7th International Scientific Conference
"Business and Management 2012"
May 10-11, 2012, Vilnius, LITHUANIA

ISSN 2029-4441 print / ISSN 2029-929X online
ISBN 978-609-457-116-9 CD
doi:10.3846/bm.2012.146
http://www.bm.vgtu.lt

ENTERPRISE RISK MANAGEMENT IN PRACTICE OF POLISH SMALL BUSINESSES – OWN RESEARCH RESULTS

Anna Korombel

Czestochowa University of Technology, Dąbrowskiego ave. 69, PL- 42-201 Częstochowa, Poland
Email: annakorombel@poczta.onet.pl

Abstract. Enterprises taking an active part in the modern market economy must continuously develop and improve in order to survive. One of the fundamental processes that contribute to ensuring business continuity is the process of risk management. Micro and small businesses often overlook this element of economic activity, which leads to financial problems or bankruptcy. The purpose of this paper is to present, based on own research, the degree of risk awareness among small business, areas of risk specific to their activities, as well as the most effective ways to deal with such risks.

Keywords: small businesses, risk, risk management, Enterprise Risk Management (ERM), Poland.

Jel classification: G32

1. Introduction

The world financial crisis, increasing globalization, the scale of social and economic changes as well as changing and uncertain environment constitute challenges for enterprises, forcing them to implement a process of enterprise risk management in their structures. This process is known and implemented in companies almost all over the whole world, but in Poland, it is a new and little known phenomenon. Whereas elsewhere in the world the traditional approach to risk management is evolving, going through subsequent phases of development, in Poland entrepreneurs are beginning to learn what risk is and try to manage it.

There are various organizations across the world which monitors the development and maturity of ERM process in enterprises. Very interesting studies in this area include *Enterprise Risk Management (ERM). Benchmarking Survey 2008* conducted by Price Water House Coopers among enterprises across Finland (2008), *Enterprise Risk Management: From Theory to Practice* (KPMG 2008) and *Charting a safe and sustainable growth journey*, *Singapore Enterprise Risk Management Survey 2010* conducted by KPMG among enterprises from Singapore (2010), *Global risk management survey, seventh edition Navigation in a changed world* conducted by Deloitte (2011), *Global Enterprise Risk Management survey 2010* (AON Corporation 2010) and *Enterprise Risk Management* carried out by AON Corporation (2007). These are only a few of many studies of ERM that have been conducted. Polish manufacturing companies have not been studied so comprehensively, as the advancement level of risk management process is low in them (some industries or local authorities have a statutory obligation to manage risk). In 2005, the company Marsh (2005) conducted the study *Zarządzanie ryzykiem w Polsce* (*Risk Management in Poland*) among the most dynamically developing enterprises, and in 2009 the company AON Risk Services examined *Zarządzanie ryzykiem i ubezpieczeniami w Polsce. Raport Aon Polska* (*Risk and insurance management in Poland. Report Aon Polska*) (2009).

The aim of this paper is to examine how Polish entrepreneurs representing small enterprises perceive risk, and whether and how they manage it. An empirical study was conducted among 101 companies in the Silesia voivodeship in Southern Poland. The paper has the following structure: presentation of the theory of the concept of Enterprise Risk Management, results of empirical studies and final conclusions showing the relation between the study and the theory presented.

2. SME definition

In different parts of the world, different definitions of a small business are used. The differences between them are quantitative (annual turnover, volume of sales, number of employees, assets, average annual receipts or capital) and qualitative (legal form, industry division, organizational structure, organization and division of labor, independence from big company). In Australia, a small business is one that employees fewer than 15 people (Australian Government: Fair Work Act 2009), whereas in Japan the whole enterprise sector was divided into the sector of small companies and the sector of large companies. Which sector a company belongs to depends on two criteria of division: the number of employees and the value of the equity or total investments. Meeting one of the conditions means being categorized as a small enterprise. The criteria for the sector of small companies were established for the four areas of the economy: 1. Manufacturing, construction, transport or any other category of business (employment up to 300 people, equity or total investments up to 300 mln ¥), 2. Wholesale trade (employment up to 100 people, equity or total investments up to 100 mln ¥), 3. Service industry (employment up to 100 people, equity or total investments up to 50 mln ¥), and 4. Retail trade (employment up to 50 people, equity or total investments up to 50 mln ¥) (Small and Medium Enterprise Basic Law 1963). In the United States, the definition of a small business that is used was established by Small Business Administration and announced in the Small Business Act in 1953. According to this definition, a small business is one that is independently owned, operated and is not dominant in its field of operation. The criteria qualifying an entity as a small business conform to the guidelines of North American Industry Classification System Codes (U. S. Small Business Administration 2010). In a small business, the annual average number of employees is from 50 to 1500 people (most often 500 employees), and average annual receipts are from USD 0.75 mln to USD 35.5 mln depending on the type of industry. The European Union countries apply a definition, according to which small enterprises are those which employ fewer than 50 people and whose annual turnover does not exceed EUR 7 mln and/or whose annual balance sheet total does not exceed EUR 5 mln (Commission of the European Communities 2003).

3. Concept of enterprise risk management

Risk has been managed since the dawn of time, but over the centuries we have called and formalized this process differently. Looking at the recent years of risk management rise, we can make a division into a period of intuitive (non-formalized) risk management and a period of managing risk in a formalized way. The first period is the time until the early 1990s, when companies managed risk through a number of activities without naming the processes, actions or tools. In 1990s developed enterprises across the world started to organize these activities through introducing risk related names and building risk management processes. Only several years later, in response to the activities of these companies, international risk management standards started to be developed, introducing the term of Enterprise Risk Management (ERM) (Korombel 2008).

Risk is a possibility of occurrence of an event that may impact the objectives set in a company. This impact may be both negative and positive (speculative risk) or only negative (pure risk) (Korombel 2007). Risk management is „(…) a systematic method of using a firm's physical, financial and human resources to attain certain objectives concerning most pure loss exposures. A pure loss exposure is one which provides only two prospective outcomes – loss or no loss. There is no possibility of a gain" (Hollman, Mohammad-Zadeh 1984). Risk management is now moving away from a silos perspective of risk, towards a holistic way of looking at risk, in which all risks are managed jointly and analyzed across the entire enterprise. Such approach is called Enterprise Risk Management (ERM), integrated risk management, corporate risk management, holistic risk management or enterprise-wide risk management. In the scientific literature we can find numerous definitions of this concept. According to Hampton J.J. enterprise risk management "(...) is the process of identifying major risks that confront an organization, forecasting the significance of those risks in business processes, addressing the risks in a systematic and coordinated plan, implementing the plan, and holding key individuals responsible for managing critical risks within the scope of their responsibilities" (Hampton 2009). Lam (2003) defines ERM as „(...) a comprehensive and integrated framework for managing credit risk, market risk, operational risk, economic capital, and risk transfer in order to maximize firm value". Enterprise risk management according to the Committee of Sponsoring Organizations of the Treadway Commission (COSO) is „(...) a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives" (COSO 2004). The CAS Committee on Enterprise Risk Management, in turn, defines ERM as „(...) the discipline by which an organization in any industry assesses, controls, exploits, finances, and monitors risks from all sources for the purpose of increasing the organization's short - and long - term value to its stakeholders" (CAS 2003). According to Hopkin (2010), however, the ERM approach means „(...) that an organization looks at all the risks that it faces across all of the operations that it undertakes. (...) ERM is concerned with the management of the risks that can impact the objectives, key dependencies or core processes of the organization. (...) Also, ERM is concerned with the management of opportunities, as well as the management of control and hazard risks. Two other ERM definitions should also be added here, i.e. „(...) ERM seeks to strategically consider the interactive effects of various risk events with the goal of balancing an enterprise's portfolio of risks to be within the stakeholders' appetite for risk. (...) The ultimate objective is to increase the likelihood that strategic objectives are realized and value is preserved and enhanced" (Fraser, Simkins 2010). Chapman (2006) believes that „(...) enterprise risk management is about protecting and enhancing share value to satisfy the primary business objective of shareholder wealth maximization. (...) It must be multifaceted, addressing all aspects of the business plan from strategic plan through to the business controls: strategic plan, marketing plan, operations plan, research and development, management and organization, forecasts and financial data, financing, risk management processes, business controls". Currently, many organizations and institutions all over the world deal with the development of integrated risk management standards. The most popular ones include: *Risk Management Standard AIRMIC/ ALARM/IRM 2002,* proposed by a team consisting of representatives from the largest industry organisations in the UK: ALARM (The National Forum for Risk Management in the Public Sector), AIRMIC (The Association of Insurance and Risk Managers), IRM (The Institute of Risk Management) (ALARM, AIRMIC, IRM 2002). The standard is promoted by FERMA (Federation of European Risk Management Associations) and that is why it's also known as the FERMA standard; *COSO II - Enterprise Risk Management – Integrated Framework,* developed by COSO in 2004 (The Committee of Sponsoring Organizations of the Treadway Commission in USA) (COSO 2004); *ISO 31000:2009 Risk management – Principles and guidelines* (ISO 2009), which replaced the Australian – New Zealand standard of AS/NZS 4360:2004 Risk Management (Standards Austalia, Standards New Zealand 2004). This standard was also developed by the ISO team.

The aim of a risk management process is to identify potential events which, if occurred, could have a negative impact on the achievement of objectives set by an enterprise, to assess their effects and probability of occurrence, as well as to indicate ways of limiting them. Naturally, occurrence of an event may also have a positive impact on a company's objectives, but in the economic practice events that cause negative deviations from the objectives set are mainly considered. The process of risk management in companies usually consists of several successive stages: 1. Plan for risk, 2. Identify risk, 3. Examine risk impacts, both qualitative and quantitative, 4. Develop risk-handling strategies and 5. Monitor and control risk (Frame 2003). Hollman and Mohammad-Zadeh (1984) proposed a process of risk management in small companies divided into five steps: identify loss exposures, analyze loss exposures, select techniques, and implement strategy and control.

The Polish literature on Enterprise Risk Management consists of one publication entitled *Zarządzanie zintegrowanym ryzykiem przedsiębiorstwa w Polsce* (Enterprise risk management in Poland) entitled by Kasiewicz (2011). The author of this study is also the co-author of the book being currently published, entitled „*ERM - zintegrowane zarządzanie ryzykiem. Wybrane problemy teorii i praktyki*" (ERM – Enterprise Risk Management. Selected issues of the theory and practice).

4. Research objectives and methodology

Due to the area in which the enterprises examined operate, the author of this paper adopted the definition of a small enterprise proposed by the European Commission. The study, which was conducted in the second quarter 2011, covered 150 small enterprises from the territory of the Silesian voivodeship in the south of Poland, representing various manufacturing industries. No financial organizations or local authorities participated in the study. The companies filled in questionnaire forms consisting of a section on risk and respondents' particulars. The section on risk consisted of 13 closed questions with a possibility of selecting the answer: Other – what? Of 110 questionnaires returned by the companies, 101 were complete and filled in correctly. All the companies represented the private sector of the economy. People who filled in the questionnaire forms were company owners and/or persons from the management. The study involved risks grouped into six basic categories: market risk, operational risk, financial risk, staff-related risk, IT risk and legal and political risk. In each category, typical risk generating events were placed, referred to in the study as factors. This allowed receiving risk registers for each category examined. To build risk registers, the author used the register proposed by the consulting company AON in the report *Zarządzanie ryzykiem i ubezpieczeniami w Polsce. Raport Aon Polska* (2009), classifications presented in foreign research as well as conclusions from studies conducted earlier by the author among enterprises on risk and risk management.

5. Findings

The findings of the study have been presented in two parts. The first part presents the risks that have an impact on the economic activity conducted by the respondents, whereas the second part shows the degree of implementation and quality of the process of risk management in the companies examined.

5.1. Risk categories and factors

The respondents were asked to rank the risk categories according to their importance and impact on the economic activity conducted by them. The category that proved to have the greatest impact on the operation of the enterprises examined was operational risk, which is connected to the internal potential of a company, production, quality, costs or deadlines (Table 1).

Table 1. Risk category ranking (Source: own study)

Position	Risk category
1.	Operational
2.	Market
3.	Staff-related
4.	Legal and political
5.	Financial
6.	IT

A less important, but also significant category is, according to the respondents, market risk, which is connected, among other things, with market conditions, competition, customers, suppliers, adopted market strategy, fluctuations of prices, demand on the market. The other categories, in the order of importance, are: staff-related category, which involves, among other things, thefts, disloyalty, accidents, rotation or difficulty in recruiting and maintaining employees in a company; legal and political category, which is connected with a country's policy, changing legal regulations; financial category involving fluctuations of exchange rates and interest rates, availability of bank credits. The least important category is IT risk, which is connected with IT systems used in a company and data storage.

In the second step, the respondents were asked to indicate 10 most important risk factors from all the 48 factors grouped in 6 categories. Occurrence of these factors could, according to the respondents, be the greatest threat to the business continuity of a company. The information presented in figure 1 does not sum up to 100, because they are expressed as average percentage points for each answer (Fig.1).

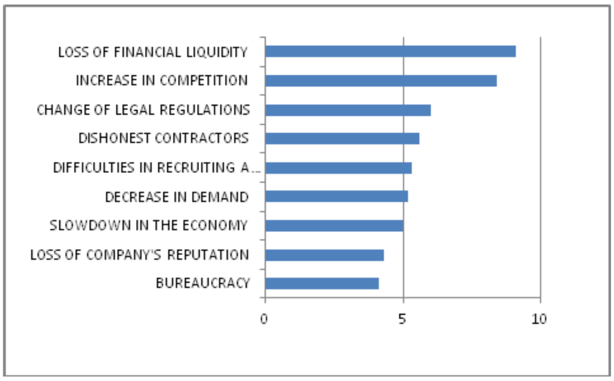

Fig.1. Most important risk factors (indication %) (Source: own study)

The threats that are seen as the most important to the functioning of small enterprises are: loss of financial liquidity (operational category) and increase in competition (market category). Less important factors are: change of legal regulations (legal and political category), dishonest contractors (operational category), difficulties in recruiting a qualified employee (staff-related category), decrease in demand (market category), slowdown in the economy (market category), loss of company's reputation (operational category) and bureaucracy (legal and political category).

5.2. Risk management

The next group of questions in the questionnaire forms concerned the process of risk management – its quality and degree of implementation. As many as 48.5 % of the respondents do not manage risk (37.6 % do not manage risk and do not plan to start doing so, 10.9 % do not manage but plan to start), whereas 51.5 % manage only selected risks (e.g. through insuring the assets). None of the companies examined manages risk in a holistic way based on available world standards of risk management. When asked: *If there is no risk management in your company and no plans to implement this process in the nearest future, what are the reasons for this?* the respondents indicated mainly too high costs of risk managing (75.5 %), lack of need to manage risk (63.3 %), lack of qualified staff (42.9 %) and lack of knowledge about how to do this (36.7 %). The sum of the percentage points does not sum up to 100, because the respondents often indicated more than one answer.

The information presented further in the paper concerns the companies which manage selected risks. In the companies where selected risks are managed (51.5 %), the responsibility for risk management usually lays with the company owner who is also the boss (82.70 %) or a person who runs a company but is not its owner (17.30 %). The motives which drove the companies to manage selected risks were above all expected financial benefits (94.2 %) and, in a significantly smaller degree, partners' requirements (5.8 %). As many as 92.3 % of the companies manage risks occasionally, which is a huge majority compared to 7.7 % of the companies which manage risks on a continuous basis. In the next question the respondents were asked to indicate documents which were used in and supported management of selected risks. As many as 32.7 % of the companies examined do not have risk management policy and do not keep risk registers, around half of the companies examined register risks without having an established policy in place (51.9 %), whereas only 15.4 % of the companies both have a risk policy and keep risk registers. Further question was designed to find out which method is most often used in the companies examined to identify risk. During risk identification, as many as 84.6 % of the companies examined rely on intuition and experience of the management and/or company owner, and only 15.4 % on discussion at the level of risk officers. None of the respondents indicated the use of other methods. Intuition and experience of the management is also most often used during risk assessment (94.2 %), whereas qualitative methods at the level of risk officers are used to a little degree (5.8 %). Very interesting information was received in answers to the subsequent question in which the respondents were presented with 40 potential ways of responding to risks grouped in six risk categories: ways of responding to operational, market, financial, IT and legal and political risks with a request to indicate the most effective ways and thus most often used in their companies (Table 2). The respondents were to indicate the ways of risk responding which are most often used in their companies and thus are, in their opinions, the most effective. The table contains only the ways which received the biggest number of indications in each of the categories. Information about risk and ways of risk management is obtained by the respondents mostly from the Internet (90.4 %), specialist trainings (9.6 %), and, to a smaller degree, from popular scientific literature (1.9 %). The sum of percentage points does not sum up, in this as well as in the next question, to 100 % because the respondents often indicated more than one answer.

Table 2. The most effective ways of responding to risks (Source: own study based on research conducted)

Risk category	The most effective, used ways of responding to risk	
Operational	1	Using accident insurances
	2	Purchasing proven technology from reliable supplier
	3	Guarantees given by contractors, equipment and technology suppliers
	3	Creating reserves, especially material ones
Staff-related	1	Employing adequately qualified employees
	2	Professional trainings for employees and managerial staff
Market	1	Concluding long-term contracts for delivering products and services to purchasers (often at a price set in advance)
	2	Making reliable forecasts of demand for a given product or service
Financial	1	Maintaining a safe financial and credit structure
	2	Continuous search for cheaper sources of financing
	3	Using such plan of debt repayment that will make it possible to adapt the repayment dates to the possibilities of financing the company
IT	1	Making information backup
	2	Purchase of antivirus programs
Legal and political	1	Legal examination of an agreement before signing it
	2	Recognizing threats of legal nature

When asked *How would you like to extend your knowledge about risk* as many as 76.9 % indicated participation in trainings and workshops, free or at a symbolic charge, organized by Municipal Office or Commune Office, a visit by an external expert who would hold training within a company (53.8 %), whereas 13.4 % of the companies examined are not interested in extending their knowledge in this area.

6. Conclusions

Risk management is a relatively young area of science – one that is continuously changing and developing. The process of risk management goes through successive phases of development through Enterprise Risk Management, ERM linked to Economic Capital Models (ECM) heading in the future towards Integrated Risk and Performance Management (IRPM). In Poland, the process of enterprise risk management is starting to enter first large companies, such as ENERGA SA, Grupa Lotos SA, PKN Orlen, Poczta Polska, Telekomunikacja Polska or Katowicki Holding Węglowy. In the Polish conditions, implementation of ERM is a process which usually lasts from 3 months to one year. How long the implementation will last depends on what will be done for a given company, and the amount of money a company can and wants to allot for this purpose: system implementation, trainings, building a risk management policy, making a map of the most important risks or joint work for several months (Korombel 2011). The situation looks completely different in Polish small companies. The research conducted by the author shows that although the respondents see potential dangers that may have a negative impact on the functioning of their companies, in most cases they do not manage them at all or manage only selected risks, most often only occasionally. The most risk generating areas turned out to be operational and market areas, which carry threats, among others, in the form of loss of liquidity and increase in competition.

None of the companies examined had the ERM process implemented in its structures, thus none of them managed risk in an integrated way. Almost half of the companies did not manage risk in any way, of which around 10 % of the respondents planned to launch this process in the near future. Only in half the companies examined, attempts are made to manage selected risks. How this process runs and what is its quality is usually decided by the company owner, who mainly relies on his/her experience and intuition. Also the process of risk identification and assessment is in most cases conducted intuitively. A positive aspect of the study conducted is the information about what documents are used to support the process of managing selected risks. Having an established policy of risk management and risk registers is the first step towards enterprise risk management. The process of risk management in the companies examined is a non-formalized process, performed reactively, i.e. usually when threats occur. The study conducted shows that Polish small enterprises are in the period of intuitive (non-formalized) risk management, which in the future should turn into formalized risk management.

As Polish enterprises only begin to apply risk management, before and during implementation of the ERM process they should use the experience of companies which already manage risk, especially those in which problems occurred, e.g. AIG, Arthur Andersen, BP, Cadbury Schweppes, Coca-Cola, EADS Airbus, Enron, Firestone, Maclaren, Northern Rock, Shell, Societe Generale. An analysis of the causes of the failures has been presented in the report *Roads to ruin. A study of major risk events: their origins, impact and implications* developed by AIRMIC and Cass Business School in 2011.

Summing up, it should be said that there are big possibilities for the development of new research on Enterprise Risk Management in small enterprises. There is also a huge demand for publications and other forms popularising ERM among Polish entrepreneurs. The activity of Stowarzyszenie Zarządzania Ryzykiem POLRISK (POLRISK), which is an organization for Polish risk managers and people interested in economic risk management, should be supported by actions taken by local authorities, such as organizing trainings and workshops for entrepreneurs, or publishing information encouraging risk management.

References

AIRMIC. Cass Business School 2011. *Roads to ruin. A study of major risk events: their origins, impact and implications.*

ALARM, AIRMIC, IRM 2002. *Risk Management Standard AIRMIC/ALARM/IRM 2002.*

AON Risk Services 2009. *Zarządzanie ryzykiem i ubezpieczeniami w Polsce. Raport Aon Polska.*

AON Corporation 2007. *Enterprise Risk Management.*

AON Corporation 2010. *Global Enterprise Risk Management survey 2010*.

Australian Government: Fair Work Act 2009. [online] [accessed 18 December 2011]. Available from internet: http://www.fwa.gov.au/documents/legislation/fw_act/FW_Act.htm#P773_65859

CAS (Casualty Actuarial Society Enterprise Risk Management Committee). 2003. Overview of Enterprise Risk Management. [online] [accessed 19 December 2011]. Available from internet: http://www.casact.org/research/erm/overview.pdf

Chapman, R. J. 2006. *Simple tools and techniques for enterprise risk management*. Hoboken. New Jersey: John Wiley & Sons, Ltd. 8 p.

Commission of the European Communities. 2003. *Annex to the recommendation made by the Commission of the European Communities concerning the definition of micro, small and medium*-dated 6 May 2003 (2003/361/EC).

COSO 2004. *Enterprise Risk Management – Integrated Framework.*

Deloitte 2011. *Global risk management survey, seventh edition Navigation in a changed world*.

Frame, J. D. 2003. *Managing risk in organizations. A guide for managers*. Washington: Jossey-Bass.18 p.

Fraser, J., Simkins, B .J. 2010. *Enterprise risk management. Today's leading research and best practices for tomorrow's executives.* New Jersey: John Wiley & Sons, Inc. 33 p.

Hampton, J. J. 2009. *Fundamentals of enterprise risk management. How top companies assess risk, man-*

age exposure and seize opportunities. New York: AMACOM. 18 p.

Hollman, K. W., Mohammad-Zadeh, S. 1984. Risk management in small business, *Journal of Small Business Management*, January: 47–48

Hopkin, P. 2010. *Fundamentals of Risk Management. Understanding, evaluating and implementing effective risk management*. London, Philadelphia, New Delhi: IRM/Kogan Page. 225 p.

ISO (International Organisation of Standardisation). 2009. *ISO 31000:2009 Risk management – Principles and guidelines.*

Kasiewicz, S. 2011. *Zarządzanie zintegrowanym ryzykiem przedsiębiorstwa w Polsce. Kierunki i narzędzia.* Warszawa: Oficyna a Wolters Kluwer business.

Korombel, A. 2007. *Ryzyko w finansowaniu działalności inwestycyjnej metodą project finance*. Warszawa: Difin.

Korombel, A. 2008. What is ERM – Enterprise Risk Management?, in *Changes and Risk in Knowledge Based Economy*. Ed.by Ralph Lescroart, Aneta Pachura, Marcin Kozak. Haute Ecole"Blaise Pascal", Arlon. 159-165.

Korombel, A. 2011. Implementation of COSO II Standard - Enterprise Risk Management - Based on the Capital Group ENERGA SA, *Risk management strategies in the enterprise – risk communication:* 255–274.

KPMG 2010. *Charting a safe and sustainable growth journey. Singapore Enterprise Risk Management Survey 2010.*

KPMG 2008. *Enterprise Risk Management: From Theory to Practice* 2008.

Lam, J. 2003. *Enterprise Risk Management. From Incentives to Controls*. Hoboken, New Jersey: John Wiley & Sons, Inc. 44-45 pp.

Marsh, 2005. *Zarządzanie ryzykiem w Polsce. Badanie najbardziej dynamicznie rozwijających się przedsiębiorstw.* [online] [accessed accessed 10 December 2011] POLRISK. Available from Internet: www.polrisk.pl

PWC (Price Water House Coopers). 2008. *Enterprise Risk Management (ERM). Benchmarking Survey 2008*.

Small and Medium Enterprise Basic Law, Act no. 154 of 1963, Amended in December 3, 1999, Article 2.

Small Business Act (§ 3 (a) (1)) [online] [accessed 18 December 2011]. Available from Internet: http://www.sba.gov/sites/default/files/files/Small%20Business%20Act.pdf

Standards Austalia, Standards New Zealand 2004. *Australian/New Zealand Standard Risk management. AS/NZS 4360:2004.*

U. S. Small Business Administration. 2010. *Table of Small Business Size Standards Matched to North American Industry Classification System Codes.* [online] [accessed 18 December 2011]. Available from Internet: http://www.sba.gov/sites/default/files/Size_Standards_Table.pdf