

## Risk Management Standardization in Entrepreneurship. Selected Issues

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### Abstract

The paper deals with the issues related to the process of risk management standardization in entrepreneurship. In particular, it reviews the selected approaches and concepts used in this respect all over the world. It discusses the basic problems in a synthetic way. Due to the complex character of these problems, the paper mainly focuses on the specificity of activities conducted by insurers as service providers, since risk is a key area in insurance.

### Key words

Risk, risk management, risk management standards, insurance, entrepreneurship.

**JEL Classification:** D8, G22, G32, L26

### Introduction

In practical economic activities, risk management is a necessity. This results from a number of factors and one of reasons why an effective risk management system needs to be implemented in a company is the fact that this system directly contributes to a rise in the company's value. Not surprisingly then, in entrepreneurship all over the world a process of risk management standardization, based on the guidance given by reputable and well-known global institutions, research centres and organizations, is underway. Also in Poland, such solutions are implemented in business practice. This process, however, is slow and requires a lot of commitment and a shift in the mindset of many domestic entrepreneurs and managers. The creation of an integrated risk management system, based on the guidance given in international risk management standards, is also costly and requires specialized knowledge in this field. Therefore, the main aim of this paper is to introduce the concepts, assumptions and solutions relative to the key risk management standards. In particular, the authors attempt to review the most common risk management standards worldwide and briefly evaluate, in a synthetic way, how successful these solutions prove to be in business practice in Poland. Due to the complex character of the problems, which are the subject matter of the deliberations, these issues are analyzed with reference to insurers' activities, as risk is the main field in insurance, and risk management in a typical insurance company is an integral part of this company's operations. The methodical aspects are of vital importance here, as well as their practical application by economic entities in Poland. The deliberations in the paper are mainly theoretical and the authors draw on the studies of literature. They also use their own expertise

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and experience gained from their long term research into the problems in question. In this paper, the authors use deduction, induction and synthesis.

## 1. The Review of Risk Management Standards in the World

Since the middle of the 20th century, risk management has followed some standards, which have provided frameworks and systems to deal with risk management processes in organisations [1]. The implementation of risk management standards in organisations can be most clearly seen in organisational structures of companies; although it isn't limited to enterprises only. All over the world, a few well-tested, and at the same time (more or less) universal, international risk management standards are commonly used in companies, i.e. Federation of European Risk Management Associations (FERMA), Committee of Sponsoring Organizations of the Treadway Commission (COSO II), Australia and New Zealand Risk Management Standards AS/NZS 4360:2004, introduced by Standards Australia and Standards New Zealand [1]. A synthetic comparative analysis of the three types of standards is shown in Tab. 1.

Feature	FERMA	COSO II	AS/NZS
Risk definition	The combination of the probability of an event and its consequences. The standard draws attention to both positive and negative aspects of risks but focuses primarily on the former ones.	A possibility that an event will occur and have a negative impact on the achievement of objectives. It addresses negative and positive (opportunities) aspects of risks.	A possibility of something happening that impacts on a company's objectives. It's the chance to either make a gain or a loss and is measured in terms of likelihood and consequence. It addresses negative and positive aspects of risk.
Risk management definition	The process whereby organisations methodically address the risks.	Conducted by an entity's board of directors, management or any other personnel. This process is applied in strategy setting and across the company, designed to identify potential events that may affect the entity, manage risk which is within its risk appetite and provide reasonable assurance regarding the achievement of entity objectives.	Culture, processes and structures directly focused on making gains and controlling threats at the same time.
Application	The standard may be applied in any types of organisations, including the public sector.	Universal standard designed mainly for American listed companies.	The Standard may be applied in any organizations.
How detailed	A very general description of the risk management process and its stages.	A very detailed description of stages within the risk management process.	A general description in the standard plus a brief expansion in a handbook.
How formalised	Entities participating in the process are identified and it is recommended that general internal regulations should be established.	A risk management system relatively strongly embedded in an entity's structure and a need for wide-ranging legislation.	Identifying entities involved in risk management and formal documents to support the risk management system.

Objective setting	No special section dealing with goal setting. The impact of risk management on achievement of strategic goals is emphasized.	Objective setting is a stage of the risk management process. It emphasizes that risk management should be correlated with the achievement of strategic objectives. Four types of objectives are distinguished: strategic, operations, reporting and compliance.	Objective setting is embedded in the risk management process.
Risk identification	Risk identification is treated as part of risk analysis, which comprises risk description and risk estimation. Few directives are given in this area. It's recommended that risk identification should be conducted in a methodical way to ensure that all activities are defined. An appendix to the standard includes a short list of risk identification techniques.	Within risk identification, the standard refers to the analysis of a company's internal and external environment, which may be a source of events that have a positive or negative impact on the strategy implementation (suggests a catalogue of internal and external factors). COSO provides detailed information about risk identification techniques (with examples).	AS/NZS doesn't pay much attention to risk identification. It emphasizes the need of regularity, no matter whether risk is controlled by an organization or not. The standard provides some guidance about the information needed to identify risk, a method of identification and documentation which closes this stage of the process.
Risk estimation	As soon as the risk evaluation stage is completed, risks need to be referred to pre-agreed criteria and a decision about further actions should be taken.	No separate section about estimation. Some references to risk estimation may be found in the section on risk assessment and risk response.	In the guidelines part, estimation criteria and risk appetite concept are described. No references to historic events when determining assessment criteria.
Reporting and communication	Reporting and communication (internal and external) are discussed before the risk response section.	COSO anticipates that reporting and communication should follow risk response and control activities.	Reporting and communication issues are presented in the first part of the Standard.
Risk response	FERMA doesn't pay much attention to this issue. It's underlined that risk control and mitigation are part of risk responses, just like risk avoidance, transfer and financing.	COSO distinguishes four possible risk responses: avoiding, reducing, sharing or accepting risk. It provides a brief analysis of costs and benefits. More details can be found in the volume on Application Techniques.	AS/NZS provides separate descriptions of risk activities, bringing positive and negative effects. The main part of the standard outlines an analysis of costs and benefits of every risk response, but more details about it (qualitative and quantitative analyses) can be found in the guidelines part.
Monitoring of risk management process	Monitoring should bring information about risk identification and appropriate control actions to be taken.	COSO distinguishes two kinds of monitoring – ongoing (in progress) and ad hoc. The standard provides a detailed description of the observation process, including the subjective and objective scope of reporting.	Continuous monitoring combined with drawing conclusions are vital in risk management process. The guidance part provides, e.g. a detailed description of monitoring and measuring effectiveness of risk management process.

Responsibility for risk management	The standard specifies the roles and scope of responsibility for: the Board of Directors, Business Units, the Risk Management Function and Internal Audit. In addition, it deals with a risk management policy and resources needed to implement the risk management process.	The standard outlines the roles and responsibilities of: board of directors, managers, CRO, financial officers, internal auditors and external parties. The supplementary part includes detailed examples of job descriptions for CRO, CEO, audit committee and risk committee.	The AS/NZS Standard refers to this issue in a very general way and discusses the following: assessment of practices used so far, provision of support from top level management, establishing responsibilities, ensuring appropriate resources.
ERM limitations	Not included.	Even the best risk management system doesn't necessarily ensure that the objectives are met. COSO indicates the following limitations: management process, human error, circumvention of controls, costs of risk responses.	Not included.
Supplementary documents	References to ISO/EIC standards.	Closely connected with COSO (internal control) and the Sarbanes-Oxley Act.	It's suggested that additional standards may be used for specific risks.

Table 1: Synthetic comparison of features demonstrated by international risk management standards and their contents

Source: [2].

When looking at the table 1, it may be stated that risk management standards are, in a way, the culmination of the risk management process, i.e. as defined by *Enterprise Risk Management (ERM)* [1]. Before risk management processes were formalised in business, the terminology and the risk management concept had been established. As a result, a separate field of knowledge and science, currently referred to as risk management, emerged. It's stated that the term of risk management, with reference to business-related risk, started to be used in the 1950s, although until the 1970s risk management didn't find its practical applications in non-financial businesses to the full extent but only in a partial and occasional way [3]. Currently, in this respect one should take into account „(...) the importance of a new international risk management standard of ISO 31000:2009 Risk management - Principles and guidelines and the accompanying documents: ISO Guide 73:2009 - Vocabulary and ISO/IEC 31010:2009 Risk Assessment Techniques. (...) These provide some kind of foundation for risk management in corporations all over the world“[4]. Furthermore, a breakthrough for the development of the corporate risk management process were the activities initiated in the 1990s, in which speculative financial risks played a major part [5]. It's believed that the program structure of financial risk management is typical for financial institutions, including insurers, as most of their assets are financial assets, for which specific and adequate management methods should be used [6]. It should be kept in mind, however, that until now no universal and reliable risk management process has been created to work well in every organization, circumstances and conditions. This is best evidenced by the current economic crisis, when in numerous financial institutions worldwide early warning mechanisms failed and the risk management system, e.g. in banking, in many cases didn't work (bankruptcies). According to a report on the use of ERM by financial institutions, issued by the Economic Intelligence team and published in „The Economist“, in the opinions of the managerial staff of 316 institutions from various countries, collected in July 2008 (at the beginning of the

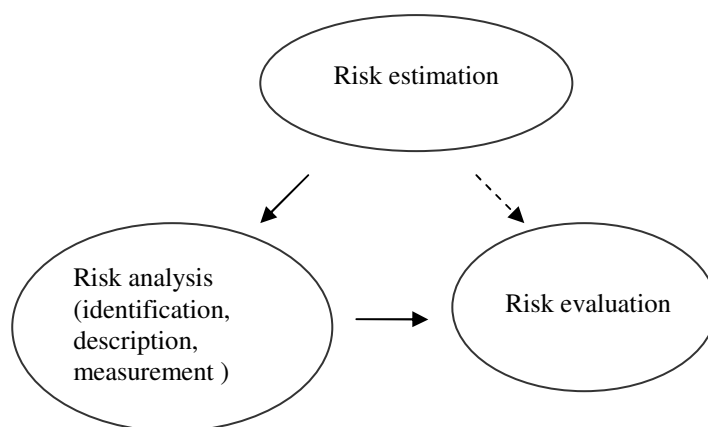
financial meltdown), only 18% of the respondents believed they had a well-formulated and fully implemented ERM program, and 71% stated that had an ERM strategy at an implementation stage [1]. In 2009, also the studies of Risk and Insurance Management Society (RIMS) and Marsh (the world leading insurance broker) were published under the title of „Excellence in Risk Management”, according to which in 2008 only 7% of the respondents fully implemented ERM, 40% partly implemented the system and 19% were planning to implement it [1]. It should be emphasized here that even the best integrated risk management system doesn't protect entrepreneurs from the consequences of risk. Nevertheless, risk management has to be continuously implemented and improved in business and treated as a separate aspect of corporate management, and to this end, primarily the international risk management standards should be used. Summing up, it can be concluded that the standardization of risk management process doesn't guarantee a business success and the implementation process of these solutions, for example in financial businesses, is difficult and complicated, due to the specificity and the risk profile of financial institutions, e.g. insurers.

## **2. Risk Management Standards vs. Insurance Companies – Selected Issues**

As underlined before, all over the world attempts are taken to standardize risk management procedures in business. Risk management standards provide entrepreneurs with ready-to-use solutions in this respect, especially when it comes to risk management methodology. However, it isn't always possible to fully implement risk management standards in economic activities. This is difficult, first of all, because of the specificity of every single entity's operations and its business profile. Also the conditions in which manufacturers operate differ from the ones of service providers i.e. insurers. Therefore, risk is managed differently, depending on an entity's profile. In practice, the fact that international risk management standards are a ready-to-use source of guidance doesn't mean that the solutions offered there are automatically transferred to organizations. They, first, have to be thought over by decision-makers in a company, i.e. a question about how to implement these solutions in one's own business activities needs to be answered. It also seems that a lot of problems are faced when an enterprise attempts to create their own so-called standardised risk management path, appropriately designed to suit the specificity of the industry and the entity's business activities. Such attempts, for instance, were taken by insurance companies which, by definition, provide insurance services, i.e. insure risk, in exchange for a specified price, i.e. an insurance premium. In principle, based on the analyses of the three international risk management standards (FERMA, COSO II, AS/NZS) given in Tab. 1, three basic stages can be differentiated within the vertical structure of risk management process, i.e. risk assessment, risk treatment, control and monitoring. Risk treatment should be understood as the application of risk management methods, given in the literature on the subject, which include the ones creating the risk management matrix [7]. In particular, risk assessment is a key stage for the entire risk management process and the standard created by FERMA provides managers, in a clear, simple and comprehensive way, with specific actions and activities that need to be undertaken during risk assessment. In the context of insurers' activities, the risk assessment concept given by FERMA is the most useful one, i.e. due to its focus on risk estimation procedures in insurance. (Here, the risk assessment process based on the FERMA standard is described in more detail because, according to the authors of the paper, it's highly universal as it's suitable for any types of enterprises, i.e. not only typical financial institutions such as e.g. insurers.) At the risk assessment stage, such activities as risk identification, description and estimation are undertaken within a so-called risk analysis, and afterwards risk is evaluated [1].

Risk identification is particularly useful for determining the level of uncertainty in a company, based on available data about the company's operation, its environment (including the market it operates on) - mainly legal, social, political and cultural etc.- with reference to objectives (mainly strategic ones) defined by the enterprise [1]. The next activity, at the risk assessment stage, is risk description, i.e. displaying the identified risks in a structured format, for example, by using a table, as suggested by FERMA, as such a presentation of risks i.e. in form of tables, makes it easier to concentrate on so-called key risks that need to be analysed in more detail [1]. Another step during the analysis at the risk assessment stage is risk estimation which, according to the FERMA concept, can be quantitative, semi-quantitative or qualitative [1]. Also the other standards listed in Tab. 1, use a similar quantitative and qualitative approach in their complex risk analysis. This is shown in Fig. 1.

*Figure 1: A flow of activities at the risk estimation stage in the risk management process*



Source: [1].

Another aspect of the risk management process, proposed by FERMA, is the justification that a risk analysis carried out at the risk assessment stage can be used to create a so-called risk profile, that is a risk map, where specific risks are given significance rating [1]. By referring the risk to an insurer's areas of activities, for instance (as well as other types of company organisational models) on a map, control procedures that may modify control costs in these areas can be determined and identified [1]. According to the concept shown in Fig. 1, the final stage of risk assessment, within the risk management process in an insurance company, is risk evaluation. In general, risk evaluation should be used to make decisions about the significance of risks to the organisation (insurer) and how each specific risk should be treated, in terms of risk management methods. This concerns, in particular, comparing the estimated risks against risk criteria which the organisation has established and accepted.

There is no doubt that in such deliberations, one should also take into consideration the concepts and experience of many other organisations and research centres all over the world, which suggest practical business solutions in this respect in virtually all areas of social and business life, including insurance. Here we should emphasize the importance of „(...) risk management standards in enterprises and public organisation, according to IRM, AIRMIC and ALARM, or e.g. the concept of 101 principles of risk management by IRMI”[8], „(...) as well as other solutions proposed by leading representatives of this field of research worldwide”[9]. There is an unlimited number of organisations which deal with such problems, directly or indirectly. The examples include: „(...) American Association on Risk Management (ARIA), Risk and Insurance Management Society (RIMS), The Geneva Association – Risk and Insurance Economics and Research, Advocates for Highway and Auto Safety, Agents Council

for Technology, Alliance of American Insurers (AAI), Alliance of Insurance Agents and Brokers, American Academy of Actuaries, American Academy of Insurance Medicine, American Academy of Physical Medicine and Rehabilitation, American Association for Long Term Care Insurance, American Association of Crops Insurers (AACI), American Association of Insurance Services (AAIS), American Association of Managing General Agents (AAMGA), American Association of State Compensation Insurance Funds (AASCIF), American Board of Independent Medical Examiners (ABIME), The American College, American Council of Life Insurers (ACLI), American Institute for Chartered Property Casualty Underwriters (AICPCU), American Institute of Marine Underwriters (AIMU), American Insurance Association (AIA), American Land Title Association, American Risk and Insurance Association (ARIA), American Society for Healthcare Risk Management (ASHRM), American Society of Pension Professionals & Actuaries (ASPPA), American Society of Safety Engineers (ASSE), America's Health Insurance Plans (AHIP), Applied Systems Client Network, Associated General Contractors of America (AGC), Associated Reporting Companies (ARCO), Association for Advanced Life Underwriting (AALU), Association for Cooperative Operations Research and Development (ACORD), Association of Governmental Risk Pools (AGRP), Association of Health Insurance Advisors, Association of Insurance Compliance Professionals (AICP), Association of Life and Health Administrators, Association of Professional Insurance Women, Association of Workers' Compensation Boards of Canada (AWCBC), Australian Risk Policy Institute (ARPI), Automobile Insurance Plans Service Office (AIPSO), Automobile Insurers Bureau of Massachusetts, Aviation Insurance Association (AIA), Belgian Risk Management Association (BELRIM), Board of Certified Safety Professionals (BCSP), California Workers' Compensation Institute (CWCI), Canadian Board of Marine Underwriters (CBMU), Canadian Council of Insurance Regulators (CCIR), Canadian Independent Adjusters Association (CIAA), Canadian Institute of Actuaries, Canadian Life & Health Insurance Association (CLHIA), Canadian Life Insurance EDI Standards Association (CLIEDIS), Captive Insurance Companies Association, Inc. (CICA), Casualty Actuarial Society (CAS), CatAdjuster.org, Centre to Protect Workers' Rights (CPWR), Centre for Study of Insurance Operations, Certified Automotive Parts Association (CAPA), Chartered Property and Casualty Underwriters (CPCU) Society, Coalition Against Insurance Fraud, Commission on Accreditation of Rehabilitation Facilities (CARF), Construction Industry Institute (CII), Construction Management Association of America (CMAA), Construction Safety Council, Consumer Credit Insurance Association (CCIA), Council of Insurance Agents & Brokers (CIAB), Crop Insurance Research Bureau (CIRB), Direct Marketing Association, Employee Benefit Research Institute (EBRI), Federal Office of the Superintendent of Financial Institutions, Federation of Defence & Corporate Counsel, Inc., Federation of European Risk Management Associations (FERMA), Florida Association of Insurance Agents, Highway Loss Data Institute (HLDI), Independent Financial Brokers of Canada, Independent Insurance Agents and Brokers of America, Inc. (IIABA), Independent Insurance Agents of Texas, Inland Marine Underwriters Association (IMUA), Institute for Work & Health, Insurance Accounting & Systems Association, Inc. (IASA), Insurance Brokers Association of Canada (IBAC), Insurance Brokers Association of Nova Scotia, Insurance Bureau of Canada, Insurance Data Management Association (IDMA), Insurance Information Institute (III), Insurance Institute for Highway Safety (IIHS), Insurance Institute of Canada, Insurance Library Association of Boston, Insurance Loss Control Association (ILCA), Insurance Marketing Communications Association (IMCA), Insurance Regulatory Examiners Society (IRES), Insurance Research Council (IRC), Insurance Services Office, Inc. (ISO), Intermediaries & Reinsurance Underwriters Association (IRUA), International Association of Industrial Accident Boards &

Commissions, International Claim Association (ICA), International Credit Insurance & Surety Association (ICISA), International Foundation of Employee Benefit Plans (IFEBP), International Institute of Loss Adjusters (IILA), International Insurance Society, Inc. (IIS), Life Insurance Marketing & Research Association (LIMRA), Life Office Management Association (LOMA), Missouri Public Risk Management Association, Mortgage Insurance Companies of America (MICA), National Academy of Social Insurance (NASI), National Association of Fire Investigators (NAFI), National Association of Health Underwriters (NAHU), National Association of Independent Insurance Adjusters (NAIIA), National Association of Insurance and Financial Advisors (NAIFA), National Association of Insurance Commissioners (NAIC), National Association of Insurance Women (NAIW), National Association of Mutual Insurance Companies (NAMIC), National Association of Occupational Health Professionals (NAOHP), National Association of Professional Employer Organizations (NAPEO), National Association of Professional Insurance Agents, National Association of Professional Surplus Lines Offices Ltd. (NAPSLO), National Association of Public Insurance Adjusters (NAPIA), National Association of Subrogation Professionals (NASP), National Association of Surety Bond Producers (NASBP), National Conference of Insurance Guaranty Funds, National Conference of Insurance Legislators (NCOIL), National Council of Self-Insurers (NCSD), National Council on Compensation Insurance, Inc. (NCCI), National Endowment for Financial Education (NEFE), National Fire Protection Association (NFPA), National Foundation for Unemployment Compensation and Workers Compensation, National Health Care Anti-Fraud Association (NHCAA), National Independent Statistical Service (NISS), National Institute for Occupational Safety and Health (NIOSH), National Institute of Pension Administrators (NIPA), National Insurance Crime Bureau (NICB), National Organization of Life and Health Insurance Guaranty Associations, National Safety Council, National Society of Insurance Premium Auditors (NSIPA), Non-profit Risk Management Centre, Physician Insurers Association of America (PIAA), Professional Liability Underwriting Society (PLUS), Property Casualty Insurers Association of America (PCI), Property Insurance Plans Service Office (PIPSO), Property Loss Research Bureau (PLRB), Public Agency Risk Managers Association (PARMA), Public Risk Management Association (PRIMA), Public Utilities Risk Management Association (PURMA), Reinsurance Association of America (RAA), Risk & Insurance Management Association of Singapore (RIMAS), Risk and Insurance Management Society, Inc. (RIMS), Risk Management Institution of Australasia Ltd. (RMIA), Self-Insurance Institute of America (SIIA), Society for Risk Analysis (SRA), Society of Actuaries, Society of Insurance Financial Management (SIFM), Society of Insurance Research, Society of Insurance Trainers and Educators (SITE), Society of Professional Benefit Administrators (SPBA), Society of Risk Management Consultants (SRMC), Southern Association of Workers' Compensation Administrators (SAWCA), Surety Association of America (SAA), Surety Information Office, Tennessee Public Risk Management Association, Texas Public Risk Management Association (Texas PRIMA), Texas Surplus Lines Association, Inc. (TSLA), University Risk Management and Insurance Association (URMIA), Workers Compensation Research Institute (WCRI)”[10].

## Conclusion

The use of international risk management standards in entrepreneurship all over the world is, beyond any doubt, needed and justified. This is also true for Poland where, however, practical applications of the guidance given in the standards described in the paper are rare. There are some industries where the international risk management standards are almost unknown. The best example may be construction and assembly companies, where integrated



and formalised risk management is practically not used at all. Managers from this industry aren't familiar with the solutions offered by the risk management standards outlined above. Also the knowledge of risk management standards in the insurance sector in Poland isn't always sufficient. There are many cases when insurers do not know these standards at all. Like in the construction industry, also many insurers in Poland express the view that traditional approach to corporate and finance management and, first of all, the existing risk management processes, are good enough and there is no willingness or determination to introduce a novelty, such as the international risk management standards, in their own business practice. With a very superficial attitude to the problem and a certain amount of ignorance, an insurer's task is believed to be to estimate risk, provide protection and handle compensation claims and, therefore, the standards do not have to be known or used [1]. When looking at an insurance company from a broader perspective, however, one can see that this is one of many forms of entrepreneurship, i.e. to be more specific, it's an company in the financial sector, which provides insurance services and, what's important, should not ignore or 'cognitively dissociate' from risk management or the knowledge of risk management standards, as such behaviour is irrational [1]. Currently, there is an increasing need to implement the solutions on a wider scale in business in Poland since – as already emphasized in the introduction – risk management contributes to increasing the value of an enterprise and, to put it simply, helps the company to save money.

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