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Strategic Finance and Business Analytics

Master's thesis

Reputational Risk Management as a key element for business continuity and value maximization

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ABSTRACT

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This thesis reveals the topic of reputational risk management as a key element for business continuity and value maximization. The purpose of the work is to investigate reputational risk from the side of its definition, management (including legal requirements on this risk category) and measurement and to analyse reputational risk's impact on business continuity and value maximization. To be able to do this, different respective articles, reports of financial institutions are gathered and constructive summaries and analysis are made. In order to deeply investigate the impact of reputational risk on business continuity and value maximization, it was chosen to study it from three aspects: 1) check the impact of stock valuation of 7 companies that experienced reputational catastrophe / risk, 2) analyse a case study on disagreements in management of reputational risk among case companies and impact on their respective performance, and 3) conduct a survey of financial sector companies in Liechtenstein to see how reputational risk management works in practice. The findings of the research showed a significant impact of reputation decadence on company's value and trading volume, and showed crucial importance of post-crisis management for the company's financial performance. The results of the qualitative research based on survey proved that companies consider reputational risk management as a one of the key elements for their business continuity and value maximization.

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1 INTRODUCION

Reputation has long been playing an important role in business success. Together with other factors such as financial stability and product quality positive reputation is a company’s competitive advantage. It provides a license for a company to operate in the community and helps to insure its long-term survival. Whereas negative reputation after reputational risk event can damage business and even escalate into a crisis for a company, sometimes in an instant, due to the globally connected business world and high speed spread via social media channels. That is why reputation can be named one of the most important corporate asset and at the same time also one of the most difficult to protect. The words of Warren Buffett suits here in the best way:

> *“It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you’ll do things differently”.*

In the modern world with its speed and diversity of the information offered in today’s global media society, companies do understand the significance of the intangible assets for the business success. They increasingly trying to evaluate their assets in terms of intangibles, such as knowledge, customer loyalty and brand visibility (Deloitte, 2014). That is why companies, especially with well-known brands operating globally, put reputation to the place of their core business, seeing in it an orientation in society and an instrument for maintaining stakeholder trust, because product and price strategies have not already been the only determinative factors in competition for a long time.

Corporate reputation has shifted from being an unquantifiable factor to a measurable indicator in the sense of management control. This increased the importance of reputational risk management within corporate governance field. Legal authorities issue requirements for companies (especially operating in financial sector) on managing reputational risk as a separate risk category and measuring its impact on the company’s performance (Basel Committee on Banking Supervision, 2009). However there is not much research done on the reputational risk. The question of the financial impact of reputational risk itself as a separate risk category is still an open question because many previous researches considered it just as a consequences of other risks, such as operational risk. The complexity concerning managing reputation lies in the fact that reputation is based on highly subjective perceptions held by different groups of company's stakeholders with different interests and determined by a wide variety of factors. Tracking relationships with all of the stakeholders is a difficult task for any company, but the success of this procedure forms the base for the company's long-term success. Relevance of the topic of this thesis is also can be supported by the fact that the majority of companies think that information and advice about how to manage reputational risk is hard to find, compounding the sense of uncertainty and confusion about how best to manage it (ACE European Group, 2013; Deloitte, 2014). That conclusion can be made after analysis of couple latest global surveys on reputational risk management, such as “Reputation at Risk” conducted by ACE European Group or “Global Survey on Reputation Risk” conducted by Deloitte, and after personal discussions with some of the companies' executives.

1.1 Research questions and objectives

The purpose of this work is to investigate reputational risk category on its own with focus on its impact on business continuity and value maximization. The main research question is formulated in the following way: does reputational risk management presents itself a key element for business continuity and value maximization?

In order to deeply investigate this topic, it was chosen to study it from three aspects:
1) investigation of the impact of the reputation catastrophes on the company's stock value and trading volume;
2) investigation of the importance of the reputational risk management for the company's performance;
3) conduct a survey of financial sector companies in Liechtenstein to see how reputational risk management works in practice.

These selected aspects found their way in the empirical part of this master thesis within three study surveys conducted. They will reveal the topic of reputational risk management with focus on its impact on business continuity and value maximization from different and most interesting sides. The first one will show whether there is any impact of reputational risk on company's financial performance at all or not by analysing impact on company's stock price and trading volume. The second one is aimed to see whether a company can influence its scenario of further development and the recovery period after the reputational catastrophe by implementing a proper post-crises management policy or not. It will be achieved by analysing companies' case studies and investigating their post-crises management policies. And the third one is aimed to look at the perception of the reputational risk by company's executives, what they think on this topic and whether they consider reputational risk management as an important risk category.

Studies were conducted based on the event study method and qualitative research. The findings of the research showed a significant impact of reputation decadence on company's value and trading volume, and showed crucial importance of post-crisis management for the company's financial performance. The results of the qualitative research based on survey proved that companies consider reputational risk management as a one of the key elements for their business continuity and value maximization.

The results of this thesis provide useful information for companies especially operating in the financial sector. It can serve, first of all, as a kind of handbook with relevant information on reputational risk management that will help companies to increase their awareness of the topic that will make them feel more confident. Secondly, it proves the existence of the reputational risk impact on company's financial performance. And, thirdly, it shows that companies should and can evaluate and systematically track their reputation making it is possible to manage reputational risk. With a proper reputational risk management implementation reputation, a fragile asset, over time will crystallise into reputational capital that will serve a company in a best way.

1.2 Limitations

The purpose of this work is to investigate reputational risk as a separate risk category with focus on its impact on business continuity and value maximization. However there are some limitations. First is related to the amount of literature available on reputational risk management and measurement because of not big amount of studies and research done on the reputational risk, as well as different approaches to it. But in spite of that, primary and secondary sources (mostly company's annual and other reports, business magazines, executives' interviews, etc.) made it possible to make an analysis.

Second is related to the sample size of the respondents for the qualitative survey on reputational risk management in Liechtenstein. In general 86 companies were approached but eventually only 15 agreed to disclose their information on reputational risk management. Despite that it was possible to see the general trend on the reputational risk management perception in this country.

1.3 Structure of the thesis

The master's thesis consists of five main parts.

Part 1, Introduction, presents the introduction into the topic of research, states the main research questions and objectives and discusses the limitations and structure of the thesis.

Part 2, Literature review, presents the theoretical part of this master's thesis. It reveals the topic of reputational risk from the side of its definition, management (including legal requirements on this risk category) and measurement, and also provides the theoretical analysis on reputational risk's impact on business continuity and value maximization.

Part 3, Data and methodology, presents itself the first section of the empirical part of the thesis. It introduces data and methodology on three studies conducted within this thesis.

Part 4, Empirical results and studies description, presents the second section of the empirical part of the thesis and explains the results of studies conducted within the thesis.

Part 5, Conclusion, presents conclusions based on theoretical and empirical parts of the thesis, provides summarized answers to all of the research objective formulated within this thesis.

2 LITERATURE REVIEW

2.1 Corporate reputation and reputational risk definitions

There is a particular amount of literature regarding corporate reputation; however definitions vary from author to author, making it even more interesting to analyse and compare. For example, Fombrun (2012) defines corporate reputation in the following way, distinguishing between the stakeholder groups: “a corporate reputation is a collective assessment of a company’s attractiveness to a specific group of stakeholders relative to a reference group of companies with which the company competes for resources” (Fombrun, 2012, p.100). From a bit different perspective corporate reputation is defined by another author: “reputation is the belief and trust that a variety of people have for your organization and they expect the same attribute in future” (Honey, 2009). In the Oxford English dictionary reputation is defined as “the beliefs or opinions that are generally held about someone or something” (Rayner, 2004). And as Jenny Rayner was discussing in her book “Managing Reputational Risk” this definition itself gives the complexity which comes from the point that beliefs and opinions may or may not be the same as reality because these beliefs are result of years of relationship with the organization.

Because of the composite nature of reputation itself, some authors, for example as M. Eisenegger in his paper “Trust and reputation in the age of globalization”, are going even deeper in defining reputation and subdivide it into several components. So, M. Eisenegger says that the reputation of all agents in our society invariably consists of three components: functional reputation, social reputation and expressive reputation (Eisenegger, 2009, p.11). The first, functional, component carries an idea that each agent needs continuously demonstrate own competence and associated successes. Second one – social reputation component – means that agents must adhere to social norms and values in a responsible way. The expressive reputation component reveals an emotional aspect of it: every agent relies on an emotionally attractive profile to separate him from his competitors. This three-dimensional reputation approach presented by the author demonstratively shows how the logic of reputation constitution has changes in the age of globalization. So, in order to succeed and earn a positive reputation each agent needs to think and fulfil all of the three components: functionally, socially and expressively.

Another author, Gary Honey, to define the multifaceted nature of reputation highlights six different components of it and gathers them into an acronym for REPUTE (Honey, 2009):

- “**R**elational Construct” means that different stakeholders have a different relationship with an organisation and deal according to the reputation they have got for this organization.
- “**E**xception Attributed” means that reputation of an organisation can be based on an exception feature that distinguishing it from other players in the industry.
- “**P**erception Comparison” means that organisation’s reputation is nothing else as a perception of it in the eyes of others.
- “**U**nintended Consequences” means that reputation might be influenced by third parties, some situations that might not been foreseen and might be changed because of these consequences.
- “**T**rack Record” means that reputation is built over time and based on how an organisation does its business.
- “**E**motional Appeal” means that reputation is based on trust. And trust is everything for reputation.

Because of the different approaches to define corporate reputation, it is possible to find different definitions of the reputational risk. For example, in the Global Risks Meeting Report (New York, 6-7 April 2011) reputational risk was defined as “the difference between who one is and who one wants others to believe one is”. Rephrasing this sentence we can say that reputational risk is the difference between actions, words and expectations. The perfect scenario takes place when all those elements are matching each other. And organizational culture is at the root of that alignment – it is the principles, values, practices, behaviour and responses that a company communicates to the public at large. This culture must be well perpetuated as public perception cannot be realigned when in a crisis situation.

A bit different definitions can be found in the papers of other authors. For example, J Rayner defines reputational risk as “any action, event or circumstance that could adversely or beneficially impact and organisation’s reputation” (Rayner, 2004); or the definition for banking and financial industries as “reputational risk is the possibility of loss in the going-concern value of the financial intermediary – the risk adjusted value of expected future earnings” stated in a paper “Reputational risk and conflicts of interest in banking and finance: the evidence so far” by I. Walter (Walter, 2006).

There is no question that reputation is crucial for the long-term survival of any company and that it is now a key issue for every board of directors. Leading companies do realize that they will be in a much better position to manage changes and challenges (financial, social and environmental) if they have invested in the relationships with their stakeholders, meaning investing into building trust, loyalty and commitment. However despite a well understanding of the importance of reputation among executives, the studies and conducted surveys show that executives admit that reputational risk is the most difficult risk category to manage due to its intangible nature. Accordingly, reputational risk has been defined in numerous ways that we have been discussed earlier in this section. However it is necessary to highlight that the one definition that relates to the context of banking and finance (the main target segment for this thesis) was stated by Basel Committee on Banking Supervision in its legal document that serves as the base of regulatory requirements in order to operate in that sphere (the definition will be provided further).

Generally, reputational risk is defined as a risk of risks because reputation accounts for a significant portion of a company’s market value and affects its future viability as well as because incidents that damage reputation can result in greater financial loss than the original event. However it is not that easy to distinguish reputational risk from other risks, for example such as operational risk, especially when some of the executives still consider the first one as a part of the second one.

Most operational losses are characterized by an individual coincidence of circumstances involving some kind of failure or problem. In this way they attract the attention of the public and the media even though the financial losses are sometimes relatively small. Because of this increased attention to operational risk events they can be especially harmful to firm's reputation, particularly if the loss is caused by an internal event. The loss from this kind of event followed by the loss of customers or executive employees might be tougher than the direct effect from the loss itself.

The multifaceted nature of operational losses makes it difficult to define operational risk and in some cases it is hard to distinguish between operational risk and other types of risk. Nevertheless, the following definition of operational risk presented by the Basel Committee on Banking Supervision clarified the situation.

> “Operational risk is the risk of losses resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic risk and reputational risk” (Basel Committee, 2006, p.144).

Even though, as we can see, this definition excludes reputational risk, it is widely recognized that operational losses also effect the reputation of the company, posing a risk exceeding the effect of the direct financial loss itself. The interesting moment here is that in the version 2006 Basel II excludes reputational risk from the definition of operational risk but does not provide a definition of reputational risk. And only in 2009 the Basel Committee on Banking Supervision presents a full section on reputational risk in its document proposed enhancements to the Basel II framework, also submitting among other a definition of reputational risk:

> “Reputational risk can be defined as the risk arising from negative perception on the part of customers, counterparties, shareholders, investors, debt-holders, market analysts, other relevant parties or regulators that can adversely affect a bank’s ability to maintain existing, or establish new, business relationships and continued access to sources of funding. Reputational risk is multidimensional and reflects the perception of other market participants. Furthermore, it exists throughout the organization and exposure to reputational risk is essentially a function of the adequacy of the bank’s internal risk management processes, as well as the manner and efficiency with which management responds to external influences on bank-related transactions”. (Basel Committee, 2009, pp.19-20)

The definition clearly highlights the importance of reputation and the impact of a bad reputation on bank’s performance. Especially taking into consideration that reputation in financial industry is a very sensitive and crucial subject because of the nature of the industry itself – operation and managing money.

Apart of the definition of reputational risk, for the first time the “Enhancement to the Basel II Framework” provides detailed requirements for the reputational risk management, to point out: requirements, not instructions. (Basel Committee, 2009, pp.19-20)

1. Banks should have policies in place to identify sources of reputational risk.
2. Stress testing procedures should take account of reputational risk

3. Methodologies to measure the effect of reputational risk in terms of other risk types (e.g. credit, liquidity, market or operational risk) should be developed.

In October 2010, the Bank for International Settlements (BIS) released the “Principles for Enhancing Corporate Governance”, which can be found on their web-page, that also covers some issues relevant to reputational risk management (available at www.bis.org) like other publications issued later.

2.2 Reputational risk management

As it was mentioned above, reputational risk is not easy to manage. The reasons for that are the followings. First of all, reputational risk can come from a wide range of different sources as within a company as outside, making it even harder to track. Secondly, companies find it difficult to define, categorize and measure the financial impact of reputational risk on the company’s business that brings extra challenge for choosing the way of managing it. In addition, there is a lack of information and advices on managing reputational risk. Also it is a common knowledge that the larger the company, the more difficult it becomes to manage reputation. The ACE European risk briefing report 2013 “Reputation at risk” proves that well. According to their survey, more than half of the respondents-large companies with their high-profile brands feel not confident regarding reputational risk management (see Table 1) (ACE European Group, 2013, p. 15).

Table 1. The larger the brand, the bigger the problem

Company category	Annual revenues	Strongly agree that reputation is the most difficult risk category to manage
Small companies	US$250m - US$500m	36%
Mid-sized companies	US$500m - US$1bn	44%
Large companies	over US$1bn	52%

Source: ACE European Group, 2013, p. 15

However, a well-established management of reputation reduces the risk and increases opportunity. The first attention to corporate reputation itself was got in the 1990-2000 when many authors discussed the concept of corporate reputation and compared it with the concept of corporate image (Lucius et.al, 2011, p.4). They also agreed to the fact that reputation can be managed. Nowadays all of the fields (marketing, communication, accounting, etc.) have some perspective relating to corporate reputation. Also the changes in business environment during the years have pointed out the necessity of managing reputation: (1) change in corporate governance and stakeholders' perspective with their strong urge for organizations to be more transparent because of the fear and uncertainty in the modern world; (2) globalization that with its change in views also brought a rise in public and political expectations due to the increase amount of international corporations; (3) progress in media with it advanced technologies and its increased spread of information flows; (4) increased importance of intangible assets where there have been changes about how business is operating and how it is managing relationships with its stakeholders, and also (5) the changes in government laws that have taken place lately that encourages the companies to declare the non-financial assets. All of this mentioned changes have forced companies to monitor and manage reputation as one of the key indicators. And it is possible to admit it is not that easy task.

Management of reputation becomes such a difficult and delicate question also because different stakeholders groups have different expectations. For example, if we look at employees, they more pay attention to payment and work conditions, and also at opportunities for career advancement and availability of trainings; for customers quality of products and services as well as the overall service process and post-sale service/maintenance come to the first place; business partners take care about the conditions of doing business with the company and its compliance with the terms of contracts; investors are focused more on the shareholder value; while regulators check organization from a legal compliance perspective. After all, it becomes a real challenge to manage reputation also due to the difference between what a company does and how its actions are perceived.

Effective reputational risk management depends on strong governance. Good governance starts with the board and management team. The CEO plays a critical role in reputational risk management. He / She may be ultimately responsible for reputational risk, but cannot manage it alone. The whole employees' team across the entire business has to actively carry out a risk-aware standpoint. For this the culture of the company comes to play a crucial role. Companies that develop and embed a strong risk culture, so that every employee understands the importance of reputation and how easily it can be compromised, will be well placed to identify early warning signs and ensure that employees across the workforce act in a way that will support, rather than damage, reputation. The responsibility for the reputation usually falls on the chief officers and board of directors. For example, according to the companies who participated in Deloitte 2014 global survey on reputation risk "Reputation@Risk", responsibility for reputation risk resides at the highest levels of the organization, with the chief executive officer (36%), chief risk officer (21%), board of directors (14%), or chief financial officer (11%) (Deloitte, 2014, p.6).

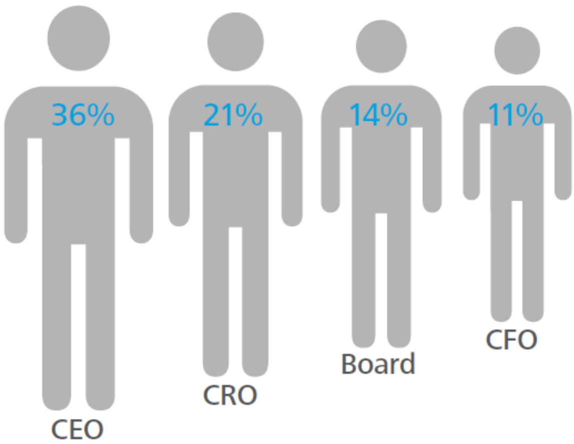

Figure 1. Primary responsibility for reputational risk (Source: Deloitte, 2014, p.6)

The way to manage reputational risk is also vary from company to company. For example in its survey on reputational risk Deloitte offers the following three steps to consider for the managing reputational risk (Deloitte, 2014, p.10): 1 – identify stakeholders and data sources for stakeholder information; 2 – identify factors that indicate changes in stakeholder expectations and potential reputation risks; 3 – use insights from identifying reputation risks to inform on-going risk management decisions.

Another more detailed plan is provided by ACE European Group in its risk briefing report 2013. They offer the following ten steps on the way to successful management of reputational risk (ACE European Group, 2013, p. 23).

1. Put the CEO in charge of reputational risk.
2. Incentivise employees to guard your reputation.
3. Develop an "outside-in" perspective on risk.
4. Value your reputational capital.
5. Monitor reputation across your markets.
6. Create transparency and accountability.
7. Communicate your values, then live by them (Reputations are managed through positive actions, not just through defensive measures. Make sure there is clear, common understanding about the company's values throughout all levels of the organization and measure personal performance against them).

8. Plan for the next crisis. (Even though it is hard to predict reputational event coming, but put in charge the team to address those issues to, the same as know the process of dealing with it will help a company handle a crisis faster and more effectively).
9. Develop a multi-disciplinary approach to reputational management.
10. Learn from others' mistakes.

One more approach to corporate reputation management was presented by M. Schwaiger et al. at their paper "Recognition or rejection – How a company's reputation influences stakeholder behaviour". They consider reputational management as a "closed loop system" as shown in Figure 2 (Schwaiger et. al., 2009).

Figure 2. The reputational management circle (Source: Schwaiger et. al., 2009)

With this interpretation the authors wanted to show that reputational management is continuous process. Moreover they say that "reputation is not a goal in itself, the reputation manager has to decide which outcomes should be focused" (Schwaiger et. al., 2009, p.43). For example a company may set to focus on customers' loyalty and a company's preference in the market, or employees' commitment, or investors desire to hold their shares, etc.

In general all of the above mentioned approaches are not controversial but complimented. And each company has to create and follow its own steps for managing reputational risk according to the personal characteristics of the business.

Another moment that is needed to be discussed is management of a crisis – when reputational event that might damage business has happened already. In this situation the company needs (1) to fix the problem that caused the reputational issue, and (2) to communicate very quickly. According to an Economist Intelligence Unit paper "Reputation:

Risk of risks", this communication must have three elements, or 3-"C"s: Concern, Commitment and Control (Economist Intelligence Unit, 2005). The first one, Concern, means that the company acknowledges that something has gone wrong and do understand it, regrets and expresses concern. The second one, Commitment, signifies that the company shows the desire and commitment to fix the problem, and presents the plan of how it is going to do that. The third one, Control, implies showing by the company that it controls the situation and is working on the ensuring that this kind of issue will not happen again. For applying this procedure the company has very limited amount of time, otherwise the crisis situation will be rules by others, for ex. by regulatory authorities. And if the company communicates quickly, it has chance to get the benefit of the doubt from its stakeholders and wins time for managing the crisis.

In this section we have talked about reputational risk management in general, the next subsection is assigned specifically to managing reputational risk in banks because banks and other financial organizations.

2.2.1 Reputational risk management in banks

As the trigger point for the global economic downturn, financial services firms have faced some of the biggest challenges in managing reputational risk and protecting the value of their brands. That is why within this section it would be paid particular attention to the management of reputational risk in banking industry: the definitions of the reputational risk that leading banks of European Union stated within their risk management policies are going to be explored as well as the ways these banks treat reputational risk management are going to be studied. In addition it would be interesting to have a look at the case study of European Investment Bank on the topic "Do bank manage reputational risk?". The information is taken from secondary sources – official web-paged and annual reports.

Reputation in its meaning presents the belief and trust that people have for an organisation and moreover they expect the same attribute in future. It is the way a company is viewed in the eyes of others. And it is extremely fragile and delicate thing. Reputation for the banks is especially critical because they are dealing with customers' money, with their capital that brings additional sense of responsibility towards their customers and require deeper believe to these financial institutes from the customers' side. That’s why existence of clear reputational risk management in place in banks is crucial for their success.

In order to be able to manage reputational risk it is necessary to identify and understand the reputational risk framework. It is necessary to remember that all of the banking decisions and activities that are controversial will be perceived by bank’s stakeholders and might lead to bank’s reputational risk. That will impact bank’s bottom line. The complete picture of explained reputational risk framework in a bank can be found in the Figure 3. This framework was presented by Manjarin within GARP (Global Association of Risk Professionals) Switzerland Chapter Meeting on reputational risk management in 2012.

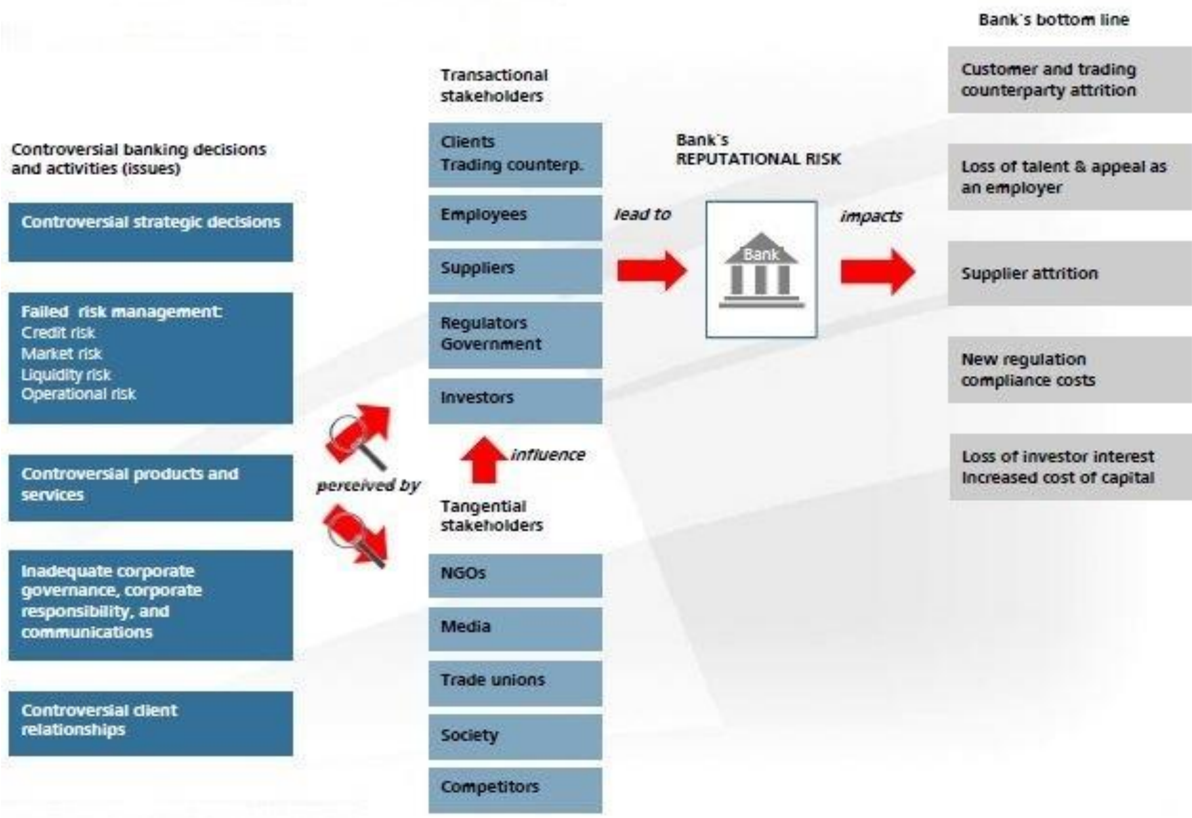

Figure 3. Reputational risk framework (Source: Manjarin, 2012, p.8)

There are various regulatory requirements given to banks regionally based on the country and also by Basel Committee on Banking Supervision (BCBS) which is a committee of banking supervisory authority. The Basel Committee on Banking Supervision provides standards and procedures on banking supervisory matters. The Committee was established in 1974 by the Governors of 10 countries, and nowadays the amount of countries is 27 (Committee, 2009). It warrants its activities by exchanging information, enhancing international banking business and setting supervisory standards wherever it is necessary.

The requirements for presence of exactly the reputational risk management in the banks are quite new (from 2009 when BCBS published its Proposed Enhancement to the Basel II Framework). Banks still have experienced some challenges with this process due to the several moments that are described in the paragraph above. However the leading banks do manage their reputation. The case study of European Investment Bank “Do banks manage reputational risk?” reviles this topic. The main research question of the case study was how leading banks of European Union manage reputational risk. The sample of the leading banks of European Union chosen for the study was based on their total assets and which are peers to European Investment bank. And one of the main findings of the paper was that managing reputational risk in a bank consists mainly of the five major steps: 1. Knowing your organization’s reputation; 2. Evaluating your organization’s reality; 3. Reducing the gap between reality and perception; 4. Monitoring the change in perception; 5. Having people in-charge of reputational risk. (Lucius, et.al., 2011, pp. 9-12).

The other findings of the case study were that out of 19 banks under the study there were 8 banks that mentioned management of reputational risk as part of one of the categories: operational risk, pension risk, insurance risk and compliance risk. These banks do not disclose much information about their reputational risk strategies; 10 banks disclosed to consider reputational risk as a separate risk measure. The majority of the banks (14 out of 19) do have systems in place to manage the reputational risks while only 3 have recourse to some kind of audit within this issue.

The own findings on the question of reputational risk management in banks, based on the secondary data, are presented below. For the brief overview of the reputational risk management in banks it was chosen 13 biggest European banks sorted by total assets (Information about total assets was taken from the website: Banks around the world, List of Top Banks 2014. www.relbanks.com). The largest European banks 2014). The definition of the reputation risk was disclosed in 8 banks among 13 selected, detailed in the Table 2. The interesting fact is that steps and responsibilities for managing the reputation risk are provided by every single bank selected, but not the definition. That is why we can consider that as a fact that still the biggest challenge in managing the reputation risk is to correctly and clearly define what it is.

Table 2. The Definitions of the Reputational Risk in the largest banks

№	Name of the bank	The Definition of Reputation Risk
1.	HSBC Holdings plc	Reputational risk is the failure to meet stakeholder expectations as a result of any event, behaviour, action or inaction, either by HSBC itself, our employees or those with whom we are associated, that might cause stakeholders to form a negative view of HSBC. [1]
2.	Barclays	Reputation risk is the risk of damage to Barclays brand arising from any association, action or inaction, which is perceived by stakeholders to be inappropriate or unethical.[2]
3.	Deutsche Group	Risk that publicity concerning a transaction, counterparty or business practice involving a client will negatively impact the public's trust in the Group.[3]
4.	Royal Bank of Scotland	Reputational risk, meaning the risk of brand damage and/or financial loss due to a failure to meet stakeholders' expectations of the Group's conduct and performance, is inherent in the Group's business. [4]
5.	Banko Santander	The reputational risk is that linked to the perception of the Group by its various stakeholders, both internal and external, of its activity, and which could have an adverse impact on results, capital or business development expectations. This risk relates to juridical, economic-financial, ethical, social and environmental aspects, among others. [5]
6.	Groupe BPCE	Reputational risk is the use of inappropriate means to promote and market its products and services, or the inadequate management of potential conflicts of interest, legal 3 and regulatory requirements, competition issues, compliance issues, money laundering laws, information security policies and sales and trading practices (including methods for disclosing information to customers), which can lead to the reputational damage.[6]
7.	UBS AG	Reputational risk is the risk of a decline in the reputation of UBS from the point of view of its stakeholders – customers, shareholders, staff and the general public.[7]
8	UniCredit Group	Reputational Risk as the current or future risk of a loss or decline in profits or share value as a result of a negative perception of the bank's image by customers, counterparties, bank shareholders, investors or regulators.[8]

[1] HSBC Holdings plc. Annual Report 2014, p. 199
[2] Balclays Annual Report 2012
[3] Deutsche Bank Annual Report 2012
[4] Royal Bank of Scotland Annual Results for the year ended 31 December 2014
[5] Banko Santander Risk Management Report 2014, p.244
[6] Groupe BPCE Annual Report 2014
[7] UBS AG Annual Report 2014, p. 170
[8] UniCredit official website

The overall impression of bank's definitions of the reputational risk is that reputational risk is considered as an undivided part of the operational risk, and even the definitions, provided above, can easily describe the operation risk as well. As a conclusion for the definitions in the table it is possible to say that reputational damage stems from a breakdown of trust. It challenges the perceived strength of a company and its management, and undermines relationships with key stakeholders. It was also figured out that not even a single bank among the research made any kind of reputational risk measurement or statistical/empirical research, probably because of the complicatedness of finding the statistical data and lots of similarities with crisis management.

The phases of the reputational risk management in the major banks are comparably the same and can be summarised into 4 different stages (phases), which are graphically shown in the Figure 4. The first phase is to understand vulnerability meaning the necessity to review corporate reputation and assess risks. The second phase is to build resilience that would help a bank to protect its corporate reputation in case reputational risk event takes place. The third and fourth phases that are to regain trust and resolve crisis accordingly aimed at restoring of the corporate reputation. All of the four phases with description can be found in the figure 4.

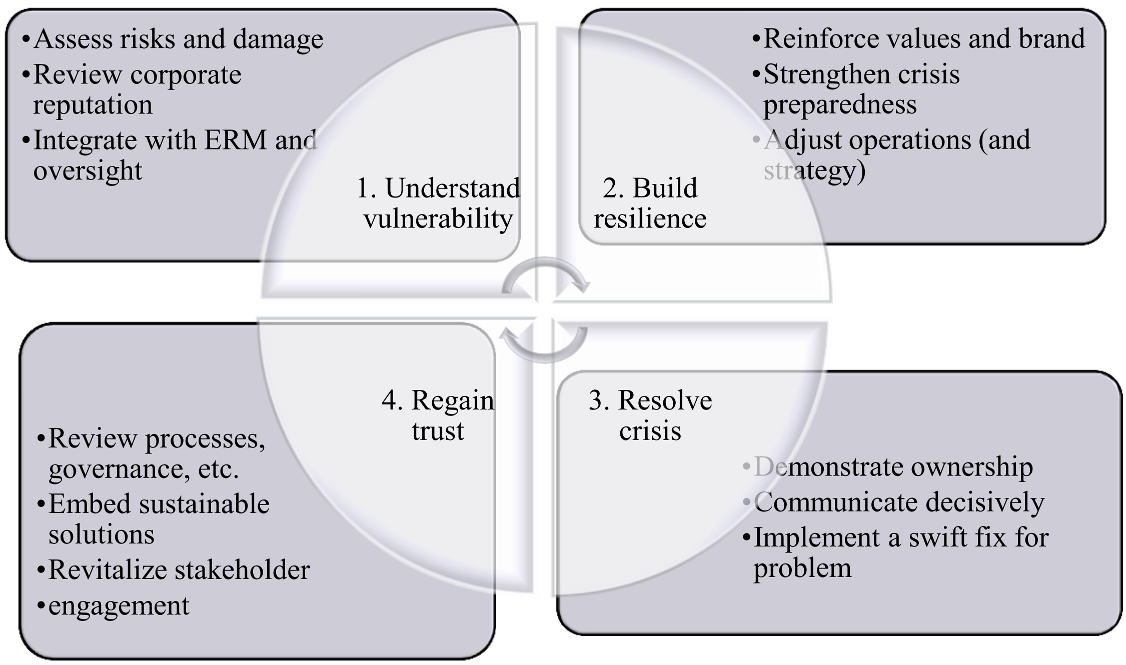

Figure 4. Reputation risk management phases

Reputational risk management framework in banking industry can be divided between three different levels: business, regional, and the group levels. It was possible to make this division after analysing and consolidating the information disclosed by selected major banks in their annual reports. Each group has its own tasks, which help to avoid or to manage reputational damage on the bank. Summarized scheme of the risk framework, taking into consideration all the banks analysed, is provided in the Figure 5. According to the information below: any kind of decisions concerning banks' reputation is made at the highest group level.

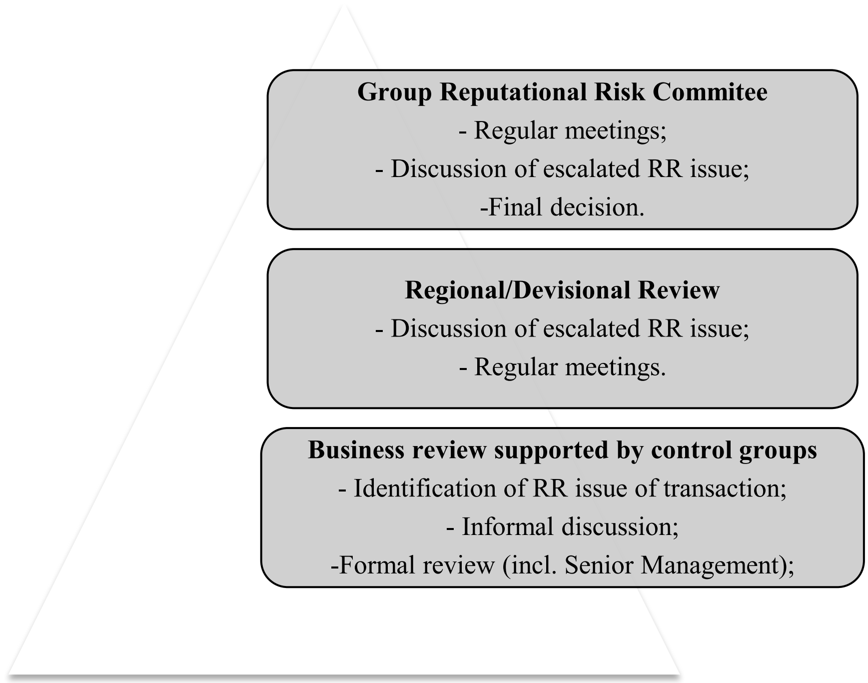

Figure 5. Reputational Risk framework of the major banks

Making a short conclusion on this sub-chapter it is possible to say that reputation is crucial for achieving strategic goals and financial targets of an organisation and damage to its reputation can have fundamental negative effects on its business and prospects.

2.3 Reputational risk measurement and impact estimation

Reputation, per se, is hard to measure; it is difficult to be quantified. The annual ranking by Fortune Magazine and the Financial Times of the world's most respected companies provide a broad indication of corporate reputation based on key indicators such as quality of management, financial soundness, social responsibility, and quality of products and services (Money & Gardiner, 2005, p.45). More precisely, a company's reputation is affected by its business decisions and performance across a wide range of areas: financial performance, quality, innovation, ethics and integrity, crisis response, safety, corporate social responsibility, security. A company's reputation forms part of its intangible assets, which include brand, goodwill, human capital and knowhow. As such, it is that valuable hidden asset that only emerges as a gap between book value and market capitalization (Honey, 2009). And that presents itself an important reason why companies that, from the first sight should be worth similar amounts, can differ so widely.

Measuring impact of reputational risk is a particular challenge for any company. While reputation is an intangible asset, damage to a company's reputation may lead to very tangible consequences such as company's value decrease, a stock price decline, loss of customers and investors, regulatory investigations, etc. And what makes it particularly challenging to evaluate is the random nature of a strike. Sometimes really minor issues might damage in a larger way than ones seemed to be major by a company, as well as the different outcomes might depend on the geographical location of the risk event happened within the business. That is why nowadays the question about the possibility to quantify reputational risk, both in terms of the severity and likelihood of the risk, and also in terms of its financial impact becomes more and more central. While evaluating the impact of a risk event on company's reputation it is also necessary to take into consideration the resilience of corporate reputation that depends on the amount of reputational capital built by the company and also at the nature of the risk event: was it predictable and preventable or unforeseeable occurrence. Another moment which is necessary to remember about, is reputation track recording: a series of minor bad news and reputational risk events can have a cumulative effect and after the next minor issue comes out that might reach the top and lead to loss of reputation when stakeholders lose the confidence to operate with a particular company onwards.

A good latest example of reputational risk impact was showed by Volkswagen. When in September, 2015 the Environmental Protection Agency (EPA) found that many VW cars being sold had a "defeat device" in diesel engines for the improvement of the testing results. Later Volkswagen, the German car giant, admitted cheating emissions tests in the US. As a result of this emission scandal VW will recall 8.5 million cars in Europe and 500,000 in the US; 6.7bn euros are stated as cover costs. This scandal resulted in the company posting its first quarterly loss for 15 years of 2.5bn euros in late October. This scandal heavily damage the reputation of the company. The group’s chief executive at the time, Martin Winterkorn, said that the company had "broken the trust of our customers and the public". And Matthias Muller who now took the place of CEO said that his most urgent task is to win back trust for the Volkswagen Group. Because of this situation the sales volume and stock price value have dropped already. All of this information was taken from the BBC website. (BBC News, www.bbc.com)

In addition to all of the stated above moments about reputational risk measurement it presents a challenge also because in the reality the tools and methods required to quantify reputational risks are still evolving. In corroboration of this, the survey conducted by ACE European Group in 2013 can be taken, which provides the data that risk managers interviewed within the survey admit that they struggle with the issue of measuring impact of reputational risk, and only 28% of their respondents believe their company is effective at quantifying the financial impact of reputational risk (ACE, 2013, p.8). Moreover some risk managers are still not sure whether to measure reputational risk as an issue on its own or simply as a consequence of other risks. Experts on reputational risk management certainly acknowledge that it is difficult to quantify reputational risk. Moreover, the ability to quantify its impact varies with size. In particular, once a company grows and becomes more complex, this becomes an even more difficult task. However, one measure that is sometimes used is the difference between the immediate costs of a crisis versus damage to a firm’s market capitalization. As a rule of thumb, in the period following a crisis event, any losses in shareholder’s value beyond general market fluctuation, which cannot be accounted for by financial costs from the event itself, may be considered pure reputational losses (ACE European Group, 2013, pp.7-8).

After analysing literature on the topic of this thesis dealing with measuring reputational risk of a company in both financial and non-financial industries it is possible to say that the majority of them are using event study method and analyse the impact on reputation due to some operational losses such as Fiordelisi et al. (2012) in their paper “The determinants of reputational risk in the banking sector”. Another author, Gary Honey, describes two ways of measuring reputation in his paper “A Short Guide to Reputation Risk” (Honey, 2009):

1) a monetary valuation using market capitalization or return on assets;
2) a relative approach of valuation as intellectual capital using internal performance scorecard and other indices.

Both this approaches of measurement have their advantages and disadvantages. For example, the first one is a more spread method, based on stock market reaction due to an operational loss and presents itself basically an event study; the second one is not used often mostly because of its very subjective nature. The techniques and methods used for measuring reputation of a company depends on what is more suitable for an organization and on what it adapts.

Going further in the details of the way for measuring reputational risk and reputational capital of a company, it is interesting to have a look at The Financial Times "World's Most Respected Companies" ranking system that was developed in 1998 with the focus on the perception of peer CEOs. The idea is a conducted survey where the respondents are CEOs from major global corporations and the survey consists of open questions and done mostly via phone, sometimes via mailing and personal interviews. Within it the following aspects should be considered:

- strong and well thought strategy;
- quality of products/services;
- maximizing customer satisfaction;
- successful change management and globalization;
- business leadership;
- innovation;
- robust and human corporate culture;
- globalization of business. (Lucius et al., 2011)

Another very important moment about measuring impact of reputational risk is to place the reputational damage in context. This means that quantification of reputational risk will inevitably rely on a number of assumptions, and that could generate a false sense of precision, leading companies to rely on estimations that may ultimately turn out to be far from the truth. But the good point is that today data analytical tools such as strategic media intelligence and clippings services (fintech group AG, www.fintechgroup.com), which uses the media reports from television, newspapers, radio, NGO (Non-Governmental Organizations) blogs, etc., can track mentions of the company across traditional and social media, and use algorithms to identify and track positive and negative perceptions of the company, providing the reputational risk index for the organization. Also this is a good tool to track the reaction of the audience about any new announcements and that will help a company to better understand what activities are better influencing its reputation. This methodology is also used by RepRisk AG which is a leading provider of dynamic ESG business intelligence on environmental, social and governance risks for an unlimited universe of companies and projects by monitoring a set of 27 issues on environmental, social and governance headings (www.reprisk.com). Of course, sometimes these kind of services are not completely accurate and relevant to a particular organization but they provide a good picture about the possible emerging risks from different sources.

Speaking about the impact that reputation can render on the business, they are: shareholders' decisions to hold onto their shares; customers' desire to buy products and use services; suppliers' desire to work with the company; media coverage; attitude of control and regulatory authorities; competitors attitude towards a company and their eagerness to enter the market; cost of capital; motivation of current employees and possibility of recruitment of high professionals; in case of a risk event, positive reputation most likely will provide the benefit of the doubt towards a company from the stakeholders' side.

3 DATA AND METHODOLOGY

According to a study by the World Economic Forum conducted in 2012, on average more than 25% of a company's market value is directly attributable to its reputation (Deloitte, 2014). And if to think about the modern highly connected world with its spread and allocation of a company's stakeholders all over around the planet and the high speed of information flows that can destroy a company's reputation within couple of minutes, probably this number would be even higher. In the previous part of this thesis we have studies the importance of the reputation and reputational risk management from the theoretical side. This part of the thesis will provide the practical insight into the topic and evidence that reputation is really a "matter of life or death" (Deloitte, 2014) from a business and career perspective.

As it was stated at the beginning the main research question that goes through the whole thesis is: does reputational risk management present itself a key element for business continuity and value maximization? In order to deeper investigate this topic it was chosen to study it from three aspects:

1) investigation of the impact of the reputation catastrophes on the company's stock value and trading volume;
2) investigation of the importance of the reputational risk management for the company's performance;
3) conduct a survey of financial sector companies in Liechtenstein to see how reputational risk management works in practice.

These selected aspects reveal the topic of reputational risk management with focus on its impact on business continuity and value maximization from different but connected sides. The first one will show whether there is any impact of reputational risk on company's financial performance at all or not by analysing impact on company's stock price and trading volume. The second one is aimed to see whether a company can influence its scenario of further development and the recovery period after the reputational catastrophe by implementing a proper post-crises management policy or not. It will be achieved by analysing companies' case studies and investigating their post-crises management policies. And the third one is aimed to look at the perception of the reputational risk by company's executives, what they think on this topic and whether they consider reputational risk management as an important risk category.

The sample chosen for the study are leading companies that had experienced corporate reputation catastrophes; also the comparison case study analysis will be presented. In addition the survey on the reputational risk management among the companies of financial service sector in Liechtenstein will be conducted that would give an understanding of management and perception of reputational risk in practice. The study uses quantitative, qualitative and mixed approaches and incudes publicly available annual reports, risk management reports, discloser in the official website of the companies and the results of survey (a questionnaire and the interviews conducted in Liechtenstein).

3.1 Valuation of 7 corporate reputation catastrophes

For the practical analysis of reputation risk impact on company's value it was selected a set of 7 corporate catastrophes that caused the reputation damage according to the following criteria:

(1) The disasters are human-made, natural disasters are excluded;
(2) Each involves a publicly-quoted company;
(3) Each corporate catastrophe received the headline coverage in world media;
(4) The disasters occurred during the last 4 years.

The information about corporate catastrophe portfolio is provided in the Table 3.

Table 3. Catastrophe Portfolio

Date	**Company name**	**Catastrophe description**	**Financial estimate (US$)***
07/03/2014	General Motors	Recall of 2.6 million cars. CEO Mary Barra and top executives were called to appear before Congress. (Wall Street Journal 24/7. *America's Nine Most Damaged Brands*)	535$ m
01/04/2014	Bank of America	The bank disclosed that an accounting error led it to incorrectly report that it had an extra $4 billion on its books. (Yahoo! Finance)	514$ m
20/02/2012	Nintendo	Nintendo lowered its sales forecast for the recently ended fiscal year from 920 billion yen to just 572 billion yen. (Yahoo! Finance)	125$ m
06/05/2014	Twitter	Growth in monthly active users disappointed Wall Street in both the fourth quarter of 2013 and the first quarter of 2014. Although Twitter's first-quarter revenue more than doubled, from $114 million last year to $250 million this year, investors were not terribly impressed. (Wall Street Journal)	144$ m
08/10/2014	Sotheby's	The letter from investor Dan Loeb to chairman and CEO William Ruprecht accused Sotheby's of wasteful spending and failing to stay competitive in the global art market. (Yahoo! Finance)	27$ m
18/01/2012	McDonald's Corp.	Fast-food workers striking across the country, demanding liveable wages. (Wall Street Journal)	320$ m
24/04/2014	Starbucks Corporation	Coffee chain Starbucks' UK sales have fallen in the wake of its tax-avoidance row and the company came under a fresh attack as accounts showed it had retained its controversial offshore structure that wipes out profits in the UK. (London Evening Standard. *Starbucks UK sales fall in wake of tax-avoidance row.)*	86$ m

* The decrease in Net income in the quarter following the corporate catastrophe (Yahoo! Finance. Income Statements).

This catastrophe portfolio constitutes a representative sample of international companies that are leading players in their industries; each company presents different industry that make this portfolio very diversified. The majority of the companies are American (five out of seven) and the remaining two are British (it was founded in United Kingdom in 1744 but later the headquarter was moved to the USA) and Japanese. Information about the diversification of the companies' sample is presented in the Table 4.

Table 4. Diversification of the companies' sample

Company name	Founded	Industry
General Motors	USA	Automotive
Bank of America	USA	Banking / Finance
Nintendo	Japan	Consumer electronics / Interactive entertainment
Twitter	USA	Internet / social network service
Sotheby's	United Kingdom	Auctioneering / Specialty retail
McDonald's Corp.	USA	Fast-food restaurants
Starbucks Corporation	USA	Coffee Shop

The methodology that is used for the analysis of these 7 corporate catastrophes is similar to the one presented by R.F. Knight and D.J. Pretty in their work "The impact of catastrophes on shareholder value" at the Oxford executive research briefings. (Knight and Pretty, 2001).

The data on companies' stock prices and trading volume was taken from Yahoo Finance. The length of estimation window is 250 days prior the event window for all of the companies except Twitter (because the data for Twitter is not available prior to 7.11.2013 when it was listed first time at new York Stock Exchange). The length of event window is -5 to 110 (116 days) for all of the companies. The detailed methodology is revealed in the following sub-sections.

3.1.1 Stock price impact

Firstly it is necessary to isolate the effect of the catastrophe on stock price in order to avoid the effects of other events that may impact stock prices simultaneously. This procedure contains two phases. The first one is made at the individual company level and involves the filtering out of share price movements and the effect of market-wide factors. The result of this process is reaching the estimation of so-called abnormal returns (a term used to describe the returns generated by a given security or portfolio over a period of time that is different from the expected rate of return – source: investopedia) for a period immediately after the catastrophe. During the second phase these abnormal returns are aligned on the catastrophe day (day 0) and then are averaged across the total sample. So, this process filters out any company-specific effects not related to the catastrophe.

Then these average abnormal returns are accumulated over what is now catastrophe time, resulting in a set of portfolio returns from day 0 known as cumulative abnormal returns (CAR).

The abnormal return, on stock *i* on day *t*, is defined as:

$$U_{it} = R_{it} - E(R_{it}) \tag{1}$$

where:

R_{it} – the risk free return on stock *i* on day *t*.
E – the expected value operator.

$$R_{it} = \log(P_{it} / P_{it-1}) \tag{2}$$

where:

P_{it} – market price of stock *i* on day *t.*

The excess returns (R_i - R_f) for each day of estimation and event window are calculated. The expected return is modelled, using the risk-adjusted market model:

$$E(R_{it}) = a_i + b_i R_{mt} \tag{3}$$

where:
R_{mt} – the return on the market portfolio on day *t.*

Parameters, a_i and b_i, represent the intercept and slope coefficient respectively and are estimated from a market regression model:

$$R_{i\tau} = a_i + \beta_i R_{m\tau} + \varepsilon_{i\tau} \tag{4}$$

where:
a_i – intercept coefficient on stock *i.*
b_i – slope coefficient on stock *i.*

The risk-adjustment procedure follows the work of Sharpe (Sharpe W. F., 1964, pp.425-442) and Lintner (Lintner J., 1965, pp. 13-37) on the well-known Capital Asset Pricing Model (CAPM). The systematic risk parameter, beta, is calculated for each individual company, and is equal to the slope coefficient in a time series regression of the return on stock *i* (R_{it}) on the return on the market portfolio (R_{mt}). In consideration were taken NYSE Composite and TOPIX Composite indices. In this way, the results are controlled for market-wide influences.

The abnormal returns for each firm are accumulated over the event window as follows:

$$CAR_{pt} = \frac{1}{N}\sum_{i=1}^{N}\sum_{t=0}^{t} U_{it} \tag{5}$$

where:

CAR_{pt} – the cumulative abnormal return on portfolio *p* on day *t*, relative to the day of the catastrophe (t = 0).

N = the number of corporate catastrophes in portfolio *p*.

When making calculations at the individual company level (reaching estimation of abnormal returns) it will be possible to see whether reputational risk catastrophe influenced the company's financial indicators or not, and whether the company managed to recover after that in case of influence (if CARs went up back to the pre-catastrophe level). The companies that managed to recover will be gathered to the recovers group, the companies that did not manage to get to the initial level will be allocated to the non-recovers group.

3.1.2 Trading volume impact

In addition to examining the direct impact of the catastrophe on stock prices, formula (6) reports the impact on trading volume. The metric to evaluate the impact on trading volume is defined relative to the average trading volume in the stock within the thirty trading days after the reputational catastrophe:

$$UTV_{it} = TV_{it}/ATV_{i} \tag{6}$$

where:

TV_{it} – trading volume of stock *i* on day *t*.

ATV_{i} – daily average trading volume of stock *i*, within the thirty trading days after the date of corporate catastrophe.

Impact on trading volume (UTV_{it}) was calculated for each stock for the first month following the event. And as an average for all the stock portfolio. Even though it is assumed that the corporate catastrophe may influence stock price behaviour during the whole post-event calendar year, the impact exactly on trading volume will be shown primarily during the first month after the event has happened.

3.2 Concorde vs. Firestone case

This case study gives an example of crisis management and how it influences the company's financial indicators. The data was collected from different sources including media, web-pages, business magazines, companies' reports. During the summer of the year 2000 there were two tyre-related crises:

July 25th – a Concorde of Air France crashed with the loss of 113 lives (109 people on board and four people on the ground) because of punctured Concorde's tyres (BBS news)

August 7th – Firestone tyres were withdrawn from sale in the US. Under investigation by US safety authorities, the tyres have been implicated in 174 deaths and hundreds of injuries. Two days later, Firestone announced a voluntary recall of 6.5 million tyres in the US. The problems with the tires were known several years earlier. In 1997–1998, Saudi Arabia reported tread separation on the SUV Explorers. In August 1999, Firestone replaced the tires in Saudi Arabia. In February 2000, Firestone replaced the tires in Malaysia and Thailand, and in May 2000 in Venezuela. (Pinedo, et.al., 2000)

Similarities and differences for both cases provided in Table 5.

Table 5. Clear similarities and key differences of the cases

SIMILARITIES	DIFFERENCES
1. Each case is associated with large loss of life. 2. Each involves tyres – a technical, safety failure 3. Each involves a strong product brand – Concorde and Firestone – for parent companies Air France and Bridgestone, respectively. 4. And in each case, the crisis involves a second company with an economic interest in the outcome of the case. Like Air France, British Airways operates Concorde jets, whilst the majority of Firestone tyres recalled were fitted to Ford Explorer sports utility vehicles (SUVs).	1. The Concorde crash was a sudden and unexpected loss, whereas the allegedly defective Firestone tyres had produced complaints for several years. 2. Concorde crashed on home soil, whereas the Firestone accidents occurred many thousands of miles away from Bridgestone's domicile in Japan. 3. There is no close substitute for Concorde travellers; there are numerous suppliers of quality tyres. 4. The post-loss communications and crisis management initiatives embarked upon by the respective companies, Air France and Bridgestone, were strikingly different.

The analysis of case includes valuation of corporate catastrophe’s impact on value of the corporations according to the different risk management strategies and steps of the management team after the catastrophes. Also, the information about the impact on the suppliers and panthers is added. Value reactions are measured the same way as in the previous sample (3.1.1. Stock price income) using abnormal returns.

3.3 Reputational risk management in Liechtenstein

This research was conduction with a target at reputational risk perception and reputational risk management in companies from financial sector in Liechtenstein, micro-state in Europe. This country was chosen for the survey because of its very well developed financial service sector with wide range of services provided, strong corporate law with its lately focus on reputational risk and solid public financial policy.

Figure 6. Survey demographic (Source: Google pictures, search: Liechtenstein on the map)

The companies participated in the survey are all from the financial sector: private or public banks, fund or asset management companies. The research is qualitative and based on a survey of 15 executives responsible for managing corporate risks, including 5 chief risk officers (CRO), 5 chief executive officers (CEO) and 2 partners and 3 other top managers (Figure 7).

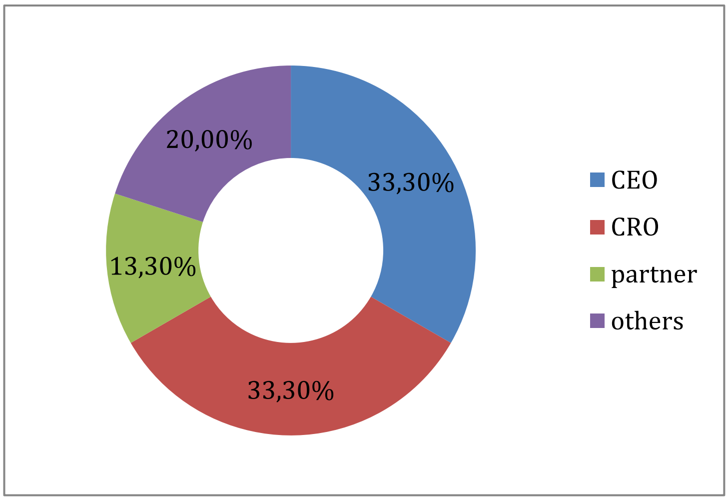

Figure 7. Respondents by job title in the company (%)

Respondents mostly represent small companies (below CHF 250m in annual turnover); the other categories were presented equally (20% for each of other three size categories – Figure 8).

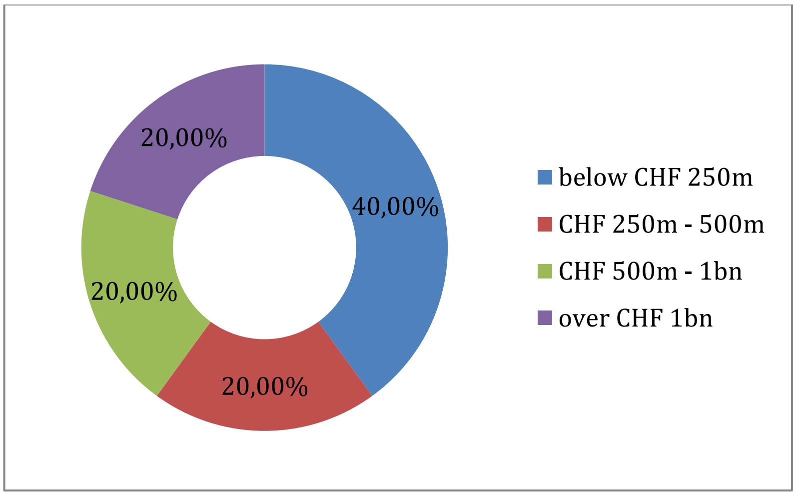

Figure 8. Respondents by company's size of annual turnover (%)

Respondents also vary by the amount of employees in the company: and here the most respondents are the companies with 1-10 employees (6 companies out of 15) or 250+ employees (4 companies out of 15), because small and mid-sized companies are the dominant companies' classes presented in Liechtenstein.

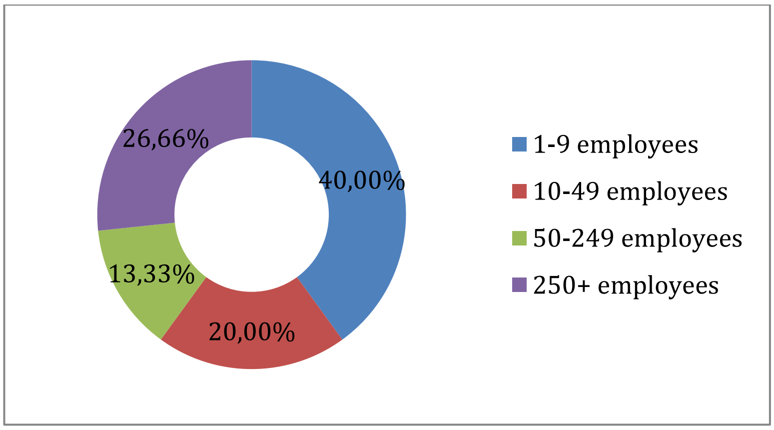

Figure 9. Respondents by company's size of employees (%)

Survey was conducted in different ways depending on the preferences of the respondent: by personal discussions during the autumn 2015 during different events hold in Liechtenstein, by private meetings, by mail, or telephone. Respondents were chosen randomly from a pre-selected database and were screened for eligibility and availability. In general for the survey respondents spent around 15 minutes. They were not compensated and the condition was to keep the answers anonymous (the question about company's name was not included).

In addition some interviews were conducted including the interview with the Minister of Finance (who is the Prime Minister) of Liechtenstein, Adrian Hasler (the interview took place in Vaduz (Liechtenstein) in November, 2015). The interview with Prime Minister is interesting from the regulatory side on reputational risk management in Liechtenstein and the general situation in the financial industry in the country. Other interviews were made with the executives participated in the survey (in case of personal meetings). And also some insights were obtained during discussions with executives with expertise in the field of reputational risk and risk managers of the companies from financial sector in Liechtenstein during different conferences and events during September – November 2015 in Liechtenstein. It was helpful in order to go deeper in understanding of the situation with reputational risk management inside the companies. The words are rephrased with keeping the meaning throughout this research.

4 EMPIRICAL RESULTS AND STUDIES DESCRIPTIONS

Companies have always faced risks that could damage their reputation. But those risks have never been as widespread and immediate as they are in the modern world. Companies' executives place reputational risk clearly at the top of risk managers' list of priorities. And it is not for nothing - if quickly check the recent newspaper headlines we can see the existing extent of the challenge. That is why also reputational risk management has been allocated to a separate risk category, although as the results show, some of the executives, mostly in small companies, still consider it as a part of other risk categories, however in big corporations it is managed separately due to the size of the business and complexity it causes.

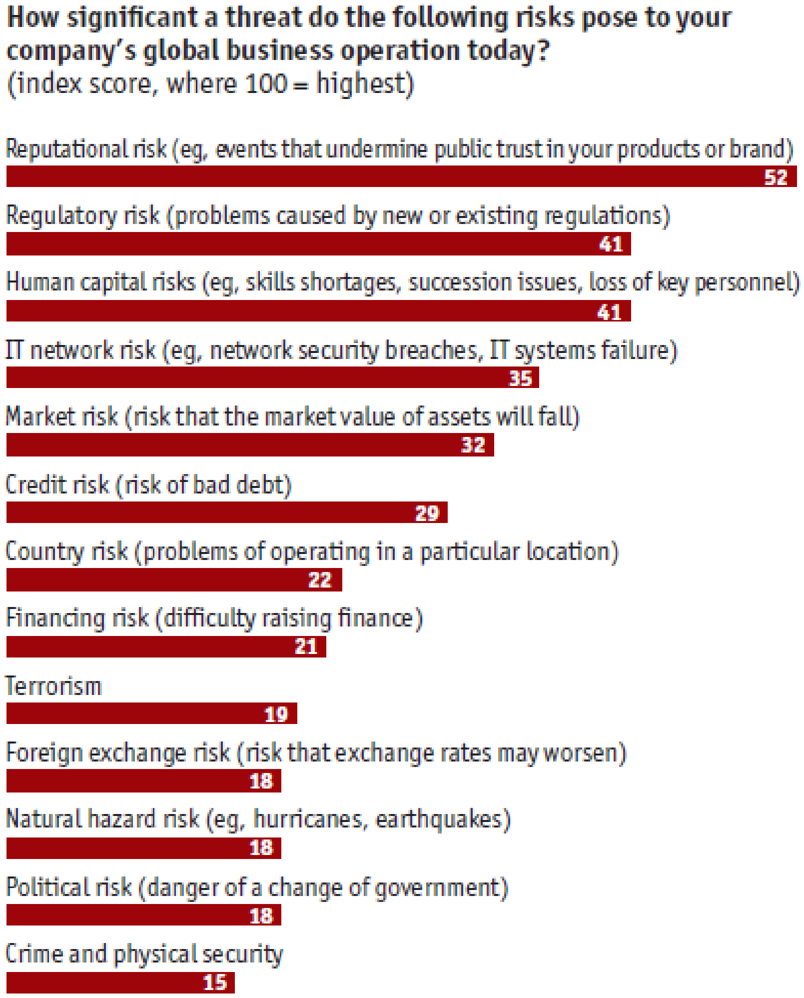

Figure 10. Corporate risks significance (Source: survey of Economist Intelligence Unit, 2005)

This section of the master's thesis provides further descriptions on the conducted studies and presents its empirical results. All of the studies reveal the topic of reputational risk management but from a bit different perspectives. The first one, valuation of 7 corporate reputation catastrophes, shows the existence of impact of the reputational risk catastrophes on the company's value by the examples of global leading companies. The second, two companies' comparison study, is aimed to demonstrate the importance of post crisis management carried out by companies on the further scenarios of company's development after the reputational risk event takes place. The findings from the third study are drawn from a survey of senior executives in Liechtenstein with focus on companies' perception of reputational risk and its implementation in companies corporate risk management as well as the overview on the general reputational risk management situation in the country from the regulatory side pursued by the Government.

4.1 Valuation of 7 corporate reputation catastrophes

For the investigation of the impact of reputation catastrophes on the company's value it was selected 7 global leading companies from different industries that experienced reputation catastrophes matching particular criteria stated in the previous section Data and Methodology. These companies are General Motors, Bank of America, Nintendo, Twitter, Sotheby's, McDonald's Group and Starbucks Corporation. Being leading players in their industries these companies fit to be good examples for this research. Also it was beneficial for this research in terms of data collection due to the availability of the data in databases as well as because the reputation catastrophes got a wide media coverage.

Applying the methodology described earlier, the cumulative abnormal returns (CARs) were calculated on a daily basis and are shown selectively in Table 6 in percentage form.

Table 6. Cumulative abnormal return results

Event Trading Day	*Full Sample*	*Recovery Portfolio*	*Non-recovery portfolio*
-5	-0,2001%	0,0373%	-0,5167%
0	-0,4295%	-1,1015%	0,4665%
5	-2,6308%	0,1156%	-6,2926%
10	-2,7004%	-0,1980%	-6,0368%
20	-1,3551%	5,3105%	-10,2424%
30	1,4051%	12,3868%	-13,2373%
40	1,3111%	12,6731%	-13,8382%
50	0,9421%	13,2494%	-15,4675%
60	2,5511%	16,4202%	-15,9410%
70	4,2451%	19,6319%	-16,2705%
80	6,6916%	25,3041%	-18,1251%
90	6,2558%	26,2607%	-20,4174%
100	5,2645%	26,0225%	-22,4128%
110	5,1149%	27,1316%	-24,2406%

According to the calculations, the ability to recover the lost value over the long-term period varies considerably between companies: some companies managed to recover and some not. So, 7 companies affected by catastrophes fall into two different groups: recovers (Nintendo, Twitter, Sotheby's, Starbucks) and non-recovers (General Motors, Bank of America, McDonald's). Figure 11 shows the abnormal returns of these two groups during the event window from -5 to 110 (116 days).

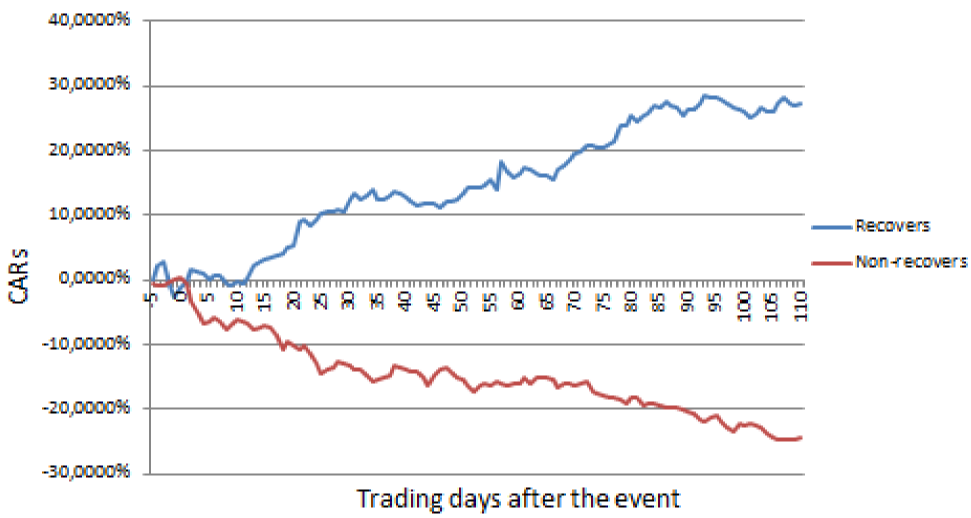

Figure 11. Recovers' and non-recovers' abnormal returns

The initial loss of value on the day of catastrophes occurred for both recovers and non-recovers was nearly the same and fell to a mark of 1% in minus. Then within the first thirteen days after the catastrophe it was already possible to see the different trends in the companies groups' scenarios. The situation with the CAR of recovers' group was not stable and demonstrated slight volatility while for the non-recovers' group we could see more or less smoothly declining trend. And after thirteen days we can observe further clear differences in the scenarios: recovers' group started to improve and showed the increase in their abnormal returns while non-recovers group continued with decline in their abnormal returns. By the thirtieth trading day, the average abnormal returns of recovers went to a plus and was already around 12% in plus. So the net impact on stock returns by this stage was actually positive and they were able to recover after the reputation loss less than in one month on average (by reaching the positive returns again). The non-recovers were showing smooth declining trend within the whole interval of observation.

In the tables and graphs below the data on the cumulative abnormal returns for recovers is presented. They are the majority of the sample of this portfolio. And that can be explained by the good reputational risk management policies carried out by companies on on-going basis that helped companies to recover quite quickly.

Table 7. Selected recovers' CAR

	CAR at 5 trading days	*CAR at 13 trading days*	*CAR at 30 trading days*
Nintendo	9.46%	6.11%	13.78%
Sotheby's	5.84%	12.91%	21.57%
Twitter	-13.24%	-7.44%	12.26%
Starbuck Corporation	-1.60%	2.16%	1.94%

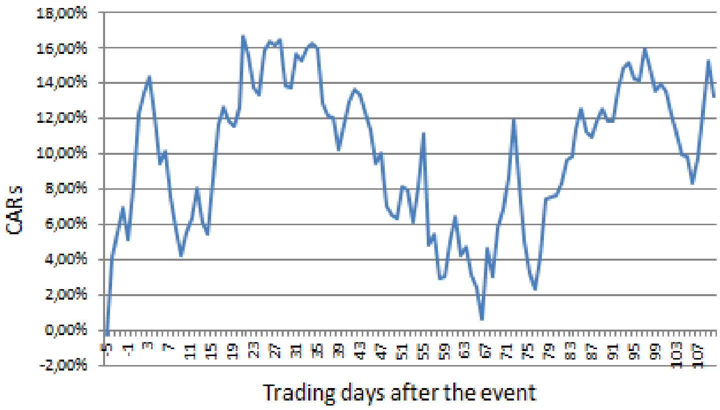

Figure 12. CAR for analysing period for Nintendo

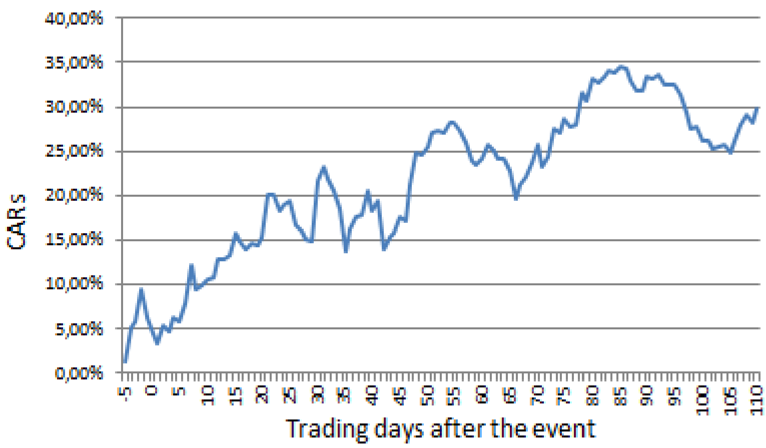

Figure 13. CAR for analysing period for Sotheby's

The first two companies from the recovers group – Nintendo and Sotheby's – during the whole period of event window were having positive cumulative abnormal returns and did not drop below zero. It is difficult to say that the companies were affected a lot by the reputational risk event under the consideration (financial estimate of which for Sotheby's for example, was also just $27m (see Table 3). Nevertheless it is possible to see a small decrease on the day of the catastrophe. But they managed to come to the initial level within a very short period of time (just couple of days). Apparently that can be explained by the strong brand reputation possessed by Nintendo and Sotheby's and by the benefit of the doubt provided by company's stakeholders due to that.

But also it is important to pay attention to interesting situation with high volatility demonstrated by Nintendo (especially between 50th and 70th trading days). Because straight after the announced reputational event the CARs did not change dramatically and stayed in plus but on the 51st trading day within the analysis cumulative abnormal returns dropped significantly and stayed low for some time (Figure 12). The attempts to find explanation within publicly available data were unsuccessful. The only is that during that time (April 2012 – two month after the reputational event under consideration) Nintendo made system menu updates by adding feature to the HOME Menu in version 4.0.0-7U which allows the creation of up to 60 folders for organization and also it improved eShop usability (Nintendo official web-page, Corporate History). Even though the company presents it as upgrading changes it might cause impact on CARs in a negative way.

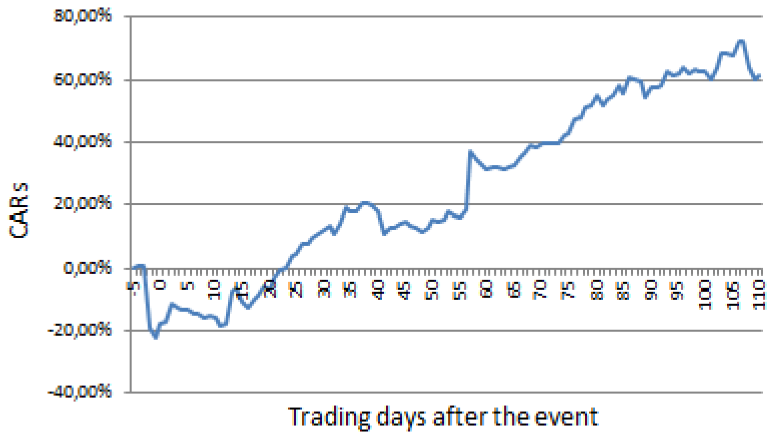

Figure 14. CAR for analysing period for Twitter

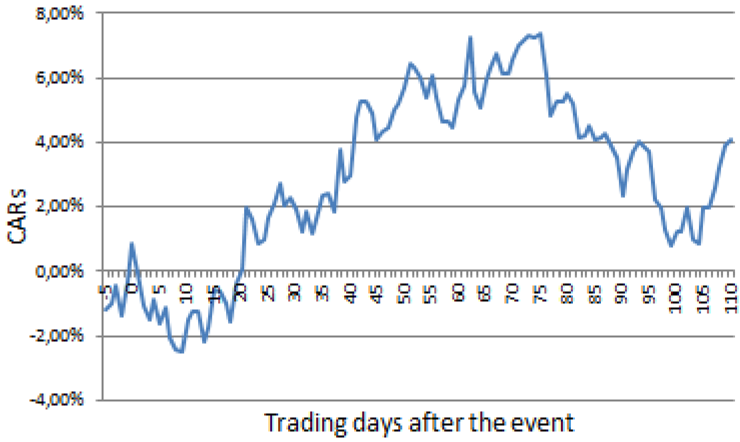

Figure 15. CAR for analysing period for Starbucks Corporation

The second two companies from the recovers group – Twitter and Starbucks – were influenced by the reputation catastrophe in a greater degree. Their cumulative abnormal returns on the day of the catastrophe went to the negative level and it required longer period of time (approximately twenty trading days) to reach the positive level of the CAR. However already within the next five days they managed to reach the initial level and continue demonstrating the increasing trend. For Twitter it was a more smooth increase and close to the average scenario of the whole group of recovers while for Starbucks it was possible to observe high volatility of the CARs and after a bit more than two month it experienced the decrease again. The exacerbated situation for Starbucks is possible to explain by the continued investigation process on the companies tax-avoidance in June, 2014 (a bit more than two months later the reputational catastrophe) within the European Commission (European Commission. Press Release Database. Brussel, 11 June 2014).

Now let's have a closer look at the companies that went to the non-recovers group according to the calculations within the analysed period of time: there are three companies there. The information on selected cumulative abnormal returns is presented in the table 8. Further it is possible to see the graph with the individual scenario for each company.

Table 8. Selected non-recovers' CAR

	CAR at 5 trading days	*CAR at 13 trading days*	*CAR at 30 trading days*
General Motors	-8.06%	-8.44%	-11.50%
Bank of America	-6.31%	-9.74%	-20.30%
McDonald's Corporation	-4.51%	-4.81%	-7.92%

Figure 16. CAR for analysing period for General Motors

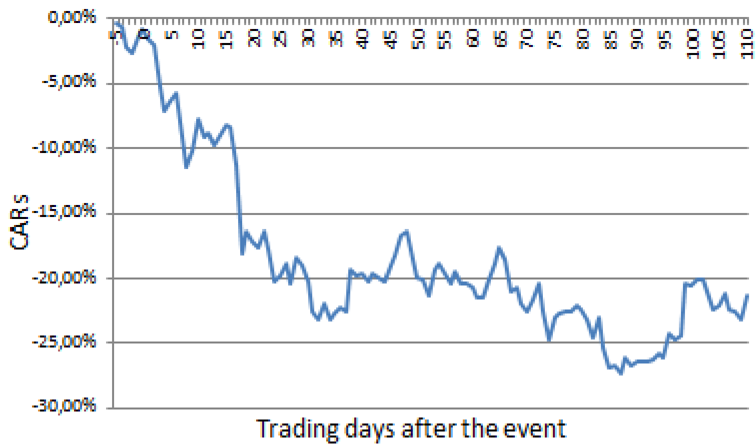

Figure 17. CAR for analysing period for Bank of America

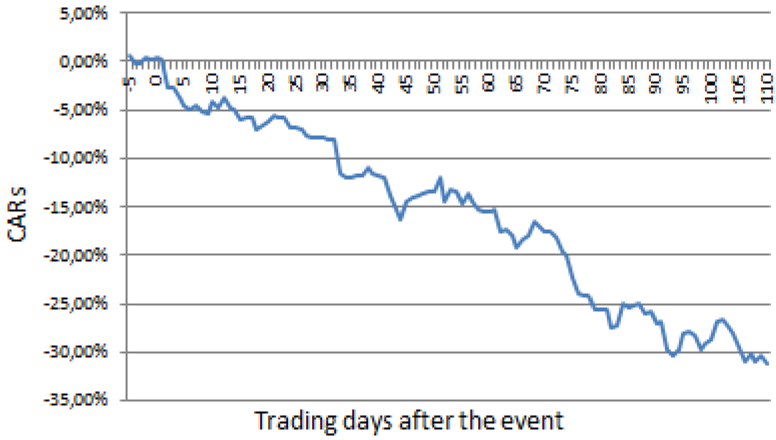

Figure 18. CAR for analysing period for McDonald's Corporation

As it is possible to see from the graphs reputation catastrophes did influence the companies' financial performance in this group. Cumulative abnormal returns (CAR) of the companies' reputation catastrophes went to the negative level and they could not reach the positive CAR within the whole analysed period. However, General Motors had some jumps during the period but those movements were rambling and did not lead to the stable improvement. And probably if to extend the analysed period it would be possible to the moment when CAR would reach level in plus.

The explanation to the fact that after a company experienced reputational catastrophe there are two possible scenarios for the company's further development – to recover and to non-recover – is that although all catastrophes have a negative impact on price during the first time for sure, paradoxically they also offer an opportunity for the management to demonstrate their talent in dealing with difficult circumstances that is leading to an increase in the returns. Effective management of the consequences of catastrophes would appear to be a more significant factor that whether catastrophe insurance hedges the economic impact of the catastrophe or not. More details and prove about this will be discussed in the next sub-section within empirical results and case descriptions.

In addition to the direct impact on company's returns, catastrophes also have a significant impact on the level of trading in shares especially within the first ten trading days after the event.

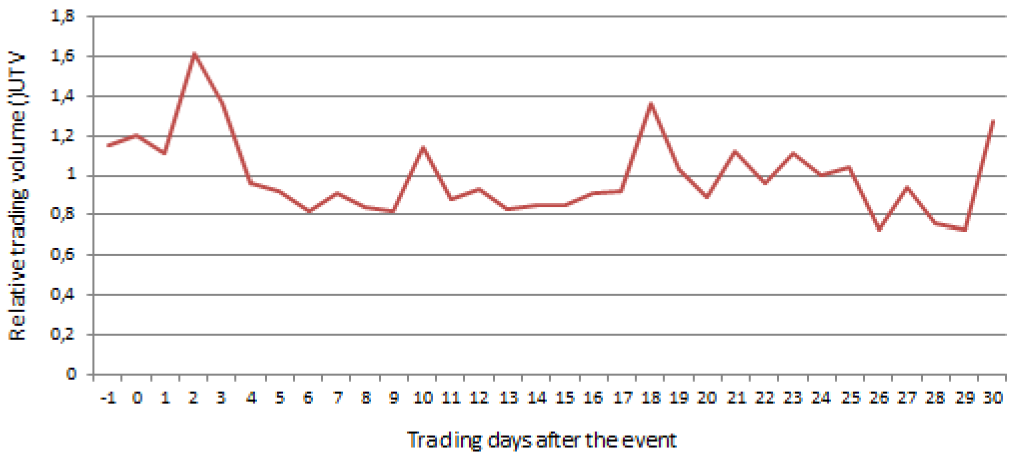

Figure 19. The impact of catastrophes on share trading volume

According to the calculations of Relative Trading Volume, which is shown on the Figure 19, trading volume is back to the normal conditions in less than one month. It is possible to make an assumption that here reputation distress is over in 30 days. Also it is necessary to underline that rapidly grown trading volumes during the first 2 weeks after the catastrophes are caused mainly by non-recovers.

Making a short conclusion on this research: reputational catastrophes do have significant impact on the company's value and share trading volume. That proves the importance of reputational risk management for company's continuity and value maximization. There are two possible ways for a company to develop after the catastrophe – to recover and not to recover – and that depends on the crisis management of the company, as well as on ongoing reputational risk management within a company that could provide a benefit of doubt as a reward for a company's management hard work.

4.2 Concorde vs. Firestone case comparison

After identifying the existence of the impact of reputational catastrophes on the company's financial indicators such as company's stock price and trading volume the next step of this master's thesis is to study the way companies perform with the crisis management – the actions companies undertake to cope with the reputational catastrophes and how this influences the scenario of company's further development. For this we will concentrate more precisely on the example of two companies – Concorde and Firestone. The data, reasons, preliminary case descriptions were provided earlier within the data and methodology section.

As it was stated earlier these two companies have both similarities and differences. And if the similarities are about the type, character and general description of the catastrophes, one of the differences is exactly connected to the post-lost communications and crisis management initiatives undertaken upon by the respective companies.

Product recalls are always costly and embarrassing for any kind of industry, especially for the auto industry. Improper handling of a recall can have first of all an adverse effect on consumer confidence with the possible trend to sales' decrease and also affect the selling price of the stock. The first company under consideration is a good example here – Ford and tyre manufacturer Firestone were suffering for quite a while from the repercussion of their handling of a product recall in 2000-2001.

On August 7, 2000 Firestone tyres were withdrawn from sale in the Unites States primarily because of tread separation problems on Ford Explorers sports utility vehicles (SUVs). Under investigation by the U.S. safety authorities, the tyres have been implicated in 174 deaths and hundreds of injuries. Two days later, on August 9, 2000 Firestone announced a voluntary recall of 6.5 million tyres in the US. (Pinedo, et.al, 2000)

The problems with the tyres were known several years earlier because of accidents happened in other countries although it was believed initially that the problem might be restricted only to countries with hot climates and rough roads: in August 1999, Firestone replaced the tyres in Saudi Arabia; in February 2000, Firestone replaced the tyres in Malaysia and Thailand, and in May 2000 the tyres were replaced in Venezuela. But later same year the U.S. National Highway Traffic Safety Administration received a lot of complains involving Firestone's tyres, and Ford and Firestone adopted a unified response concerning the recall (Knight & Pretty, 2001).

However, unfortunately, accidents were continuing after the recall. Two companies started to blame each other, not willing to take responsibility: Ford blamed Firestone for flaws in the tires and Firestone blamed Ford for design flaws in the SUV Explorers. The Ford – Firestone relationships were quickly deteriorating. Obviously, this behaviour drew attention of social media which covered this situation really wide. Because of the situation when none of the companies was willing to take responsibility for their actions (probably because of the impending lawsuits), reputational situation were diminishing in both companies: consumer were losing their confidence about the companies – consumer perception was that financial factors were more important for the companies than consumer safety, – and also as a result the stock prices were decreasing. The overview from the financial side of this case will be presented below. (Pinedo, et.a., 2000)

Bridgestone Corporation, which bought Firestone in 1988, declined to comment the recall. Moody's (Moody's Corporation – a credit rating agency that produces manuals of statistics related to stocks and bonds and bond ratings) downgraded Bridgestone's long-term debt rating A2 to Baa1 – above-average creditworthiness relative to other domestic issuers to average creditworthiness (Moody's Investor Service. Rating Symbols and definitions. August 2015, p. 12).

In the commercial market, sales of Firestone tyres fell 40% over September/October. Sales in the US fell by 18%. Analysts commented that Firestone could lose up to 7% of market share in the US to rivals. The reaction of the investors is shown in Figure 20 (Knight & Pretty, 2001, p.19). The stock market reaction was severe: 50 % of value is wiped off Bridgestone shares.

Figure 20. Bridgestone Corporation's shareholder value following the recall of Firestone (Source: Knight & Pretty, 2001, p.19)

The impact of the recall crisis spread beyond Bridgestone and key purchasers of the product were affected also. The majority of tyres were fitted to Ford Explorers so Ford became involved in the crisis via its supply chain (Figure 21). This proves once again that reputational risk management is a difficult risk category to manage because the peril can come not only from inside the business but also outside it bringing extra challenge for companies.

Figure 21. Ford Motor Company's shareholder value following the recall of Firestone (Source: Knight & Pretty, 2001, p.20)

Ford's Chief Executive Officer Jacques Nasser tried to allay consumers' fears and issued a statement emphasizing the importance of safety and trust and launched a US$5 million advertising campaign. However, his actions did not support his words. In September 2000, J. Nasser refused to testify at the Senate and House Commerce Subcommittee on tyre recall stating that he was too busy. In October 2000, Masatoshi Ono resigned as CEO of Bridgestone, Firestone's parent company. In October 2001, Jacques Nasser also resigned as Chief Executive Officer of Ford. Both executives departed and left behind over 200 lawsuits filed against their companies (Pinedo, et.al, 2000).

Analysing the data presented in the Figure 21 we can see that abnormal returns did drop by 20% (US$10 billion) in the first calendar month following the recall however in spite of all odds proceeded to recover about half of this lost market value. After 100 trading days abnormal returns increased significantly reaching later on up to 30%.

Concluding this particular case we can state the following moments:

- when the early-warning signs appear a proper attention needs to be paid to it and actions to be undertaken in order avoid the catastrophe;

- it is necessary to take responsibility for the actions your company does if you want to keep the trust to your company from its stakeholders' side;
- words must be proved with actions.

The second case here under consideration is Air France – Concorde catastrophe that happened on July 25th, 2000. An Air France Concorde flight crashed on take-off killing all passengers on the board (109 people) and four people on the ground. As the first reaction, Air France immediately grounded its entire Concorde fleet pending an accident investigation. The catastrophe was also broadly covered in the media; and in response to existing media pressure, Air France used its website for press releases, it also expressed sorrow and condolence from the company, and arranged for some of the relatives of the victims financial consideration to be paid prior to a full legal settlement. The chairman of Air France, Jean-Cyril Spinetta, visited the accident place the day of the accident and later he attended a memorial service for the victims.

Reputation risk management of Air France after the Concorde aviation disaster was effectively ruled by the chairman of Air France Jean-Cyril Spinetta. Air France's handling of the crisis was characterized by fast and open communication with the media and sensitivity for the relatives of the victims. Consolidating all of the information it is possible to identify the following steps:

- Spinetta, the chairman of Air France, was visible at the crash site in Gonesse, signalling that he was involved personally;
- He grounded Air France's fleet of Concordes immediately;
- Spinetta kept in touch with the families of the victims by attending services for the victims in France and Germany;
- Air France was not defensive about compensation and volunteered an interim payment to the victims' families ahead of any compensation deal.

The result of such a successful risk management policy demonstrated by Air France was found in the picture of financial indicators: the selling price of the stock declined rapidly the day of the disaster but made a quick recovery (Figure 22).

Figure 22. Air France's shareholder value following the crash of Concorde

(Source: Knight & Pretty, 2001, p.17)

As it is possible to see in the figure Air France dropped 5% approximately in shareholder value in the first few trading days following the loss and proceeded to outperform the market expectations within around fifteen days. The negative value reaction during the 30-40th, 50-65th trading days is explained by high oil price that rapidly increased during these two intervals.

The corporate impact of the Concorde Crash was also observed in British Airways, as Concorde fleet also operated there. The enterprise was not involved in the accident itself, but Figure 23 illustrates the negative value reaction. Moreover, British Airways took a different approach for dealing with the catastrophe immediately after it happened: it waited a month before grounding all Concorde flights for indefinite period of time and only it did it only after the Civil Aviation Authority announced that it would be withdrawing the Concorde's airworthiness certification. After some time, eventually, the airworthiness certification of Concorde was reinstated but anyway this significantly influenced the stock price of British Airlines.

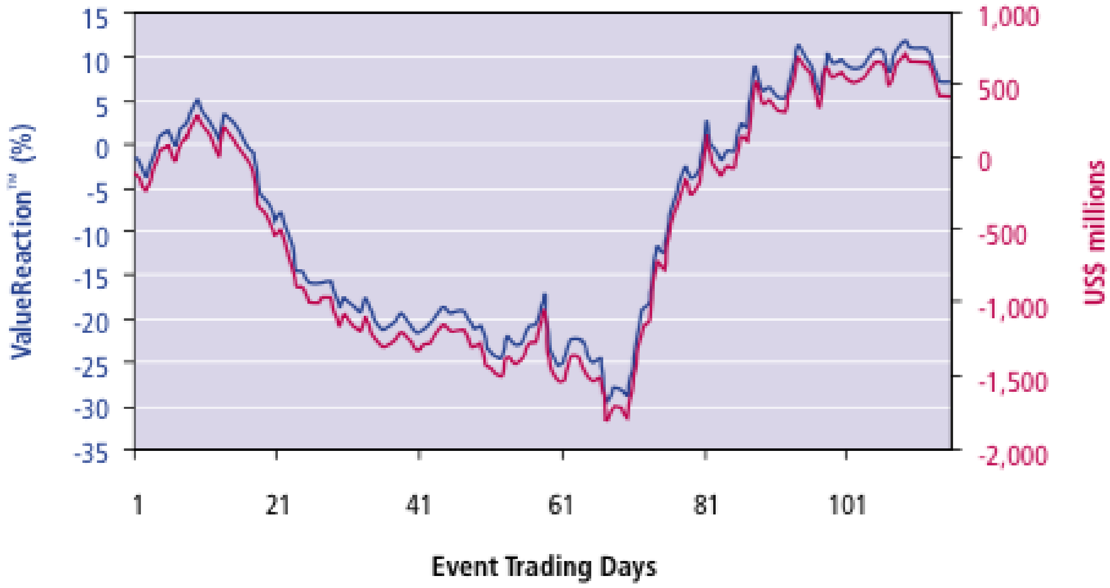

Figure 23. British Airways' shareholder value following the crash of Concorde (Source: Knight & Pretty, 2001, p.17)

As it is possible to see he air crash had a significant effect on British Airways stock. Due to the fact that British Airways did not ground its Concorde fleet immediately after the crash that also could be considered as disregards of company's social responsibility, is considered as a main factor to the sharpen fall in British Airways' share value and the longer period required for the price to recover.

These two case catastrophes are great examples of the importance of the post-crisis management for the future of the company and it directly influences its scenario of the development. In the theoretical part of this master's thesis it were already discussed the main elements for the successful crisis management via its communication and actions: concern, commitment and control, following fixing the problem. Air France showed successful management programme in practice with its really quick communication that helped the company to recover in its stock price also really fast. The other companies did not apply those concept or applied it partly that also reflected in their financial performances. Summarised information on crisis risk management of these companies can be found in the table 8.

Table 9. Comparison of crisis risk management on Concorde & Firestone cases

	CONCORDE'S OF AIR FRANCE CRASH	**RECALL OF FIRESTONE TYRES**
Date	July 25th 2000	August 7th 2000
Loss of lives	113	174
Reason	Punctured tyres	Unsafe tyres
Parent Company	Air France	Bridgestone
Companies involved	British Airways	Ford Motor Company
Reputation Risk Management of Parent Companies	**STRONG** Personally ruled by Chairman Jean-Cyril Spinetta.	**WEAK** Bridgestone Corporation, which bought Firestone, declined to comment the recall
Reputation Risk Management of involved companies	**WEAK** BA did not ground its Concorde fleet immediately after the crash .	**STRONG** Ford Chief Executive Jacques Nasser issued a statement emphasising the importance of safety and trust and launched a US$5 million advertising campaign.

4.3 Reputational risk management in Liechtenstein

Protecting a company's reputation is the most important and difficult task facing senior executives. The previous researches conducted within this master's thesis showed the importance of the reputational risk management for a company's financial performance at the "figures' level" by analysing the financial data and determining the existing level of impact. This section of the thesis will provide an inside into the thoughts of the senior executives on the reputational risk, what are their opinions and practices about this risk category. The findings are drawn from a survey of senior executives in Liechtenstein and outcomes from the interview with the Prime Minister of Liechtenstein. Due to some specific and interesting characteristics of this small country in different criteria the results of survey are also really interesting. The questionnaire for this survey can be found in the Appendix 1 at the end of this thesis.

After analysing articles and global surveys on reputational risk management it was clearly seen that reputational risk is put into the place of core business for companies but it was observed that there is less agreement on how reputational risk should he approached and whether it exists as a separate issue or not: the results were providing information about existence of two different groups almost equal in number that whether considered reputational risk as a separate category or as a part of other risk category. Asking the same question within survey conducted in Liechtenstein it was interesting to see that the majority (87%) of the respondents define and manage reputational risk as a separate risk category (Figure 24).

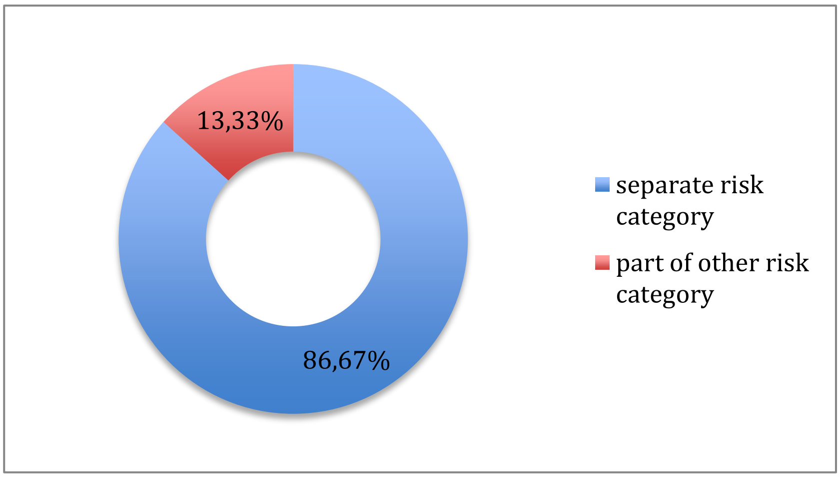

Figure 24. Do you consider reputational risk as a separate risk category or as a part of other risk category?

Respondents admit that reputational risk is a risk category demanding special solutions and particular attention. The Prime Minister and Minister of Finance in Liechtenstein is of the same opinion: “Management of reputational risk is more and more important, especially for the financial sector. Reputation reflects the confidence of the customer in the company. Therefore I consider reputational risk as an issue in its own and any company should focus on that risk as a separate risk category”.

Precise attention to reputational risk can be explained also by the fact that these companies are operating in Liechtenstein that brings additional sense. Firstly, lately this country has been playing a special attention to the reputation of the country in general and to the reputation of the companies operating in it particularly, applying certain steps on legislative level. The reputational situation of the financial industry in Liechtenstein has improved since 2008. The Liechtenstein government has a proactive policy in order to promote the adaption of the national economy, especially the financial market, to the international developments and standards, in particular in the area of transparency and exchange of information in tax matters. With its Liechtenstein Declaration of March 2009, Liechtenstein already adopted a strategy of cross-border tax compliance. In 2014, Liechtenstein committed to the early adoption of the OECD’s (Organisation for Economic Co-operation and Development) new Common Reporting Standard for the automatic exchange of information. The relevant implementing law will come into force on January 1st, 2016. An Agreement with the European Union to implement the Common Reporting Standard according to the Early Adopters’ timetable was signed by Liechtenstein and the EU on October 28, 2015. The Liechtenstein Parliament has approved the agreement last week (2-8.11.2015), in order to ensure its timely ratification and entry into force. Moreover the Global Forum on Transparency and Exchange of Information in Tax Matters has confirmed that Liechtenstein has established the required framework for an effective exchange of information. The Peer Review Report of the Global Forum, published on October 30th of this year, concludes that the legal framework and practical implementation in Liechtenstein by and large comply with the international requirements on administrative assistance in tax matters on request. All these steps have been very important to improve the reputational situation. (Information was conducted during the interview with the Prime Minister of Liechtenstein on November 11, 2015).

Secondly, Liechtenstein is very close to Switzerland in many aspects (geographically, economically, socially, etc.) where the Basel Committee on Banking Supervision is settled which provides standards and procedures on banking supervisory matters and in 2009 published in its Proposed Enhancement to the Basel II Framework separate chapter on reputational risk with the requirements concerning it. So, the BCBS's requirements in Liechtenstein were spread not only among bank but among companies in financial services in general.

The companies that consider reputational risk as a part of other risk categories (13% of the respondents) are the small companies and they consider reputational risk as a part of operational risks. And talking to one of the risk managers from this group of companies it was said that for small companies such as family foundations or family offices with 1-9 employees there is no need to manage reputational risk separately from the operational risk, that would only bring additional costs, while for the big companies the separation is really must have place.

The importance of the reputational risk management and the difficulties related to its measuring and managing have been already discussed widely within the theoretical part of this master's thesis. Now it would be interesting to have a look at the situation with these issues on a particular examples – companies from financial sector in Liechtenstein (Figure 25). So, the majority of the respondents of this survey (73%) admitted that reputation is the most significant asset of their companies. Others were not sure about that considering other assets as much important as reputation. Admitting the importance of reputation, more than 60% of the respondents monitor and measure reputation on ongoing basis even though the majority finds it difficult to quantify the financial impact of reputational risk on their business (67% of the respondents). That easily can be explained by the multifaceted nature of the reputational risk, other business risk that must be also actively managed and by the range of risk drivers that are placed as inside the company as can come from outside – when being involved into a reputational catastrophe by a stakeholder within third-party relationships, for example by a supplier as it was in the case studied in the previous section with Air France. It is necessary to remember that a company's reputation is affected by its business decisions and performance across a wide range of areas, such as financial performance, quality, innovation, ethics and integrity, crisis response, safety, corporate social responsibility and security. The prove for almost all of these components is possible to find within the companies under consideration in this master's thesis.

Completely the same amount of respondents (67%) said that reputational risk is more difficult to manage than any other risk category. The rest of the respondents were rather not sure than against this statement just because some of the companies have settled risk management policies and strategies that are working well and that's why they don't experience big problems with measuring and managing reputational risk.

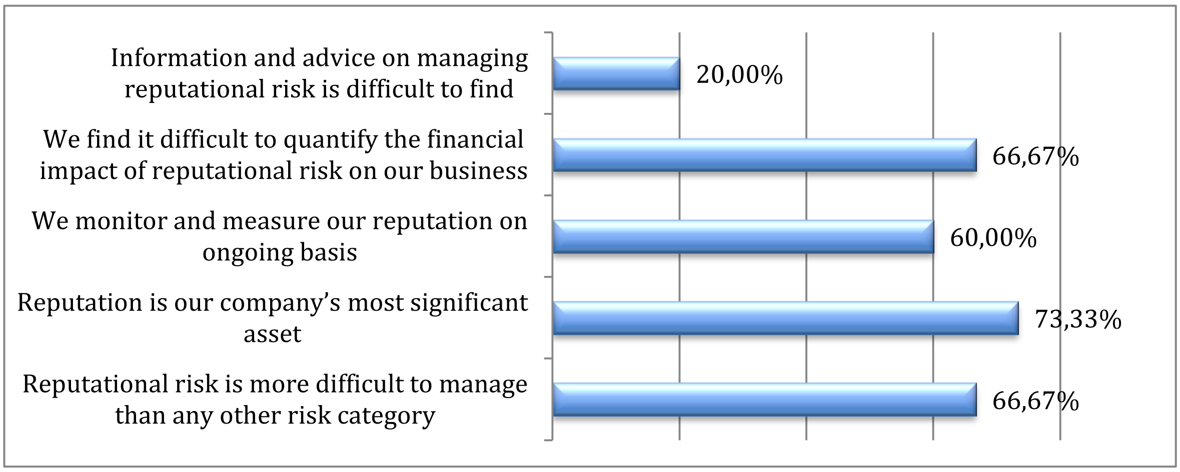

Figure 25. In which extent do you agree with the following statement? (% of respondents who agree)

The number that attracts attention in this chart is 20% - only twenty percent of the respondents think that information and advice on managing reputational risk is difficult to find. And that can be explained by the place where the companies do business. As it was already mentioned above Liechtenstein's government pays a lot of attention to companies' operation in the country and places particular requirements for the companies. A strong and independent supervisory authority and high regulatory standards continue to be key factors for the stability and development of Liechtenstein's financial sector - the FMA is the independent financial market supervisory authority of Liechtenstein, ensuring the stability and credibility of the financial market, the protection of clients, and the prevention and prosecution of abuse (FMA annual report 2014, p.7). Additionally, in order companies can stay in compliance with those regulations and requirements particular actions are taken, for example spread of information on managing reputational risk, organizing forums and conferences on the topic where the authorities can provide some guidelines and companies can exchange experience, etc. Exactly that is why the majority of the respondents feel confident about dealing with their reputation – with its measuring and managing (Figure 26).

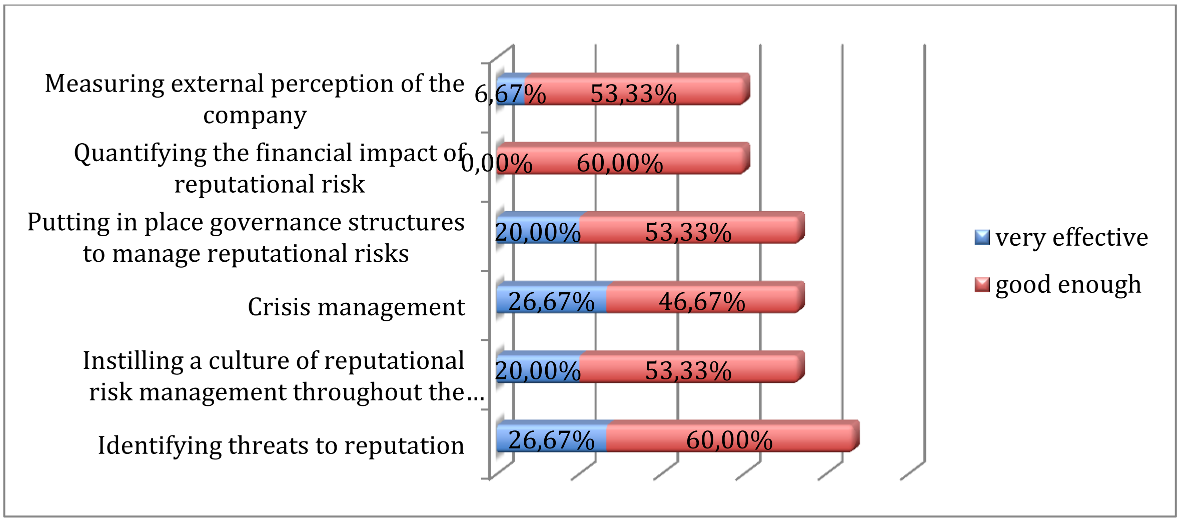

Figure 26. How effective your company at managing the following aspects of reputational risk?

If to look at the chart presented in the figure 26 it is possible to see that the majority of companies (over 60-70%) think that they are very effective or good enough at each of the stated categories of managing reputational risk. Although many of the respondents say that they are not perfectly effective at managing reputational risk because this risk category is distinctly more challenging and tricky than any other risk category due to a lot of reasons (they were discussed earlier), nevertheless, they have established strategies and policies that are implemented in their risk management and are working pretty well and that makes senior executives feel good. By the way, we can also see here that none of the respondents admitted to be very effective at quantifying the financial impact of reputational risk on their business and 40% said that they need to work on its improvement – again, due to high complexity of this task. Particular challenging companies also have with measuring external perception of their company that understandable – a company has a lot of stakeholders' groups with different interests.

And in order to deal with stakeholders' perception successfully it is essential to systematically track evolving stakeholder expectations. For that a company needs:

- identify stakeholders and data sources for stakeholder information considering both internal and external stakeholders;
- identify factors that indicate changes in stakeholder expectations and potential reputational risks and monitor them regularly;

- use insights from identifying reputational risks to inform ongoing risk management decisions and take early actions when necessary because it is always a bit easier to prevent a crisis than to deal with the post-crisis management saving in many aspects.

The respondents who said that they need to improve their management of reputational risk are young companies that are now at the stage of evolving and that's why they feel necessity to work more on that issue, and they are mostly private banks. "In my opinion the Liechtenstein financial sector is aware of the reputational risk and has extended the reputation management. There are established guidelines in the financial sector, especially for cross-border business, but I know there is a room for improvement", - said the Prime Minister and Minister of Finance of Liechtenstein.

Whether or not companies feel confident at managing reputational risk and being able to find tools and strategies to deal with it, first of all it is highly important to look at the areas where reputational risk is likely to have the greatest impact (Figure 27).

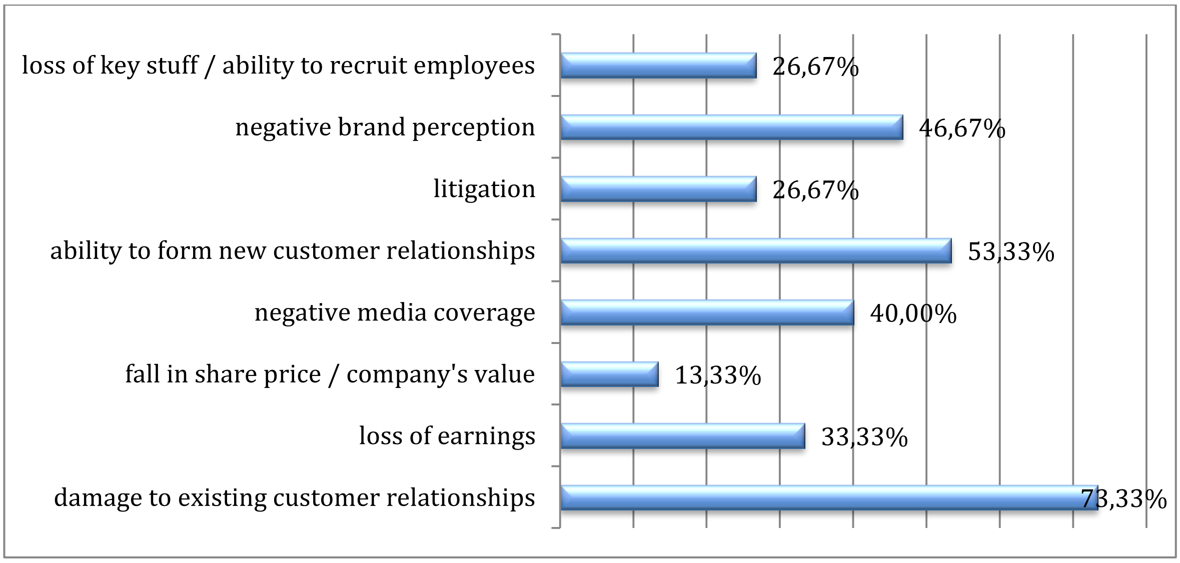

Figure 27. Which of the following potential impact of reputational risk would cause you greatest concern as a business? (% of respondents, applicable more than one answer)

As it is possible to see from this chart, for respondents in this survey there are two core areas of concern: both of them are related to the potential impact on customer relationships. The first issue executives worry about is the damage that reputational risk could have on their existing customer relationships – more than 73% of the respondents fear most about that. The second biggest issue under concern is the ability to form new customer relationships. The third and fourth place were taken by negative brand perception and negative media coverage with 46.7% and 40% accordingly. This is explained by the executives from the point of view that for the companies operating in banking and financial services reputation is the main aspect customers, current and potential, pay attention while choosing a company to deal with, a company they could entrust such a sensitive asset as their money. Financial performance is also very important but it goes straight after the reputation. That is why the company's perception and media coverage is very important.

"Trust is the basis for any business. If I do not trust the company, I will not have any business relationships with this company. This is especially true for the financial sector. Reputation is an expression of trust and can, in my view, definitely be considered as "priceless" intangible asset" (Prime Minister and Minister of Finance in Liechtenstein, 11.11.2015).

The other areas of concern that are linked under the category of financial damage but still can be separated are loss of earnings and fall in share price / company's value were picked up by 33.3% and 13.3% of respondents accordingly. Respondents clarified this saying that share price / company's value and earnings are also important and they for sure feel concerned about these financial issues but for them the greatest impact of reputation is coming on relationships with their stakeholders and then as a consequences it influences financial indicators. And also it might be connected to the fact that in Liechtenstein financial companies are quite stable in their financial development (due to a lot of reason, including economic stability in the county among others) and if a company meets its clients' expectations things are operating well. Loss of key stuff and ability to recruit employees cause greatest concern only to a 27% of the respondents.

Another important moment while speaking about the reputational risk management is to decide who should be put in the primary responsibility for the reputational risk within a company. According to the companies participated in the conducted survey, responsibility for reputational risk resides at the highest levels of the organisation (Figure 28).

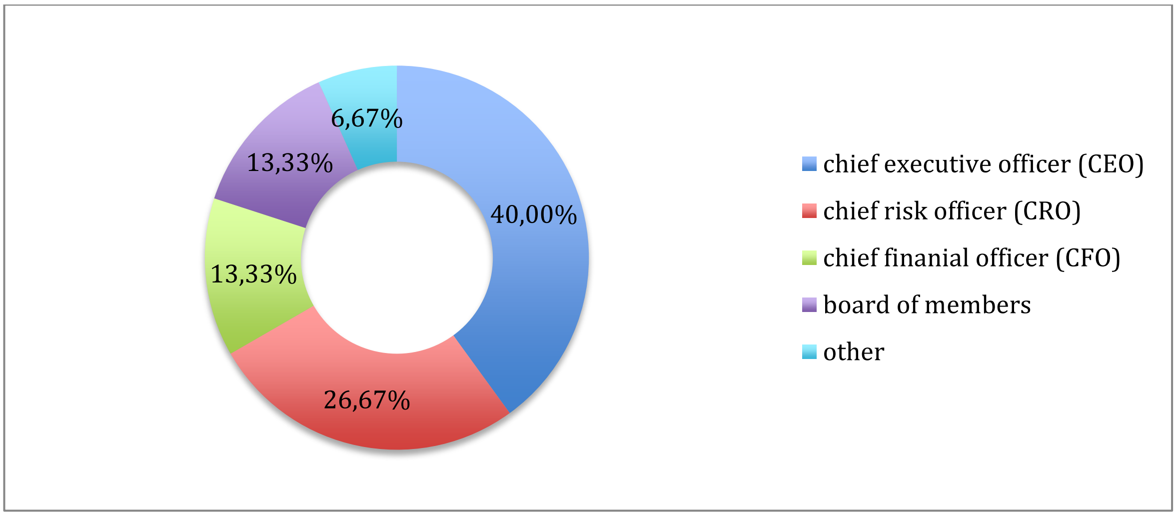

Figure 28. Who is assigned for the primary responsibility for reputational risk in the company?

As it is possible to see from the chart the majority of the respondents said that the primary responsibility for reputational risk in the company is assigned to chief executive officer (40% of the respondents). "The management of reputational risk is very important and should be assigned to the CEO". Talking to the respondents it was possible to hear that responsibility for the risks that directly and strategically impact business strategies and development has shifted to the top. Second in the line is chief risk officer with 26.7%. Then the place for reputational risk responsibility with the percentage of 13.3% was taken by the chief financial officer and board of members. All of the respondents who picked up the answer "other" indicated employees of the company, explaining that they don't have one executive responsible for managing reputational risk but rather, the heads of each business and function undertake this responsibility. And also every employee is aware of the fact that he or she represents the company and is responsible for the reputation the same as the CEO. Addressing the same question to the Prime Minister of Liechtenstein during the interview, he also stated that management of reputational risk is very important and should be assigned to the CEO.

The next question in the questionnaire was related to the reporting on reputational risk. As we can see from the results of this survey the majority of respondents (86,7% - see the Figure 24) consider reputational risk as a separate risk category and they measure and manage reputational risk on its own. Also results showed that 60% of the respondents monitor and measure their reputation on ongoing basis (see the Figure 25). So, it was interesting to see whether they report about reputational risk in their annual reports also separately. But the results were the followings (Figure 29).

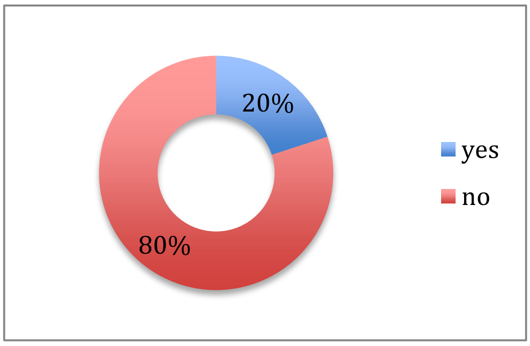

Figure 29. Do you cover a separate section of reputational risk in your Annual report?

In spite of the fact that companies participated in the survey stated that they manage reputational risk separately they don't provide a separate section on reputational risk in their annual reports. Answering the question why and if they mention this risk category at all within their reports they say that they include information on reputational risk management within the section on risk management in general or within the section on operational risk. The explanation is that reputational risk is a very sensitive topic especially when speaking about structuring it on paper because of its complicity and dimension – to proper indicate in short all of the information on reputational risk is really challenging task and companies don't see an extreme necessity of it. Also they add that their stakeholders know their reputational situation pretty good without reading about it in their annual reports. But they do state in their reports that reputation is very important for their companies and that they measure and manage it, just not speaking about further details.

The same situation was faced within working on the section on reputational risk management in banks within this master's thesis. Not all of the leading banks disclose information on their reputational risk management, although the majority of them provided at least the definition of the reputational risk and their statements about the necessity of its managing.

The last of the questions that was covered within this survey on the reputational risk management within the financial sector in Liechtenstein was connected with the remuneration incentives within the company within the reputational risk management process and was formulated as following: Does your company have any remuneration incentives relating to the handling of reputational risk included in risk management system and corporate culture? And 100% of the respondents answered "no" to this question. Trying to shed more light on this issue, during the personal conversations after asking for the comments, they were stating that they don't have any particular remuneration incentives just because it is enabled by default: once a person becomes an employee at the company he or she is getting responsible for the reputation of the company. The executives participated in the survey said that their company is very effective at instilling a culture of reputational risk management throughout their company. Again partly due to the fact that these companies are operating in Liechtenstein where not only executives of the companies but also the government pay a special attention to special attitude to reputation and placing a strong risk culture. And they are sure that companies that develop and insert a strong risk culture in such a way that every employee understands the importance of reputation and how easily it can be compromised, will be well prepared to identify early warning signs and ensure that employees will act in a way that will support, rather than damage, reputation, and no additional remuneration incentives are needed.

Concluding the section about the survey on reputational risk management it is possible to say that results have proved the importance of the reputational risk and the necessity of its measuring and managing. The main results are going in line with the global trend on reputational risk that was widely covered within the theoretical part of this master's thesis as well as with the findings of previous reputational risk management surveys but with the correction on the specific features of the place where the companies are operating in.

5 CONCLUSION

The most valuable asset in the capitalist economy is not cash, stocks or other tangible assets, but trust. It was important decades ago and it is even more important today, with crazy volumes of assets flowing daily through international financial markets faster than legal confirmation can be provided. Thus, although a shortage of cash and lack of liquidity can bring a company to its knees, it is more frequently that a loss of reputation deals the final blow.

Definitions of reputational risk vary widely, and different companies take a variety of approaches for identifying, assessing and mitigating the reputational risks they face. The biggest and the first question is divided into two options: whether reputational risk is a category of risk in its own right, or simply the consequence of a failure to manage other strategic risks being a part of other risk category. Some of the companies, including banks, still consider reputational risk as a part of operational risk, in terms of measuring complexity and absence of the necessary statistical information and other data. Whatever position companies take on this issue, almost all executives agree that corporate reputation is a greatly valuable asset that needs to be protected. Understanding how different aspects of a company's activities encroach on stakeholders perceptions is a vital aspect of protecting a company's reputation. And the main point here is that a company has a clear and appropriate framework in place for measuring and managing reputational risk that is well understood across the business.

According to the current global situation, due to the fact that we are living in the world of media and fast spread of information, even issues that seem to be insignificant can become hot news with possible damage and breakdown of reputation, forcing companies to improve their capabilities in the area of managing reputational risk. Moreover, reputational risk will most likely be increasingly critical in the next years continuing to be a core strategic business issue with the responsibility residing at the highest levels of the organization. Reputational risk can arise from almost any business failure. As such, it is very important and that is why the CEO plays the vital coordinating role with the emphasis that the heads of each business and function undertake the responsibility as well. Other members of the reputational risk team include chief risk manager, chief financial manager (in some companies) and board of directors. Additionally companies with positive reputation create a strong corporate risk culture where employees take responsibility for enhancing corporate reputation through their everyday activities.

Reputational risk is driven by a wide range of other business risks that must be actively managed. According to the Deloitte reputational risk survey the top position in the list of other business risks drivers is taken by ethics and integrity, followed by security risks, product and service risks (related to safety, health and environment) and third-party relationships (Deloitte, 2014, p.3). Concerning the third-party relationships risks companies feel least confident because it is beyond their direct control, while managing confidently such risks related to regulatory compliance, employee and executive misconduct.

Currently many companies feel that their capabilities in managing reputational risk are quite good but still they leave much room for improvement, but the high rewards of success in this not easy process should provide a strong motivation. Reputational damage can have irreversible effect, but establishing a solid reputation can provide a strong competitive advantage. A good reputation strengthens market position, reduces the price of capital and increases shareholder value.

The main research question of this master thesis was whether reputational risk presents itself a key element for business continuity and value maximization or not. Also in order to deeply investigation the answer to this question it was decided to consider it from thee aspects that found their ways in the empirical part of the thesis within the three study survey conducted: 1) investigation of the impact of the reputation catastrophes on the company's stock value and trading volume, 2) investigation of the importance of the reputational risk management for the company's performance and 3) conduct a survey of financial sector companies in Liechtenstein to see how reputational risk management works in practice.

The first study conducted within this master's thesis (evaluation of the seven corporate catastrophes) proved a significant impact of reputation decadence on enterprise value and trading volume with an approximate calculation of recovery period, which is 30 days. After this time interval of trading days it is possible to investigate if the company is going to recover or it is going to proceed in non-recovers' group. The cases of Concorde and Firestone illustrated the lessons for senior management proving crucial importance of post-crisis management. Even though all catastrophes have a negative impact on stock price during the first time for sure, paradoxically they also offer an opportunity for the management to demonstrate their talent in dealing with difficult circumstances – a proper post-crisis management will lead to a company's recover and even to an increase in the returns. Effective risk management strategies must take into account the risk quality of a firm's key stakeholders, partners, suppliers and customers. Failure to do so can result in a ripple effect across national and industry boundaries, all suffering from a single crisis.

If the first two studies conducted within this master's thesis showed the importance of the reputational risk management for a company's financial performance by analysing the financial data, making calculations and determining the existing level of impact, the third study, made by conducting a survey on reputational risk management within the financial sector in Liechtenstein, provides insides into the senior executives perception of reputation and reputational risk management, and shows how it is working in practice. The main results show that executives consider reputational risk management to be a very important risk category that needs to be managed on everyday bases because it presents itself one of the key element for business continuity and value maximization.

The results of this thesis provide useful information for companies especially operating in the financial sector. It can improve the situation with the availability of information on reputational risk management. The results on existence of the impact of reputational risk on company's financial performance hopefully will motivate companies to invest more in developing tools for measurement and managing reputational risk. Because although no company can ever be 100 per cent safe, by current reputational risks monitoring and including it into a business strategy and investing in the right capabilities, a company can significantly identify the probability of breaking down risk and provide a path for continued growth and success.

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APPENDIX 1. QUESTIONNAIRE FOR THE SURVEY ON REPUTATIONAL RISK MANAGEMENT WITHIN THE FINANCIAL SECTOR IN LIECHTENSTEIN

1. Company's field of operation

____

2. Size class: number of employees in the company

□ 1-9 employees	□ 10-49 employees	□ 50-249 employees	□ 250+ employees

3. Size of annual turnover

□ < CHF 250m	□ CHF 250m - 500m	□ CHF 500m – 1bn	□ over CHF 1 bn

4. Job title of the respondent

____

5. In which extent do you agree with the following statements?

Statement	**Agree**	**Not sure**	**Don't agree**
Reputational risk is more difficult to manage than any other risk category			
Reputation is our company's most significant asset			
We monitor and measure our reputation on ongoing basis			
We find it difficult to quantify the financial impact of reputational risk on our business			
Information and advice on managing reputational risk is difficult to find			

6. Do you consider reputational risk as a separate risk category or a part of other risk category (for example, such as operational risk)

□ separate risk category

□ part of other risk category (please, specify which:
______________________________________)

7. How effective is your company at managing the following aspects of reputational risk?

Aspect	**Very effective**	**Good enough**	**Need to improve**
Identifying threats to reputation			
Instilling a culture of reputational risk management throughout the company			
Crisis management			
Putting in place governance structures to manage reputational risks			
Quantifying the financial impact of reputational risk			
Measuring external perception of the company			

8. Which of the following potential impacts of reputational risk would cause you greatest concern as a business? (applicable more than one answer)
□ damage to existing customer relationships
□ loss of earnings
□ fall in share price / valuation
□ negative media coverage
□ ability to form new customer relationships
□ litigation
□ negative brand perception
□ loss of key stuff / ability to recruit employees

9. Who is assigned for the primary responsibility for reputational risk in the company?

□ chief executive officer (CEO)
□ chief risk officer (CRO)
□ chief financial officer (CFO)
□ board of directors
□ other ____________________________________

10. Does your company have any remuneration incentives relating to the handling of reputational risk included in risk management system and corporate culture?
□ yes (please, specify if possible:
____
____)

□ no

11. Do you cover a separate section of reputational risk in your Annual report?
□ yes
□ no

Thank you very much for your answers.

APPENDIX 2. INTERVIEW STRACTURE WITH THE PRIME MINISTER AND MINISTER OF FINANCE IN LIECHTENSTEIN, ADRIAN HASLER

Dear Mr. Adrian Hasler,

1. **Do you find corporate reputation to be a "priceless" intangible asset for the long-term survival of any company, and especially in financial industry? Why?**

2. **How would you describe in general the reputational situation of the financial industry in Liechtenstein? Would you describe it as definitely positive?**

3. **Do you consider reputational risk as an issue in its own or simply as a consequence / part of other risks?**

4. From the industry perspective, financial services are leading the way in recognizing the importance of reputational risk management, which is not surprising if to look at the amount of attention that have been focused on issues such as financial downturn and financial crisis. However, after analyzing a couple of latest global surveys on reputational risk management it was possible to see that the majority of companies think that information and advice about how to manage reputational risk is hard to find, compounding the sense of uncertainty and confusion about how best to manage it. **So, what would you say, in your opinion, do financial organizations and banks in Liechtenstein feel confident at managing reputational risk? Are there established guidelines?**

5. In continuation to the previous question: in 2009 the Basel Committee on Banking Supervision (BCBS) which mandate is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability, first time presented a full section on reputational risk in its document Proposed Enhancements to the Basel II Framework. **What are the regulatory requirements given to banks and financial institutions at the country level apart of the requirements by BCBS?**

6. **Is there any compliance checking on the status of reputational risk management in the organization within the financial industry in Liechtenstein? Any ranking?**

7. **Whom do you say primary responsibility for reputational risk should be assigned to within an organization?**

Thank you very much for your answers!