Buenos Aires (Argentina)
- Gene C. Lai** – Safeco Distinguished Professor of Insurance, Department of Finance, Insurance, and Real Estate, Washington State University (USA)
- Yenyu (Rebecca) Huang** – Lecturer, Business Administration Department, St. John's University (Taiwan)
- Wojciech Mucha** – M.Sc. in International Financial Management, University of West of Scotland (UK)
- Abeer Hassan** – M.Sc. Programme Leader of International Financial Management, Business School, Faculty of Business & Creative Industries, University of the West of Scotland (UK)
- Rickard Olsson** – Ph.D., Assistant Professor, Umeå School of Business, Umeå University (Sweden)
- Renaud Beaupain** – Assistant Professor of Finance, IESEG School of Management, Lille (France)
- Lei Meng** – Assistant Professor of Finance, IESEG School of Management, Lille (France)
- Romain Belair** – IESEG School of Management, Lille (France)
- Raj K. Kohli** – Dr. of Business Administration, Professor of Finance, School of Business and Economics, Indiana University South Bend (USA)
- Raquel M. Gaspar** – Assistant Professor, Advance Research Center, ISEG, Technical University of Lisbon (Portugal)
- Hugo Sousa** – Department Supervisor, Instituto de Seguros de Portugal (Portugal)

Submission guidelines for authors

The cover page of a manuscript should contain the **title** and **name(s)** of the author(s). The author's name, degree, position and the place of work as well as contact details (phone number, job or/and personal e-mail) should be provided at the bottom of this page.

1. Abstract preparation guidelines

- 1.1. The abstract (150-200 words) should reflect the conceptual content of the article.
- 1.2. Journal of Economic Literature (JEL) classifications are necessary.

2. The paper main body preparation guidelines

- 2.1. The paper should present the result of independent original research, undertaken by the author; it also should contain the data never published before.
- 2.2. The paper should contain a clear description of research objective and its subject.
- 2.3. The methodology of research should be described in detail.
- 2.4. The author's personal scientific contribution must be grounded in the paper.
- 2.5. The paper should contain basic suggestions on how to solve the problem under study.

3. References in the text

- 3.1. References in the text are made as follows: (Myers, 2000), the former being name of the author, the latter edition year.
- 3.2. Examples of references:
Alchian A., S. Woodward. Reflections on the Theory of the Firm // Journal of Institutional and Theoretical Economics, 1987. – №143. – pp. 110-136.
Berle A.A., G.C. Means. The Modern Corporation and Private Property. – New York: Macmillan, 1932. – 418 pp.

4. Manuscript length

- 4.1. The paper should not be less than 2000 words and should not exceed 6000 words.

5. Submission guidelines

Please send your paper using one of the formats listed below:

- 5.1. A soft copy as an MS Word .doc file (all versions accepted) or as .rtf file to:
Journal "Insurance Markets and Companies: Analyses and Actuarial Computations":
Executive Editor: inseditor@businessperspectives.org
- 5.2. A hard copy supplied with a disc containing a soft copy of the paper to:
Publishing company "Business Perspectives"
Dzerzhynsky lane, 10
Sumy 40022
Ukraine

6. Reviewing process

All papers are refereed by the international competent researchers using a "double-blind" review which is the best practice in papers reviewing.

7. Acceptance fee

We offer a very democratic fee policy to our contributors. We only ask for payment from those authors whose papers have already been reviewed and accepted for publication in the journal.



A joint subscription form 2011/2012

Follow guidelines to complete it.

“PROBLEMS AND PERSPECTIVES IN MANAGEMENT”



For institutional subscribers EURO
 Print 560
 Online 370
 Print version + online 720

“INVESTMENT MANAGEMENT AND FINANCIAL INNOVATIONS”



For institutional subscribers EURO
 Print version 560
 Online 370
 Print version + online 720

“INNOVATIVE MARKETING”



For institutional subscribers EURO
 Print version 495
 Online 350
 Print version + online 580

“BANKS AND BANK SYSTEMS”



For institutional subscribers EURO
 Print version 495
 Online 350
 Print version + online 570

“INSURANCE MARKETS AND COMPANIES: ANALYSES AND ACTUARIAL COMPUTATIONS”



For institutional subscribers EURO
 Print version 495
 Online 350
 Print version + online 570

“ENVIRONMENTAL ECONOMICS”



For institutional subscribers EURO
 Print version 495
 Online 350
 Print version + online 570



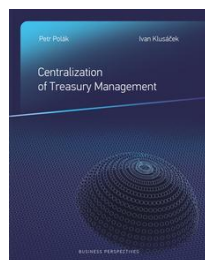
WORLD FINANCIAL CRISIS: CAUSES, CONSEQUENCES, WAYS OF OVERCOMING ISBN 978-966-2965-07-0

About the book:

- ◆ Language – English
- ◆ Publisher – "Business Perspectives" Publishing Company
- ◆ Editorship – Serhiy Kozmenko, Tetyana Vasylyeva
- ◆ Year of publishing – December 2009
- ◆ Number of pages – about 400 pages (hardback)

Unit cost:

1. Single copy – 84€.
2. Five and more copies – 80€ each.
3. Ten and more copies – 70€ each.

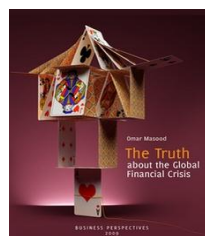


CENTRALIZATION OF TREASURY MANAGEMENT ISBN 978-966-2965-08-7

About the book:

- ◆ Authors – Petr Polák (Chapters 1-11), Ivan Klusáček (Chapter 12)
- ◆ Language – English
- ◆ Publisher – "Business Perspectives" Publishing Company
- ◆ Year of publishing – February 2010
- ◆ Number of pages – about 100 pages (paperback)

Unit cost: one copy – 34€.



THE TRUTH ABOUT THE GLOBAL FINANCIAL CRISIS ISBN 978-966-2965-06-3

About the book:

- ◆ Author – Omar Masood
- ◆ Language – English
- ◆ Publisher – "Business Perspectives" Publishing Company
- ◆ Year of publishing – December 2009
- ◆ Number of pages – about 150 pages (paperback)

Unit cost: one copy – 30€.

Underline one of the payment methods you prefer, and write the amount to pay (if you prefer, you can pay by one check/bank transfer to subscribe to all the journals):

1. I enclose a check for USD / EURO _____;
2. Send me an invoice for USD / EURO _____.

Write your contact details here:

Name _____ Institution _____
 Address _____ E-mail _____ Tel _____
 Signature _____

Please, send this form (with the check if you prefer to pay by check) at:

Ms. Lyudmyla Ostapenko
 Publishing company "Business Perspectives"
 Dzerzhynsky lane, 10, Sumy, 40022 Ukraine
 E-mail: head@businessperspectives.org