

THE SOCIAL AND ECONOMIC NATURE OF ENVIRONMENTAL RISK INSURANCE

The article points out the need and benefits from environmental protection when indemnifying damages, caused by the environmental risk upon its realization. The aims and goals of environmental insurance are presented. The role and function of the environmental insurance category are defined from the point of view of insurance theory. The correlation between the liability insurance against environmental protection and other insurance types is highlighted; analyzing the current condition and the opportunities for its development on the national insurance market; justifying the need of environmental pollution liability insurance for the economy of the country.

JEL: G22; Q59

The environmental policy of EU member states is aimed at protecting the environment and the health of population from the effects of technogenic accidents and environmental disasters. It is necessary to synchronise the insurance legislations of the different states in terms of environmental insurance. That has become particularly evident in 21st century, when we witness considerable deterioration of the quality of various environmental parameters as a result of industrial activities. Therefore, it is necessary to implement adequate environmental risk management, including several basic measures, such as: identifying environmental protection measures; establishing funds for self-funding losses; controlling risks; introducing changes in the legislation aimed at implementing stricter requirements and penalties for companies which may potentially cause environmental damage, etc.

One of the most efficient risk management measures which companies can take, however, is environmental pollution risk insurance. This topic however has not yet been the subject of serious academic study in Bulgaria, determining the up-to-date nature of the issue:

Need of and economical benefits from environmental risk insurance

Historically, environmental insurance was first introduced and developed as a response to the growing environmental pollution problem, aggravated enormously in the 21st century.

Insurance against financial liability arising from losses related to environmental pollution was first introduced in 1960, when insurance policies were aimed at indemnifying damages from accidents and contingencies, which were defined as "cases involving long-term or recurrent impact of circumstances which incur personal and financial losses and are unexpected and unpremeditated by the insurer".¹

Environmental insurance is considered as one of "the means of distributing responsibilities regarding hazardous activities as regards natural sites".²

¹ <http://www.risk24.ru/straxekolriski.htm>

² <http://neva-strahovanie.ru/business/186-ocenka-ekologicheskikh-riskov-promyshlennogo-predpriyatija>.

Worldwide, environmental insurance has gained in popularity over the last 10- 15 years, a process triggered by the development of the national insurance markets in terms of environmental protection and by the fact that over that period losses from environmental pollution amounted to billions of dollars.

Covering damages from industrial accidents and other activities are beyond the capacity of even large companies. If the companies which have caused the pollution are to cover the damages, that would result in disturbance of the production process and the balance of the companies, inability to fulfil contractual agreements, delays in production, increase in the cost of production and others.

Environmental insurance was first introduced onto the Bulgarian market in the context of Bulgaria's environmental policy as a response to the emergence of new insurance demands from various types of clients.

The increase in consumer demand for environmental insurance over the last few years arises from the following *preconditions*:

- inability to fully compensate for losses arising from environmental risk at the expense of the state budget, or of the state disaster relief fund respectively.
- Deterioration of the quality of the environment as a result of environmental pollution from certain types of industrial activities;
- imposing heavy penalties by the state on companies polluting the environment and on separate sectors of the economy;
- introducing new technologies and production processes which can lead to the emergence of new environmental risks;
- the yet liberal legislation as regards certain types of production and their impact on the environment;
- the emergence of new insurance demands related to the commercial activities of enterprises and the need to improve the risk management of companies;
- realising and increasing the insurance benefits for the owners of enterprises with hazardous production.

The *benefits* of environmental insurance are present in both of its organisational and legal forms - mandatory and voluntary, demonstrated in some key advantages:

- Environmental insurance is social. It is associated with providing the parties injured by the environmental risks with social and legal warranties for compensation of damages caused by environmental pollution.

- The means for provisioning insurance protection of the economic entities is in effect "a relatively small regular expense in the form of insurance premium"³, which the insured persons have to incur in order to insure their professional liability; that expense is unsubstantial when compared to the probability of compensating potential large amounts in order to cover the damages suffered by victims of the environmental risk.

- Transferring the environmental pollution risk relieves companies and enterprises of the "great economic burden" and allows them to continue their normal production process.

³ Draganov, Iliev, Kamenov, 1993, p. 158.

- The responsibilities associated with regulating claims from injured parties are transferred onto the insurer, while on the other hand, they are guaranteed qualified legal representation.

- The application of environmental insurance reduces considerably the vulnerability of the social and economic system of the country by contributing to the compensation for damages caused by technogenic catastrophes and industrial accidents and by maintaining the economic stability of the enterprises with hazardous production.

- Environmental insurance guarantees a maximum coverage of financial and non-pecuniary losses, including direct material damages and indirect material damages related to the clean-up, restoration and reconstruction activities.

- This type of insurance also constitutes an additional source of non-governmental funding of environment protection initiatives.

- Environmental insurance is performed in accordance with market mechanisms and is a type of entrepreneurial activity in the field of ecology.

In modern society the pursuit of sustainable growth is an integral part of any human activity, determining the prosperity of all sectors of the economy. The challenges we face while trying to achieve sustainable growth are of great significance for insurers due to their urgent nature, the scope of their potential impact and the role of the insurance sector in spheres such as⁴: climate change; microinsurance; lifelong learning; healthcare; managing risks, as a result of human activity; environmental responsibility; natural resources; recycling; environmental management system.

The stable increase in the share of environmental insurance on the national markets and the expansion of the range of risks covered is a sure sign that companies are much more responsible as regards environmental protection and use of natural resources.

Aims and goals of environmental risk insurance

There is a growing demand for environmental insurance since the implementation into the national legislations of the European Directive of 21st April 2004, on the environmental responsibility in terms of prevention and indemnification of damages caused by environmental pollution. This trend which can be observed in Europe is due to the fact that the number of claims related to environmental insurance is growing.⁵

The 'pollutant pays' principle makes entrepreneurs realise that environmental pollution may have serious negative impact such as considerable environmental damages. Consequently, any professional activity - regardless of whether it is in the large, medium or small business sector - may lead to damages to the biodiversity and thus companies are obliged to bear responsibility for damages.

⁴ L'assurance durable. Rapport inaugural du Groupe de travail Assurance...

⁵ L'assurance environnementale. Une solution simple...

The aim of environmental insurance is best defined as covering the financial losses of the enterprises in the various sectors of the economy in the event of industrial accident or environmental pollution by transferring the risk to the insurance company.

In view of the above, the main *goals* of environmental insurance may be as summed up follows:

- Establishing an insurance fund and redistribution of losses between the participants in that fund;
- Guaranteeing the rights of third parties by indemnifying the damages caused by environmental pollution;
- Protecting the financial interests of enterprises in the event that the risk "industrial accident and environmental pollution" is realised;
- Financial incentives for the insured parties to take preventive measures against industrial accidents;
- Reducing the maintenance costs of the insured parties for emergency response activities by using insurance protection;
- Creating additional sources of funding for environmental protection initiatives;
- Reducing budget costs for limiting the impact of environmental pollution resulting from industrial accidents and other cases.

Based on this, we can formulate the following *definition* for the category in question: Environmental insurance is in its essence a specific type of activity, namely an insurance service, performed by a specialised entity - the insurance company in the field of intangible production with the end result being the provision of insurance products aimed at meeting certain needs, related to the realisation of different types of environmental risks and the financial funding of environmental safety in the interests of both parties to the insurance contract, as well as of all entities involved in its execution.

Function and role of the environmental insurance category

The essence of an economic category is revealed in its function. Like most economic categories, insurance has both main and auxiliary functions. They are reflected in the role of the category in question. Functions are as a rule constant and not subject to changes while the role may change depending on the influence of the particular social and economic factors. The functions of "an economic category are a manifestation of its nature or field of impact".⁶ In order to define the environmental insurance category first we should identify its functions. While the main function of insurance is indemnification, it is worth mentioning that similarly environmental insurance has one main and several auxiliary *functions* (see Fig. 1).

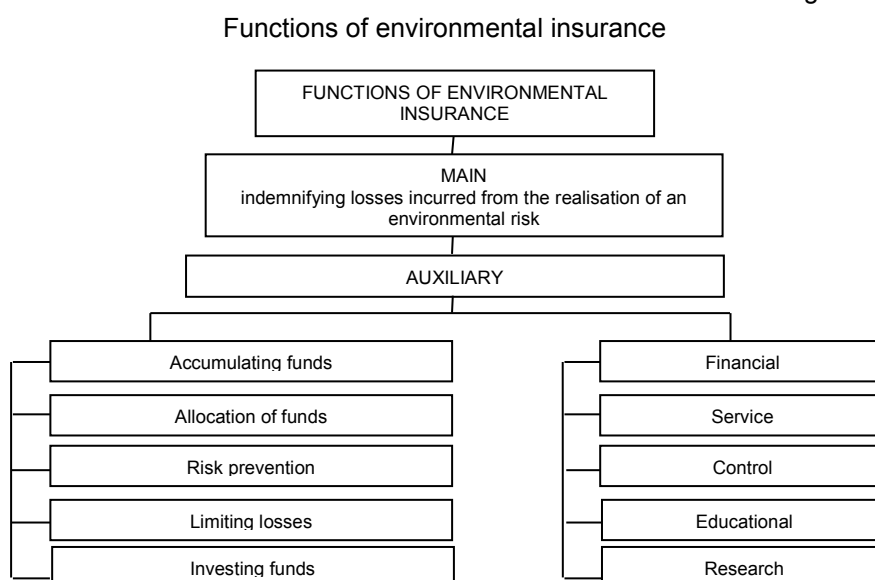
The indemnification function is main function, related to the compensation of losses when insuring:

- environmental pollution liability of companies;

⁶ Draganov, Misheva, Parvanova, 1998, p. 12.

- the property of the company against industrial accidents resulting from the realisation of an environmental risk and the occurrence of property damages;
- life, health and disability insurance of workers within companies with hazardous production in the event of non-pecuniary damages caused by environmental risks;
- the funds of the investor invested in the enterprises with hazardous production in various sectors of the economy against the realisation of an environmental risk. This function of environmental insurance guarantees the security of the shareholders in view of the invested capital and the usual production process even under critical circumstances;
- subsequent damages incurred by the realisation of the environmental risk.

Figure 1



Function "Accumulating funds" is aimed at setting up a fund of insurance premia deposited by the commercial entities in specialised insurance companies for the purposes of guaranteeing the security of the insured parties as relates to the realisation of adverse circumstances resulting from the occurrence of an environmental risk.

Function "Fund distribution" – it is related to the establishment of an insurance pool of insured units with approximately the same risk factors to enable the insurer to pay for due amounts and damages in the event of an insurance case caused by an environmental risk.

The financial function is aimed at reducing the maintenance costs of the companies by transferring the risk to the insurer and compensating for losses suffered by the injured third parties due to environmental pollution. In this way, the financial function stabilises the cost of production and respectively the costs for

company insurance do not affect the competitiveness of the company, at least not in the way it would have been affected by costs for indemnifying huge losses associated with the realisation of an environmental risk at the expense of the company's own funds.

The preventive function includes all "technical, economic and other activities which are aimed at preventing loss occurrence".⁷ This function is to be reviewed from two perspectives - from the point of view of the insurer and from the point of view of the insured.

Preventive measures within the *insured* enterprises with higher risk of environmental pollution can be promoted by favourable insurance conditions and tariffs. Environmental security initiatives on the part of the *insurers* can be financed by allocating a reserve for preventive measures against environmental risks by deducing amounts from the gross insurance premium which the insurance company has received during the accounting period or by directly financing such initiatives at the expense of the profit of the shareholders. On the other hand, the accumulated amount in the reserve can be used for crediting environmental protection facilities.

The preventive measures reserve, or the so called prevention addition calculated in the premium, can both be used to finance participation in initiatives under the following *categories*:

- for reducing the environmental risk involved in the operation of the insured companies and for promoting safe working conditions;
- for designing, constructing or reconstructing research laboratories, diagnostic stations and testing facilities;
- for construction and reconstruction of centres for animal disease control and prevention, veterinary clinics, facilities of the border veterinary checkpoints and others;
- for the construction of facilities for advanced warning in the event of environmental pollution from industrial accidents;
- for construction and renovation of stations for the protection of plants, financing research laboratories which look into the application of biological methods in the control and prevention of pests and agricultural crop diseases;
- for the purchase of transport vehicles for the purposes of fire service, police, first aid, etc.;
- for the improvement of fire alarms;
- for improving the technical facilities and material base, mobile pumping stations and the condition of drinking water resources;
- for financing and applying preventive and sanitary and hygiene measures aimed at protecting the health of the population - vaccinations, regular medical examinations and others;
- to improve the equipment of the water treatment facilities and filters at enterprises with hazardous production;

⁷ Draganov, Misheva, Parvanova 1998, p. 13.

- to improve the technical facilities and material case of the oil and gas pipelines;
- to finance scientific research in the field of improving environmental protection methods;
- for payment of remunerations to citizens for their participation in environmental protection initiatives as specified under legislative regulations and others.

Function "limiting losses" – involves all measures restricting further spreading of damages caused by an event which has already occurred and measures combating dangers, respectively, which are still in the process of realisation, i.e. when they have occurred but they have not yet been completely realised.⁸ The application of this function involves organising initiatives related to combating the consequences of accidental environmental pollution such as covering transport costs for land, air and water transport.

The Service Function covers the additional services provided by the insurer. Depending on the stage of legal relationship when various services are provided, they may be divided into the following three groups:⁹ services before signing the insurance contract; services during the validity of the insurance contract; services in the event of an insurance case.

When the environmental insurance is at the stage 'signing the insurance contract', the insurers provide the following services:

- consulting the risk managers at the enterprises with hazardous production regarding the ways to investigating the risk situation they are exposed to;
- supporting the development of new risk policies of the enterprises, including their risk management;
- consultancy regarding the preventive measures of the enterprises;
- assistance with identifying the insurance value of the enterprise and with determining the insurance amount;
- assistance in preparing the documentation relating to the pre-contract information on the enterprise to be insured;
- providing the necessary statistical data (such as damages suffered by identical enterprises) and others.

During the term of the insurance contract, the insurance company:

- provides ongoing consulting services regarding the eventual change in the risk situation of the insured site;
- informs on the opportunities to apply new forms of insurance or offering preferential conditions to the insured company;
- makes available health information;
- provides funding for specific preventive initiatives;

⁸ Draganov, Misheva, Parvanova 1998, p. 13..

⁹ Iliev, Misheva 2005, p. 123-124.

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- organises seminars, relating to the safety and environmental safety of the population and other issues.

At the stage when the insurance case has been realised, insurers invest all their efforts into:

- providing professional help in emergency crisis situations;
- giving information about the environmental damage occurred;
- rendering technical assistance in the event of an industrial accident;
- processing the documentation relating to the environmental case in the shortest time possible;
- providing legal opportunities to the insured by participating in the consideration of claims and others.

The control function covers company activities, related to securing environmental safety. The control is executed at various stages in the process of signing the insurance contract. When it is signed, the insurance company analyses the activity of the company and takes part in the environmental audit of the site. In this way one can estimate the amount of the risk and can evaluate the financial stability of the company. Based on the results of the inspection, a conclusion as to the advisability of signing an insurance contract can be drawn. During the term of the insurance contract, the current activity of the company is assessed in view of securing environmental safety and controlling the execution of preventive environmental protection measures.

In the event that an insurance case occurs, the reasons for the industrial accident and the extent to which the company is responsible are investigated and evaluated. Whether recourse claims are to be filed against the party responsible for the realisation of the environmental risk is decided at this stage.

The educational function is aimed at increasing the insurance awareness of the population. This function is aimed at both increasing the legal, health and environmental awareness of the population and the financial literacy of the consumers of insurance services.

The function *Investing funds* is related to the management of the temporarily free cash accumulated in the insurance company from premia paid by the insured. Premium reserves are invested in suitable investment instruments, as permitted by the law.

The research function is aimed at the study of the insurance needs and interests, including analysing the consumer demand for insurance products which cover risks associated with environmental pollution. This function is aimed at monitoring and evaluating the extent of the risk of the entities and sites to be insured. It is also related to accounting for the reasons for technogenic risks and industrial accidents and to forecasting the amount of potential losses.

The *role* of the environmental insurance for the economy of Bulgaria may be sought in the following *general lines*:

1. *Relieving the state budget of the responsibility to cover losses resulting from the realisations of environmental risks.* In this way, new opportunities for

redirecting the funds provided by the national budget to making stable long-terms investments for:

- Environmental protection of endangered regions from ecological risks;
- Organising initiatives for the protection of the population on the territory of the country from the negative impact of anthropogenic factors;
- Increasing the environmental safety when using natural resources for doing agricultural activities.

2. *Supporting commercial entities in specific sectors of the economy in their efforts to protect, evaluate and manage environmental risk*, i.e. the contribution of environmental insurance for the economic results of the enterprise must be sought also in new opportunities to assist:

- employers in selecting the right insurance service and selecting the appropriate environmental insurance;
- the shareholders in the enterprises to look after and protect the health of the population and to create healthy and favourable labour conditions for the employees in the companies with hazardous production;
- managers in identifying and applying measures related to the economic protection of the enterprise and respectively to prevent and limit the negative impact of the risks resulting from environmental pollution.

3. *Assistance in implementing a nationwide environmental protection policy* and assistance in implementing the state policy on taking long-term decisions for protecting, recovering and improving the health of the nation as well as of the environmental and climatic and living conditions in Bulgaria.

In this respect, the role of the companies, specialised in environmental insurance should be sought in applying *an integrated approach to managing environmental risk*, involving:¹⁰ insurance audit, implementing an action plan for risk prevention and applying regulatory monitoring. In this respect, insurers who include environmental risks in the scope of their responsibilities have the opportunity to adjust their insurance policies to the insurance interests, to support consumers in the evaluation of the risk situation and to contribute by sharing expert knowledge in this field.

Defining the correlation between the liability insurance against environmental pollution and other insurance types

This liability is practised by insurers, specialised in the general insurance field. According to the Insurance Act, this insurance product falls in the category of professional liability insurance, which is part of the Liability branch and the General Liability Insurance respectively. Figure 2 shows that environmental pollution liability insurance falls into the group of professional liability insurance, together with liability insurance for lawyers, notaries, dentists, architects and others. Unlike employer or

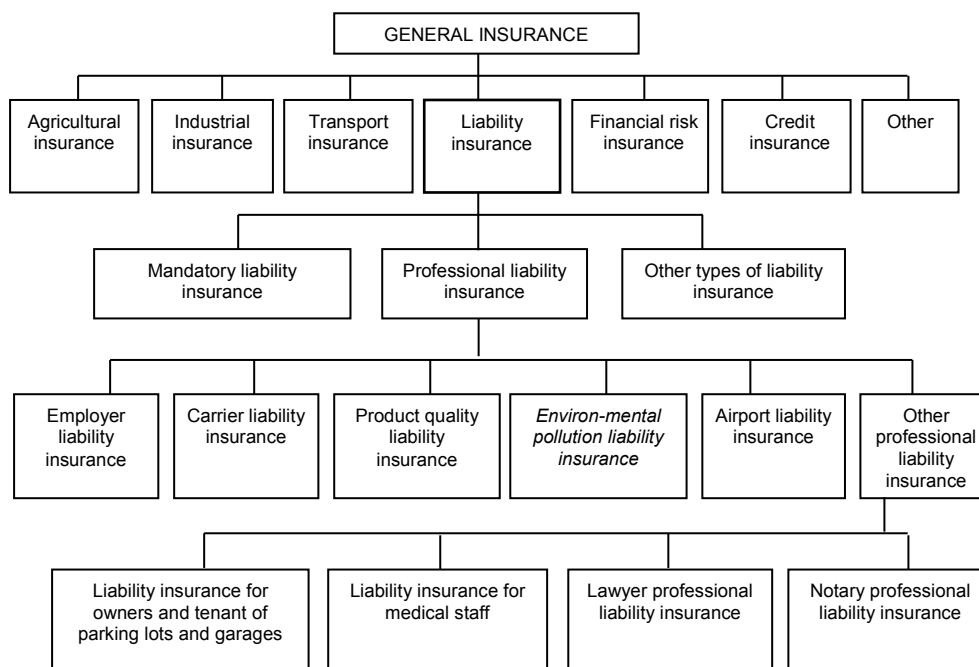
¹⁰ Gestion du risque environnemental: Responsabilité et assurance...

carrier liability insurance, environmental pollution liability insurance is one of the least popular and demanded products on the insurance market.

Professional liability insurance groups together various types of financial liabilities of the different categories of individuals who may, while performing their professional obligations, cause material or moral damage to third parties. Each professional liability insurance has its own particular features. For some professions (doctors, guards, notaries and others) a license is required, whereas for other professions it is not.

Figure 2

Defining the correlation between the liability insurance against environmental pollution and other insurance types in the general insurance field*



* The category "Other types of insurance and reliability" involves: insurance of parcels and shipments, insurance of investment risks, insurance against loss of licensing , freighter insurance, bank safe insurance, etc.

The common feature of the above-mentioned types of professional liability insurance is that the object of insurance is the financial interests of the insured which relate to liabilities for damages inflicted on third parties as the result of faults or omissions made while practising their main profession. Unlike property or personal insurance, in the case of professional liability insurance the occurrence of the insurance case does not depend on external factors such as natural disasters,

accidents or actions of third parties but on the qualification and competence of the individuals performing a certain professional activity.¹¹

Insuring the liability of companies in the various sectors of the economy against environmental pollution is associated with the risk of wrong or substandard production processes as well as of the occurrence of an industrial accident which may lead to damages to third parties.

Defining the positioning of the liability insurance against environmental pollution on the national insurance market

According to the insurance legislation in Bulgaria, insurers who are licensed to provide general liability insurance as issued by the Financial supervision commission, can also offer environmental pollution liability insurance.

Environmental pollution liability insurance is slowly setting foot on the national insurance market and only a limited number of insurance companies offer the product on the market (Table 1).

Table 1

List of insurers who offer general liability insurance in Bulgaria as of 2014

№	Insurance companies which provide professional liability insurance against environmental pollution
1.	Bulstrad Vienna Insurance Group JSC
2.	Armeec JSC
3.	Lev Ins Insurance company
4.	DZI General Insurance Ltd
5.	Bul Ins Insurance company JSC
6.	Allianz Bulgaria JSC
7.	Victoria JSC
8.	Euroins insurance company JSC
9.	Uniqa Insurance company JSC
10.	OZK Insurance JSC
11.	Generali Insurance JSC
12.	HDI Zastrahovane JSC
13.	Energy JSC
14.	Groupama Insurance JSC
15.	DallBogg Life and Health Insurance Ltd

Source. www.fsc.bg.

The information presented in the table shows that the companies which offer insurance from the General liability insurance type operate in the General Insurance branch. Therefore, of all 31 companies which function on the general insurance market as of 2014, only 15 practice environmental pollution liability insurance. This fact shows that this type of insurance is still not widely offered on the insurance market, which accounts for the insufficient demand on the part of the consumers.

¹¹ Insurance A - Z..., 1996, p. 500.

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Professional liability insurance and the general liability insurance respectively are still being developed in Bulgaria. There is ample evidence for this in the data on premium income and paid damages under the type of insurance policies in question.

The structure of the premium income by types of insurance for the General insurance branch shows that during the period of the financial crisis (2008-2013) and during the post-crisis period, the General liability insurance did not have a high relative share (Table 2).

Table 2

General liability insurance in the structure of the premium income for the General insurance branch for the period between 2008 and 2013 (%)

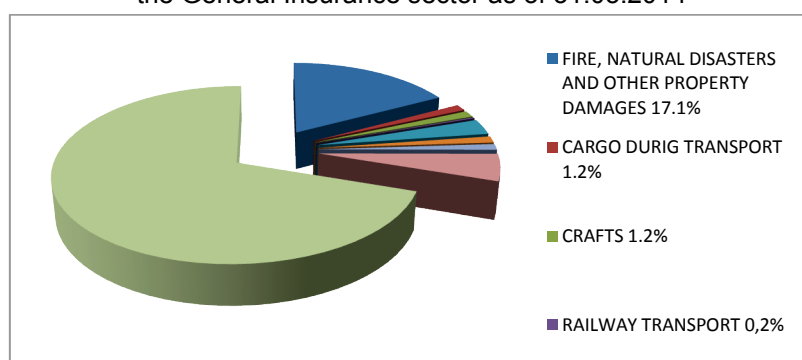
Years	Relative share of the premium income
2008	2,1
2009	1,9
2010	2,2
2011	2,2
2012	2,4
2013	2,4

Source. www.fsc.bg.

During the period in question, the data for the premium income indicator in the general liability insurance sector demonstrates a trend for low values of around 2% within the structure of the premium income for the sector. The highest percentage for premium income generated from the type of insurance in question was registered during the last two years of the period, with the values for both years at 2.4%. The data for the share of premium income from general liability insurance during the first two quarters of 2014 show a subtle increase for the sector with a value of 2.9% (Fig. 3).

Figure 3

Structure of the gross premium income by type of insurance in the General Insurance sector as of 31.05.2014



Source. Based on data provided by FSC - www.fsc.bg.

For the period between 2008 and 2013, payments made by insurers under general liability insurance policies are relatively low compared to others within the structure of paid indemnifications in the general insurance sector. That is demonstrated by the data for the relative share of insurance payments in the case of realised insurance cases under the insurance policy in question (Table 3).

Table 3

General liability insurance in the structure of indemnifications paid for the General insurance branch for the period between 2008 and 2013 (%)

Years	Relative share of indemnifications paid
2008	1,8
2009	2,2
2010	1,2
2011	0,9
2012	1,1
2013	0,8

Source. www.fsc.bg.

Table 3 demonstrates that the average value of the relative share of insurance indemnifications under general liability insurance contracts amounts to 2% of the total structure of insurance payments for the sector.

The above can be illustrated with data for the premium income and insurance payments under general liability insurance in absolute terms. The trend for the analysed period demonstrates low amounts of collected insurance premia when compared to other types of insurance in the sector. The highest premium income for the period under general liability insurance contracts was about BGN 34 million for 2013 (Table 4).

Table 4

Premium income and insurance payments under general liability insurance contracts for the period between 2004 and 2013 (in BGN)

Years	Premium period	Indemnifications paid
2008	31,672,802	10,726,679
2009	28,292,869	1,121,155
2010	26,724,616	7,940,118
2011	29,377,677	5,909,003
2012	32,643,087	7,558,799
2013	33,858,195	6,031,844

Source. www.fsc.bg.

Despite the low amounts of the insurance premia for the period between 2008 and 2013, the premium income demonstrates an upward trend over the last four years - from over BGN 26 million for 2010, the premium income increased and reached nearly BGN 34 million in 2013. While premium income were growing, the amount of paid indemnifications for the same period were fluctuating. The reasons

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for these opposite trends for the amount of premium income and paid indemnifications can be found in the following *tendencies*:

- an increase in the number of insurance contracts signed as a result of the increase of insurance interest, which has led to an increase in premium income;
- an increase in the insurance amounts, which reflects on the amount of the insurance premia and on the insurance income for the insurance companies respectively;
- a decrease in the amount of indemnifications paid as a result from a decrease in the number of civil claims, more particularly of claims by third parties, who have been injured by the environmental pollution.

The market share of the insurance companies who offer general liability insurance is presented in Table 5).

Table 5

Market share of insurance companies in the general liability insurance for 2013

No	Insurance company	Market share (%)
1.	Bulstrad Vienna Insurance Group JSC	26,1
2.	Armeec JSC	6,7
3.	Lev Ins Insurance company	3,4
4.	DZI General Insurance Ltd	13,6
5.	Bul Ins Insurance company JSC	1,3
6.	Allianz Bulgaria JSC	16,7
7.	Victoria JSC	5,0
8.	Euroins insurance company JSC	7,6
9.	Uniqa Insurance company JSC	4,2
10.	OZK Insurance JSC	7,6
11.	Generali Insurance JSC	3,4
12.	HDI Zastrahovane JSC	1,2
13.	Energy JSC	0,4
14.	Interamerican Bulgaria JSC	2,6

Source. www.fsc.bg.

The data show that the leading insurer in the particular type of insurance in question for the last year was Bulstrad JSC. The insurance company has become a leader with the highest market share - 26.1% for 2013, followed by Allianz Bulgaria JSC and DZI General Insurance Ltd, which have a market share of 16.7 and 13.6% respectively. The above-mentioned 3 companies are the ones with the highest market share in terms of general liability insurance accounting for 55.4% of the total premium income. In other words, it is noticeable that the national insurance market for general liability insurance is consolidated.

The reason why this particular insurance sector of the national insurance market still has a relatively weak market positioning can best be accounted for by the presence of several major *factors*:

- insufficient interest on the part of insurers in offering insurance products from the general liability branch;
- insufficient public awareness about the benefits from the different types of insurance;
- weak interest on the part of risk managers in environmental pollution liability insurance;
- omissions in the legislation as regards the penalties for enterprises polluting the environment;
- expensive environmental protection due to the large scope of the consequences of environmental pollution.

The above-mentioned factors hinder the development of professional liability insurance and more particularly of professional liability insurance for enterprises in various sectors of the economy in Bulgaria. The influence of these factors reflect on the condition and dynamics of the general liability insurance sector.

Significance of environmental pollution liability insurance for the economy of the country

Insuring against environmental pollution liability is a specific type of insurance which is an element of the general liability insurance sector. Its role can be defined not only by its positioning and correlation to other insurance types, but also by it also plays a significant role for security initiatives if we are to guarantee normal society growth and development.

The significance of general liability insurance lies in supporting the economy of the country by equalising random deviations within its branches and can be defined by several main indicators, presented in Table 6.

Table 6

Macroeconomic indicators for general liability insurance in Bulgaria

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Gross domestic product by current prices, (mln BGN)	38824	45484	51783	60185	69295	68322	70511	75308	78089	78115
Gross premium income from general liability insurance, (mln BGN)	21538837	26525226	30913504	30811793	31672802	28292869	26724616	29377677	32643087	33858195
Population as of the end of the year	7761049	7718750	7679290	7640238	7606551	7563710	7504868	7327224	7284552	7245677
Insurance penetration (ration between GPP and GDP in %) /2/:1/	0,0055	0,0058	0,006	0,0051	0,0046	0,0041	0,0038	0,0039	0,0042	0,0043
Insurance density (premium per capita) /2/:3/, BGN)	2,78	3,44	4,03	4,03	4,16	3,74	3,56	4,01	4,48	4,67

Source: NSI, Statistical Reference Book, BNB, NSI, internet sources;¹² calculations by the author.

¹² http://statlib.nsi.bg:8181/isisbgstat/spp/fulltext.asp?content=/FullIT/FullOpen/OMIP_215_2011_2013.pdf;
http://www.bnb.bg/bnbweb/groups/public/documents/ bnb_download/s_ macro_indicators_a1_pdf_bg.pdf;
<http://www.nsi.bg/bg/content/2206>

The data presented in Table 6 show that the calculated indicators for insurance density and insurance penetration have very low values. During the 10-year monitoring period, the insurance penetration remained at values of less than 1%. The reason can be the small volume of the premium income from the general liability insurance in Bulgaria, although there has been a slight increase over the last four years of the period - from approximately BGN 27 million in 2010, it rose to over BGN 33 million in 2014.

The premium income from general liability insurance per capita in BGN increased slightly over the period of analysis. The insurance penetration index has very low rates for the period, varying between BGN 3 and BGN 5 for insurance expenses per capita. Nevertheless, there is an insignificant increase in its values over the last few years of the period. The lowest rate was during the first year of the period in observation, when it was at levels of BGN 2.78 and the highest rate was during the last year of the period - BGN 4.67. Despite the increase in income from insurance premia under general liability insurance contacts during the period from 2004 and 2014, the low rates of the index are due to the decrease in the population in Bulgaria and the still low rates of insurance premium income.

Environmental pollution liability insurance is still not widely popular in Bulgaria, but it is expected to become a necessary and perspective type of insurance, for which there are favourable development conditions. In order to position the type of insurance in question correctly on the market, insurers should concentrate all of their efforts in:

- applying appropriate marketing measures by insurers to potential consumers, aimed at: increasing insurance culture, raising awareness about the benefits of the insurance, realisation of insurance interests and making decisions for the consumption of insurance protection;
- motivating insurers and their brokers to increase contract sales for environmental pollution liability insurance, also improving sales by raising the qualifications of the insurance experts and specialising insurance brokers in this type of insurance;
- regarding environmental pollution liability insurance as a separate type of insurance within the general liability insurance sector and creating opportunities for accounting its current condition and development separately both in the insurance company itself and also among the other types of insurance in the general insurance sector;
- expanding the range of insurer by including environmental pollution liability insurance in the portfolio of companies which have not yet offered such type of insurance, thus creating opportunities for introducing innovations in the product policy of insurers;
- implementing the constructive foreign experience of leading insurers and following European and world trends in developing liability insurance.

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To sum up, the following general *conclusions* can be drawn:

1. It is a fact that the amount of cashed insurance premia for general liability insurance is relatively low - an average of BGN 3 per capita for the period between 2004 and 2014.

2. Despite the insufficiently high rates of premium income, at the end of the period in observation there was a noticeable trend towards an increase in the amount of collected premia from this type of insurance in absolute terms. The increase in premium income may be due to attracting new insured policy-holders or to increasing insurance amounts, reflecting on the amount of the insurance premia.

3. The insurance density and insurance penetration rates - regardless of their low values - show a marked tendency for increase, even though it is a slight one, which is a basis for further development of the general liability insurance.

4. Despite the rare distribution of the environmental pollution liability insurance, it has its important role in the general liability insurance and general insurance sectors.

5. General liability insurance also plays an important role for the economy of the country and is expected to grow in the future. By raising the legal, insurance and environmental awareness of the population, there will be new favourable conditions for increasing the demand for environmental pollution liability insurance in Bulgaria.

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