### TECHNICAL RESERVES IN THE INSURANCE SERVICES – COMPARISON OF NATIONAL LIMITS IN THE SELECTED EU COUNTRIES

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**Abstract.** In modern economies the insurance industry has been outlined as a specific sector focusing on technical reserves' accumulation as well as their management, distribution and appreciation. Any insurance company's technical reserves are defined as financial funds of its clients having been accumulated as a proportion of insurance premium and calculated on the basis of actuarial mathematics. Accumulation of technical reserves as well as forms and limits of their allocations have been subjects of specific legislations in particular European countries and observing the law has been under the control of supervisory authorities. The European Union Directives determine the minimum standards for the EU countries' legislations on technical reserves though the countries are allowed to determine even more rigid rules of their own. The paper presents the comparison of national limits of technical reserves in the insurance services in the selected EU countries.

**Key words:** technical reserve funds, allocation of technical reserves, limits, directives, comparison, European Union

#### INTRODUCTION

In modern economies, the insurance industry has been outlined as a specific sector focusing on technical reserves' accumulation as well as their management, distribution and appreciation.

Any insurance company's technical reserves are defined as financial funds of its clients having been accumulated as a proportion of insurance premium and calculated on the basis of actuarial mathematics.

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Accumulation of technical reserves as well as forms and limits of their allocations have been subjects of specific legislations in particular European countries and observing the law has been under the control of supervisory authorities. The European Union Directives determine the minimum standards for the EU countries' legislations on technical reserves though the countries are allowed to determine even more rigid rules of their own.

The submitted paper focuses on the above mentioned topical issues. Our ultimate aim is to point out regulation in allocations of technical reserves on the side of the European Union, the EU Directive implementation into national legislative standards as well as briefly compare technical reserve allocation limits in the selected EU countries. The submitted contribution has been the output of the VEGA No 1/4629/07 Project – Progressive Trends in Life and Non-Life Insurance Coverage Risks – being carried out in the Insurance Department of the Faculty of National Economy of the University of Economics in Bratislava.

## LEGAL AMENDMENTS FOR ALLOCATING TECHNICAL RESERVES IN THE EU COUNTRIES

The principal concern for all legal standards of the EU countries dealing with insurance industry businesses is to simplify the unified market development in the area of insurance business services and, at the same time, ensure adequate level of consumer protection. Investment, banking and insurance services have had specific positions within the European law system.

The most important legal act, dealing with raising technical reserves and their financial allocations within the life insurance sector, is the Directive 2002/83/EC of the European Parliament and the European Council, of 5 November 2002 on Life Insurance.

This Directive presents an important procurement on integration of domestic markets into the unified market which enables all the clients to select any insurer out of the European Union member states with adequate protection guarantees. The national authorities of each particular EU member state shall monitor the financial stability of insurance companies, including their solvency, setting adequate technical reserves as well as their coverage by financial assets.

Following the Directive, the assets covering technical reserves shall consider the insurance company's particular type of activity, security, yields and ability to trade their investments.

The Directive determines limits only for certain type of assets thus specifying them as maximum percentage of gross technical reserves. While implementing these directives into national legislative standards member states are obliged to require from each insurance company to allocate up to:

- 10% of their gross technical reserves in one real estate or building. If there are more
  than one real estates or buildings concerned, they are to be considered as a sole
  investment only in the case they are situated close to each other;
- 5% of the total gross technical reserves in shares or other securities that are traded on regulated markets or loans being provided to the same debtor. This limit is to be increased up to 10% if insurance company does not invest more than 40% of their

gross technical reserves in loans or other securities of issuing bodies and debtors where the company placed more than 5% of its assets;

- 5% of the total gross technical reserves in non-guaranteed loans, including 1% for the non-guaranteed loan other than loans being provided to credit institutions, insurance companies and investment companies established in member states. Particular member state is entitled to increase the limit up to 8%, in specific situations only up to 2%;
- 3% of the total technical reserves in cash;
- 10% of the total gross technical reserves in shares or any other share-like securities or debt securities to be traded on non-regulated markets.

The EU Directive claims that all non-limited asset categories are unacceptable for unlimited technical reserve coverage. Insurance companies should neither be limited in their decisions where to allocate their assets nor which assets to utilize for their investment activities by their national legislations. However, insurance companies are obliged to determine their own choices.

Allocation of technical reserves in non-life insurance sector has been amended by the European Council Directive 92/49/EEC of 18 June 1992, on coordinating laws, other legal regulations and administrative proceedings regarding direct insurance excluding life insurance and on amendment of the directives 73/239/EEC and 88/357/EEC (the third directive on non-life insurance). Both directives contain the same instructions regarding financial asset categories denoted to technical reserve coverage as well as their limits.

# COMPARING LIMITS FOR ALLOCATING TECHNICAL RESERVES WITHIN THE SELECTED EU COUNTRIES. TECHNICAL RESERVES AND THEIR ALLOCATION IN THE SLOVAK REPUBLIC

Until 1995, the Slovak insurance business market was raising insurance – oriented funds. However, during the process of approximation of the Slovak insurance law to that of the European Union, some amendments concerning their raising and utilizing had to be admitted. In 1996, the Public notice No 136/1996 issued by the Ministry of Finance of the Slovak Republic, determined criteria for raising utilizing and allocating technical reserves of insurance companies. Since the given period, all technical reserves have been raised in accordance with the European Union legislation.

Technical reserves have been raised to the extent that any insurance company or any foreign insurer branch shall be able to settle their liabilities resulting from insurance policies as well as those resulting from their activities that are used to settle them.

Insurance business is outlined by the fact that timing of earnings from insurance policies precede insurance claims coverage. As a result insurance companies are obliged to raise technical reserves by debiting costs – thus achieving time balance between earnings and costs.

The basic legal standards dealing with financial allocation of technical reserves in the Slovak Republic are as follows: Act No 8/2008 Code of Laws on Insurance Industry as well as Guideline No 7/2008 issued by the National Bank of Slovakia – they both determine the limits for technical reserve allocations in insurance business sector.

Any insurance company, foreign insurer branch, re-insurance company or foreign re-insurer branch are entitled to allocate technical reserve funds exclusively as follows [Act No 8/2008 of 28 November, 2007 on Insurance and its amendments, § 32, par. 1]:

#### Purchase

- bonds issued by the Slovak Republic or the National Bank of Slovakia and bonds guaranteed by the Slovak Republic,
- bonds issued by banks or foreign banks with their headquarters in any member state, European Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD), International Bank for Reconstruction and Development (IBRD),
- treasury bills or treasury bills issued by member states,
- listed bonds on quoted security markets of stock exchange,
- listed shares on quoted security markets of stock exchange,
- participation certificates of open mutual funds or securities issued by foreign open entities of collective investment,
- participation certificates of closed mutual funds listed on quoted securities market of stock exchange,
- mortgage bonds and foreign mortgage bonds,
- deposit certificates or foreign deposit certificates,
- real estates on the territory of the Slovak Republic or other member states,
- bank guarantee bills and notes issued by bank,
- foreign securities that are traded in foreign stock exchanges or any other regulated public security market abroad – in any member state or any OECD member state,
- any negotiable securities and monetary market instruments,
- debt securities issued by specific target-oriented instrument<sup>1</sup>.

#### Deposit

 time deposit accounts in banks or foreign banks with their headquarters in any member state.

#### Grant

- loans to those insured clients who contracted life insurance policies with particular insurance companies,
- loans or credits guaranteed by bank collateral,

in the form of accounts receivable or any other similar assets towards re-insurance company or other member state re-insurance company and towards foreign re-insurance company.

Insurance company, foreign insurance company branch, re-insurance company or foreign re-insurance company branch – they all are obliged to allocate technical reserves exclusively in the following ways and stated limits, as shown in the Table No 1.

<sup>&</sup>lt;sup>1</sup> A specific target-oriented instrument is a company other than insurance or re-insurance companies that takes over risks of insurance and re-insurance companies. These risks shall be financed to their full extent from yields resulting from issuing debt securities or any other financial activities. Thus the repayment right for the above mentioned financial instruments' investors has been subordinated to re-insurance liabilities of the stated company – Act No 8/2008 of 28 November, 2007 on Insurance, § 3, par. 3.

Table 1. Limits for allocation of technical reserves in the Slovak Republic Tabela 1. Limity alokacji rezerw technicznych w Republice Słowackiej

Type of financial allocation		Limit [%]
Bonds		
Issued by the Slovak Republic, National Bank of Slovakia, issued by member states or their Central banks, guaranteed by the Slovak Republic or member states, issued by the EIB, EBRD, IBRD		100
Issued by banks, foreign banks with headquarters in member states		50
Listed in regulated markets – in case issuer's headquarters are in any member state		25
Listed in regulated markets – in case issuer's headquarters are in other than member state country		3
Share certificates		
of closed unit trusts listed in regulated markets		15
of open unit trusts or securities of foreign open entities of collective investment		20
Shares		
Listed on quoted security market	If insurance company's share for each issuer's capital and reserves exceeds 20%	0
Quoted securities of stock ex- change or foreign stock exchange or to underwrite such shares	If insurance company's share for each issuer's capital and reserves does not exceed 20%	15
Time Deposit Accounts		
In banks or foreign banks with headquarters in any member state	If insurance company's value of technical reserves does not exceed 50 million SKK	100
In banks or foreign banks with headquarters in any member state	If insurance company's value of technical reserves exceeds 50 million SKK	50
Treasury bills		
Issued by member states or their Central banks		80
Issued by banks or foreign banks with headquarters in member states		50
Issued by other entities		5
Mortgage debenture certificates		
If issuer 's headquarters are in member states		50
If issuer 's headquarters are out of member state		3
Deposit certificates or foreign deposit certificates		50
Real estates		15
Loans to those insured clients wh particular insurance companies	o contracted life insurance policies with	5

Source: Authors' research. Źródło: Opracowanie własne.

## LIMITS FOR ALLOCATION OF TECHNICAL RESERVES IN THE CZECH REPUBLIC

The topic on raising and allocating technical reserves in insurance companies of the Czech Republic has been determined by the Act No 363/1999 Code of Laws and Public notice of the Ministry of Finance of the Czech Republic No 303/2004 that had been

Źródło:

Opracowanie własne.

amended twice by Public notices No 96/2006 and No 458/2006 of the Ministry of Finance of the Czech Republic.

Limits for particular assets are very similar to those valid in the Slovak Republic. Contrasting to the situation in the Slovak Republic, there are two more categories of financial assets added, namely articles and masterpieces of artistic value and re-insurance derivatives. Apart from limits for basic items of financial distribution, there are other limits to be defined as follows:

- Foreign securities that are traded on regulated markets of the OECD member states
   their limit reaches 10% of the total amount of technical reserves.
- In case of real estates any land or building recorded in land-register as a single real estate shall not exceed 10% of the total amount of technical reserves.

Table 2. Limits for allocation of technical reserves in the Czech Republic Tabela 2. Limity alokacji rezerw technicznych w Republice Czeskiej

Type of financial allocation	Total limit [%]
Bonds	
Issued by member states or their Central banks, guaranteed by member states	75
Issued by banks or similar credit-providing institutions with headquarters in member states	50
Issued by the EIB, ECB, EBRD, IBRD	75
Quoted on community level	20
Quoted issued by trading companies	20
Real estates	
On member states' territories	20
Shares	
Listed on quoted security markets of stock exchange	10
Articles and masterpieces of artistic and cultural value	
Assessed by minimum two surveyors, if these items are insured for the cases	5
of damage, loss or theft with other insurance company	3
Treasury bills	75
Mortgage debenture certificates	50
Deposits	
Confirmed by deposit certificate or bank deposit certificates	50
Bills of exchange	
Those guaranteed by bank collateral	10
Loans	
Loans, credits and accounts receivable guaranteed by bank collateral	10
Loans to those insured clients who contracted life insurance policies with particular insurance companies	5
Securities	
Issued by collective investment unit	20
Re-insurance derivatives	5
Accounts receivable towards re-insurance companies	50

- Deposits in each single bank their value shall not exceed 20% of the total amount of technical reserves, whereas this category does not include current accounts that are used for settling operating costs.
- Re-insurance derivatives follow the rule that these instruments are allowed to re-insure all types of financial allocations with the exception of insured clients' loans as well as accounts receivable towards re-insurance companies.
- Financial allocation to all assets with the exception of treasury bills, articles of artistic value, real estates, bonds issued by the EIB, EBRD, IBRD and member states or their respective Central banks or re-insured by member states has been limited up to 5% of the total amount of technical reserves for each single issuer. However, it is possible to increase the limit up to 10% in the case that insurance company does not invest more than 40% of the total amount of technical reserves in financial allocation with those issuers where the insurance company had allocated more than 5% of its total amount of technical reserves.

The Table No 2 reflects those limits that insurance companies shall observe for allocating technical reserves, following the valid legislation.

#### LIMITS FOR ALLOCATION OF TECHNICAL RESERVES IN HUNGARY

In Hungary, investment activities of insurance companies have been determined by the Insurance Act No 60/2003 [Act of the Republic of Hungary No LX/2003 on Insurance Companies and Insurance Business Activities, § 132–140]. The law strictly declares that allocation of insurance and technical reserves shall be carried out by insurance companies with regard to the particular insurance business sector. It shall also monitor the structure of liability maturities and follow both their safety and profitability with the final aim of preserving insurance agency's liquidity. For the sake of safe forms of investment, insurance company shall simultaneously select out of a number of investment forms and even within the given investment form it shall aim at minimizing investment risks by splitting them.

When investing insurance and technical reserves – insurance company's share in any other company shall not at all exceed 25% of company's underwritten capital and reserves. However, it is necessary to consider the liquidity, not only the mathematical reserves or those of life insurance policies that are connected with investment units.

Insurance companies are entitled to keep insurance and technical reserves in the following forms of assets [Act of the Republic of Hungary, No LX/2003 on Insurance Companies and Insurance Business Activities, § 134]:

#### Investments

- documentary credits, bonds or any other credit instruments of financial and investment markets.
- loans,
- shares, any other share securities with flexible yields,
- shares in companies of collective investments or any other mutual funds,
- real estates, property rights connected with real estates.

#### • Accounts receivable

- re-insurer's accounts receivable including insurance and technical reserves accumulated by re-insurer for re-insurance risk purposes,

- deposits or other forms of accounts receivable resulting from insurance transactions having been taken over by re-insurer agency,
- accounts receivable resulting from both insurance and re-insurance transactions towards both insured clients and insurance brokers that are not older than three months,
- insurance premium advance payments,
- tax refunds,
- accounts receivable towards guarantee funds.

#### Other remedies

- tangible assets with the exception of real estates, considering the depreciated value following the prudence principle,
- amounts of cash accessible on current bank accounts or in cash box, bank deposits or those in any other financial institutions,
- future interests and rents,
- future acquisition costs.

All insurance and technical reserve covers shall take place on the OECD or the EU member state territories. All assets to be utilized for covering insurance and technical reserves are subjects to certain limitations as follows in the Table No 3 [the Act of the Republic of Hungary, No LX/2003 on Insurance Companies and Insurance Business Activities].

Insurance company is entitled to invest up to 5% of its total gross insurance and technical reserves in those shares that had been issued by the same single issuer, credit-type

Table 3. Limits for allocation of technical reserves in Hungary Tabela 3. Limity alokacji rezerw technicznych na Wegrzech

Type of financial allocation	
Bonds	
Non-guaranteed neither by the government nor by any other type of insurance	
Not listed on regulated security markets	
Shares	
Shares and other securities with flexible yields	
Non-quoted on regulated security markets	10
Securities	
Issued by collective investment unit	35
Real estates	
And real state rights added to them	
Cash	
Loans	
Non-guaranteed loans	
Accounts receivable	
Those of insurance and reinsurance transactions towards both the insured clients and insurance brokers, in case that they are not older than three months	

Source: Authors' research. Źródło: Opracowanie własne. securities or other types of financial and capital market instruments. It is also allowed to invest in loans being provided to the above mentioned companies, with the exception of the loans having been provided to any member state, local or regional governments of any member state, nor international organization involving either one or more member states. This amount can be increased up to maximum 10% of the total gross insurance and technical reserves if the total share of both securities and loans does not exceed 40% of the gross insurance and technical reserves.

Supervisory authority is entitled to permit a certain deviation from stated assets and limit categories, determined by legislation, on insurance company's request and in exceptional situations, to a limited degree and for a limited period.

#### LIMITS FOR ALLOCATION OF TECHNICAL RESERVES IN POLAND

In Poland, the 2002/83/EC Directive has been implemented into the legislation by the particular Act of the year 2003<sup>2</sup>. The Act had been amended in 2005 with the aim to achieve final harmonization between the national and European legislations.

The above mentioned Act exactly clarifies and limits all those assets where insurance companies are entitled to allocate their technical reserves.

Limits determined for insurance companies' investment activities are stated in the Table No  $4^3$ .

Table 4. Limits for allocation of technical reserves in Poland Tabela 4. Limity alokacji rezerw technicznych w Polsce

Type of financial allocation	Issuer's limit	Total limits
Bonds	[70]	10
Accounts receivable		
Towards companies, re-insurers or insurance brokers, as well as re-insurers' shares on technical reserves	_	25
Shares		
Enclosed mutual funds	5	10
Future rents and interests	_	3
Cash	_	3
Loans		
Non-guaranteed	5	
Guaranteed	5	
Real estates		
On member states' territories	10	25

Source: Authors' research. Źródło: Opracowanie własne.

<sup>&</sup>lt;sup>2</sup> The Act of the Republic of Poland on Insurance and its amendments of 22 May, 2003.

<sup>&</sup>lt;sup>3</sup> Extracted from: the Act of the Republic of Poland on Insurance and its amendments of 22 May, 2003.

Apart from the limits presented in the table, insurance companies are obliged to observe the following limits:

- 40% of the total technical reserves for securities listed in regulated markets or shares in collective investment companies,
- 25% of technical reserves' values for real estates, shares in investment funds with the exception of real estates, as well as those loans that are guaranteed by mortgages,
- 5% of total technical reserves for those securities having been issued by a single issuer or a group of issuers, or loans by single debtor or a group of debtors,
- 10% of total technical reserves in deposit certificates, shares and stocks that have not been listed in regulated markets or other securities with both fixed or flexible yields under the condition that the insurance company's share in the security issuing company would not exceed 10% of its basic capital.

The above mentioned limits regarding bonds in the first three parts do not consider the following:

- securities issued or guaranteed either by the state treasury or by those international organizations where Poland has its membership,
- loans granted or guaranteed either by the state treasury or by international organizations where Poland has its membership,
- securities issued or guaranteed by regional self-governing authorities or regional unions, loans granted to self-governing or regional units.

#### CONCLUSIONS

The EU Directives and their implementations into legislative regulations have occurred in all states compared, including the Slovak Republic. The EU Directives enable to determine certain variations in national limits that consider each country's specific conditions in their financial markets.

In the Slovak Republic – the highest limit is 75% for purchasing bonds and treasury bills issued either by the Slovak Republic or by the National Bank of Slovakia or those being guaranteed by the Slovak Republic, or those having been issued by member states or by their Central banks. The Slovak legislation's outstanding feature is that it specifies any insurance company's investments in time deposit accounts in banks with their headquarters in the EU member states.

The Czech Republic, similarly to the Slovak Republic, has determined the highest limit - 75% – both for bonds and treasury bills issued by member states or their Central banks as well as for those bonds issued by the EIB, EBRD and IBRD. As in Slovakia, so in the Czech Republic, there are neither determined categories nor limits for non-guaranteed loans. The Czech Republic demonstrates an exclusive Act, namely in the category of assets: masterpieces of outstanding artistic and cultural values as well as re-insurance derivatives – these do not occur in other countries in question.

The selected EU countries observe the limits determined by the EU Directive for a single subject. Within all countries in question, there is quite a huge diffusion between particular total limits (in specific categories – from 5–75%).

Insurance companies prefer those investments that are distinguished for their safety and they tend to restrict those with higher levels of risks. This has been clearly demonstrated by the declared limits for each particular assets category that is to be utilized for technical reserve covers.

The total limits for technical reserve allocations to real estate varies – in the Slovak Republic – 15%, in the Czech Republic – 20%, in Poland – 25% and for Hungary, the total limit reaches 10%.

The EU Directive on technical reserve allocations stresses the impact on careful asset investments in non-guaranteed loans. The investments in loans without bank guarantees present a high credit risk for insurance companies. Therefore, the EU Directive determines a low limit for this type of allocations. Comparing the limits within the selected countries, it results in the fact that Hungary and Poland strictly observe this limit within their legislations, while neither Slovakia nor the Czech Republic admit such a type of allocation.

The EU Guideline permits, apart from the 5% limit for guaranteed loans for a single debtor, to increase the limit up to 10%, under the condition that these investments would not exceed the 40% of the total technical reserves. This category of technical reserve allocations determines the same limit for all countries in question. Apart from this, both the Slovak and Czech Republics have a specifically stated limit of 5% – for those insured clients who signed life insurance contracts.

Another recommendation on the side of the EU Directive is – to limit investments in those securities that have not been traded on regulated markets. This type of investment creates high risky business for insurance companies. Hungary permits to consider this type of investments up to the limit of 10%. The same is true for Poland, under the condition that insurance company's share in the company issuing these securities would not exceed 10% of its basic capital.

Those securities that would be issued by collective investment units in Hungary are limited by 35%, while both in Slovakia and the Czech Republic, the limits are 20%. However, Poland declared the limits of 10% of total technical reserves that could be invested in mutual funds.

#### REFERENCES

Ducháčková E., 2003: Principy pojištění a pojisťovnictví. Praha Ekopress.

Daňhel J. a kol, 2006: Pojistná teorie Praha: Prefessional Publishing.

Kafková E., 2004: Technické rezervy a investičná činnosť komerčných poisťovní na Slovensku. In: Ekonomický časopis: časopis pre ekonomickú teóriu a hospodársku politiku, roč. 52, č. 2, s. 166–180.

Majtánová A., Krátka Z., 2006: Investičná činnosť poisťovní a jej optimálna diverzifikácia. [In:] Ekonomie a management: vědecký ekonomický časopis: roč. 9, č. 3, s. 86–93.

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Zákon Českej republiky č. 363 /1999 Zb. z. o poisťovníctve v znení neskorších predpisov.

Zákon Maďarskej republiky č. LX/2003 o poisťovniach a o poisťovacej činnosti.

Vyhláška Ministerstva financií Českej republiky č. 303/2004, ktorou sa upravujú náležitosti zákona o poisťovníctve.

Zákon Poľskej republiky z 22 maja 2003 o poisťovníctve v znení neskorších predpisov. www.nbs.sk www.mabisz.hu www.cea.assur.org www.eur-lex.europa.eu www.nbp.pl www.mnb.hu www.ec.europa.eu

## REZERWY TECHNICZNE W USŁUGACH UBEZPIECZENIOWYCH – PORÓWNANIA KRAJOWYCH LIMITÓW W WYBRANYCH PAŃSTWACH UE

Streszczenie. W nowoczesnych gospodarkach, usługi ubezpieczeniowe stanowią specyficzny sektor skupiający się głównie na akumulacji, zarządzaniu oraz dystrybucji rezerw technicznych. Rezerwy techniczne przedsiębiorstwa ubezpieczeniowego definiowane są jako fundusze klientów, akumulowane jako proporcja składki ubezpieczeniowej oraz obliczone na podstawie aktuarialnej matematyki. Zarówno akumulacja rezerw technicznych, jak również formy i limity ich alokacji stanowią przedmiot specyficznych uwarunkowań prawnych w poszczególnych państwach Unii Europejskiej. Dyrektywy unijne wyznaczają minimalne standardy w tym zakresie, jednak państwa mogą zaostrzać kryteria we własnym zakresie. W artykule przestawiono porównanie krajowych limitów rezerw technicznych w usługach ubezpieczeniowych w wybranych państwach UE.

Słowa kluczowe: rezerwy techniczne, alokacja rezerw technicznych, limity, dyrektywy, porównanie, Unia Europejska

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