

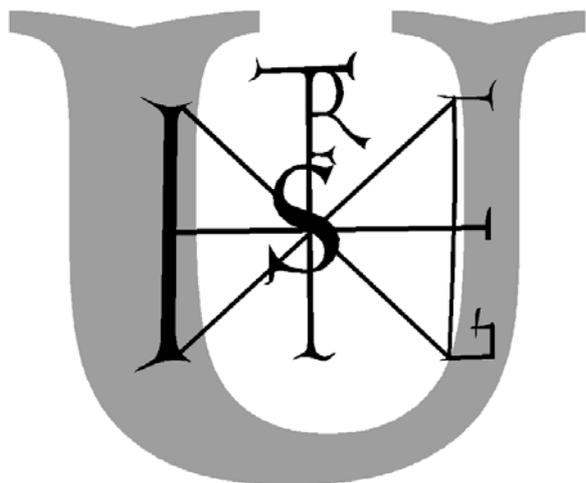
SZENT ISTVÁN UNIVERSITY

Ph.D THESIS

PRODUCT LIABILITY AND ITS INSURANCE

Attila Szakács

Gödöllő
2003



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Of Ph.D education

Description: economic- and organisational sciences

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Permission of educational location

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Permission of theme leader

1. PRECEDENTS OF WORK, SET GOALS

All over the world the most significant motivation, engine of the economic development is entrepreneur. Due to market competition they are the people who make the most important financial sacrifice in research-development, innovation, creating new products, establishing workplaces and take most of risks. “Simple” operation of both a new undertaking and an old one means great liability for the first manager of the undertaking and of course to the management as well. Every undertaking works in a given social, economical environment, various influences can take efficiency of the undertaking in positive or negative direction. Estimation of these ones is difficult because of its many components, variations in time and space it is almost impossible. In order to avoid consequences of negative events by undertaking, to reduce adverse influences, to survive this situation and to use positive endowments coming from the changed circumstances, the undertaking has to plan the way of how to live together with risk, risk taking and handling policy. Summarising, they have to do risk management activity in order to ensure their safety.

For efficient and peaceful work liability and full knowledge of possible risks occurring is elementary. Very important way of their reduction is possibility of various insurance policies. Insurance prosperity is function of development of the entire economy in such context, that what new needs appear and what new needs can be generated within the players of economy. Appearance of new insurance companies, broker agencies, privatisation and organisational changes of the state owned insurance companies predicted dynamic development of the insurance market and at the same time insurance culture, together with increasing needs for product liability-insurance. Because subject of commerce is mostly material product even today (preceding services and non-material, intellectual products), liability of producer, manufacturer – combined with liability of trader – is connected with it. Production activity is very divergent, means many risks, of which taking into account – event to be very careful – misses completeness in many cases. Adverse consequences of risks can be balanced most efficiently by insurance policy.

1.1. Actuality, importance of theme

The producer is responsible to get the greatest insurance protection – as greatest as possible – for the products made. Development of commerce – besides its many positive aspects – also means many-many new problems, however they can be solved if there is a “safe background”. If not most of our effort will be occupied by occurring a possible damage, reducing our energy used to real work. Assessment of the products is made on the marketplace within there ruling strict competition circumstances. In the requirement system of the marketplace the product safety is the only requirement. Besides it the primary requirement – competitive market price and connected competitive services – is pointed out. It is without doubt that product safety and establishing competitive price make adverse requirements against each other. Solution could be that with meeting optimum safety requirements distribution of a product on competitive price would be possible. Solution of this contradiction is very problematic task. However the producers can solve this task in the countries, where the product liability system is effective for longer-shorter time.

These solutions are eventually bi-directional. First direction is that the producers – within their own competence – try to reduce risks coming from product liability with a system of *harmonised measures*. These ones can relate – my opinion – to quality management, environment management and risk management activities as well. The second way is *insurance of product liability risks*. It should be emphasised that these are not alternative, but rather **postulatory solutions**, because they would be only measures without value. Product liability insurance can be found in the insurance opportunities for long-time, but the producers, who are mostly addressed, have not used

it. At the same time it is obligatory way to use in Western Europe, North America. Its domestic application is not specific yet. At the beginning of the 90s fewer than 100 such insurance was made for the products intended to sell in the domestic market. Nowadays increasing demand appears for such insurance also in Hungary.

1.2. Reasons of choosing theme:

Economical processes, influence of privatisation, changes in the society – on the international markets – product liability principles established in the European Union in 1992 and more and more spreading since then and legal regulation concerning it made discovering of the domestic liability risks faster. Changing of small-scale production to large-scale one, appearance of modern technique and technology, their application in development, design and production made the whole production process more complicated. The products made in this manner became more complicated and developed which means that their control, discovering of possible faults, correction can only be made by technical staff of the producer (Quality Management ISO 9000, Environment Protection ISO 14000). The fact that the products are very often sold in original packaging – can be resold only unpacked – shows that liability of product fault, damage is more strongly directed to producer. Changing of food industry in Hungary already started in the years of 80s, but important structural changes only occurred after changing of regime. Nowadays transformation of corporate-, market- and ownership structure is being made. In this process of economic transformation multinational companies play very important role it means globalisation.

- Primary, during the time spent at Insurance Department of Corporate, Allianz Hungária Biztosító Rt. this theme was the "most suitable" and most interesting area. In Hungary the insurance area is not at the West European level, but it is able **to develop and eventually dynamically developing**. Therefore there is perspective for those people who want to deal with insurance in more details.
- Secondary, my decision was influenced by the fact that **main criteria of our products penetration** in the West European markets, accession of European Union is a European level product liability law and insurance and their adequate application.
- As personal precedent it can be mentioned that my final study was also made in this subject. This **research work** was continued in my work and in London, at British interest of Allianz, Coornhill for about 3 months.

1.3. Set goals

Our knowledge about the companies working in the Hungarian economy – what does liability–quality and insurance mean to them – is mosaic-like. We have a lot of information but correlation, influence and international relationship is not known enough. With preparing the thesis I undertook to present creation, system, actual problems of product liability and its insurance opportunity. I mainly dealt with the questions related to agricultural growers, processing companies and food trading companies.

Main goals of the thesis are the followings:

1. Historic evaluation of creation and development of product liability-insurance. Evaluation and comparison of models established in the world economy (European – North American models).

2. Critical analysis of creation and development of Hungarian product liability system, assessment of its further development.
3. Clarifying correlation between product risks – product liability, insurance and marketing – and marketing-mix and assessment, comparison of possible solutions, alternatives.
4. Inventory and assessment of behaviour of the Hungarian companies related to product risks and of product liability-insurance solutions applied inside and outside the company within risk management.
5. Analysis and assessment of difference in behaviour of the Hungarian companies related to risks and application of risk management tools.

2. THEME AND METHODOLOGY

Receiving every opportunity, support from my professors and colleagues this thesis can be considered as a summary of my research work done during the past 10 years. In accordance with specialities of the complicated insurance market various methods were applied when preparing this thesis.

2.1. Professional literary study:

I tried to know historical development and updated results of research areas connected with subject of my thesis – in time and areas – through study and process of foreign and domestic professional literatures.

2.2. Logic and historical analysis:

On my study trips abroad I could get such personal and professional literary experiences with help of which I could compare and analyse liability for damage coming from the product fault between the two various universal orders, east and west. Furthermore how it was applied in the legislation and insurance practice from the end of 1950s up till now. Over comparison of European and American product liability-insurance models the Hungarian product liability-insurance was also placed between the international models.

2.3. Document analysis, case studies:

When assessment and comparison of general data of the thesis was made the statistics, documents of the Federation of Hungarian Insurance Companies (MABISZ), Central Office of Statistics and Allianz Hungária Biztosító Rt. were used. In the mirror of data and collected information a brief summary was made about general condition of the Hungarian economy – mostly food industry – in term of liability and quality management.

2.4. Data analysing, mathematical and statistical methods:

Data summarised by various industry, individually requested from the studied companies by identification number was made by help of SPSS statistic analysing computer program. Statistic data were used since 1986. Summarised data of HUNOR system of Allianz Hungária Biztosító Rt. (nation-wide on-line system) were used since 1998, personal statistic data since 1992.

- In the chapter 2.4.1 of my thesis a few important questions of the German industrial companies' risk management – also important in Hungary – were used when preparing my questionnaire and interviews. Names and addresses of the international market leader companies to be studied were accessed from the publications of Hoppenstedt Bonnier Co. Ltd. (1995-2000), CD-database listing issued by the Central Office of Statistics (1995-2000), Allianz publications (1992-2001), annual publications of MABISZ and database of Allianz Hungária Biztosító Rt. List of 130 companies was controlled and corrected by Mr. Péter Würsing, director of International Directorate of Allianz Hungária Biztosító Rt. and Mr. Zoltán Török, director of North-Plain Region.
- Prior to preparing questionnaire very detailed professional interviews were made at 27 companies. At large companies the interview was made mainly with the quality management associate, at medium-size and small companies with the manager of economics or the top manager. Structure of the interview was the following:

- Forms of liability insurance
- Damage cases of company connected with insurance
- Tools of risk management at the company
- Correlation and efficiency of quality- and environment management
- Relationship between operation of marketing functions and insurance risks
- Expectations connected with legislation
- Expectations connected with suppliers.

On the base of interviews such questionnaire was made which was later applied in the following quantitative research. Through interviews I could get a general picture on the above-mentioned subjects, which was supported by the results of quantitative assessment made later. Assessment of professional interviews will be presented in more details in the Chapter 6.

- Inventory and assessment of working specialities of the domestic companies – in subject of liability insurance – is based on the questionnaire including 29 questions (Chapter 7.) and the answers received. Questions of the questionnaire relate to company data; quality and environment management systems; marketing organisations and their tasks; liability insurance, damages connected with it and consequences of damages; application of risk-management; and risk of development within the frame of product liability law, damages caused by agricultural products and opinion of the companies on these questions. Questionnaire attached with a letter was sent by mail and electronic way to managers and the given employees of 130 companies. To questionnaire 102 companies answered in writing, with risk management or managers of 28 companies interview was made. Downloading companies' data – by use of statistics database of Allianz Hungária Biztosító Rt. – was made on the base of the company's identification number and the nine digits of the so-called "honor" number. The needed company's identification numbers were selected by help of the competent Section of Allianz Hungária Biztosító Rt.
- Figures related to finance, number of employees, ownership structure were summarised by help of tabling program Microsoft Excel 7.0. Shares, changes and distributions related to the given industries were calculated – on the base of summarised data of the studied companies – by help of cluster analysis. Answers, data of the companies were summarised by database handling program "oracle", then final completion was made by tabling program Microsoft Excel 7.0. The following assessments (calculations) were made by help of statistic analysing program SPSS:
 - Scattering
 - Distribution
 - Factor analysis
 - Regression analysis

Over the basic calculations of the questionnaire for analysis of deeper correlation the method of cluster analysis was used.

- The following computer programs were used to prepare the thesis:
 - SPSS statistic analysing database handling program
 - Microsoft Excel 7.0. tabling program
 - Microsoft PowerPoint 7.0. presentation editing program
 - Microsoft Visio 1.0. diagram editing program
 - Microsoft Word 7.0. word processing program
 - Oracle downloading and database handling program

2.5. A method was also used active participation in professional circles (conferences):

Through scientific lecturing, participation on scientific conferences I could know opinion, thoughts of other people and later to use these ones when collecting questions of the questionnaire and making assessment, analysing work. On study trips made in England and Germany – on which I could participate – I could get very valuable experiences in term of various types of liability insurance. Personal discussions with the local experts made the facts known from the professional literature alive, practical and discovered new research directions to me.

In the study eleven years spent at the Allianz Hungária Biztosító Rt. were dominant, during this time I participated in several works which dealt with development of insurance policy and correlation of liability insurance and quality. In order to get updated information and to extent professional orientation I continuously took opportunity of Internet and Intranet (via international server of Allianz).

3. MAIN CONCLUSIONS OF THE THESIS, RESULTS

3.1. Correlation of product liability and marketing

- Product liability – as legal tools – was created through recognition of reality that there is contradiction between economic interests and safety requirements. Product liability includes liability connected with product fault, which can be various originated from a physical product fault. However product liability in narrower interpretation is liability which independent of objective sinfulness, which was introduced by American law as term “strict liability”.
- It was defined that skilled application of marketing is not enough to market success of the companies, because thanks to globalisation a company works internationally (international production and commercial network), and can be accessed by everybody thanks to mass production. Products and services mean never seen sources of hazard.

large series → low price → global consumption of the products → damage can occur for anybody, anywhere, anytime → in large volume

From the customer side requirement for quality, healthy foods, healthy environment and product liability starts to appear. Besides the fact that the producer sells the product at the same time he should ensure the customer has risk as small as possible when using the product. The company responds to new quality, development, customer challenges through marketing mix. Product safety can be improved with quality management systems. However it cannot provide full protection to customers. Another important part of protection is insurance. If the product is faulty and consequently causes damages then the customer will be entitled to require compensation. Role of customer protection has been raised and focused. Producer is liable for any potential damage whether he made contract with the customer or not. Through influence of these cases modern Product Liability Law was introduced in Hungary since 1 January 1994.

- Similarities, differences of quality management and product liability-insurance were clarified and it was also shown that it is a system very much built on each other. (Table 1).
- By help of a model worked out the horizontal and vertical relationship of the market players were examined (Figure 1) with considering risks of liability insurance. Everybody has influence on marketing decision making and everybody also means risk. The given areas are shown not sharply separated but rather built on each other, considering influence exerted on each other, environmental (economic, political) changes.

Table 1. Comparison between quality management and product liability-insurance (Source: Szakács 2001)

	Quality management (ISO)			Product liability, safety		
	Grower, Producer, Distributor (GPD)	Customer	Auditor (Outer independent company)	Grower, Producer, Distributor (GPD)	Customer	Customer protection organization
Whose interest	+	+		+	+	
Whose liability	+		+	+		
Who qualifies	+	+	+			+
Who controls	+		+		+	+
Who has advantage	+	+		+	+	

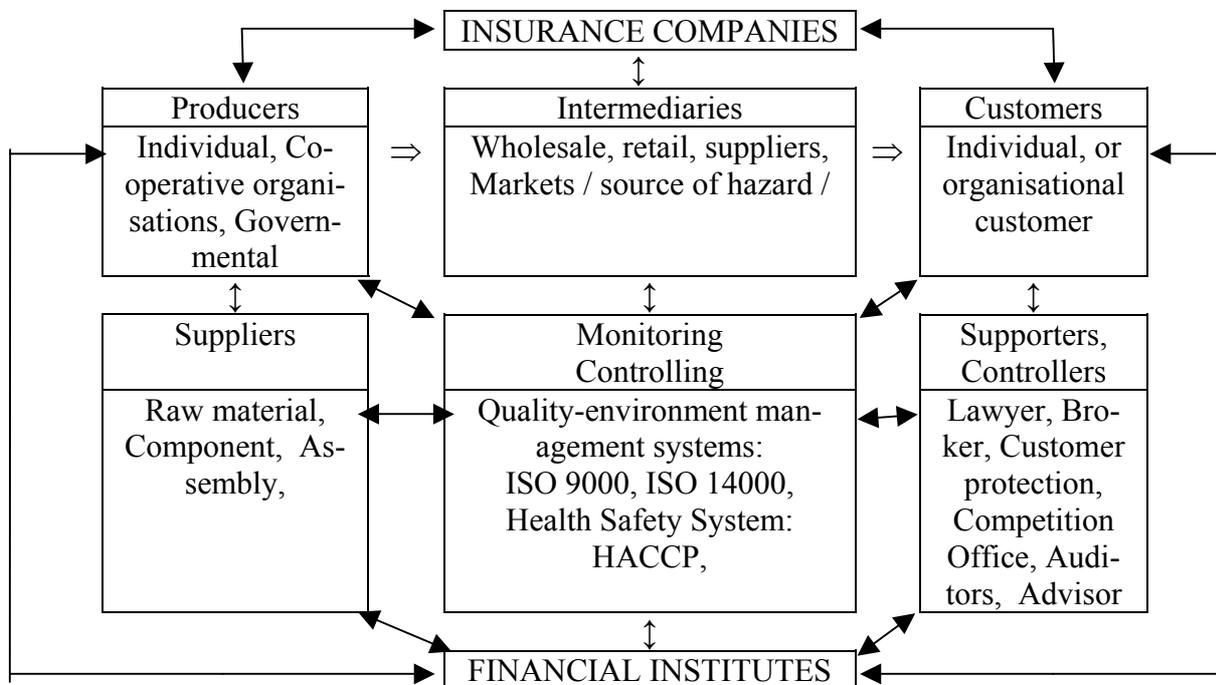


Figure 1. Vertical and horizontal connection of market players with liability insurance (Source: Szakács 1999)

3.2. Presentation, overview and evaluation of various product liability models in economic and legal aspects.

- a) In Europe a mutual regulation – based on recommendations of 25 July 1985 – product liability independent of sinfulness was introduced.

Most important principle of the new recommendations is that the producer should bear liability of a faulty product (his liability is objective liability independent of chargeability), extent of which is theoretically unlimited. Death or injury caused by faulty products – by the recommendations – is liability of the producer – which is valid for minimum 10 years from distribution of the product and with limit of at least 70 million ECUs.

- b) Principles of accountability in the United States are the followings:

- Infringement of warranty rules

Product quality is focused, more exactly difference between actual and guaranteed quality. In 1975 minimum standard of the written guarantee was summarised in five important clauses. These are the followings:

- Rule of publication
- Rule of accessibility prior to distribution
- Rule of making difference between full and limited guarantee
- Rule of providing written guarantee
- Rule of settling information disputes

- Sinfulness

If the producer failed to produce his products with expected carefulness or to control before distribution, can be chargeable for failure of liability.

- Strict liability

Strict Liability in Tort issued in 1963 made the producer liable without guiltiness. The producer has objective liability, which is independent of binding contract and whether he controlled product before distribution. The producer is also liable for damage caused by his product if he produced and distributed the product with carefulness as great as possible.

- c) Main differences between European and North American product liability.

- The most significant difference is *field of application* of product liability. The **European product liability is narrower** than American, because the first one concerns only customer goods and damages of customers. The North American product liability is much wider, because covers every product, even services. The latter is similar with the European product liability because it does not cover economic damages, consequently production loss occurring due to product fault and also profit loss. American product liability also covers products which are not qualified for customer articles (for example: machine tools, agricultural machines, etc.) and other faults caused by products manufactured or distributed for other production purposes. Also it is mutual feature that North American and European product liability insurance does not cover damages being in the product and legal remedy is available with other title (warranty, etc.).

- If it does not mean difference theoretically, in practical issue it is much more *differences* when considering European and American *judicial act*. In the United States of America decision in facts is competence of an assize-court, where social and justice aspects mainly influence logic process of fact finding.
- It is also significant difference that *European product liability is codified*. In North America product liability is effective in the system of Common Law, it means that it is *part of the given states*.
- Further differences are also *other process features*. In the United States *there is no judge fee*, it is very attractive to initiate legal procedure. It was also mentioned that *contingency fee* is effective in American advocator regulation. If somebody has chance to initiate legal procedure or at least to reach any agreement then he can start such a procedure without any financial spending. Many legal offices undertake representation against contingency fee with advancement of full cost. In case product fault probability of new legal procedure is very high. It is much higher than in Europe in case products fault occurred. The insurance company has to take it into account.
- There is other significant difference that *European law does not know the institute of punitive remuneration*. In the legal practice of the United States at most of product liability demands over strict liability also punitive remuneration is required.
- *Burden of proof is different*. While in the United States the producer should proof that damage was not caused by his product fault, in Europe it is task of the party suffering from damage.
- As was mentioned above difference should be made between the wider and narrower product liability. Besides objective and narrower product liability of course in Europe also remuneration obligation based on any kind of sinfulness is effective. This remuneration obligation becomes stricter and stricter. This *strictness spreads in such extent that in many cases reaches strictness of strict liability*.

3.3. Creation of the Hungarian product liability system and its place among international models.

In Hungarian export relationship of course we have to be prepared first for European product liability in export and import businesses. This is the reason why European model was introduced in Hungary. However at the companies which export in the United States or Canada the local product liability means very strict challenge. Considering the principles European product liability follows the American one.

In the table 2 important features of legal regulation related European and Hungarian product liability are compared.

Table 2. use for follows short words:

- FMGT. = Is product liability law valid for the unprocessed agricultural, fishery and hunting products?
- TTFK. = Is exceptional case if fault was not known in the given moment on the current level of science and technology?

Table 2. Important features of legal regulation related European and Hungarian product liability.

Countries	Introduction date	FMGT	TTFK	Minimal Limit (EURÓ)	Maximal Limit (EURÓ)
Britain	01.03.88.	no	yes	500	no
Italy	29.06.88.	no	yes	500	no
Greece	30.07.88.	no	yes	500	21.141.130
Luxembourg	02.05.89.	yes	no	500	no
Denmark	10.06.89	no	yes	500	no
Portugal	12.11.89.	no	yes	500	49.879.790
Germany	01.01.90.	no	yes	575	81.799.591
Netherlands	01.11.90.	no	yes	500	no
France	19.05.98.	yes	yes	500	no
Spain	06.07.94.	no	yes	390	63.106.271
Ireland	16.12.91.	no	yes	444	no
Belgium	01.04.91.	no	yes	560	no
Austria	01.07.88/01.01.94	no	yes	500	no
Finland	10.09.91/01.01.94	yes	no	no	no
Sweden	01.01.93	yes	yes	400	no
Hungary	01.01.94	no	yes	40	no

3.4. Presentation of own questionnaire research results in the mirror of conditions, motivation and opinion of Hungarian and international companies on product liability, quality and risk- and environment management.

- Similar assessment has not been made in Hungary and most important results are as follows:
 - About half (64) of the requested companies use quality management system. Of the companies which do not use it currently about half plans to introduce quality management system. Much fewer of the companies have environment management system, only 12 companies. Introduction is only planned by 20%. Examining environment of the companies it can be said that their suppliers just partly have quality management systems. If the parent company has quality management system then 87% of the subsidiary companies also have ISO certificate. Environment management system has no such an influence on the subsidiary companies, only 55% introduced among them where the parent company has environment management system.
 - More than 20% of the studied companies think that the producer should bear product liability risks predicted due to scientific – technological development results. Opinion of 40% is that the producer should bear it partly, opinion of 25% is that the producer should not bear it. Opinion of one third is that the producer liability should only relate to hazardous products.
 - About half of the requested companies think that agricultural products have to be introduced in the circle of product liability as well. More than one third think to do that just partly, opinion of 10% is that it can be made later (Figure 2).

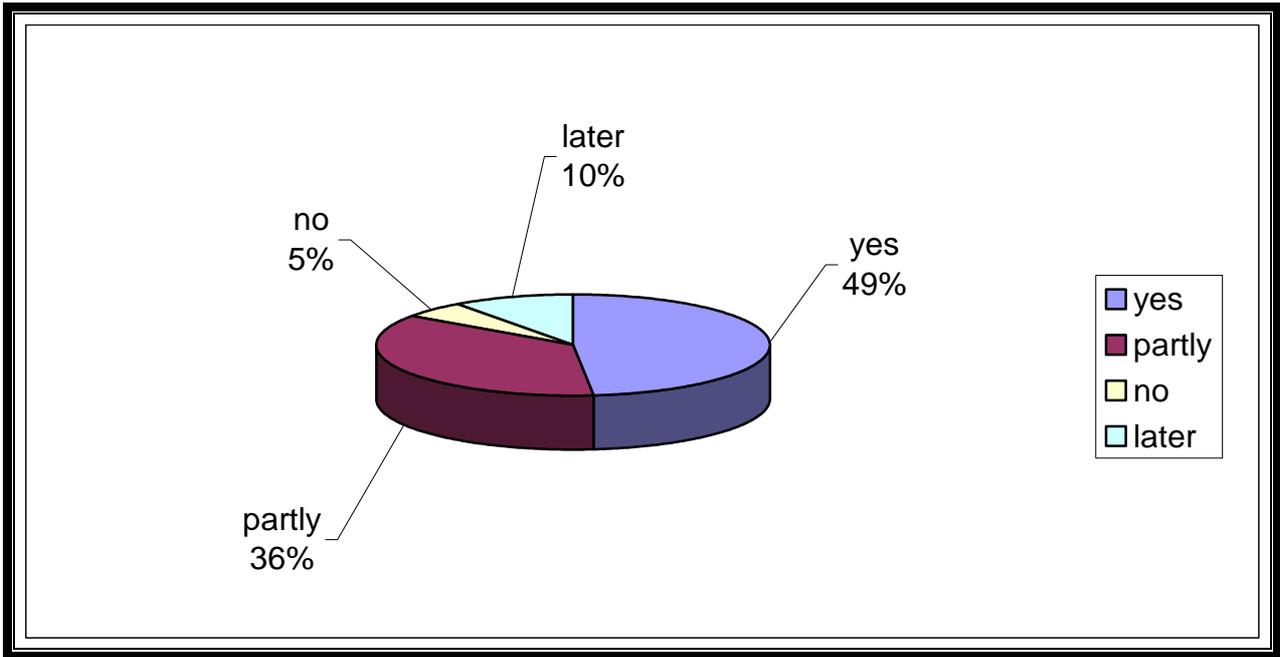


Figure 2. Introduction of agricultural products in the circle of product liability.

- Based on my research results (currently just in the region of North-Plain) an absolute new “federation of four” was established – in accordance with its principle the insurance companies, auditors, producers and customer protection have to work together in order to maintain quality (control) in the interest of the customers.
- Based on application of product liability and quality management systems within the companies working in agribusiness 4 segments were separated – by help of cluster analysis – as follows (figure 3).

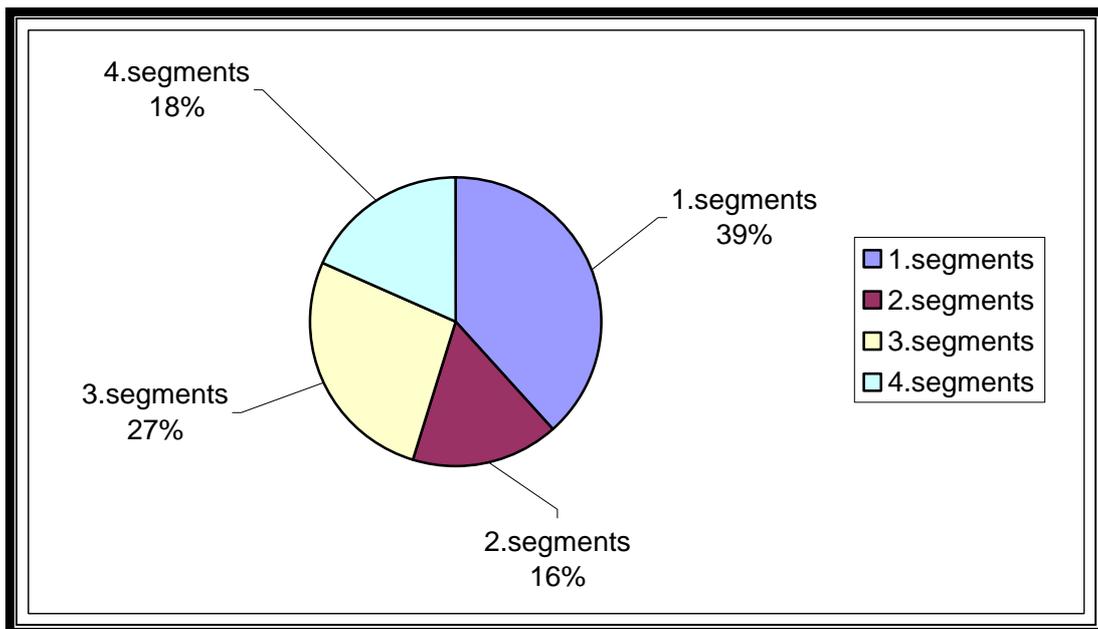


Figure 3. Distribution of liability segments in the sample

- 1. *Multinational „creator-type”*

Over mainly industrial activity and relative high turnover in this segment the most international players can be found. They are strictest against the suppliers and use opportunity of risk management for insurance policy in high ratio. Number of product liability damages is high.

- 2. *Large company „follower-type”*

Here mainly companies with medium or high turnover are placed, which can be owned by domestic or foreign owner (in accordance with ratio of sample structure). They require – without exception - quality management system from their suppliers. Most of them use opportunity of risk management for their insurance policy. Number of product liability damages is highest.

- 3. *Service company „indifferent-type”*

Companies with lower turnover can be found in the highest ratio. Relatively many service companies are included in this segment. Mostly domestic companies do not require quality management system from their suppliers. They have the lowest level application of insurance risk management. No product liability damage is reported.

- 4. *Agricultural „remainder-type”*

Mostly domestic companies with low-medium turnover are included, in three-fourth part with agricultural activity. Probably due to their activity they less require quality management system from their suppliers (less than segment 3). About 50% of these companies use risk management for insurance. About 30% of product liability damages – considering number of the companies – is reported.

- After privatisation the companies did not recognise for long time opportunities of advisory work on the area of quality, adequate environment, product liability-insurance. Application of risk management supporting decision preparation was mainly made - almost 40% - where international financial or human capital appeared. Where the “young” – with international experience and point of view – management appeared on the marketplace and legislation was made resistance of the companies decreased. The companies are getting to recognise such economic needs and benefits, which are necessary to accession of the European Union and to efficient and peaceful work on the marketplace. It is important to make stronger relationship between advisors (consultants, auditors, brokers) and insurance companies.

Our results could show that working together with the advisors:

- The companies can get professional knowledge of high level,
- They can meet international requirements easier,
- Programs meeting the current requirements can be made,
- More cost effective,
- Individual “personal” tailored advisory method can be most effective.

3.5. New scientific results

Based on outcomes of the thesis and the applied methodological principles the following new results can be emphasised:

1. Traditional research results primarily examined product liability questions in correlation system of quality, risk and risk insurance. In the frame of Ph.D. research environment protection and ***marketing as further aspects were added and introduced in the study.***
2. Assessment, systematisation and comparison of international product liability systems (European, North American, Hungarian). An unique ***model was established showing horizontal and vertical relationship of market players***, which also considers liability insurance risks.
3. Application of product liability-insurance, quality- and environment management systems can be considered new scientific approach and also the grouping made by help of traditional methods and cluster analysis, within which ***4 corporate segments were determined.***

- ***Creator type***

Dominantly Hungarian subsidiary companies of multinational companies are included in this segment, requiring strict demands from their suppliers. They use opportunity of risk management for insurance in high ratio. They are open for every new solution and apply it as soon as possible, usually on their own.

- ***Follower type***

Dominantly the companies with high turnover are included in this segment and require – without exception – quality management system from their suppliers. Usually they use solutions already introduced by other companies. They know their rights very well and they are excellent in promoting their interest. They are ready to fulfil obligation – which does not mean profit immediately – through legal, political and social pressure. Number of product liability damages is highest.

- ***Indifferent type***

The companies with lower turnover can be found in highest ratio in this segment. Relatively ratio of the service companies is high. Because they are not in danger in term of product liability therefore product liability-insurance, application of quality- and environment management systems are not valuable to them currently. No product liability damage reported. Considering application of insurance risk management they are at the lowest level.

- ***Remainder type***

This segment mainly includes domestic owned companies, mostly with agricultural profile. Coming from the profile – because it is delivered – these companies have no opportunity to require quality management system from their suppliers. Because of their difficult financial situation they cannot finance the “new” solutions, even have no enough information. They need huge subsidy.

4. Application features of product liability-insurance, quality management, risk- and environment management systems of the companies working in Hungary, which can be characterised with the followings.
- The *multinational parent companies have positive influence* on introduction and distribution of product liability-insurance and quality management systems.
 - The domestic and foreign owned export oriented industrial companies working in Hungary have *positive attitude* in introduction of product liability-insurance and quality management systems.
 - *Agricultural companies can be mainly grouped in the segment “remainders”*, which have delaying attitude in introduction of quality management systems.
 - Comparing distribution of quality management systems with *environment management systems in application of the latter there is significant delaying*, even at the subsidiary companies of the multinational companies working in Hungary no positive influence can be determined. At the other companies there is significant delay.

4. CONCLUSIONS AND RECOMMENDATIONS

- When presenting international economic significance of the general micro- and macro integration systems and studying connection opportunities of common marketing I experienced sharp differences between the differently developed economic, social, political areas and groups. At the remainders even at the leaders the harmonisation of marketing, quality- and product liability insurance has to be improved.
- In agricultural raw material management the necessity of product liability insurance is very much proved by the fact that faults made in the raw material production cannot be or just hardly corrected in the food production process. Quality of raw material determines the quality of foods. It can be seen that what risk the agricultural production means to the customers. Therefore my recommendation is important that Hungarian product liability law should not exclude obligatory product liability for the unprocessed agricultural, fishery and hunting products, similarly like product liability law in France, Finland, Sweden and Luxembourg.
- One of the most important opportunities to handle risks is prevention. Perhaps the most important preventive risk management tool today and in the future is application of traceability in certain circle and environment protection. One of the important tools can be the wider distribution of satellite monitoring systems. With its help the materials needed in the agricultural activity can be put in environment only in precisely defined quantity and quality: seed, fertiliser and pesticide. One of the main tasks of plant protection is to provide quality of plants. Risk free food can only be produced from perfect raw materials. Production of healthy food should be the main goal of every players involved in the agricultural production – which is free of heavy metals, pesticide residue, pests, microbiological pollutants. Member states of the European Union emphasised also in the agreement of Maastricht that protection of customers' health has primary role, principle of free circulation of goods has only secondary role. We have been over that age when environment protection was just a movement and nothing else. Today ecology is combined with economic necessities, standards, incitements and prohibition. Thanks to this incitement-prohibition policy the environment protection management is being built in the organisational structures of the large companies, which works out environment protection strategy. The larger environment pollution risk should be considered by a company, the more “brakes” should be built in, because investment in environment protection will cost less for long-term than the value of penalty. On the way going to the world marketplace very soon a table of ISO 14000 will show the “good” way. The foreign companies working together with Hungarian ones will require the mentioned signage soon. Those companies, which can meet strict requirements, will have benefits, their products receive certificate of environment pollution free, clean product. In order to maintain the controlled quality the insurance companies and producers have to work together. My recommendation is that those companies and products, which meet strict requirements, receive certificate of environment pollution free, clean product, will have benefits when making insurance contract. Because environmental solutions and food safety will appear with much more influence in the future of agricultural policy.
- Similarly, like in distribution of quality management opportunities governmental participation is necessary in order to introduce environment management solutions. The small and medium size companies will not be able to solve these problems just on their own. Over financial resources training of human resources and circulation of information materials should be emphasised.

- Based on my research results the new “federation of four” was established regionally, by principle of which the insurance company, auditor, producer and customer protection should work together in order to maintain strict (control) quality in the interest of the clients – I recommend spreading it nation-wide.
- The thesis also emphasises that there are important opportunities in co-operation of insurance and advisory network – also important for accession of the European Union. In the mirror of the accession of the European Union our recording system has to be changed in three aspects, to which I recommend to involve insurance side:
 - on the professional area,
 - on the area of data collecting discipline,
 - on the area of the provided services and their accessibility.

Circle of the services can be widened by involvement of insurance advisory activity. On the area of accessibility large development could be experienced, because the insurance branch network and the agricultural experts are present on the whole area of Hungary. Thanks to foreign ownership structure of the insurance companies international experiences can also be used. At the same time the adequate data collecting and professionalism could realise, because the insurance companies have wide circle of clients, where the “partners” trust in each other.

My thesis can be considered a summary of my advisory and research work done in the insurance and risk- management activity in the past 10 years. Within this work I set goals for addition, systematisation and summarising of knowledge gained on the area of product liability- insurance policy. I have made it with the hopes that considering my recommendations and study results the customers, manufacturers and insurance companies will have fewer damages in the new millennium.

5. PUBLICATIONS OF THE AUTHOR

Scientific articles in concerned journals:

- Szücs J., **Szakács A.** (1997): *A gyümölcskészítmények és gyümölcslevek piaca Magyarországon, a piac főbb szereplői*, Új Kertgazdaság, 2. szám. 46-51. p.
- Szücs J., **Szakács A.** (1997): *The Role of Multinational Companies in Hungarian Agribusiness Hungarian Agricultural Research*, Vol. 6, No. 4. ISSN 1216-4536, 15-19. p.
- **Szakács A.**, Töröcsik I. (2000): *Marketing környezet hatása a szolgáltató vállalatok szervezésére - A "termékfelelőség" (Tf.) biztosítási piacra*, Marketing & Menedzsment c. tudományos lap, XXXIV évf. 3.sz., ISSN 1219-0349, 60-64. p.
- **Szakács A.**, Markó O. (2002): *Globalisation at the insurance market*. Buletinul USAMV-CN, AcademicPres, Cluj-Napoca, România, Volumul 57, ISSN 1454-2382, 448-452. p.
- Leloczky K., **Szakács A.** (2003): *A Francia termékfelelőség*, Külgazdaság, megjelenés alatt

Professional book:

- Tóth A. et. al. (Szerk.) (2000): *Gyakorlati Controlling Kézikönyv*; Zéman Z., **Szakács A.**: *Biztosítási szervezetek controllingja*, 7.10.1. fejezet, WEKA Szakkönyvtár KFT, 2000. ISDN 9638592052, 1-15. p.

Scientific conference lecturing, published in publication:

a.) International conferences

- **Szakács A.** (1997): *Product's Liability and Quality Insurance*, Miskolci Egyetem Gazdaság Tudományi Kar 10. Jubileumi Konferenciája a Közgazdász-képzés megkezdésének 10. évfordulójára rendezett konferencián, International Conference of PhD Students; Miskolci Egyetem, 12. p.
- **Szakács A.** (1999): *Global -World Wide - Insurance Market*, Miskolci Egyetem 2. International Conference of PhD Students; Miskolci Egyetem, ISBN 9636613745, 366-369. p.

b.) Domestic conferences

- Szücs J., **Szakács A.** (1996): *Hungarian market of fruit products, the participants of domestic market -A gyümölcskészítmények piaca Magyarországon, a piac szereplői*, Lippai János Tudományos Napok; Kertészeti és Élelmiszeripari Egyetem, ISBN 9637712445, 456-457. p.

- **Szakács A., Szűcs J. (1996):** *Veszélyes anyagok a felelősségbiztosításban*, Keszthelyi Georgikon Napok Keszthely; Integration in Agricultural Economy - Integráció az Agrárgazdaságban, Pannon Agrártudományi Egyetem, ISBN 9637743995, 638-641. p.
- **Szakács A., Szűcs J. (1996):** *Az ISO 9000 szerinti minőségbiztosítási rendszer*, XXXVIII. Georgikon Napok Keszthely; Integration in Agricultural Economy - Integráció az Agrárgazdaságban, Pannon Agrártudományi Egyetem, ISBN 9637743995, 627-632. p.
- **Szakács A., Szűcs J. (1996):** *Biztosítás - termékfelelősség, ISO - szerepe a vállalatirányításban*, XXXVIII. Georgikon Napok Keszthely; Integration in Agricultural Economy - Integráció az Agrárgazdaságban, Pannon Agrártudományi Egyetem, ISBN 9637743995, 633-637. p.
- **Szakács A., Szűcs J. (1996):** *Product's liability and quality insurance - Termékfelelősség és minőség- biztosítás*, Lippai János Tudományos Napok; Kertészeti és Élelmiszeripari Egyetem, ISBN 9637712445, 450-451. p.
- **Szakács A. (1996):** *Product's liability and its insurance*, V. Agrárökonómiai Tudományos Napok, Management and Market Competition in Agriculture Volume 2., Gazdálkodás - Piaci Verseny a Mezőgazdaságban II. kötet, GATE Mg. Főiskolai Kar, Gyöngyös, 356-357. p.
- **Szakács A., Szűcs J. (1996):** *Termékfelelősség, biztosítás, minőség*. XXXVIII. Georgikon Napok Keszthely; Integration in Agricultural Economy - Integráció az Agrárgazdaságban, Pannon Agrártudományi Egyetem, ISBN 9637743995, 642-646. p.
- **Szűcs J., Szakács A. (1997):** *A nemzetközi piacvezető cégek szerepe a magyar élelmiszer-gazdaság multinacionalizálódásában*, Vállalati környezet és alkalmazkodás az élelmiszer-termelésben. Konferencia a GTK megalakulásának 10. évfordulójára. Gödöllői Agrártudományi Egyetem, ISSN 1418-950X, ISBN 9638140 78 xö, 59-62. p.
- **Szakács A. (1998):** *Minőség szerepe a termékfelelősség (TF.) biztosításban, és a vállalatirányításban*, 40. Keszthelyi Georgikon Napok; Pannon Agrártudományi Egyetem, ISBN 963909630 XÖ, 449-453. p.
- **Szakács A. (1998):** *Környezetvédelem és felelősségbiztosítás*, 40. Keszthelyi Georgikon Napok; Pannon Agrártudományi Egyetem, ISBN 963909630 XÖ, 454-459. p.
- **Szakács A. (1998):** *Mit érdemes tudni az ISO 9000-es szabványsorozatról*, 40. Keszthelyi Georgikon Napok; Pannon Agrártudományi Egyetem, ISBN 963909630 XÖ, 460-466. p.
- **Szakács A. (1998):** *Felelősségbiztosítás és környezet*, VI. Nemzetközi Agrárökonómiai Tudományos Napok; GATE Gyöngyösi Főiskolai kar, ISBN 96381407043, 119-124. p.
- **Szakács A., Szűcs J. (1998):** *Vállalatirányítás szerepe a megfelelő biztosítás és környezetbarát technológiák kiválasztásában*, Mezőgazdaság és Vidékfejlesztés; VI. Nemzetközi Agrárökonómiai Tudományos Napok, GATE Mezőgazdasági Főiskolai Kar, Gyöngyös, ISBN 96381407043, 125-130. p.
- **Szakács A., Papp J., Komáromi N. (2000):** *Globalizáció hatása a biztosítási piacra és a káralakulásokra*, VISION 2000 Tudományos napok; SZIE Gödöllő, 338-343. p.

- Zéman Z., Tóth A., Véry Z., Fónagy Á. P., **Szakács A.** (2000): *A szervezeten belüli controlling differenciálódása a controlling metodika standardizálása mellett*, VISION 2000 Tudományos napok; SZIE Gödöllő, 358-365. p.
- **Szakács A.**, Szakács Zs., Zéman Z. (2000): *Biztosításmarketing elméleti és gyakorlati kérdései az EU. csatlakozás küszöbén*, 42. Georgikon Napok; Az Agrár – Termékpiacok és Környezetük, Pannon Agrártudományi Egyetem, II. kötet ISBN 963909671 7Ö, ISBN 963909673 3, 102-108. p.
- **Szakács A.**, Szakács Zs., Zéman Z. (2000): *A szolgáltatásmarketing elméleti és gyakorlati kérdései a felelősségbiztosításokban*, 42. Georgikon Napok; Az Agrár - Termékpiacok és Környezetük, Pannon Agrártudományi Egyetem, I. kötet ISBN 963909671 7Ö, ISBN 963909673 3, 113-118. p.
- **Szakács A.**, Papp J., Komáromi N. (2001): *Termékfelelősség és minőségbiztosítás kapcsolatában rejlő lehetőségek az agribusiness területén*. "VISION-2000 III. – A kooperáció, a koordináció és az integráció szerepe és lehetőségei az agrár- és a vidéki gazdaságban" című tudományos konferencia kiadványa. II. kötet, Gödöllő, 208-216. p.
- Illés B. Cs., **Szakács A.** (2002): *A termékfelelősség és minőség kérdése a hazai agribiznisz szektorban*. VIII. Nemzetközi Agrárökonómiai Tudományos Napok "A mezőgazdasági termelés és erőforráshasznosítás" című kiadvány, 2. kötet, Gyöngyös, ISBN 963 9256 75 7 ö, ISBN 963 9256 77 3, 66-71. p.
- **Szakács A.** (2002): *Termékfelelősség – versenyképesség – EU-környezet*. VIII. Nemzetközi Agrárökonómiai Tudományos Napok "A mezőgazdasági termelés és erőforrás-hasznosítás ökonómiája" című kiadvány, 3. kötet, Gyöngyös, ISBN 963 9256 75 7 ö, ISBN 963 9256 88 9, 300-305. p.