Aalborg University
M.Sc. International Business Economics

The Impact of Risk Governance on Financial Stability

Rebuilding Financial Risk Management after the Financial Crisis

Master's Thesis

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Table of Content

List of Figures and Tables

EXECUTIVE SUMMARY

The aim of this segment is to briefly summarize the main aspects of the following study. First of all, the present thesis will provide the readers with insights in regards to the impacting relationship between risk governance and financial stability. Subsequently, the financial crisis shed lights to numerous weaknesses and bottlenecks of the financial system that resulted in the breakdown of the global financial system. Therefore, due to its importance and complexity, the financial stability can be impacted by excessive risk-taking, ignorance, inappropriate risk measures and mitigation tools, and lack of consistent governance policies, just to name a few factors. Hence, risk governance is a complex process, which possesses critical cascading events that can have influential effects on the financial stability if it is not managed appropriately.

Hereby, the conceptualization and the applicability of the introduced enterprise risk management will be discussed along with its complexity, which results from a holistic view of risk management, by taking into consideration an extended risk management process across all business units on an organizational level. Therefore, the importance of the financial risk and its governance was emphasized by conducted expert interviews that also confirmed the collectively impacting nature of the risk management aspects in conformity with the financial stability. However, despite the fact that some of the aspects of the risk governance process were highlighted, they all shall be considered as equally important concerning the impacts they have on the financial system.

Nevertheless, due to its complexity and interdependent nature, a number of significant mistakes and failures were depicted by the experts while knowingly reflecting on the financial crisis in 2008. The interviewees have consistently confirmed that risk management wasn’t an integrated part of the risk related decision making process prior to the crisis. Therefore, a number of relevant failures will be discussed further on in conformity with the argumentations provided by the consulted experts. Following these specifications, recommendations will be cited in accordance to the sustainability of the risk management process. Moreover, a final reflection will be demonstrated by the researcher in order to frame the suggestions debated by the interviewees. Consequently, an indirect impact between risk management and financial stability will be justified during the course of the thesis, and more precisely arguing that the weaker the risk governance the greater the risk of a financial distress occurrence, which causes financial instability.

INTRODUCTION

The financial distress in 2007 has escalated to its highest extent, causing a severe disruption of the global financial stability. This destructive event took place due to the consequences of a critical economic event, which portrays the failure of the financial structure and its governing system. This financial crunch caused significant damages to real economy and facilitated the eruption of the financial crisis, which was considered as the biggest and the sternest event since the Great Depression of the 20th century. Subsequently, the financial crisis shed lights to numerous weaknesses and bottlenecks of the financial system at that time, which has resulted in the breakdown of the global financial system. Therefore, it can be concluded that real economy relies on a stable and sound financial system in order to function properly.

Nonetheless, financial stability plays a significant role in strengthening and supporting the global economy due to its vital attributes. It possesses the capacity which is inevitable in order to operate accordingly under a wide range of circumstances, thus it plays a crucial role in the economical prosperity of a country. Due to its importance and complexity, the financial stability can be impacted by excessive risk-taking, ignorance, inappropriate risk measures and mitigation tools, lack of consistent governance policies, just to name a few factors. The overall impacts of the risk governance will be discussed more detailed during the course of the study.

Additionally, to support the relevance of these influencing factors, practitioners and researchers claim that risk management is an integrated pillar of the system which assures financial stability. Hence, risk governance is a complex process, which possesses critical cascading events that can have influential effects on the financial stability if it is not managed appropriately. Therefore, these prominent effects can contribute to certain negative consequences by adversely altering the stability and the sustainability of a healthy financial system. Moreover, financial markets provide an ambiguous environment where the reactive actions taken by individuals alter and influence the outcome of certain events, thus financial stability is correlated with the systematic and unsystematic changes in the environment. (Holzer, 2004)

Although financial stability and risk governance as comprehensive notions were discussed by a number of researchers, a lack of attention was dedicated towards the implementation of an effective scheme in order to identify, assess, analyze, mitigate, monitor and report financial risks. Nevertheless, the crisis gave prominence to the fact that several boards were lacking the necessary experience and knowledge to successfully stem the promptly increasing ramification of the institutions they were governing. National authorities failed to have a profound overview of the risk governance allowing the appraisal of an accumulated pool of systematic and unsystematic risks.

Consecutively, the outcome of these events supports the need for an enhanced disclosure of financial risk strategies in order to tailor and assess risk. Risk is an integral component of business activities, thus organizations have to take into consideration the fact that there is a strong link between governance and risk-taking. Therefore, an advanced attention should be dedicated towards updated risk management practices in order to prevent another global financial crisis. Subsequently, due to its relevancy and complexity, the main purpose of this study is to provide a concise argumentation of the influential effects that contributed to a critical and memorable financial disruption worldwide. In addition, this study will also give space for citing and analyzing the main concepts of the topic, along with the presentation of several corrective actions that can be taken into consideration as a future reference.

Problem Formulation

According to the above mentioned information, in order to get a better understanding of this extensively examined topic, the following problem statement was indicated for further conceptual expansion and investigation:

"The Impact of the Risk Governance on Financial Stability: Rebuilding Risk Management practices after the Crisis"

Nonetheless, the problem statement of this study aims to investigate the issues concerning the proposed topic more precisely, in order to justify the necessity of a sound risk management system to maintain a healthy financial balance across financial institutions globally. Therefore, this examination is supported by the following research questions, which facilitates the deployment and the development of the problem formulation. Three sub research questions were established as follows:

1. What are the implications of the financial risk and its governance from an organizational perspective?

2. Which components of risk governance can impact the financial stability?
3. What are the lessons learnt from the financial risk management failures that can be implemented in order to strengthen an organization's financial system?

Assumption

Prior the financial crisis, risk governance was relied on traditional risk management structures, which didn't highlight prompt changes in the environmental sources of risk, thus it didn't provide a reliable assessment of possible negative outcomes during an investment. Governing methods were dependent on historical data, supporting the ignorance of rapid environmental changes and in the same time allowing an inaccuracy of financial risk analysis.

In addition, a poor performance regarding risk management can be observed among financial institutions, which were revealed and analyzed in the post-crisis period. Hence, by also investigating the prior-crisis period, one can conclude that excessive risk-taking and corporate governance has a collateral relationship, which impacts the overall financial stability due to a cascading nature of the system as a result of the globalization.

Nevertheless, conspicuous signs were referring to the forthcoming critical event, however financial institutions failed to recognize and adjust their risk appetite and governance in a way to develop preventive actions. Subsequently, taking into consideration the conjectures provided by a number of literatures concerning this event, this study stands by the following assumption: risk governance has an impact on financial stability, triggered by the magnitude of the changes in the environment, thus these changes can and will affect the financial system in case an absence of a sound risk management approach is disclosed.

Problem Justification

As it was already mentioned before, it is inevitable to possess a sound, stable and healthy financial system in order to supply an efficient allocation of resources and to control the distribution of risks across the economy. Due to the fact that risk governance differs substantially across financial institutions, there is no single measure or method which can be recommended, on account of the increased diversity within these institutions. Thus, a unified risk governance method would enhance the threat of vulnerability of the financial system. (Ellis, Haldane, & Moshirian, 2014) Additionally, the financial crisis perfectly exemplified the outcome of the financial system's collapse along with the negative consequences that have been provoked from the absence of a sound risk management procedure.

Subsequently, in order to obtain high returns on investments, investors took on more risks without acknowledging the associated ramifications. A well determined risk culture was not embedded in numerous financial institutions' corporate strategy, which resulted in a misperception of severe risks. The majority of the applied risk management models were based on historical data and wasn't effective enough to prevent or prepare investors for the crisis. These models led to a lack of focus and gave space to the formation of a significant ignorance towards risk. The consequences of widespread deleveraging and accelerated illiquidity on the markets were not taken into consideration. In addition, the inability to anticipate and be prepared for extremely disastrous outcomes assured an outstanding risk to the financial system's stability.

Consecutively, this particular topic was chosen as the main driver of this study due to the reasons discussed beforehand. Several financial literatures agreed upon one statement, namely that the risk itself is inherently unobservable, however only the outcomes of these risks can be observed and managed. (Holzer, 2004) This is one way of looking at financial risks encountered by the active participants of the economy. On the other hand the concept of risk is dynamic by nature, thus it requires constant reviews and assessments in case people want to prevent certain events and not just ease or control them. Possible outcomes of financial risks can be assumed and based on those theoretical assumptions, preventive actions can be drawn.

According to the previously described concerns and issues regarding the importance of a sound risk management taking into account the financial stability, several lessons can be learnt from the financial crisis. These lessons can facilitate the development of a more stable and accurate risk management process in order to prevent similar future events. Therefore, the choice of studying the impacts of risk governance on financial stability taking into consideration a restructuring approach due to the failures resulting from the financial crisis, was decided from the commencement of the elaboration process of this study. It is very interesting to analyze the pitfalls of such risk governance processes due to their cascading and interdependent nature, which in case of a small disruption can cause a destructive domino effect on the global financial stability.

Aim of this Study

The post-crisis period was portrayed by significant work in motion concerning the regulatory policies involved in the realignment of the capital standards in order to achieve a more stable and sound financial system in the future. Due to an observation made by the researchers and practitioners, a unification of the risk governance strategy among financial institutions is not recommended in account of the associated vulnerabilities, thus a common framework has to be further aligned with an emphasis on the strategic objectives set by the particular organization.

The aim of this thesis is to justify the chosen theoretical framework indicating distinct practices that is applied by numerous organizations in order to facilitate their performance associated with their financial stability. Thus, this perception and the applicability of the framework will be tested by expert interviews in order to assess the impacting aspects of the risk management process. In addition, these practices and tools have to be realigned with the financial institution's corporate strategy in order to have an integrated risk management structure, which is embedded in the organizational culture. The theoretical framework will also take into consideration the failures in risk management that played a significant role in triggering the financial crisis and will use the lessons learnt in order to form a final conceptualization.

Structure of the Thesis

This thesis consists out of six comprehensive chapters aiming for the provision of an in-depth knowledge concerning the concepts based on which the study was build and also presenting the outcome of the detailed investigation. The chapters will be as follows: Introduction, Theoretical part, Methodology and Research Methods, Analytical Discussion, Limitations and Recommendations. First of all, the introductory chapter provides the reader a concise preface of the chosen topic, which is followed by an elaborated literature review capturing and highlighting a consistent overview of the particular literatures selected in order to support the course of the examination within the theory.

Additionally, the third chapter will present the methodology and the research methods applied in the data collection process by giving a precise argumentation of the pursued methodical approach and its applicability. Moreover, the justification of the proposed assumption will be carried out in the analytical discussion together with the outcome of the investigation process in order to answer the initially proposed research questions. Consecutively, the discussion will be followed by certain limitations of the study in order to arrive to the recommendation chapter, which will present the lessons learnt from the research, thus ensuring a summative conclusion of the whole report.

LITERATURE REVIEW

The main focus of the theoretical background drives the provision of an in-depth knowledge concerning the variety of risk exposures faced by organizations during their daily business activities. Together with this determination, a holistic financial risk management approach will be presented in order to define essential risk governance processes. The theoretical discussion allows a better acknowledgement of the relevancy associated with the financial risk management. Thus, a detailed conceptualization of these fundamental notions will be argued taking into consideration different perspectives in order to achieve a better understanding of the main influencing factors of the financial stability.

1. Risk and Risk Management

1.1. Definition of Risk

The conceptualization of risk captured the center of attention for many researchers and practitioners, due to the fact that a precise definition of risk is inevitable in order to successfully identify, measure, control and govern it. Although an explicit determination of risk is essential, its definition can alter substantially in account of certain values associated with potential adverse consequences, thus citing a single definition of risk is challenging. Moreover, the interpretation of risk is inherently controversial, hence the choice of an utmost definition can influence the outcome of resource allocation, power distribution and policy related discussions. (Fischhoff, Hope, & Watson, 1984)

One generic role of defining risk is to compile a consistent conception of a certain ramification resulted from a risky decision making. Therefore, the primary step in determining risk is to specify the consequences that should be considered. (Fischhoff, Hope, & Watson, 1984) Subsequently, the definition of risk is correlated with the approach towards the aspects of risk. According to Błach (2010), risk can be viewed from two different perspectives, one being the negative conceptualization of risk which presents the notion as an exposure to an unexpected potential loss. However, in account of a neutral perception, risk can be also assumed as an opportunity which yields results different than those initially considered. (Błach, 2010)

Nevertheless, risk is also concerned by the context, in which one examines and determines it, thus despite the fact that it is an accepted notion in numerous definitions, it alters in terms of the processes applied in order to cluster and to portray the outcome. Berg (2010), defines risk as the “likelihood” and “impact” of an occurring event which affects an organization’s objectives, by provoking an unexpected future outcome. Therefore, risk is also associated with the uncertainty of the outcomes of an event, capturing the probability of a negative ramification and its magnitude. (Berg, 2010)

Nonetheless, according to Knight’s famous definition, risk can be considered as a distinction between subjective and objective interpretations of probabilities. Moreover, he distinguishes between uncertainty and risk. According to Knight, statistical probabilities portray the measurable uncertainties, being delimited as risk, however immeasurable probabilities which are caused by inherent symmetries are defined as uncertainties. (Holton, 2004) Subsequently, in today’s economy these two terms are considered as common terminologies, therefore modern financial and economical literatures do not distinguish between them. Generally speaking, risk encompasses two major components based on which it can also be measured and understood, namely uncertainty and exposure.

1.1.1. Financial Risk: Definition and Typology

The conceptualization of financial risk narrows down the context in which risk is being determined, therefore it can be stated that financial risk refers to the exposure to an undefined degree of uncertainty, which is a crucial element of pursuing business activities. (Schmid, 2010) In addition, financial risk can be examined as a combination of the probability and frequency of an event, and its ramifications can be analyzed through the volatility of the obtained results. (Dionne, 2013)

Nevertheless, financial risk can be interpreted as any fluctuation which alters a company’s cash flow statement, financial results and basic corporate specific objectives in account of an additional risk-taking activity by shareholders in order to obtain and maximize the economic outcome of a specific investment. Thus, it underpins opportunistic behaviors concerning potential future risks that may result in positive or negative consequences. (Dionne, 2013)

Consequently, financial risk can be examined and characterized from a macro- and a microprudential approach, outlining systematic and unsystematic risks. These are subjects to unpredictable changes in the economic environment, thus highlighting a destructive nature.

Concerning the financial framework, typology indicates a common classification and aggregation of different types of risks, which due to their distinctive aspects permit them to be clustered into specific groups. The categorization of risk facilitates an organization's benchmarking processes and it also supports a collective context within which the assessment of the stand-alone financial risks can be deployed. The typology of financial risk also initiates a precise determination of the enterprise's risk profile, along with the estimation of the economic capital requirements. (Knot, 2003)

Nevertheless, typology is considered to be the foundation and the keystone for quantitative and qualitative risk measures. Thus it supports the estimation of the economic and regulatory capital of the organization, together with the necessary risk oriented processes. Subsequently, clustering external and internal risk drivers along with their prominent effects outlines the root of the financial risks. (Knot, 2003)

Consecutively, the formerly mentioned benefits of risk classification displays the elemental characteristics of the traditional risk typology, based on which different types of risks can be segregated under the following groups: *Systematic* and *Unsystematic* risks. In addition, in order to provide an initial clarification and extension, concerning their conceptualization, the reviewed financial literatures make a distinction between *systematic* and *systemic* risks.

The concept *systematic* relates to risks that are macro by nature and are uncontrollable by the organization. However, on the other hand, ***systemic*** risk can be considered as a type of risk, which is usually portrayed by financial institutions' internal turbulences that are reaching others as a result of a cascading nature. Hence, it captures rather a microeconomic nature, although it can mediate macroeconomic impacts in case of interconnected financial institutions. (Knot, 2003) Moreover, a destructive event can trigger financial instability or the failure of a financial institution, which has the possibility to result in the collapse of the industry in which the organization operates. These types of large financial institutions are labeled as 'too-big-to-fail' organizations. Thus, they are considered as systemic risks in account of the associated interconnectedness, which can represent the source of the systemic risk and can contribute to a disastrous economic event worldwide. (Knot, 2003)

Furthermore, ***systematic*** risk is also known as market or un-diversifiable risk and it represents the overall uncertainty applicable for an entire market or a particular market segment. In addition, it is defined as the risk of an unexpected turmoil resulted from the deterioration of the financial system, due to inadequate risk measures and unexpected potential exposures. (Ellis, Haldane, & Moshirian, 2014) Moreover, systematic risk has a destructive influence on most of an organization's assets, thus this type of risk cannot be prevented by diversification.

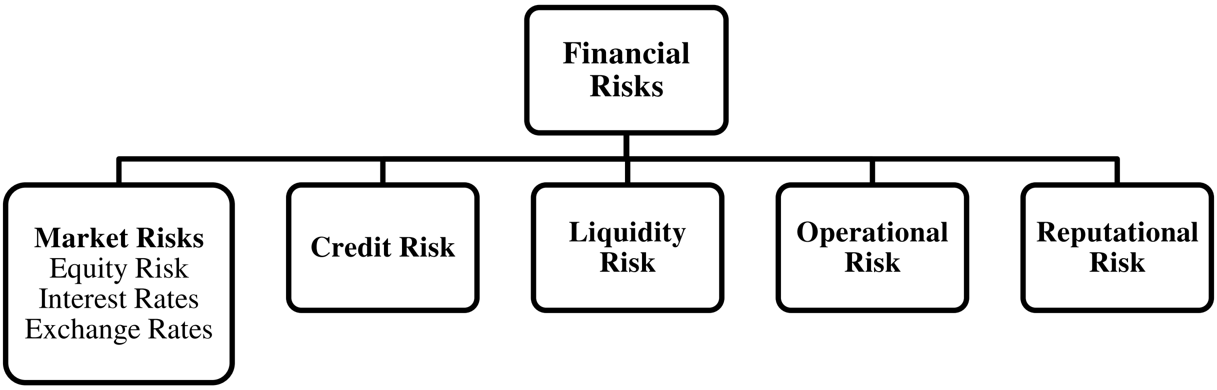
It emerges together with the different aspects of the financial markets, rules and regulations of specific countries and possesses a cascading domino effect provoking financial instability. (Ellis, Haldane, & Moshirian, 2014)

On the other hand, taking a microeconomic approach, financial risk is classified as ***unsystematic*** risk, possessing a controllable nature from the organization's point of view. It is also known as asset-specific or diversifiable risk, and is controllable by the organization while is mostly influenced by microeconomic aspects. Therefore, it represents a type of uncertainty or potential exposure to loss derived from one particular industry in which the enterprise has invested in. Moreover, unsystematic risk alters and influences only a single asset or a smaller group of assets, thus in account of this feature it is genuine to the organization. (Anonymus, xxxx) Diversification is vital in case of the unsystematic risk, due to the fact that the risk itself can be minimized across well diversified portfolios. This arises from investments that are integrally bearing certain asset-specific risks which are unique for the organization and only the involved counterparties will be affected in case an unexpected loss occurs. (Anonymus, xxxx)

Additionally, the costs associated with unsystematic loss exposures are entirely carried by the respective institution. However, the costs evolving from systematic risks are borne by all participants, thus indicating aggregated risk exposures. Nonetheless, systematic costs are not internalized individually by every organization therefore it allows a courageous behavior in terms of further risk-taking. (Smaga, 2014) A strong interdependence between systematic and unsystematic risk can be observed due to the fact that the macro perspective of the systematic risk has the potential to adversely alter the micro environment of an organization, thus increasing the unsystematic risk and associated costs as well. (Smaga, 2014)

Consequently, according to a common understanding financial risk incorporates several uncertainties, which among many others, are related to foreign exchange rates, interest rates, liquidity, and credit. Moreover, taking into consideration the extent to which a number of uncertainties can influence the financial system's volatility, some firm-specific risks, as operational and reputational risk, can also result in an economic wide event impacting the financial stability. Subsequently, financial risks can be subdivided into distinct classifications as follows:

1. Figure: *Financial Risks*



Sources: Own made

1.2. Financial Risk Management

Financial risk management is a continuous and proactive process, which treats uncertainties resulting from financial markets. The evolution of financial risk ultimately depends on human interactions and behavior due to the fact that the emergence of financial risk is strongly correlated with activities undertaken by individuals. Therefore, it is essential to understand how distinct risk management approaches can diminish identified risks within the organizational context. (Horcher, 2005)

Nevertheless, in account of its complexity and dynamic nature, financial risk management possesses multiple definitions and determinations. Generally speaking, risk management embeds a complete set of decision making process involving a number of inevitable steps, which are necessary in order to reach the quantification and the mitigation of potential risks faced by organizations due to the rapidly changing business environment. (Berg, 2010)

Additionally, risk management serves as a fundamental approach for any organization using a common framework along with an adequate set of actions. The steps involved in the process are represented by risk identification, assessment, comprehension, action taking and communication/revision. Subsequently, it encompasses a set of financial and operational procedures that targets the amplification of the enterprises' fair value by diminishing the costs correlated with any potential loss exposure caused by uncertainty. Broadly, organizations are aiming for the reduction of costs which are stemming from an unexpected financial distress. The approach considers diversification as one of its fundamental aspects.

Thus, risk culture and risk appetite plays a significant role in its sustainability and effectiveness. (Berg, 2010)

The concept of financial risk is inherently dynamic, thus it requires constant reviewing and adjustment in order to ensure an efficient risk control. Hence, risk management permits organizations to determine their own acceptable and optimal risk level by taking into consideration the enterprise's risk-taking capabilities. Moreover, it enables the comprehension of the scale and nature of interdependencies between the clustered risks. (Schmid, 2010) Thus, this overview facilitates the construction of an effective financial risk governance approach.

Nonetheless, financial risk management bears an extensive significance due to the high market imperfection and the diffuse nature of financial risk. Moreover, it assesses the volatility and the sensitivity of the perceived risk in order to determine adequate risk limits and suitable risk capital, which is essential in order to manage unexpected loss occurrences without facing a destructive financial disaster. (Schmid, 2010)

Financial risk management summarizes a framework which highlights the important segments of its process, thus it outlines the types of risk an organization may face, by defining and determining the possible destructive ramifications from a downside risk management perspective. Moreover, provides an explanation concerning the identification and the assessment of the related risk exposures, together with the selection and implementation of the right management strategy. (Horcher, 2005)

1.3. Risk Culture

Several practitioners argued that establishing and nurturing an adequate risk culture is one of the keystone activities of a sound risk governance process, which enables seamless awareness and understanding of risk and its associated complexity. Commencing the conceptualization of risk culture with a common definition, it can be stated, that it is represented by a set of values, attitude towards risk and core behaviors which forms the risk related decision making process of an organization. (Power, Ashby, & Palermo, 2012)

Nevertheless, risk culture it's a diverse notion in terms of its comprehension due to the fact that it forms the basis of sound risk governance, which by default requires a number of interdependent factors involving several risk related trade-offs between risk-taking and control. Therefore, this definition represents the shared values of an institution along with its practices and processes, enclosing risk into the risk related decision making process. (Power, Ashby, & Palermo, 2012) Moreover, in account of its diversity, flexibility is one of the fundamental characteristics which a profound risk culture has to possess in order to be embedded at all levels of the organization.

In addition, risk culture displays a transparent learning process and knowledge transfer concerning risk consciousness inside the organization. It also captures a well-communicated risk strategy along with transparent decisions and high standards regarding information sharing, due to the fact that it plays a substantial role in assuring the organization's values. (Protiviti, 2014) Nevertheless, leadership plays a significant role in aligning risk culture with distinct business units to establish a common and well perceived understanding of the culture's components and its relevancy along with an effective learning environment. Among many other factors like accountability, incentives, transparency, leadership plays an extensive role in the sustainability of a successful risk culture.

Although it bears a high importance in achieving a strong risk management, there is no one-size-fits-all approach towards risk culture, hence it represents a considerable challenge for numerous financial institutions. Critiques argue that there shouldn't be a single approach towards an effective implementation of risk culture due to the fact that business practices and priorities vary across business units, thus a standardized perspective of risk culture wouldn't enhance the overall performance of a business. (IIF, 2013)

Nevertheless, risk culture is dynamic and continuous in nature, thus it cannot be viewed as a stand-alone element of an organization's risk governance practices. It needs to be fully embedded in the organization's corporate strategy in order to sustain a stable risk strategy over time. (Protiviti, 2014) Therefore, it bears significant importance to assess the internal and external influencing factors due to their changing nature, which may have an impact on risk culture in case it is not adjusted accordingly. Additionally, an entirely integrated risk culture allows the development of a solid correlation between culture and the relevant business units.

Nonetheless, as it is captured in its definition as well, risk culture is a keystone which keeps performance management and risk management together, while assures a source of strengths and weaknesses for the organization. This keystone protects the enterprise value and the business strategy through risk appetite and management. (Protiviti, 2014) Moreover due to this possessed attributes, it highlights and takes into consideration the profiling of a number of organizational elements and the perception of a set of policies. By doing so, it maintains the utmost balance between risk-taking and control. (Power, Ashby, & Palermo, 2012)

Substantially, in account of a number of studies, it can be concluded that risk culture is an enigma, thus the provision of a standard determination of its concept and practices is not fully accurate. The first step for every organization is to define and assess its own organizational culture to which it can adjust the components of risk culture, due to the fact that risk culture evolves along with the changes in the company's strategies. In addition, shaping a streamlined risk appetite is an essential component of the risk culture, thus it shed lights to the importance of how the information about risk is received and evaluated. (Power, Ashby, & Palermo, 2012)

Consecutively, forming an accurate and well-functioning operating model for risk culture is a compounded and slow-moving process, which indicates several adjusted changes in the organization's policies, incentives, perception and processes. Overall, it is not a precisely conceptualized notion in terms of its descriptive features due to the fact that an organization has to acknowledge certain impacting factors based on which they devote their attention differently, thus the organizational position of risk culture is essential in order to enhance business performance. Subsequently, risk culture cannot be standardized and managed in a conventional way, in account of its strong correlation with the fast changing business environmental sources. (Power, Ashby, & Palermo, 2012)

1.4. Risk Appetite

Risk Appetite possesses a high importance in prospering an organization's enterprise value due to the fact that it assures a stable cornerstone for a sound risk governance process. Moreover, delimiting and quantifying its perception can be challenging in account of its interrelated strategic nature. One of its main purposes it to provide an explanation to the question of: "How much risk should an organization need in order to foster appropriate returns on their business activities?" (Advisory, 2008)

Subsequently, according to a common understanding, risk appetite is perceived as the actual amount of risk and the types of this risk, that an organization is willing to accept in order to meet its strategic objectives and risk related trade-offs. A profound comprehension of risk appetite and its relevancy streamlines the allocation of risk management related resources across a risk portfolio. In addition, in order to achieve its ultimate purpose, risk appetite has to sustain a consistency with the organization's capability, control and framework. (Advisory, 2008)

One of its key virtues is the constitutional form of risk taking and risk avoidance, which serves as a baseline for the overall direction of risk management. Thus it shapes the connection between the risk taking capacity of the organization and the sought appetite to bear risk. Nevertheless, it maintains a common context of risk perception concerning the chosen risk that will be undertaken, thus enabling a forward-looking perspective of the enterprise's adequate risk profile. (Protiviti, 2012) Establishing a healthy risk appetite framework facilitates the organization in the process of unlocking core values by obtaining an enhanced risk related alignment regarding the associated business activities and the appropriate decision making practices. Discloses risk perception and the amount of risk an organization is willing to take concerning a certain business activity, in order to achieve its initial strategic objectives. (Advisory, 2008)

Consecutively, every company's strategy and its associated risk appetite are interdependent, thus by changing the company's strategy the notion of its risk appetite will be altered as well. Therefore, it is essential to have a profound balance and alignment between the business and its capital management plans, through a well-defined tone for risk culture across the organization. (Advisory, 2008) Nonetheless, it shapes a clear understanding of the risk associated with distinct business units and also establishes the degree to which it should be considered as acceptable or unacceptable risk. Hence, risk appetite supports a diverse disposition due to the fact that external and internal environmental sources can influence its effectiveness in case it is not adjusted periodically. (Protiviti, 2012)

Notwithstanding, risk appetite supports a comprehensive framework which permits the understanding of the ultimate risk level of an organization. By doing so, it frames and defines a set of acceptable and undesirable risks, along with a regulated risk capacity. This capacity indicates the amount of risk that can be taken under certain conditions and parameters. (Protiviti, 2012) Simultaneously, qualitative and quantitative measures are implemented in order to assess one's risk appetite, in order to allow the formation of a precise risk tolerance and limit structure. Therefore, it can be presumed that risk appetite is an elemental factor in an organization's strategic decision making process and supports an opportunity seeking behavior captured by certain boundaries. (Protiviti, 2012)

Summing up its characteristics, it can be concluded that risk appetite is a complex, measurable, clear and compounded notion, which needs to be developed and integrated in the context of an organization's risk bearing ability in order to achieve effective manners on a strategic, tactical and operational level. Risk appetite is consistent with the organization's risk management, thus its successful employment is considered as the hardest part of an enterprise's risk governance. (IRM, 2011)

Risk appetite, allows zero tolerance towards risk exposures in order to protect reputational aspirations, thus risk tolerance is embedded in risk culture as well and captures the key metrics used in risk management, while specifying certain borderlines within risk appetite. Subsequently, risk tolerance refers to the quantification of risk which can be taken by the organization in order to achieve a beneficial return concerning any investment, while risk appetite presents the pursuit of risk. (IRM, 2011) Despite the fact that these two terms seem distinct by their conceptualization, they are interdependent by nature and only few researchers and practitioners make a distinction.

Consequently, being a cornerstone, risk appetite represents a compelling tool which facilitates the overall business performance through the provision of a strategic overview of the enterprise, risk alignment, determination of risk thresholds and framework of the risk appetite management, thus improving the overall risk governance. (IRM, 2011)

2. Enterprise Risk Management Framework: A Holistic Approach

The conceptualization and the applicability of Enterprise Risk Management[1] represent a significant challenge for several organizations due to the fact that it postulates a relatively new risk management discipline in comparison with the traditional silo approach, which lays on certain constraints concerning the collaboration with other business units within the same organization. The silo approach is exemplified with issues related to distinct risk philosophy among the business units, thus altering risk perspectives are put into practice which affects the overall risk mitigation. ERM stipulates the possibility of taking a revolutionary action

[1] ERM – Enterprise Risk Management

regarding risk management, by moving away from the silo approach and commencing a comprehensive view of risk governance in general. (CAS, 2003)

Hence, its complexity results from a holistic view of risk management, which takes into consideration an extended risk management at an enterprise level by integrating risk governance practices into the daily business activities of an organization. In addition, ERM supports an enterprise level view of risk, thus it can be defined as a systematic, proactive, forward-looking and ongoing process, which is applied across the whole enterprise at every level and business unit. Thus, it is involved in the strategy and objective setting plans of a company by taking into consideration the organizations' overall risk profile. Furthermore, ERM embeds financial risk into the general business risk encountered by the organization, while simultaneously paying attention on value creation and risk mitigation. (IMA, 2011)

Nevertheless, ERM's evolution is correlated with the rapidly increasing complexity of financial risks in account of the financial innovations and the newly emerging financial derivatives. Moreover, ERM specifies a framework for elevating risk treating in a holistic manner and escalating risk governance to a senior management level. This framework enhances a collective view of risks along with the development of the portfolio point of view, risk quantification and the value creating potential of risk. ERM highlights the importance of governing all types of risks and not limiting the management practices to those ones that can be seamlessly quantified. (CAS, 2003) Nonetheless, it provides a strategic framework that favors a more efficient capital allocation by optimizing the available resources, thus balancing the cost of risk with the cost of control. (CAS, 2003)

Subsequently, it bears a high significance regarding the development of an accurate risk culture by intensifying the awareness and sensitivity towards risk. Hence, it also supports the financial risk related decision-making processes by establishing a strategically aligned risk appetite, together with the practices through which financial risk can be identified, measured and mitigated. (Anonymous, 2011) Furthermore, by implementing different risk information, streamlines and improves the risk treatment related decisions in order to achieve an adequate strategy selection. ERM indicates a shared attention dedicated to downside and upside financial risks as well, thus providing a distinct view concerning the magnitude and the importance of different financial risks. This framework revolutionizes the traditional risk management approach that was concentrating mostly on the downside risks, thus depicting the potential losses that may be caused by different uncertainties. In contrary, ERM stresses the upside perspective of risks as well, due to the fact that it considers the consolidation of a value added opportunity and the advantages of an efficient financial risk mitigation process. (Anonymous, 2011)

Consecutively, ERM encompasses a widespread perspective regarding the typology of financial risks by aiming attention at reputational and operational risks as well, thus supplementing the traditional financial risk management approach. Integrating ERM into current business processes facilitates the formation of a proactive risk culture rather than a reactive approach towards risk, thus enhances investors' confidence regarding risk taking. Moreover, risk taking has to be controlled by the organization's risk management philosophy, which determines its risk perspective together with the associated decision making process. This risk taking is correlated with the periodically adjusted risk profile of the enterprise as market conditions are continuously changing over a period of time and can influence the risk culture, decisions and the implemented operating styles. (IMA, 2011)

Nevertheless, ERM fits the specifications of an organizational structure and it is viewed as a core competence enhancing a multidirectional approach, which classifies the interactions and the influencing aspects of financial risks across the organization that can impact another component. Hence, it supports a profound rationale for risk management activities and can be portrayed as an essential element of an organization's robust business and financial management. (Anonymous, 2011) Moreover, establishing an organizational context is crucial from a financial risk management's perspective due to the fact that the way and the means through which the risk is mitigated and communicated can affect the entire organization. Despite the fact that ERM considers and treats the vast variety of risks in a holistic manner and the comprehension is identical across industries and sectors, the risk management practices have not been evolved consistently. (COSO, 2004)

Continuously, generally speaking, ERM incorporates the following interdisciplinary risk management steps as illustrated below:

2. Figure: *ERM Process Steps*

Sources: CAS, 2003

ERM sustains a sound risk management approach by deeply understanding the risks of all components and their simultaneous interactions. Thus, fundamental elements can be illustrated in a number of distinctive aspects concerning the components and the involved risk mitigation steps, however the concept of ERM has to be embraced in a way to fit the respective organization's culture, capabilities, needs and size. The framework has to take into account the roles and interactions of related business functions, in order to ensure a profound risk governance structure. (IMA, 2011)

2.1. Enterprise Risk Management Components

As it was previously discussed, ERM embraces the following inevitable elements in order to ensure an effective risk management framework:

2.1.1. Establish Context

Establishing the context in which the financial risk will be identified, analyzed, assessed, treated and monitored bears a high importance in order to aim attention at understanding the overall objectives and strategies of the respective organization. The manner in which risk is governed can influence the entire enterprise, thus defining the context that provides the bases of the risk management steps is proven essential. Settling the context involves the revision of external, internal and risk management related aspects, in order to assess the organization's relationship with the external business environment, to gather an in-depth knowledge regarding the founded business strategies and to inaugurate appropriate risk categories and common metrics. (CAS, 2003)

2.1.2. Risk Identification

Risk identification is considered as one of the most important elements of the management process due to the fact that it provides an organized interpretation and description of all the potential financial risks that may arise from an organization's business activities. The risk identification process is facilitated by the organizational experience derived from past events, thus it provides the assessment of critical future outcomes while taking into consideration the initially instituted business strategies and objectives. Moreover, it allows the aggregation of the potential financial risks and structures them at every organizational level. (Horcher, 2005) Clustering potential risk exposures and uncertainties permits a solid risk management pillar for any enterprise in order to ensure a proactive risk related action taking.

Nevertheless, risk identification plays an important role in risk prioritization because it sheds light on the importance of certain risk types and also on the interdependence of their composite parts. According to the framework, the identification stage is one of the most critical stages, thus it is inevitable in order to classify the potential risk sources. Subsequently, risk identification facilitates the risk assessment stage by providing a scale of labeled risks that are estimated by applying qualitative and quantitative methods, thus depicts the impact of the financial risk. (CAS, 2003)

2.1.3. Analyze and Quantify Risks

Risk analysis and quantification point out significant material changes at the labeled risk levels on a periodic basis. Therefore, the analysis and the quantification of financial risks exemplify potential uncertainties related pitfalls in account of the hidden adverse impacts that can have on the organization's working capital. This step provides essential practices for ensuring a smooth risk integration and prioritization process. Moreover, it measures the probability outcome of a potential event that may jeopardize the affluence of achieving a strategic goal.

Therefore, it provides a probability based distribution method regarding the potential risk associated outcomes. In addition, regarding the quantification techniques, two widely used methods will be presented as follows:

2.1.3.1. Value-at-Risk (VaR)

Value-at-Risk[2] is defined as a quantitative approach, which estimates the expected losses resulting from extreme movements of the highlighted risk components. Moreover, VaR enables a consistent loss assessment method concerning a particular portfolio which is examined under normal market conditions, thus it assists the progress of risk accumulation,

[2] VaR - Value-at-Risk

enhanced risk transparency and disclosure. (Gaus, The Risks of Financial Risk Managment, 2008)

VaR determines the maximum loss which is not surpassed by a given probability, also defined as the confidence level, over a specified period of time. In other words, VaR represents the future distribution of an ambiguous risk factor. Moreover, it possesses a static nature over a given time horizon in which it is measured, thus it may seem more practical to determine short-term VaR while analyzing historical data because unlike an unpredicted event occurs, the market behaviors are not altering significantly over a shorter risk horizon. (Schmid, 2010)

Additionally, due to its limited feature and practicality concerning the rapid environmental changes, this method has been criticized by several researchers and practitioners. Although it defines the probability level of a loss occurrence over a specified risk horizon, the substantial loss encountered by an investor can be either higher or lower than VaR, thus it is not clearly established. Moreover, it is conceived as a misleading tool, due to the fact that it may provide a false sense of protection. This false sense of security can be associated with the lack of attention paid on crisis conditions and extreme case scenarios. (Woods & Dowd, 2008)

Subsequently, despite these imperfections, VaR is widely applied to cash flow and credit exposures, along with market risk assessment, thus it can be employed on any quantifiable risk. (Woods & Dowd, 2008)

2.1.3.2. Stress Testing/ Scenario Analysis

Stress Testing/Scenario Analysis serves as an efficient streamline for financial risk quantification concerning the process of raising consciousness about the potential weaknesses that can be depicted in the already existing and practiced probability based analyses. It aims to provide relevant risk related information regarding the anticipation of an exposure to the manifestation of any unexpected or extraordinary event. Moreover, it assesses the inherent vulnerabilities resulting from different types of extreme and unpredictable economic events. (Gaus, 2008) The conceptualization of Stress testing and Scenario analysis are often used interchangeably due to the fact that both financial models are basing on specific “what if” scenarios, thus it allows the quantification of distinct crisis situations where ordinary market correlations are facing significant failures. (Woods & Dowd, 2008)

Nevertheless, its structure doesn't allow a standardized approach towards risk and economic events, because it measures the highly improbable occurrences resulting from market conditions, to which a portfolio can be exposed. Moreover, this technique represents an additive approach, which facilitates the determination of an organization's capital adequacy by taking into consideration all scenarios. (Schmid, 2010)

It enables a mechanical stressing of several potentially critical factors by involving financial risk management related methodologies in order to disclose harmful future events. (Gaus, 2008) Consecutively, this financial method investigates and determines the loss profile of a particular portfolio in account of a number of changes which are affecting different risk factors. (Schmid, 2010)

2.1.4. Integrate Risks

This step discloses the results related to risk distributions, correlations and their impacting outcome on the key enterprise related performance measures and the financial stability measures. (CAS, 2003) The firm specific performance quotas include a number of mathematical formulas that facilitate the estimation of any changing aspects regarding the overall business performance. While on the other hand, a number of financial stability indicators and measurable sector variables were also established in order to provide a cross-country analysis to ensure a simultaneous focus on market, external and banking system vulnerabilities as well. (Gadanecz & Jayaram, 2009) Consecutively, the outcome of the performance measures are concerned with a periodic determination of the overall volatility level which can alter the financial stability, thus it aims attention at diminishing financial fluctuations and ensuring capital adequacy. (CAS, 2003)

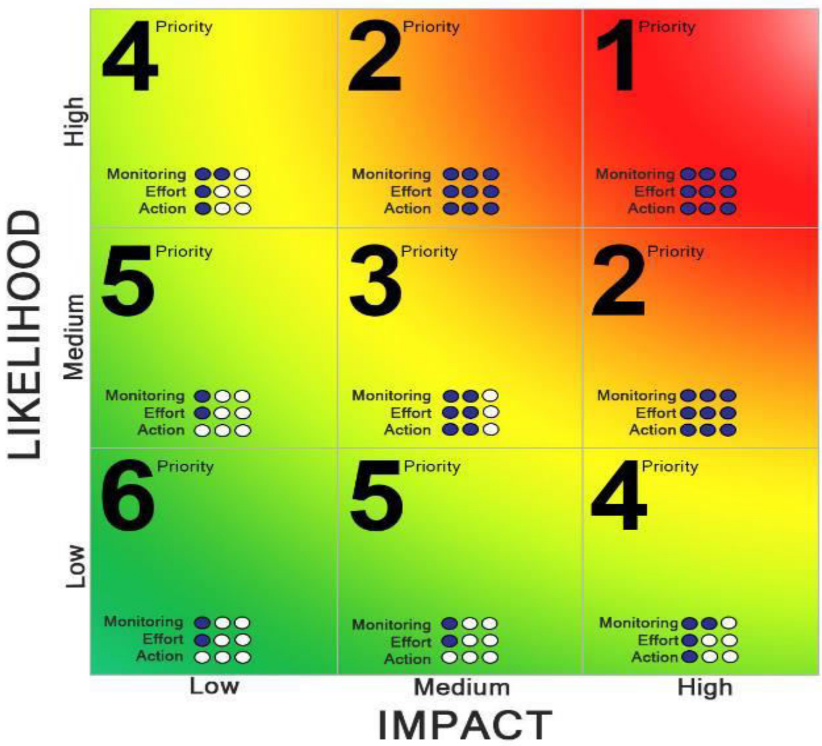
2.1.5. Assess and Prioritize Risk

Financial risk assessment exemplifies a screening process, which permits the evaluation of the impacts deriving from low and high level risks, allowing the introduction of risk prioritization. Moreover, risk assessment takes into consideration the sources of risk, the ramifications resulting from the identified risk factors and also the likelihood that the risk will occur. Therefore, it indicates the establishment of a cost effective option for dealing with risk. (Horcher, 2005) Qualitative methods are implemented during the course of the screening process, thus such technique is acting as a Risk Matrix or otherwise the Likelihood & Impact Matrix. This matrix supports the prioritization process through ranking the identified risks and also through determining the consequences and the likelihood for each risk. (Woods & Dowd, 2008)

Hence, the illustrated matrix represents the classified risks, respectively placed on the matrix based on a highly subjective judgmental manner concerning the estimation and the ranking of the likelihood and the impact of these risks. Moreover, both the likelihood and the impact are segregated into low, medium and high clusters, thus facilitating the prioritization process by determining the highest and lowest risk levels. (Woods & Dowd, 2008) Therefore, risk prioritization is consistent with the aimed risk profile of the organization and enables the development of the tolerable risk level beyond which, the risk will be accepted by the organization without any further assessment or mitigation strategy. (Horcher, 2005)

Consecutively, risk assessment enables an optimal level of risk-taking by supporting the quantification of destructive event occurrences, from which the highest risk levels can evolve. Nevertheless, it entails the determination of the extent to which a negative impact will influence the financial stability, together with the gauging of the likelihood that such an event will occur. (Berg, 2010)

3. Figure: *Likelihood and Impact Matrix*



Sources: Anonymous

2.1.6. Treat / Exploit Risk

Following the financial risk identification and assessment the organization has to decide upon a strategic method through which it's going to respond and treat the revealed risk exposures. The aim of establishing an accurate risk response/treatment strategy is to diminish the expected level of an unacceptable risk by means of cost effective risk management options. Thus, in order to choose the most efficient treatment strategy, the organization has to measure the costs and the additional benefits of alternative options. (Woods & Dowd, 2008) Subsequently, the chosen risk treatments strategy has to be adjusted to the organization's risk taking capabilities and its ability to meet initial strategic objectives needs to be accounted.

Moreover, developing the right treatment strategy is significant for any organization due to the fact that it serves as a set of risk management policy and guidelines. The strategy supports the distribution channel established for the responsibility sharing, which concentrates on the participants involved in the risk governance process. Additionally, the effectiveness of the selected risk response strategy will be exemplified by the difference measured between the "gross" estimated risk, prior the implementation of the strategy, and the "net" obtained risk after carrying out the strategy. (Woods & Dowd, 2008)

Nevertheless, risk strategies can be segmented into four distinct groups due to their initiatives. The four classifications embed the *risk avoidance strategies*, *risk acceptance strategies, risk mitigating strategies* and *risk transferring strategies*.

Treatment	Definition
Avoid	The potential loss exposure can be avoided by not accepting the revealed risk or not pursuing a business activity that might trigger the emergence of these unacceptable risks. Furthermore, this strategy possesses certain limitations in terms of the possibility of surrendering potential competitive advantages by not taking into consideration the risk and its management. Thus, risk avoidance prevents the absorption of any downside risk, however in the same time it eliminates the possibility of benefitting from upside risk as well. (Anonymous, 2011)
Accept	Responsible for accepting and controlling the identified financial risks

	internally without taking any action on reducing the risk. Thus, the organization adopting this strategy will manage financial risk as operating risk arising from normal business activities, while develop plans to finance the possible negative ramifications. (Berg, 2010)
Mitigate	The risk mitigation strategy is willing to accept a proportion of the expected risk by implementing early risk management strategies and techniques in order to diminish the impact and the consequences of the risk to an acceptable level. (Anonymous, 2011) It represents a tradeoff between risk avoidance and bearing the cost of managing the identified risks in order to prevent severe consequences.
Transfer	Enables the risk transfer from those organizations who are not willing to undertake the possible risk exposures and they aim to minimize their costs associated with risk, to those outside parties who seek risks due to their associated hidden opportunities. These strategies involve the payment of a third party in order to take over the downside risk, while preserving the possibility of upside risk, thus perceiving high flexibility.

1. **Table**: *Risk Treatment Strategies*, **Source:** Own made

Consequently, the choice of the financial risk management strategy will indicate the organization's risk capabilities, thus its risk appetite along with the identified risk prioritization. The desired strategy will highly depend on the effectiveness of the selected financial tool along with the organization's risk-taking and –bearing abilities, therefore an enterprise has to be aware of its own risk boundaries in order to balance its risk retention and risk transferring incentives. (CAS, 2003)

2.1.7. Monitor and Review

A strong correlation can be depicted between financial risk and the organizational performance measures, thus a periodic revision is crucial because it provides an indication on how efficiently the applied risk management approach is functioning compared to the organization's internal policies and designated business strategies. Financial risk is inherently dynamic by nature, thus reoccurring assessment and adjustment of the implemented risk treatment strategy is needed in order to ensure its accuracy. Additionally, the intermittent reviewing and monitoring may reveal newly emerged risk exposures or potential imperfections stemming from the process. Thus, they behave as certain controlling mechanisms that concentrate on ensuring the seamless functioning of the risk management processes. Furthermore, monitoring assures that major risks are retained within their initially established accepted risk levels. (IMA, 2011)

In addition, following the risk management strategy implementation, streamlined internal policies and regulatory guidelines have to be established in order to guarantee the effectiveness of the monitoring and controlling steps. This regulatory approach is inevitable in order to enhance the risk management's compliance with the organizations' initially determined objectives. Furthermore, this supervision permits any institution to constantly evaluate whether their internal policies are complied with the newly emerging national and international laws and regulations. Great emphasis has to be laid on the prospectively identified regulatory gaps, if any, in account of a sustainable self-supporting financial system. (Gomes, 2014) Therefore, the periodic revision and monitoring exemplify an early warning process concerning the newly emerging risks, allowing an immediate identification and evaluation of the supplementary uncertainties and potential operational deficiencies. (Woods & Dowd, 2008)

3. Theoretical Summary

A number of relevant literatures have been subject to an in-depth revision in order to compile a distinct set of perspectives and interpretations concerning the research topic. Based on the reviewed studies it can be concluded that the core conceptualization and related implications concerning the financial risk governance have been uniformly accepted by the related authors. However, along with the evolution of the financial instruments and the evolving complexity of the financial risks, minor dissimilarities can be pointed out regarding the number of steps involved in the process.

Therefore, a revolutionized holistic risk management framework has been presented during the course of the preliminary literature review in order to support the understanding and the justification of the indicated research area. The introduced conceptual framework along with the implications of the financial risks, risk culture and risk appetite will serve as the foundation of the rationalization concerning the importance and the interdependency of the presented risk management components. The previously discussed Enterprise Risk

Management framework details the relevancy of integrating the risk management process at an enterprise level, in order to ensure the effectiveness of the action plans taken on behalf of a beneficial financial performance level.

ERM represents an on-going, proactive and holistic approach towards financial risk management, which ensures the identification and the management of cross-enterprise risks in order to empower an effective response to the interconnected impacts at an organizational level. (COSO, 2004) Furthermore, its efficiency is based on an expanded view of financial risks by embracing operational and reputational risks as well, thus specifying the risk related decision making processes. The provision of an extensive view regarding the financial risk components ensures a profound risk information gathering, which streamlines and improves the overall process, reducing potential losses by providing more accurate risk related action plans with a continuous revision and monitoring.

The ERM framework justifies the importance associated with the establishment of a strategically aligned risk appetite, which can affect the decision making process and the risk governance's effectiveness. Moreover, applying risk quantification methods is essential in order to assess critical events that might push an organization's risk appetite outside of its initial boundaries. ERM also emphasizes the implications of reporting, monitoring and compliance with laws and regulations to avoid reputational damage. (COSO, 2004)

Nevertheless, risk assessment and prioritization influences the selected risk strategy together with the development of the adequate capital requirements, thus ultimately influences the financial system's stability as well. Therefore, ERM provides a thorough risk management framework, which enables an integrated financial risk management process together with the contribution of a profoundly embedded risk culture. Represents, an early warning process concerning the newly emerging risks, allowing an immediate identification and evaluation, thus proactively manages the periodically occurring changes in the business environment.

Consecutively, ERM implements a process oriented risk management approach at an enterprise level and justifies the interconnectedness of the risk governance processes and their associated impacts. Furthermore, it reflects on critical events that can alter the financial stability of an enterprise and suggests proactive risk related action plans in order to ensure a smooth financial risk management process.

METHODOLOGY

This segment of the thesis will be devoted to the demonstration of the methodological perspective implemented during the course of the research at a given point in time. It specifies the research setting and the precise investigation process indicated in order to acquire a comprehensive and integral knowledge about the topic and the methods used during its examination. Consecutively, this chapter will serve as an extended explanation regarding the collection of the accumulated data and practices that leverages the outcome of the designated analysis.

1. Conceptualization of Paradigms

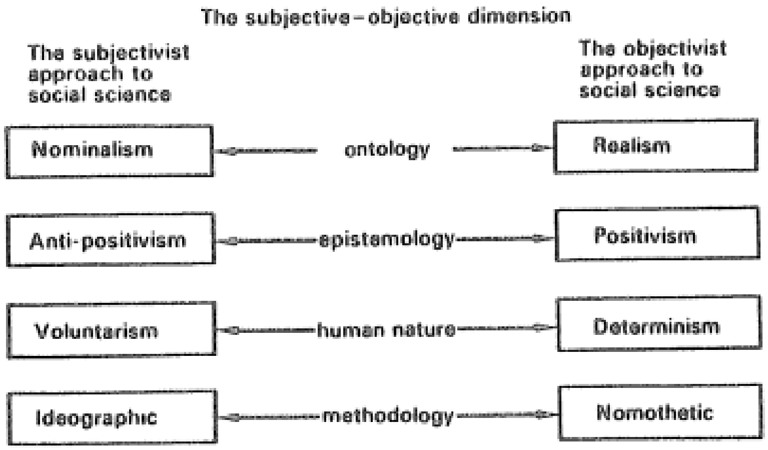
According to Kuhn's (1970) conceptualization, the term 'paradigm' depicts a set of common understanding of an examined phenomenon by proposing pragmatic questions in order to enable a structured approach concerning the answers given to those questions and the interpretation of the obtained results. (Kuada, 2010) Thus, this understanding is embraced during the procreation of the present thesis as well. In addition, Kuhn's (1970) perception served as the basis of further paradigmatic determinations supported by Burrell and Morgan (1979), and Arbnor and Bjerke (2009), however is hard to disclose a coherent definition due to the complexity of the concepts and approaches involved in the paradigmatic orientation.

Moreover, the paradigm can be determined by four sets of assumptions as follows: ontology, epistemology, methodology and human nature. (Kuada, 2010) Every scientific field, possesses its own set of phenomena, thus researchers have a pool of assumptions to choose from and decide upon their applicability in terms of the researchers' genuine understanding of the social world. The preliminary assumptions are embedded in the understanding of the distinct methodological views in order to facilitate the critical reflections over the possible perspectives that can be pursued during the intended research. (Kuada, 2010) Thus, the classification of paradigms became essential in the field of social science in account of its recognition among business economics researchers. A number of typologies of paradigms have emerged due to its objective-subjective deliberation, thus it have influenced the business studies in general. (Kuada, 2010) The present thesis will discuss three separate methodological views within the context of business economics, namely the FISI classification of paradigms emphasized by Durkheim, Herbert Spencer, Talcott Parsons and Robert Merton, the RRIF classification based on Burrell and Morgan (1979) and the methodological elaboration stemmed from Arbnor and Bjerke (2009).

1.1. Objective-Subjective Classification in Social Science

The objective-subjective classification of paradigms is correlated with the means by which researchers make sense of the concepts under examination. The sense-making process depends on the researchers' pragmatic orientations and their applied perspectives through which they would like to form their own set of common understanding and interpretation. (Kuada, 2010) Burrell and Morgan (1979) have contributed to the debated distinctions by drawing a comparison between the two approaches reflecting on the indicated paradigmatic assumptions, as it is illustrated below:

4. Figure: *The subjective-objective dimensions*



Source: Burrell and Morgan (1979, x)

Following this disposition, the four sets of assumptions will be briefly discussed as follows:

Ontology is perceived as a subjective-objective partition of a philosophical concept which pursues the determination of the pure existence in the context of reality. Its understanding portrays the nature of what researchers assume as "reality" and how they attempt to acquire a more in-depth understanding about something. In other words, ontology is concerned with the nature of being embedded in reality. Furthermore, its term captures both an objectivist (realism) and a subjectivist (nominalism) approach, thus realism argues that the social world is real and external to its participants, in contrary with the nominalism approach which cites that the social world is constructed by individual's mutual interactions. (Kuada, 2010)

Epistemology is a term generally applied for depicting and arguing the nature of knowledge, the means of knowing and also the circumstances through which one can acquire it.

Furthermore, it represents the embracing study of knowledge, thus its notion relates to the codification of this gathered know-how. Being a complex term, it captures both objective and subjective perspectives, thus it embeds the features of positivism and anti-positivism. Additionally, epistemology argues that the truth we know possesses objective characteristics within the subjectivity of the social world in which we live. (Kuada, 2010) Hence, the degree to which it is understood can alter across societies depending on the common perception that describes the current social world.

Human Nature exemplifies the third paradigm among the paradigmatic assumptions, which takes into consideration the perception of researchers concerning the method used in order to observe the correlation between the environment and human beings. This approach argues whether the social world's participants are treated as controllers or as controlled parties. Moreover, it refers to the extent to which a participant can take precautions against environmental changes or these changes are integrally unpredictable, thus impossible to be controlled or managed. (Kuada, 2010) It argues the supposition whether the environment is external to the individual or there is a correlation, which allows them to co-determine each other. Nonetheless, this paradigm takes into consideration both an objective and a subjective approach along with their characteristics, which are depicted by determinism and voluntarism. (Kuada, 2010)

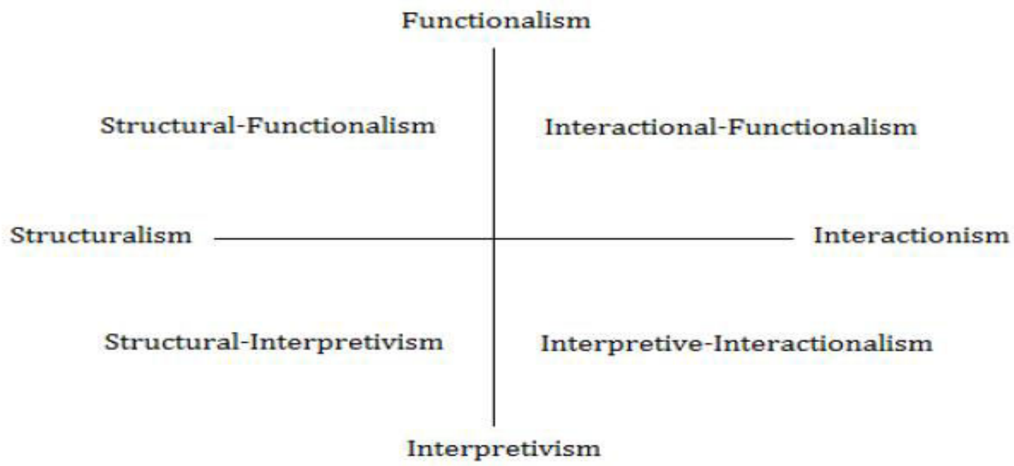
Methodology represents the means by which the research was conducted, outlining the research method used in order to define and understand the reality in which the gathered knowledge is decoded. Its conceptualization establishes a set of guidelines which forms the bases of the investigation. This set of paradigmatic guidance is coordinated by the ontological, epistemological and human nature assumptions in order to enable the contrasting interpretations of researchers who are possessing distinctive perspectives about the social world. (Kuada, 2010) Additionally, due to its principles, methodology can be classified into two different typology groups that provide the direction of the conducted analysis. Therefore, the nomothetic approach indicates a research strategy reliant on measurable primary data obtained through quantitative techniques, thus exemplifying an objective approach. (Kuada, 2010) In contrary, the idiographic approach sustains an inevitable subjectivity enclosed in the research in order to complement the objective view. This method allows a subjective perception of the social world due to its distinctive interpretation concluded from the researcher's own understanding. (Kuada, 2010)

2. Classification of Paradigms

2.1. FISI Classification

The FISI classification of paradigms emphasizes the significance of examining the social phenomena in terms of structures, functions and interactions. (Kuada, 2010) The acronym stands for Functionalism, Interactionalism, Structuralism and Interpretativism. Hence, the development of this classification has influenced the neoclassical and the institutional economics. Moreover, it further argues that social facts can be studied through positivist epistemology and by its correlated methodological approach due to the fact that these social facts are present externally concerning the individual actions. (Kuada, 2010) The classification of the root assumptions is illustrated below:

5. Figure: *FISI Classification of Paradigms*



Source: Kuada (2010, 39)

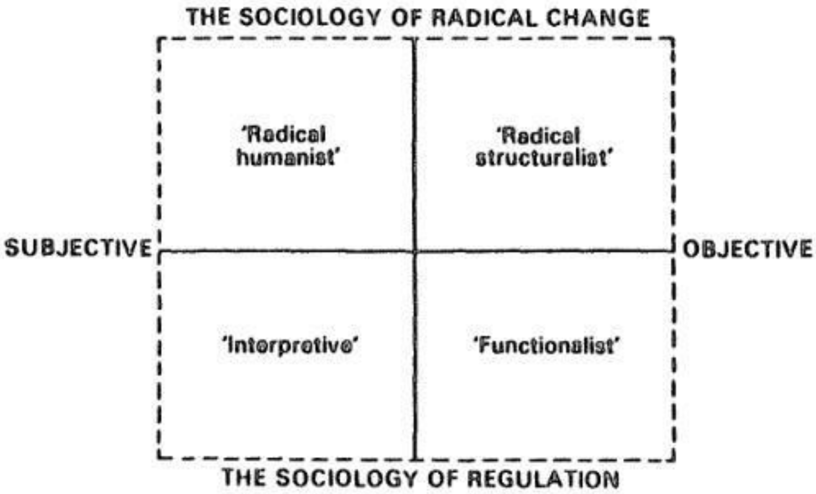
The classification discusses the implications of four paradigmatic orientations and their prudent combinations in order to reach an in-depth understanding of the research. The FISI typology permits a multiple paradigmatic perspective in social science. Therefore, due to a generic understanding, **F**unctionalism is depicted as an objectivist or positivist type of research. **I**nterpretativism determines the need for acknowledging everybody's definition concerning a given situation in which they are currently involved. Furthermore, **S**tructuralism cites that the collective is more important than the individual, and it presumes that human society is a set of complex systems and their interrelated components. Consequently, **I**nteractionism emphasizes the way how different individuals possessing different perceptions and experiences are able to understand each other. (Kuada, 2010) Consecutively, separate combinations have to be considered in order to have a more thorough and accurate investigation.

Hence, by definition, structural-functionalism refers to the fact that society exists over and above individuals. Structural-interpretativism indicates that the social world is formulated by several structures that delineate a basic conception of relationships. Interactional-functionalism describes a connection where interactions determine the functioning of a system. Interpretative-interactionalism argues that employees and organizations interact within and outside of their organizational boundaries. (Kuada, 2010)

2.1. RRIF Classification of Burrell and Morgan

The second paradigmatic orientation was classified by Burrell and Morgan (1979), and it concerns the organizational research by delineating the relationship between two distinct approaches, namely "the sociology of regulation" and the "sociology of radical change". Furthermore, their typology compares the "functionalist and interpretative paradigms with the 'radical' humanist and structuralist paradigms" in order to compile four sets of paradigms within the objective-subjective dispositions. (Kuada, 2010, p. 42) The four paradigms are outlined in the following figure:

6. Figure: *Burrell and Morgan's four paradigm model for the analysis of social theory*



Source: Burrell and Morgan (1979, 22)

Therefore, the functionalist paradigm investigates the sociological concerns through the framework of objective regulation, which stems from the consolidation of objectivity and order. Additionally, it states that the social world has a real and systematic feature, which facilitates the formation of distinct orders and regulations. (Kuada, 2010) Continuously, the interpretative paradigm possesses an extensively subjective and qualitative nature. Thus, within the business context it seeks the understanding of the process by which individuals are making decisions, rather than the outcome of the decisions themselves. (Burrell & Morgan, 1979)

The radical-humanist paradigm depicts a subjective-radical change, which assumes that the "everyday reality is socially constructed". (Kuada, 2010, p. 43) Therefore, its perspective has a strong correlation with the interpretative paradigm, due to the fact that it views the society through a nominalist, anti-positivst, voluntarist and ideographic perspective. It stresses the importance associated with the ideology of surpassing the limitations of the social arrangements. (Burrell & Morgan, 1979) Furthermore, the radical-structuralist paradigm embeds and objective perspective concerning radical changes and it declares that the society embraced associated integral conflicts within its social context. It emphasizes that radical change is enclosed in the society and it seeks to determine the interrelationships within the context of the social development. (Burrell & Morgan, 1979)

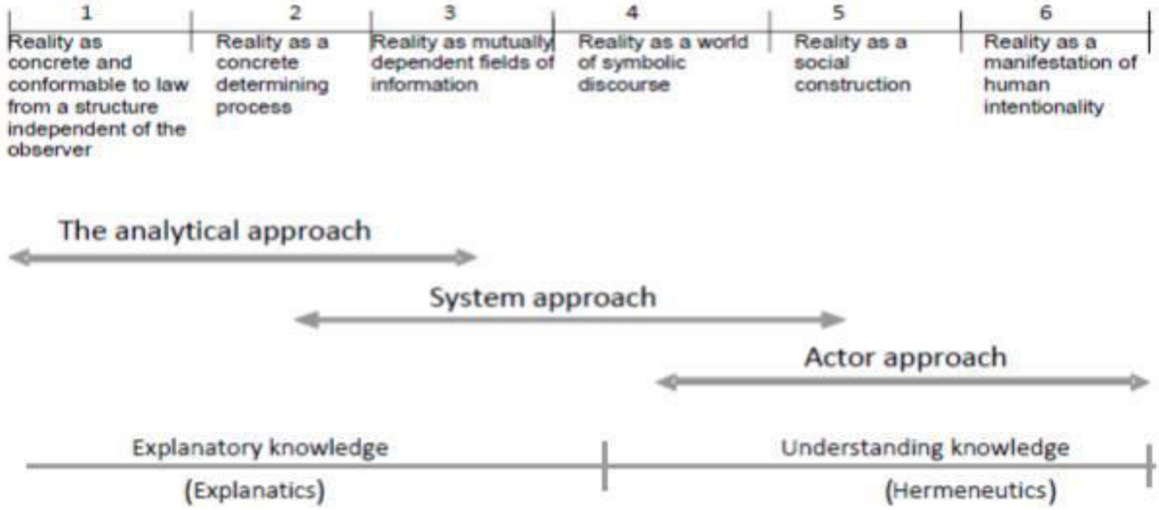
Consecutively, the four paradigms model was subject to a number of critiques in terms of their tendency to associate a higher relevancy with one particular research problem, while neglecting others. Moreover, it leads to a sudden classification concerning the suitability of distinct paradigms in terms of the desired study area and subsequently a lack of flexibility reflects its rationalization. (Kuada, 2010)

2.2. Abnor and Bjerke's Three Methodological Approaches

Abnor and Bjerke (2009) have contributed to the classification of paradigms with their two end distinctions, one related to the theory of science and methods, and the other concerned with the paradigms and methodological approaches. According to their conceptualization, a methodological approach serves as a set of guidelines followed during the knowledge creating process in order to frame a profound approach which allows the successful deployment of the proposed research questions. (Arbnor & Bjerke, 1997) Therefore, based on their terminology, an operative paradigm supports a link between the methodological approach and the research area. The operative paradigm lays its ground in the methodical procedures through which the researcher adopts a certain data collection method and in the applied methodics, which reflects on the actual data collection process. (Kuada, 2010)

Nevertheless, the paradigmatic typology implied by Abnor and Bjerke (1997) defines six coinciding paradigms as follows:

7. Figure: *Methodological approaches and their underlying paradigms*



Source: Abnor and Bjerke (1997)

Abnor and Bjerke's methodological approaches consist of the analytical, system and actor approach. Firstly, the analytical approach sustains an objective perspective and declares that reality is independent of the observer. The analytical approach shares similarities with the functionalist paradigm and assumes that knowledge is based on facts. It possesses a cumulative character, however it also allows the researcher to investigate each research objective separately before bringing them together. (Kuada, 2010) Subsequently, this approach enables the researcher to endorse a neutral attitude towards his study and respondents. (Kuada, 2010)

Secondly, the systems approach draws attention to the correlation between individual parts of the system, while focusing on the synergistic attributes within an already existing context. It allows the researcher to have an objective view concerning the static structure of the system or the regular and non-regular process within the system, or their consolidation. (Kuada, 2010) Moreover, unlike the analytical approach, the systems approach focuses on the potential unpredictability of the context within which the research is conducted. (Kuada, 2010)

Thirdly, the actor approach emphasizes such notions as subjectivity, individual and interactions. Hence, this approach, unlike the previous two approaches, considers reality as a result of individual's interactions by reflecting on their own experiences and the experiences of others as well. (Kuada, 2010) Moreover, this approach shares similar characteristics with the interpretative paradigm described by Burrell and Morgan, thus this approach is labeled by the interplay between "talking" and "listening" (Kuada, 2010, p. 49).

3. Methodological perspective

Speaking of the present thesis, establishing a coherent methodological approach is inevitable in order to frame the obtained knowledge within the chosen research methodology and its associated paradigmatic orientations. Hereby, following the brief introduction of the three paradigmatic classifications within the context of business economics, it is important to declare the methodological view of the present thesis in order to sustain its accuracy and comprehension. Therefore, the researcher decided to follow *The Analytical Approach* depicted by Abnor and Bjerke (2009) and more precisely within this approach, to pursue the second paradigm. The core ontological assumption of the chosen paradigm represents the *"Reality as a concrete determining process"*. (Kuada, 2010)

This paradigm indicates a positivist approach towards social science through an objective perception, which illustrates the research as an integrated part of the concrete reality and it is independent from the observer. Furthermore, it implies that already present theories can form the bases of certain hypothesis. However, due to a lack of initially proposed hypotheses, a holistic enterprise risk management framework was introduced with the aim of understanding the impacts and the systematic nature of the financial risk management process. The social concept can be examined by their causes and effects in account of a general character. Hereby, this framework was adopted in order to investigate its influences on the organizational performance, thus on financial stability and to draw the lessons learnt for future references. An explanatory testing was pursued in order to examine the components of the process in favor of explaining the connection between its causes and effects. Consecutively, the data collection method required by this paradigmatic orientation was lined up with the commenced research design of the present thesis, thus both primary and secondary data collection was implemented.

4. Research Methods

The adequacy of the research process is inevitable in order to successfully disclose the proposed research questions and the preliminarily determined assumptions. Furthermore, there is a set of different research methods from which one can choose in order to procreate an accurate research. Hence, taking into consideration its stipulated nature, it is important to delineate the specific methods adopted in order to guide the research process. Nevertheless, there are two types of theories guiding the research method process, namely the deductive and the inductive theory that depicts the study's paradigmatic orientation.

Burrell and Morgan (1979) align the deductive method with a positivist paradigmatic orientation, thus declaring that the social concept can be determined by examining the linkage between their causes and effects. (Burrell & Morgan, 1979) Hereby, a deductive theory follows an objective standpoint and argues that existing theories can provide the basis of the explanation concerning a social phenomenon. (Kuada, 2010) Subsequently, a deductive method follows a rational reasoning drawing a course between the preliminary premises and the obtained outcome. In contrary, the inductive method and its related theories considers an opposite perspective, thus its principles are associated with a rather subjective view of the social world. Additionally, the inductive method is related to qualitative approaches and it concerns the understanding of the social world through the eyes of the examined individuals and their experiences. The inductive reasoning commences the observation of certain premises then comes to a final conclusion about the social world by forming a theory, rather than arriving to the end conclusion through the framework of a selected theory. (Goddard & Melville, 2004)

Accordingly, the present thesis was pursuing a deductive methodological approach, due to the fact that the social world is real and extent to the researcher. Adopting the ERM as the guiding framework during the course of the research enabled the observation of the causes and their impacts on the organizational performance that is strongly linked with the financial system's stability. Thus, the selected deductive method ensured the determination of the ERM components and their implications prior to the examination of the theory.

Consecutively, following the understanding and the determination of the applied method in the present thesis, the data collection process has to be declared as well. Hereby, two types of data collection methods were ensured by the adopted theory in order to procreate a fully-comprehensive study, namely secondary and primary data. By this means, secondary data depicts the information collected by other researchers, while primary data stands for the outcome of a direct data collection process carried out by the researcher herself. (Kuada, 2010) Subsequently, due to the underlying principles possessed by the selected research method, the present thesis will make use of both secondary and primary data.

4.1. Secondary Data Collection

Prior to the primary data gathering, a substantial part of the present thesis was reliant on secondary data collection methods in order to frame and conceptualize the concepts that were later on subject to a more in depth investigation in the analytical part of the study. Therefore, in order to collect a comprehensive set of understanding in favor of the researched concepts a theoretical chapter was introduced embracing a methodological revision of the relevant literatures. Several definitions have been established to determine the concept of an effective literature review, thus authors like Hart (1998), J. Shaw (1995) and Weber & Watson (2002), just to name a few. However, the present thesis will implement Weber and Watson's (2002) conception about the synthesis of an effective literature review, which cites that "It facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed" (Webster & Watson, 2002, p. 13).

Nevertheless, according to its typology, an effective literature review can be clustered into three distinctive groups as follows: narrative, meta-analysis and systematic literature reviews. The literature review forms the foundation for the present thesis and it follows a systematic literature review approach. By definition, the systematic approach enables a broader examination of the proposed research topic due to the fact that it identifies, evaluates and integrates the relevant studies in order to achieve a high quality information gathering process based on previous individual studies. (Bern, 1995) Hereby, the systematic literature review exemplifies the secondary data collection method pursued in order to facilitate the theory development process of the present thesis.

Initially, an expansive research was carried out prior to the problem formulation and the determination of the research questions. This broad investigation was necessary in order to establish a profound structure concerning the presentation of the desired concepts and their relevancy in the social world under supervision. The problem formulation and the associated research questions are forming the basis of the thesis, thus a thorough conceptualization was in need in order to support their analysis and the applicability of the selected theory.

Following the approval of the preliminary synopsis, the researcher commenced the collection of the most significant literatures within the chosen field of expertise. A number of online search tools were easing the investigation process due to the availability of well-known online libraries as AAU Library, ProQuest, JSTOR and SpringerLink. In addition, the researcher employed her inherent sentiment to select the literatures which will facilitate the theory development. Hence, in order to do so, the collected literatures were subject to a prompt revision to decide upon their suitability. Subsequently, the full review of the preferred literatures was carried out to obtain the most important information that was utilized during the theoretical chapter of the thesis. Consecutively, the obtained knowledge was structured in a way to frame the theoretical conceptualization of the thesis, which will serve as further pertinence throughout the research.

4.2. Primary Data Collection

The primary data collection is to high importance from the present thesis's point of view because it provides a significant contribution to the analysis of the impacts of risk governance on financial stability, as it was initially indicated. Collecting primary data allows a more in-depth understanding of the researched concept and its ramifications, due to the fact that this method enables a direct data collection based on the researcher's own objectives. Furthermore, the researcher decided to investigate the research topic from a generalized perspective in order to draw a generic conclusion concerning the importance of risk governance and its influence on the organizational performance, which can alter the financial stability of an enterprise. As it was cited previously, the adopted deductive research theory favors a general character, thus it supports a comprehensive study, showcasing universal recommendations that can be further improved and customized in order to fit one's specific needs and objectives.

Nevertheless, the means by which these primary data were collected can be defined by the determination of the expert interviews. Expert interviews allow an extended elaboration on expert knowledge by focusing on technical, process-related and interpretative-evaluative knowledge, thus it relies on the conscious understanding of a specific social science field. (Littig, 2013) Therefore a systematized approach of the expert interviews was implemented in the context of the present thesis, in order to support an objective recreation of the expert's objective knowledge about the investigated field.

Subsequently, prior to present the courses of actions taken in order to conduct the intended expert interviews, certain limitations have to be mentioned in order to provide an accurate overview of the research. Initially, the researcher planned to conduct interviews with individuals from distinctive financial and non-financial institutions such as Morgan Stanley, Citi Bank, KPMG, Budapest Bank and GE Working Capital Solutions. This intention was driven by a comprehensive understanding of the financial and non-financial sectors in terms of their risk governance practices, in order to draw a general conception about the effects that may trigger financial instability in the long-term. However, due to a delimited responsiveness, the study had to be further limited. Thus, experts coming from one financial and one non-financial institution were interviewed during the procreation of this thesis. Subsequently, in order to maintain the study's viability, the researcher decided to interact with individuals in the possession of a lengthened professional experience within the field of risk management and their background involves either financial or non-financial institutions, or in some cases both. Additionally, other limitations such as time and relevant contact information can be also listed as significant barriers to a more extended primary data collection process.

Consequent to the elaboration of the preliminary course of actions and their limitations, a substantive introduction of the data collection process will be carried out as follows. Along with the facilitation of her direct team leader and other co-workers, the researcher was able to conduct seven expert interviews involving individuals with consistent previous and current professional experiences within the field of risk underwriting, risk integration, banking and insurance. The interviews were conducted within a determined timeframe starting on the 3rd of May and ending on the 12th of May. In addition, due to the previously mentioned high unresponsiveness rate of individuals representing other organizations, a downsized timeframe was featuring the conducted interviews in order to sustain the timely data gathering process.

Nonetheless, the researcher had the privilege to take part in a personal interaction concerning six out of seven interviews. The one remaining interview was carried out via telephone, because the expert was located in the United Kingdom, thus the researcher was limited by the existent geographic distance. Moreover, five out of the seven selected experts were approached personally, one person via telephone involving the cooperation of the researcher's direct manager and one via email (see Appendix nr.9). The previously mentioned cooperation was desired in account of the perceived hierarchical power distance.

Nevertheless, the approached experts were informed about the purpose of the interview and were offered the possibility of approving or rejecting the request. Hereby, the researcher would like to express her gratitude by refraining from revealing the experts' full names, thus she would rather reference them by the initials of their names in order to avoid any confusion during the subsequent interpretation of the obtained information.

4.2.1. Research Design

Consequent to the introduction of the data collection methods, further attention has to be devoted to the methodology of the expert interviews. The researcher decided to implement the practices exemplifying the chosen primary data collection method, thus she will present the interaction with the interviewees prior to, during and after the conducted interviews in order to justify the trustworthiness of the obtained knowledge. Subsequently, the researcher decided to structure her interviews following a systematizing approach in order to reconstruct the obtained special knowledge to further reflect on the impacting aspects of the ERM framework. (Bogner, Littig, & Menz, 2009)

Hereby, one of the first steps concerning the research design was to establish a structured questionnaire which will frame the entire information gathering process and will ease the interaction with the chosen experts. Six out of seven interviews were conducted in a personal manner within a rather casual than highly formal environment, thus allowing the researcher to increase the accuracy of the data collected by providing a comforting atmosphere. Moreover, one interview was conducted via telephone, which also represents a beneficial form of interaction due to the fact that the interviewee can feel more comfortable answering some of the proposed questions. In addition, prior to the personal interaction, the researcher clearly stated once again the purpose of the interview and assured the individuals concerning their anonymity in order to avoid any further inconveniences. Continuously, prior to the interview process, the researcher has communicated her willingness to record the conversation in order to avoid any discrepancies during the interpretation. Therefore, the recorded interview enabled the accurate paraphrasing of the entire conversation which facilitated the further transcription of it. In case of the interview via telephone, the researcher indicated her intention of taking notes during the conversation, which was approved by the expert. Recording the obtained information was proven significant from a transparency and trustworthiness point of view. Following the finalization of the interviewing sessions, the experts were provided with the transcript of the particular conversation in order to confirm its adequacy and viability.

Nonetheless, it is important to introduce the components of the structured questionnaire pursued during the interviews in order to get a better understanding of the sought information. The researcher was interested in the possessed knowledge an expert would consider worth for sharing, thus the questionnaire contains 12 distinctive but to some extent interconnected questions that streamline the data collection process (please see Appendix nr.1). Hereby, the first two questions were rather person oriented, shedding light to the professional background and the years of experience owned by the selected experts.

Following these introductory questions, the remaining inquiries were asked chronologically, along with the interviewees' freedom to propose or to extend the initially indicated question. Hereby, the researcher had the possibility to form different perspectives concerning one particular question and enabled a widespread information gathering process. Moreover, question number 3, 9, 11 relates to the expert's opinion about the importance of risk management and risk appetite as influencing factors in the overall management process, while on the other hand question number 11 was reliant on the expert's inherent conception regarding an effective risk management process. The answers stemming from this particular question were considered as valuable contribution the study's future generative recommendations.

Furthermore, question number 5 was postulating one of the most important questions from the research topic's point of view, thus the researcher was intending to estimate the relevancy of the clustered theoretical knowledge by comparing it with the practical experience related knowledge provided by the experts. Question 4 was indicated in order to attain an overview of the risk management's evolution over time and to examine its contribution to the current ERM's principles. Consecutively, the remaining five questions (6, 7, 8, 10, and 12) were trying to reveal the necessary information needed to generate an in-depth knowledge concerning the implications of the aspects and impacts of the risk management process on financial stability, which also support the main research area of the present thesis.

Consequently, an additional remark has to be mentioned in regards to the expert interviews, namely the language which was adopted during the interactions. Therefore, despite the fact that English was the official language concerning the expert's working environment, with the exception of one individual who was taking the interview in English, all the remaining interviewees were consulted in Hungarian. The researcher herself has translated the initial questionnaire from English to Hungarian, by paying special attention to linguistic dissimilarities in order to avoid any further misconceptions that could alter the trustworthiness of the research. By this means, the researcher was relying on her own inherent native Hungarian comprehension in order to maintain the accuracy of the entire questionnaire in both languages. The explanation of this decision is deriving from the fact that except one expert, the others preferred to use their own language – Hungarian – in order to ensure a more precise elaboration of the provided answers.

ANALYTICAL DISCUSSION

This chapter will provide the reader with a consistent analytical discussion concerning the implications of the different aspects incorporated within a holistic financial risk management framework. Moreover, the conception and the applicability of the introduced framework will be debated with the facilitation of the results stemming from the expert interviews. This segment is structured systematically around the three research questions proposed by the researcher prior to the commencement of the investigation. Nonetheless, the expansion of the main research questions will drive to the justification of the indicated problem statement, thus discussing the impacts of the financial risk management on the financial system's stability. Furthermore, different perspectives concerning the theoretical and the practical accountability will be also exemplified in order to get a widespread understanding of the complexity of such management process. Consecutively, concluding remarks will be drawn from the study along with the disclosure of the preliminary failures of such governance processes in order to provide recommending objectives for further development.

1. Data Management and Descriptive Analysis

1.1. The Implications of Financial Risk Governance

By analyzing the results stemming from the expert interviews, several similarities and differences can be drawn concerning the given answers. The researcher considers that the resulting differences are highly correlated with the fact that the consulted experts are coming from different financial sectors within the risk management field. Thus, this diversity within their professional background impacts their deliberation regarding the significance of the financial risk governance. Hereby, three of the interviewees were given an extended importance to the credit risk management as credit risk exemplifying one of the components of the overall financial risk classifications. According to their knowledge and expertise, the credit risk management specifically, is important in order to *"…avoid credit losses stemming from financial transactions…"* (I.Cs.), *"…to identify and assess the risk associated with certain credit limits…"* (L.M.) and it is *"…important to assess the creditworthiness of a customer…"* (P.S.).

Subsequently, coexisting with these specificities concerning the risk management classification, all the consulted experts were justifying the pursuit of an effective financial risk governance process due to the following reasons. Firstly, financial risk management is important also in account of the *"...financial and non-financial institutions that have to meet certain regulatory requirements..."* (R.H.) concerning their daily transactions. The *"...efficiency of eliminating unwanted risk exposures..."* (L.M.) and also the *"...time past between the initial evaluation of risk and its changes over a certain period..."* (L.B.) is relevant from an organizational perspective in order to point out newly emerging uncertainties which may alter the enterprise's financial performance. Moreover, it *"...draws attention to the different types of financial risks..."* (P.S.) in order "*...to join the dots between the various risk types..."* (R.W.).

Consecutively, risk management is important to be considered from a holistic point of view *"...in order to have a comprehensive overview of all the potential risks..."* (R.H.). This perception was justified by I.Cs. and R.W. as well, thus prior to the introduction of the ERM approach *"...organizations were following a silo approach to risk management..."*, which excluded the integrated view of the distinctive however, to some extent, interconnected risk types. By sharing this ideology, I.Cs. cited that *"...other sources of financial risks cannot be ignored either due to their destructive effects on an organization's performance..."*. Hereby, following this understanding it can be concluded that financial risk governance is relevant from several different aspects, while serving the same result of maintaining the sustainability of the financial system associated with a particular financial or non-financial institution.

Subsequently, following this course of thoughts, a deeper insight was given to the relevancy of the features possessed by risk appetite of an organization and its implications concerning the risk related decision making process within the risk management process. Hereby, a clear conjunction with the significance hold by the notion of risk appetite was accepted among all the experts. They have all agreed upon the essence which frames its comprehension and have uniformly stated that risk appetite depends on a number of differing conditions, thus *"...there is no standardized risk appetite framework which can be implemented..."* (R.H.) universally. Furthermore, a number of reasons were disclosed regarding the interdependent nature of the risk appetite, such as industry, company size, market regulations and internal policies combined with a certain degree of subjectivity. In addition, M.P. highly debates the linkage between the size of the organization and their risk appetite. Thus, in order to confirm this statement he declares that *"...a smaller enterprise might have a higher risk appetite in order to enable the growth of its business and expand its market visibility..."*.

Simultaneously, R.H. justifies the risk appetite's correlation with the regulatory requirements with the following comment, which cites that *"…the more regulated a company, the stricter risk appetite policies will possess…"*. Additionally, she also claims that the aspects of risk prioritization within the risk management process are interconnected with the stipulation of the risk appetite's level. Hereby, these determinations supported the complexity of the risk appetite together with the involvement of the risk management aspects. Nonetheless, M.P. considers that a rather subjective risk appetite can impact the risk management if it is *"…not aligned with the enterprise's risk capacity…"*. He also, grants a high importance to the provenance of the proposed internal policies within an organization due to the fact that they are mostly defined by the organization's top management level, thus in case the top level disregards the external market regulations or impacting factors, they can seriously affect the business performance. Moreover, if the risk management is *"…too strict internally then it might affect the company's competitiveness… thus the balance has to be found in terms of the risk appetite determination…"* (M.P.) which highly depends on the industry and sector within which the organization operates.

Continuously, concerning its conception, R.W. argues that risk appetite *"…doesn't really drive the risk management but it's rather a key component of the risk management…"*. This statement follows a clear rationale which cites that risk appetite *"…gives an upper and lower threshold…"* by determining the risk concepts and their impacting nature with a presumable clarity. Moreover, in order to describe its diversity R.H. states that internal policies *"…may differ among companies…thus it has to be adjusted to the company's organizational capabilities…"*. Hereby, *"internal policies should be in place in order to rule and maintain the organization's risk appetite…"* (R.H.) due to the fact that it *"can alter the outcome of the risk management process…"* (L.M.). Regardless of minor perception related differences, the consulted experts were sharing similar understandings about the implications involved with risk appetite.

Furthermore, a more specific disclosure was provided by L.B. with the following argument that *" Risk appetite possesses a strong correlation with the loan-to-value (LTV) and the debt-to-income (DIT) ratios."*. This specification stems from the fact that if any of the internally defined proportions of these minimum credit parameters changes, the working capital of the organization has to be adjusted accordingly as well. Hence, *"…risk appetite is interdependent* *on the working capital..because..it represents the sustainability of the financial health of the organization in case an unexpected risk exposure occurs…"* (L.B.).

By means of justification concerning its relevancy, L.M. cited that during the financial crisis *"…a high risk appetite level was present, thus the rational risk management was pushed into the background…"* causing a highly opportunistic behavior among risk managers in association with weak governance strategy incorporation. Notwithstanding, R.W. argues that risk appetite related decisions can be breached, however only for *"…an appropriate reason…"*.

Consecutively, a prompt presentation of the risk management's evolution was considered value adding from the analytical discussion's point of view. Therefore, the consulted experts were providing valuable insights concerning the major milestones that triggered significant changes in the risk management processes and their implementations. Moreover, irrespectively of the diversity concerning their professional backgrounds, all the interviewed experts were given examples from the period prior to and after the financial crisis in 2008. Thus, the financial crisis was highlighted as the event, which forced organizations to be *"…more concerned with their financial system's health…"* (I.Cs.) and put aside the *"…reckless behavior in terms of risk taking…"*(L.M.). Similar opinions were demonstrated regarding the necessity of severe changes and regulations after the crisis by taking into consideration the lessons learnt from the critical event occurred in the past. Therefore, they have confirmed the remarkable changes considering all the intents and purposes of the development of the risk management processes. Some consulted experts argued that along with these changes in the risk management strategies the risk appetite have altered simultaneously as well.

Subsequently, I.Cs. elaborated on the financial distress caused by the crisis in 2008, which afterwards was considered as a wakeup call for numerous financial and non-financial institutions. Prior to the crisis a more conservative way of thinking was describing the Eastern European banking sector in terms of risk taking, in contrary to the Western European and American banks that empowered an increased competition along with weaker risk governance processes in order to maintain the competitiveness. Following this exemplification, R.H. also confirmed the weak regulatory environment representing the period at the time. She cites that *"…risk management couldn't establish firm restrictions concerning the credit limit granting activities because of the intensified competition…"*, thus risk managers were trying to create solutions in order to be able to keep up with the high risk-taking behavior while obeying the minimum level of the regulatory requirements. According to L.M., prior to the crisis *"…an unnatural increase in financial performance…"* was revealing due to an *"…extensive risk-taking behavior of the institutions…"*. Moreover, critical losses had to be written down by several organizations as a result of a poor risk governance strategy.

Furthermore, concerning the introduction of the risk management processes prior to the crisis, one of the experts outlined the utilization of the modern banking strategies that *"…first assessed the customer's creditworthiness then provided the product and only following these steps … required the necessary payment…"* (L.B.)in return. This approach describes a centralized decision making process *"…which objectively estimates the potential risks associated with a customer's default…"* (L.B.). Hereby, this consideration highlights a main issue that this approach is not efficient*"… from a market expansions point of view, thus this can justify the highly subjective opportunistic behaviors during the inflation…"*(L.B.). Nevertheless, a lack of attention was present concerning the certain risk-taking related regulations and their periodic monitoring. M.P. captures the main issues representing the past course of actions such as *"…risk management related policies and guidelines were not aggregated, standardized and implemented properly…"*.

Continuously, after displaying the main issues in regards to the financial risk management process prior to the crisis, the experts were outlining certain visible changes concerning the risk management processes. Hereby, the most specifically delineated change concerning the past and present strategies were depicted by R.W. as follows: *"…the biggest change was driven by the introduction of ERM…"*. Thus, with the following argumentation he justified the need for an improved risk management process taking into account its aspects and perspectives. The argumentation cites that *"…prior to that organizations were following a silo approach towards risk management, credit risk looking after credit risk, operational risk looking after operational risk…"*. Hence, organizations started to focus on a more holistic approach towards the impacts of credit risk on other risk types. The introduction of the concept of ERM highlighted the major development after the crisis.

Additionally, experts such as R.H., L.M. and M.P., have mentioned other significant changes as well in terms of the risk management processes, namely the regulatory implications, the introduction of the standardized EU rules and the application of a systematic approach towards risk related decision making. Following the crisis policy makers started *"...regulating and standardizing the risk related processes..."* (L.M.) in order to increase the severity of the risk-taking possibilities. In addition, policy makers started to favor a more securitized risk management process in order to restore the financial stability. However, according to L.M., these processes were not necessarily better but rather aggravated in terms of the implications associated with the monitoring of the established rules and regulations. Risk management was present prior to the crisis mostly in a *"...theoretical basis thus a number of companies weren't seriously putting it into practice..."* (L.M.).

Consequently, several lessons were drawn after the crisis taking into consideration the risk related pitfalls that were present during the crisis and an extended attention was paid to the establishment of a holistic view concerning the risk management along with the assurance of a strengthened monitoring and reviewing course of actions. Thus, to be able to enable *"...quicker response and action plan setup towards certain potential exposures..."* (M.P.).

1.2. Components of Risk Governance and their associated Impacts

The complexity of this particular segment derives from the big variety of answers and opinions shared by the consulted experts. Again the differences concerning the arguments provided in terms of the questions stated in the initial questionnaire can result from the distinctive perceptions possessed by the experts, in accordance to their different professional backgrounds and current position level. Thus as a result of this observation, a risk underwriter positioned on the middle management level may see risk management related implications and impacts differently than a risk manager positioned on the top management level. Thus, that person would see rather a holistic picture of the risk management process due to its higher decision making authority. Hereby, some simplicities and complexities can be observed in terms of the given answers and justifications.

Nevertheless, several interrelated topics will be discussed during the course of this interpretation, such as the implications associated with the risk management process steps and whether they are equally important or there might be one which depicts a higher priority than the others. Continuously, some considerable aspects will be mentioned in terms of the risk management process along with the mistakes emerging from the followed processes. Nonetheless, valuable remarks will be presented concerning the influencing effect risk management has on financial stability. Hereby, regarding the importance associated with the process steps a greater majority has stated that *"...all the risk management components are* *essential…"* (I.Cs.) in order to depict the *"…strongest and the weakest links as well…"* (R.W.) and in addition, *"…all the identified financial risks have to be simultaneously taken into consideration…"*(R.H.) to enable an effective risk management process. Therefore, in case this consideration is not properly incorporated in the organizational culture, any of the well-known steps can *"…cause a critical domino effect on the long-run…"* (I.Cs.). According to M.P., *"…the most important risk steps involved in a management process depends on the business profile of an organization…",* which can form distinctive demands concerning the risk management process, due to the fact that these processes may slightly differ among business sectors. These opinions are stemming from a more holistic mindset concerning the risk governance from a generic perspective, however more specific justifications were mentioned as well by experts coming from or possessing a banking background.

Hereby, according to these experts *"…identification can be stated as the most important risk management step, due to the fact that it serves with inevitable information concerning the types of risk an organization is exposed to…"* (L.B.). Moreover, *"…identification and assessment are some of the major start points…"* (R.W.)in order to understand the risks associated with a certain transaction or potential customer. The interconnectedness of the different risk types have to be assessed accordingly in order to avoid an *"…ineffective way of managing financial risk…"*(P.S.). Subsequently, they all agreed upon the fact that a clear identification and risk assessment is inevitable, thus a risk manager has to be mindful about what the risk management theories are discussing, however he also has to take into account that *"…what happens in practice can be completely different…"* (R.W.). Therefore, transparency and flexibility are some of the key elements in any of the steps involved in the risk management process. In terms of an effective risk management process, risk identification and assessment are crucial starting points, due to the fact that if these are ignored, the organization might encounter further struggles despite the fact that all the other steps were successfully carried out.

Hence, taking into consideration this flow of thoughts, other experts are correlating an increased attention to the information and data obtained during the risk identification and assessment part of the process. Information was considered to be fundamental and highly significant from the risk management's perspective, due to the fact that it can influence the initial steps involved in the management process. Thus, information *"…is as relevant as the management steps themselves…"* (R.H.) In addition, *"…country specific and industry* *specific information is also important in order to assess the riskiness of a certain country…"* (R.H.), which can highly influence the credit rating of the organizations located within that particular country. The rationale associated with the accuracy and relevancy of the obtained information will be postulated along the entire discussion, due to the fact that it was proven essential in all the risk management related steps.

Consecutively, despite the high importance given to the risk identification and assessment steps, a comprehensive debate was provided by the experts in regards to the additional steps of the risk management process, such as analyzing, reporting and monitoring financial risks. Therefore, during the course of a profound argumentation, all the experts were determining a common understanding of the essences and impacts of these actions. Hereby, *"…risk analysis is inherently crucial…"* (R.H.), thus according to the understanding of the experts it mostly concerns the risk estimation stemming from portfolio and financial statements related analysis. This line of reasoning results from their professional experience, which highlights the practicalities of the financial risk management. Hereby, on one hand, financial analysis is considered to be a common method applied by various risk managers and underwriters, *"…because the financial statement shows the performance of the company, thus one can estimate their future financial behavior…"* (L.M.), thus a clear picture can be obtained in regards to the financial stability of an organization, which is linked with their integral risk profile. The risk profile of a company plays a major role in the risk management process, because it shows one's risk taking capabilities and also the financial risks an organization is exposed to.

According to this determination, L.M. highlighted the importance of the *"…relevant information sources which most preferably should be up-to-date information…"*. Hereby, R.W. emphasized that *"…its accuracy is extremely important so organizations that don't pay due regards to that, are facing increased risk regarding data accuracy and integrity…"*. However, some of the institutions don't necessarily have the possibility to obtain up-to-date risk related information due to a lack of direct communication between the counterparties, thus this also expands the risk of inaccuracy.

Subsequently, on the other hand, portfolio related analysis is considered as equally impart as the financial statement related analysis. L.B. argues that *"…portfolio management is important due to the fact that it can diversify the potential risks faced by the organization…"* assuring a more effective risk management. Therefore, portfolio management integrates a risk layering approach, which is crucial *"...due to the fact that it allows an aggregation of the highly risky portfolios and their examination..."* (L.B.). Furthermore, in terms of the risk analysis another interesting information was revealed during the interviews, such as the fact that the concept of payment default has to be taken into consideration as well because it can identify the ramifications of certain risk factors stemming from the possibility of a potentially occurring payment default.

By this means, continuing with the connotations related to the reporting and monitoring steps, I.Cs. cites that monitoring is also important *"...because a number of additional emerging risks can be pointed out and managed accordingly..."*. In addition to this, R.W. takes its determination further as *"...the monitoring aspects you need, may have the same principles behind them but the way an organization deploys it can differ significantly..."*. Thus, according to this conceptualization, an organization has to adjust the concept of monitoring to its own risk management approach in order to achieve efficiency. As it was discussed before, all the steps involved in the risk management process may differ in terms of their prioritization and implementation depending on the preliminarily mentioned aspects, such as industry, business sector, size, goals and strategic objectives of the respective organization. Moreover, monitoring allows the establishment of quick responses and also to *"...set up accurate action plans in order to avoid any major disruptions concerning the unexpected risk exposures..."* (L.B.).

Thus, in conformity with these argumentations, L.B. cites that a number of elements have to be considered and evaluated during a risk management process, in order to identify those weak links that can adversely alter an organization's performance. Therefore, several financial instruments support the risk management process, namely: Debt-to-Income ratio, Working Capital ratios, Stress Testing and Financial Stability Measures. Hereby, these measures and many more, are sustaining an in-depth assessment of the potential risk exposures. These instruments are facilitating the risk management process in order to provide accurate assessments and estimations, while ensure a smooth mitigation process. Consecutively, their applicability varies across organizations and financial institutions.

Additionally, taking into consideration the previous process related discussions and their implications, the experts uniformly confirmed the necessity of following a regulatory framework within which the risk management steps can be carried out and sustained effectively. This particularity of the risk management process is essential in order to *"...limit* *and standardize risk-taking among the organizations…"* (L.B.), thus policymakers have to assess these regulations accordingly in order to offer a consistent guideline which also correlates to the certain market regulations. A failure to do so would result in a false exemplification of the market, thus would provide an inefficient standard by ignoring some of the relevant uncertainties. So to speak it would enable a risk pitfall on the long-run, in account of the appearance of certain opportunistic behaviors in terms of risk-taking.

Therefore, the risk related regulatory requirements have to be systematically established by policymakers and integrated in the risk related decision making processes by the organizations. This is important, because *"…There were many cases in the financial history, that the financial risks were appropriately identified and assessed however they weren't included in the actual decision making process…"* (I.Cs.)due to a weak regulatory governance approach. Following the financial crisis, policymakers *"…have strengthened the regulations in order to form a ruled guideline…"* (I.Cs.)in order to prevent another similar situation. Thus, these requirements have to assess the relationship between the different business units and the initially appointed risk appetite level of the organization, due to the fact that they can simultaneously impact the management process.

Nevertheless, in accordance with the implications of the risk management processes and the regulatory requirements that shape the overall risk governance of an organization, the researcher elaborates on the interconnectedness associated with risk management and financial stability. An overall conformity was observed among the experts concerning the apparent relationship between the financial risk management and the financial stability. Thus, the consulted experts uniformly confirmed their interactive comprehension by stating that risk management supports a prudent risk related decision making process, due to the fact that it limits and restricts a potentially occurring opportunistic behavior. In addition, P.S. cited that *"…the regulatory requirements can have an influential effect on stability over the applied risk management strategy…"*, thus an extended attention has to be paid towards the adherence of the rules and regulations that can shape the outcome of the overall process.

Furthermore, according to R.H. a rational risk management *"…enables the decrease of certain reserves and bad debts which can increase an organization's liquidity, thus its overall performance which is linked to the financial system's heath of a company…"*. Nonetheless, risk management also portrays *"…the amount of the bad debt/working capital reserve a company has to possess in case a risk exposure occurs, thus this reserve facilitates the* *financing of certain risk exposures…"* (L.M.). A more detailed elaboration will be followed up on this thought by providing more complex explanation henceforth.

However, preliminarily to that, more opinions and statements will be presented in regards to the interaction between the risk management and the financial stability of an organization. Hereby, the absence of a *"…prudent risk management, organizations might encounter again the fundamental causes of the previous financial crisis…"* (I.Cs.). Risk management contributes *"…to the financial stability with a small proportion…"* (L.M.) due to the fact it allows a systematic financial risk assessment, which facilitates the establishment of certain action plans in order to prevent or mitigate any risk, faced by the organization.

Moreover, in conformity with L.M., *"…Portfolio management also contributes to the financial stability of an organization through risk management…"*. This statement can be supported by the explanation that the risk associated with a specific portfolio possessed by any organization can alter the smooth functioning of the whole system in case the risk diversification is not determined and carried out appropriately. Moreover, M.P. also relates to the importance of a precise portfolio analysis and its classification due to its ability of raising awareness of potentially stemming risk exposures.

Hereby, the financing department of an organization can proportionally adjust the *"…amount of reserve cash needed in order to finance that risk exposure if it occurs…"* (M.P.). In addition, M.P. has also mentioned that by viewing the possibility of the payment default of an organization, one can *"…estimate the financial stability they would need …"* in order to avoid any unexpected financial turmoil. Therefore, in case a high probability of payment default can be observed, *"…the organization has to sustain a higher working capital reserve… because through the maintained reserves the company can finance their risk exposures…"* (M.P.).

In accordance to this flow of thoughts, L.B. has disclosed the rationale behind the linkage depicted between the risk management, working capital reserves, and financial stability. Hereby, a declaration has been given in favor of the financial stability's dependence on the actual working capital of an organization *"…due to the fact that there is a strong proportional relationship among the organization's risk bearing capabilities stemming from the reserves maintained for financing potential risk exposures…"* (L.B.). Therefore, if by any means the working capital is not tailored proportionally in terms of the financial risk taken by an organization, they may encounter critical losses and financial turbulences.

Financial stability is often considered to be measured based on two different approaches, one taking into consideration the equity position of an organization and the other viewing its liquidity position. Thus, for a better understanding, the researcher wanted to clarify that the equity position of an organization cannot be viewed interchangeably with its working capital position. This difference derives from their applicability and inherent characteristics, thus working capital is used to finance short-term loans and it's linked to the liquidity level of an organization, while equity covers long-term loans.

In addition to this conceptualization, a distinction has to be made concerning capital and working capital reserves as well, in order to avoid any misconceptions. Hereby, capital reserves are intended to fund capital expenditures excluding any unexpected occurrences, while working capital relates to the organizations financial strength in terms of defining its short-term financial health. Therefore, working capital stands as a solvency ratio which allows the estimation of the necessary amount of cash an organization has to possess in order to perform effectively. Hence, if the equity and liquidity positions are balanced accordingly *"…it represents a stable financial system from an enterprise's perspective, thus a high correlation can be observed between the organizational performance and the financial stability…"* (L.B.).

These concepts are interpreted in terms of different ratios in order to quantify the *"...potentially expected loss and the working capital reserve needed in case of an unsuccessful risk-taking…"* (L.B.) occurs. The risk of failure may be increased if any aspects of the risk management or financial stability measures are not taken into consideration. Hereby, it was emphasized by L.M., that an interactive nature features these two concepts. Thus, she cites that *"... financial stability measures as GDP, volatility, country risk and many others can also highly influence the risk management process because there are many interconnected aspects that can alter the outcome of the process…"(*L.M.). By this means, these stability measures can have a direct impact along with and indirect influence concerning the result of the risk management process, while simultaneously representing a strong tampering attitude.

Subsequently, returning to the perspective supported by the impacting nature of risk management, P.S. argued that besides all the quantifiable measures *"...the organizational culture of an organization is highly correlated with the adopted risk culture of a company, thus this can impact simultaneously the risk management and the financial stability as* *well…"*. Risk management can also influence the profitability level of an organization, which to some extent represents the financial performance of an institution. Additionally, M.P. cites that *"…if we have a precise overview of the risk structure and the risk profile of a company…",* one can facilitate the necessary working capital, which has to be in place in order to ensure the positive financial performance of an organization. Therefore, it can be stated that an *"…indirect impact between risk management and financial stability…"* (L.M.) can be observed. In conformity with R. M., an inverse proportion is representing the risk governance and the financial stability, thus *"…the weaker the risk management the greater the risk of incidents occurring…"*. Consecutively, in order to sustain the financial stability of an organization, transparency was proven essential in terms of the financial risk management process.

1.3. Lessons learnt from the Financial Risk Governance Failures

In conformity with the introduced implications possessed by the financial risk and its governance, along with the discussions in regards to the complexities and impacts stemming from the components of the risk management process, the researcher took into account the number of risk management failures and mistakes mentioned during the interviews. Hereby, the following segment will provide the reader with a summative presentation of the findings in correlation with the failures considered relevant by the experts in order to determine a more effective way of managing financial risk in the future. In accordance to the recommendations cited by the experts, a final reflection will be demonstrated by the researcher in order to frame the suggestions debated by the interviewees and to raise additional research gaps that can be further examined.

Due to its complexity and interdependent nature, a number of significant mistakes and failures were depicted by the experts while knowingly reflecting on the financial crisis in 2008. The interviewees have consistently confirmed that risk management wasn't an integrated part of the risk related decision making process prior to the crisis. Thus, high importance was granted to this observation, due to the fact that most of the argumentations provided by the experts were echoing this consideration as a final recapitulation. Concerning the steps involved in the risk management process, none of the expert could outline one highly impacting step which could negatively alter the outcome of the management process in favor of its inherently co-dependent nature. Hereby, R.H. enclosed this understanding by citing that *"…every step can alter the decision making process…",* thus all of them have to be considered equally important during the process. Furthermore, R.W. elaborated on the need of understanding that there are various disciplines one has to take into consideration during the course of a risk management process, thus *"...it is really difficult to pull one out to say that if you are not going to do that one, then that's going to be the biggest issue..."*. By this means it can be concluded that all of the management steps have gotten a key part to play, thus an organization cannot focus only on one of them because it may increase the chance of failure.

Again other experts stated that one of the major failures of the risk management process can be linked to the misidentification of the potential financial risks or if the *"...segmentation and the prioritization of these risks are not accurate..."* (L.B.). Therefore, L.B. has provided the researcher with an example in order to support the significance associated with the accuracy of these steps. In conformity with this consideration he cited that the subprime mortgages in the USA during the crisis period were lacking an appropriate assessment of the accumulated risk factors *"...which led to a critical financial distress once it reached its highest pitch..."*.

In addition, P.S. argued that one of the biggest failures of the risk management process prior to the crisis can be illustrated by the fact that most of the organizations went bankrupt due to an ignored internal regulatory management of the identified financial risks. Therefore, he emphasizes that in case there are no regulatory policies involved in the risk management process an effective reviewing and monitoring will be subject to ignorance, thus amplifying the possibility of a financial breakdown occurrence. Moreover, a mutual concordance was exemplified by the consulted experts in regards to the fact that regulators came under a lot of criticism during and following the financial crisis, due to the allowance of a weak risk governance structure. This has been one of the major failures of the risk management over a significant period of time. Resulting from their professional experiences, none of the interviewees were pursuing a career within the regulatory management's field, thus their understanding of this particular failure stems from a rather external perspective, by viewing its impacts on the risk management field.

Moreover, according to R.W. a culture of greed and opportunistic behavior was representing the period during the financial crisis and even though *"...those areas were small in numbers but the impact they were having was significant..."*. Additionally, in order to exemplify this acknowledgement, he states that *"...the bankruptcy of banks that was the result of a willingness to drive increase in terms of revenues, but in an ineffective environment..."*

(R.W.). Continuing this argumentation, R.W. extended his observations by providing valuable remarks in terms of understanding the implications of the theoretical and the practical implementation of the risk management practices. This aspect can result in a serious bias by giving emergence to destructive misinterpretation of certain processes and their practicalities. Therefore, he argues that another failure of the risk governance process was stemming from the involved people's inability to do what they have to do, thus an organization could possess the best risk management framework if it lacks the appropriate human force to implement it accordingly. According to him, this phenomenon was highly representative during the crisis period.

Continuously, in order to confirm this consideration, he elaborates on the complexity of a risk management framework along with the necessity of a clear understanding of it, which was absent during the crisis, thus a number of process related failures were observable. Therefore, *"…a risk framework is made up of various different components, like issues, losses, stress testing, scenario analysis, lots of different things…"* (R.W.). Hereby, deploying the various components of the risk management process and obtaining the right risk managers to execute these processes were seen as the biggest challenges during the crisis. Nonetheless, in order to frame this ideology R.W. stated that *"Institutions believe that they have controlled however, as it turned out they couldn't control and foresee everything."*.

Subsequently, in order to exemplify an additional failure of the risk management processes prior to the financial crisis, three experts were uniformly confirming that a lack of updated risk related information and missing direct communication were also contributing to the result of an ineffective risk management. According to L.M. *"…based on historical data you cannot accurately predict the future performance of an organization, thus this may be altered by an additional external factor which cannot be pointed out from the historical data…"*. However, the consulted experts have confirmed that the absence of accurate data was highly typical during the crisis, thus due to the fact that all of them possess relevant experiences from the crisis period, they could have validated this issue. A precise overview was missing concerning the trends of the organization's performance, hence by analyzing historical financial data risk managers couldn't accurately foresee the newly emerging financial risks. Moreover, the lack of risk related information caused several misinterpretations concerning the severity associated with a certain risk type, thus enhancing a weaker risk governance structure and an intensified risk-taking behavior.

Additionally, direct communication, trustworthiness and human errors were also some of the key factors that contributed to a failed risk management process. There were a number of organizations regardless of their size, that withheld crucial information, which later on impacted the entire financial system' stability causing a destructive credit crush. Moreover, the risk related information was not directly obtained but *"...it came through different communication channels, thus some parts of the information got lost during the process..."* (M.P.). According to M.P. *"...mistakes can result due to the structure of the company as well..."* due to the fact that the size of the organization or financial institution influenced some of the aspects of the decision making process.

A severe obstacle was mentioned by L.M. in terms of the information and data accuracy concerning the financial statements utilized by risk underwriters in order to assess the performance of an organization, thus *...it is hard to obtain updated audited information especially in some of the countries where regulations concerning financial auditing differs from the respective country in which the organization operates..."*. Hereby, this lack of adequate data have caused serious problems and mistakes during the crisis as well, due to that fact that risk managers were and sometimes still are basing their decisions on the obtained information regardless of their accuracy. Moreover, following the discussion concerning the risk related information, I.Cs. stated that *"...synthesizing the obtained information is equally important in order to depict the most relevant aspects of the gathered information..."*. However, this was considered as a serious weakness of the financial risk management viable prior to the crisis.

Consecutively, several failed aspects can be outlined from the crisis period that caused the critical financial distress along with the amplified inefficiency of the financial risk management processes. Hereby, the most influential ones can be listed as follows: regulatory requirements, due foresight in terms of risk taking, information, communication and trustworthiness. All of these elements are equally important to be taken into consideration in order to maintain an effective risk management and a self-supporting financial stability. Therefore, by this means, the consulted experts have further contributed to the pool of suggestions in regards to the establishment of a risk management process with increased efficiency.

In accordance to this, their opinions and expertise were required in terms of defining the components of an effective risk management process if any. During the course of the interviews differing understandings were represented by the experts in relation to a flawless and effective risk management framework. A uniform declaration was given concerning the complexity of a general risk management process, thus deriving from this comprehension no common framework can be formed in order to assure its effective applicability among different types of organizations. In order to support this statement, R.W. criticized that *"…It's not something you can just lift and drop in any organization, the key to it is to understand the drivers of that organization and the risk they may face…"*.

Therefore, following this course of thoughts, R.W., stemming from his top level risk management experiences, cited that *"…not every organization will face the same risk so as a consequence of that they may deploy different frameworks, they may deploy their energies only on certain components of that framework…"*. This view represents a holistic enterprise level perspective which embraces the overall risk management process without breaking it down to its components in order to improve its outcome. Thus, R.W.'s approach will be recapitulated with more thoughts on this holistic ideology further on.

In addition, by abstracting from this perspective, a number of concrete examples were provided by the experts in relation to the description of a highly effective risk management process. Therefore, in accordance to this, L.M. listed several aspects that could improve the effectiveness of the risk management process, such as *"…updated financials, forecasting for at least one year ahead, trustworthiness of the customer…",* market related information and direct communication. Moreover, M.P. and I.Cs. mutually agreed upon the implications stemming from the structure and strategic objectives of the organization because these represents some of the *"…key components to the effectiveness of a risk management process…"* (M.P.). Hereby, by this statement he confirmed that the integration of a generalized risk management process won't necessarily be competent in all the different types of organizations and financial institutions.

Nevertheless, the accuracy of the obtained risk related information again was highlighted as one of the key components to an effective risk management process. In addition to this, the increased level of oversight and the requirements of other regulatory policies were proven inevitable in order to prevent *"…any further reoccurrence of the situations that have drove the financial system into a crash during the crisis…"*(R.W.). Hereby, as it was preliminarily discussed, the regulatory policies can highly impact the result of the risk governance process, thus more severe regulations and their precise monitoring should be implemented in order to ensure the financial system's sustainability.

Continuously, L.B. declares that if one organization commits the same risk related mistakes several times, that would challenge its financial stability on the long-term. Thus, in order to prevent this happening, a systematic reporting and monitoring approach should be implemented to point out and provide lessons learnt from a particular action and its outcomes. Nonetheless, I.Cs. contributes to the flow of recommendations by stating that *"…Industry, financials, company structure, owner, information, historical data, forecasting – regards to high importance considering the risk related decision making process and a holistic picture is needed concerning all the influencing aspects in order to make the final decision."*.

By this means, coming back to R.W.'s holistic view of risk management process reveals the understanding that possessing the best and most effective framework is not necessarily enough if organizations are not paying attention to the upcoming challenges they may face. Some of the risk factors can be eliminated or mitigated internally, however there are other more complex external aspects that cannot be controlled. Thus, sometimes these external factors are the ones causing the biggest issues in case organizations are not acting prudentially. Hence, the adopted framework is influenced by the risk profile of an organization, due to the fact that *"…the risk profile and the monitoring aspects you need may have the same principles behind them but the way an organization deploys it can differ significantly…"* (R.W.).

As a comprehensive outcome of the debate related to the exemplification of an effective risk governance process, R.W. shared an interesting correlation in regards to the applied framework and the individuals who are there to execute it. Thus, *"If you don't have the right people to execute the principles of a certain risk management framework then you are going to have gaps. At the same time if you don't have an embracing framework which states the necessary principles you'll also have gaps, so there are lots of things that you need to take into account."* (R.W.).

2. Reflection on the Descriptive Analysis

This section will be devoted to a brief comprehensive reflection concerning the findings stemming from the expert interviews and their rationalization from the present thesis's perspective. As it was previously discussed, the descriptive analysis was based on the viewpoints of seven experts working in the field of risk management. The consulted individuals have different professional backgrounds with many years of practical experience in the field. The years of expertise vary between 8 and 30, across financial and non-financial sectors. Therefore, the opinions and argumentations shared by the interviewees are mostly dependent on their personal perceptions combined with an overall perspective concerning the financial risk governance.

Subsequently, all the experts have provided the researcher with detailed insights concerning the importance of the risk management process, its complexity along with its impacting nature, which was then exemplified by failures and mistakes stemming from risk governance frameworks followed prior to and during the financial crisis. The relevancy of these insights are originating from the fact that all the interviewed experts have significant practical experiences from the crisis period, thus they have facilitated the course of an accurate comparative understanding of the impacting changes in favor of the risk management processes. Furthermore, these insights were shedding light to the necessity of a clear and profound regulatory management, which embraces the risk management in order to ensure its smooth and effective functioning without leaving out of consideration some of the main aspects that can adversely alter the overall outcome.

Additionally, all the inherent components of a risk management process can negatively impact its effectiveness in relation to the financial stability, thus every step is equally important. Thus, a brief recapitulation cites that *"...all the risk management components are essential..."* (I.Cs.) in order to depict the *"...strongest and the weakest links as well..."* (R.W.) and in addition, *"...all the identified financial risks have to be simultaneously taken into consideration..."*(R.H.) to enable an effective risk management process.

Nevertheless, the impacting nature of the risk management in regards to the financial stability was investigated in order to examine the relationship between these two concepts and to delineate some of the failures that can result from this interference. Hereby, a retrospective demonstration will justify the previously presented interdependent nature. Therefore, an

"…indirect impact between risk management and financial stability…" (L.M.) can be observed. In conformity with R. M., an inverse proportion is representing the risk governance and the financial stability, thus *"…the weaker the risk management the greater the risk of incidents occurring…"*.

In conformity with this review, relevant mistakes and failures stemming from a weak risk governance structure was presented in order to exemplify the destructive effects of an ineffective process. These failures were further on converted to recommendations supported by the experts, in order to sum up the lessons learnt from the past failures. Thus, *"…Industry, financials, company structure, owner, information, historical data, forecasting – regards to high importance considering the risk related decision making process..."* (I.Cs.). In addition, other aspects, such as solid regulatory policies and monitoring practices, were highlighted further on. However, R.W. made it clear that *"If you don't have the right people to execute the principles of a certain risk management framework then you are going to have gaps. At the same time if you don't have an embracing framework which states the necessary principles you'll also have gaps, so there are lots of things that you need to take into account."*.

Consecutively, a number of aspects were emphasized in order to facilitate the following connotation in accordance to the theoretical justification of the preliminarily presented descriptive analysis along with the verification of the proposed research questions of the present thesis.

3. Theoretical Alignment

This section will argue the theoretical implications of the risk management process by verifying and discussing the applicability of the previously presented ERM holistic framework while taking into consideration the data obtained and disclosed in the descriptive analysis part of the present thesis. The theoretical alignment is necessary in consideration with the problem formulation, research questions and expert interviews, in order to justify and discuss the relevancy of the present study. Therefore, the determined enterprise risk management approach provides a holistic view of risk management in order to manage financial risk and to enclose the possible opportunities stemming from these risk factors in order to achieve one's strategic goals and objectives. Further on, a more in-depth understanding of the approach's implications will be portrayed by combining and contrasting them with the rationale supported by the consulted experts.

In addition, this segment will ensure a detailed discussion in favor of the initially proposed research assumption, which cites that risk governance has an impact on the financial stability. This impact can be triggered by a number of distinctive internal and external changes, thus these changes have the potential to negatively alter the financial system's stability in case of an ineffective risk management. Moreover, a correlation will be considered between the organizations financial performance and its financial system's strength in order to justify the risk management's impacts. This was confirmed by the experts during the primary data collection process, thus they have uniformly agreed upon the interference which depicts the interacting nature of this relationship. Hereby, the verification and justification of this supposition will be facilitated by the indicated research questions, based on which the expert interviews and the descriptive analysis were clustered and further examined.

Prior to the theoretical justification, the complexity of a risk management framework has to be firmly declared in order to understand its inherently dynamic nature. This clarification is inevitable in order to avoid a stand-alone perception of the following discussion, thus in conformity with this the researcher will recapitulate a clear determination of a risk management framework provided by R.W. Hereby, thus he cites that a risk management framework is a complex set of elements involving various different issues, losses and analysis, that implies the following statement: *"If you don't have the right people to execute the principles of a certain risk management framework then you are going to have gaps. At the same time if you don't have an embracing framework which states the necessary principles you'll also have gaps, so there are lots of things that you need to take into account."* (R.W.). Subsequently, the comprehension of this elaboration is also essential from the present study's point of view.

Nevertheless, according to the reviewed literatures the enterprise risk management framework is considered to be a systematic, proactive, forward-looking and continuous approach, which stems from a holistic principle concerning the financial risk management process. This framework was a newly adopted risk management approach, which ensures that all the implications of the various risk types and their impacts are taken into consideration. As it was also confirmed by the consulted experts during the descriptive analysis, the introduction of the ERM framework was a revolutionary action taken in favor of the enterprise level view of risk management. This perspective was introduced after the financial crisis due to the fact that the silo approach followed by many organizations and financial institutions excluded the integrated view of the interconnected risk types. As the theory also discusses, the silo approach wasn't considering the organization's overall risk profile, thus it was lacking a comprehensive overview of the risk governance across all business units.

Therefore, following the credit crush in 2008 organizations started to treat financial risk in a more holistic manner also by escalating risk governance to a senior management level. However, the top management level has to consider several internal and external aspects prior to the determination of the risk treatment policy. In regards to this, one of the experts outlined that in case the top management has a flawed perception concerning the encountered financial risks they may affect the organizations' competitiveness by enforcing ineffective risk governance processes. Moreover, if the senior management level is following a stricter risk avoidance strategy they may ignore the upside perceptions and opportunities stemming from a potential risk, thus affecting the organization's overall competitive advantage. Therefore, a balanced overview is required prior to the implementation of any risk governance strategy.

Hereby, the introduction of the ERM framework was considered as one of the major changes that ensured a more comprehensive way of managing risk. An intensified importance was associated with the risk governance practices on an organizational level in order to capture all the possible risks that an organization may face. Moreover, according to some of the experts, the conceptualization and the applicability of this newly emerged approach was representing a significant challenge for a number of organizations, the fact that was also confirmed by several scholars and practitioners in the reviewed literatures.

Nevertheless, the principles adopted by the ERM framework draws attention to the importance of the distinctive risk types and their interfered impacts, as R.W. also stated in his argumentation, ERM joins *"…the dots between the various risk types…"*. The necessity of a holistic view concerning the types of financial risks was proven viable both from a theoretical and a practical perspective. The framework extends the risk identification and assessment steps by including the examination of the operational and reputational risks as well.

The operational risks deriving from distinct human errors weren't emphasized and taken into consideration during the course of a risk management process, which then caused critical situations on the long-run. Moreover, reputational risks also became important from a credit ratings' point of view in account of the accurate assessment of an organization's riskiness, since credit rating is directly proportional with the creditworthiness of a particular organization. Hereby, L.B. elaborated on the financial distress caused partially by the subprime mortgages in the USA, where an adequate segmentation and prioritization of the accumulated credit risk factors weren't taken into consideration. Thus, other possible sources of financial risks were included in the ERM processes, which delineates the following understanding stemming from I.Cs., such as *"...other sources of financial risks cannot be ignored either due to their destructive effects on an organization's performance…"*.

Therefore, the framework enhances a collective view of the various risk types due to the fact that they all have to be considered in order to rule out potentially destructive occurrences. In addition, ERM emphasizes the accountability of the risk profile, due to the fact that it's correlated with the risk taking capabilities of an organization. By this means, it was confirmed by R.W.'s conceptualization, that the risk profile of an organization highly impacts the adopted framework due to the fact that the fundamental principles behind its determination might be the same, however its deployment may differ across organizations.

Thus, it draws a correlation between the organization's risk culture and its risk appetite that cannot be viewed as a one size-fits-all aspect. According to this understanding, these two terms differ in their execution based on the strategic goals and objectives set by the respective organization. In conformity with the ERM framework, the risk management is involved in the strategy and objective setting plans that are also influenced by the risk culture and the risk appetite of an organization. The strategic objectives proposed by an organization highly impact the risk management process and its associated steps as well, due to the fact that it restricts or potentially limits an organization's risk-taking capabilities. Thus, both the risk culture and the risk appetite are consistently adjusted to the pursued strategic objectives in order to achieve effective risk related results. This ideology was pursued after the crisis because the organizations started to be more concerned with their financial health, thus an increased attention commenced to be paid on the strategic alignment of the risk appetite and the adopted risk management framework.

Risk culture represents a keystone, while the risk appetite depicts a cornerstone for a sound risk management. Hereby, risk culture involves a certain trade-off between risk-taking and control, thus encloses risk into the risk related decision making process across all organizational levels. While on the other hand risk appetite ensures the understanding of the risk level of an organization by defining the amount of risk an organization may take. Moreover, according to the theoretical and empirical discussions, there is no uniformly accepted standardized approach concerning the implementation of the risk appetite principles. In order to strengthen this statement, R.H. disclosed that risk appetite depends on a number of differing conditions, thus there is no standardized risk appetite framework, which can be implemented universally across all organizations. Thus, risk appetite needs to be consistent with the organizations' own capabilities and is mostly determined by one's industry, company size and market regulations in compliance with the internal policies of the organization. Hereby, a smaller organization will most likely have a higher risk appetite due to the aim of expending market visibility.(M.P.) However, on the other hand the more regulated a company the stricter risk appetite policies will possess, thus according to R.H. there is a correlation between risk appetite and the company's regulatory requirements that frame the extent of the risk-taking actions.

Nevertheless, the importance of the risk appetite stems from its interactive nature in regards to the regulatory requirements along with a certain degree of control. Hence, a lack of regulatory control can result in a highly subjective risk taking behavior which impacts the risk management due to the misaligned risk capacity of an organization. Risk appetite is a key component of the ERM, thus it provides an upper and lower threshold within which risk managers can integrate their risk related decision making process. (R.W.) Therefore, in conformity with this perception, the misalignment of the risk appetite will cause financial turbulences on the long-run, as it was observed during the financial crisis as well. An extensive opportunistic behavior was present during the crisis period in account of a weak regulatory system and the willingness to rapidly amplify an organization's revenues by increased risk-takings. Therefore, during this period a forced financial growth was observed, causing a serious decline in the financial system's stability level. In addition, the crisis was represented by a high risk appetite level, which ignored the rational risk management decision makings. Thus, additional implications and the failures resulting from these vulnerabilities will be elaborated further on in the following discussions.

Subsequently, risk appetite influences the organization's performance in accordance with the loan-to-value and the debt-to-income ratios. The reviewed theoretical materials didn't provide a precise specification of the previously mentioned correlation, however L.B. argued that these internally defined proportions have a strong impact on the working capital of the organization. On the other hand, the ERM principles, allow a more efficient working capital allocation by the optimization of the available resources in order to balance the cost of risk with the cost of control. Therefore, the risk appetite is interdependent on the working capital because it depicts the level of the financial health of an organization, thus a precise estimation of the necessary working capital level can safeguard the company's performance in case an unexpected risk exposure occurs. (L.B.)

Financial instruments such as the Loan-to-Value, Debt-to-Income ratio, Working Capital ratios, Stress Testing and Financial Stability Measures, are supporting the ERM process in order to quantify and measure the financial risks and the potentially resulted losses. Hereby, the applicability of these instruments varies across organizations, thus the researcher decided not to designate their in-depth understanding. This decision was based on their uniformly possessed firm-specific relations excluding an accurate generalization and also on the lack of empirical information regarding their elaborated specifications by the experts. Thus, the means by which these instruments, or many others, are incorporated within the ERM approach depends on the strategic alignment of the framework defined by the organization. Thus, this strategic alignment and its comprehension are ensured by the ERM approach, due to its emphasized corporate strategy implications, although the ERM also stresses that a practical consistency has to in place in order to ensure its success.

Moreover, prior to the crisis, risk management was allowing a more reckless risk-taking behavior across organizations and financial institutions, however after the crisis everybody started to be more concerned about their financial stability and paid an increased attention to the newly emerging enterprise risk management approach. The risk appetite was altering simultaneously with the changing principles of the risk management. Prior to the crisis, organizations were creating credit provision related solutions in order to maintain their competitive advantage on the market, however following the unnatural increase in their financial performance, severe losses had to be encountered when the credit crush occurred. (L.M.)

In conformity with this comprehension, the introduction of the enterprise risk management framework served as an integrated framework which facilitated the formation of a rather proactive than reactive risk culture towards financial risk. Moreover, it highlight the upside perspective of risk in account of a consolidated value adding possibility together with the assurance of a proactive financial risk mitigation process. As it was highlighted several times during the course of the descriptive analysis, one has to adjust and align the holistic framework in accordance to its own strategic objectives along with the incorporation of a periodic revision.

The implications of the interconnectedness associated with the financial risk typology and the supported risk management process was considered significant both from a theoretical and practical point of views. ERM provides a holistic consideration of the risk typologies by integrating the risk management processes into the corporate strategy related plans of an organization, in order to achieve a shared attention towards the downside and upside risks as well. Thus, by this means ERM magnifies the importance of different risk types and their governance.

Subsequently, according to the previous understanding and implications of ERM, it assures a concentration in regards to the components of the financial risk typology and its interactions by indicating a shared attention towards the distinct aspects of the risk management process. This conceptualization stemming from the underlying principles of the introduced holistic framework justifies the answers given by the consulted experts in account of the integrated perception of the risk management components. By notion, ERM embraces seven process related steps that facilitate the effectiveness of the framework. However, it was both declared by the theoretical revision and the descriptive analysis as well, that the number of these steps can alter across organizations due to the fact that the adopted principles by various enterprises are identical in contrary with their decoded understanding and deployment.

Hereby, the ERM lists the following risk management steps that have to be aligned with the organizations' corporate strategy, thus these steps are as follows: establishing the context, identifying risks, analyzing/quantifying risks, integrating risks, assessing/prioritizing, treating/exploiting and monitoring/reviewing risks. Furthermore, basing on the experts' understanding, al the risk management components are equally important in order to depict the strongest and the weakest links, while considering a collective view of the financial risk types. (R.W.) The implications of these aspects have to be embedded in the organizational culture in order to understand the significances carried by their implementation. Moreover, the steps involved in the incorporated ERM highly depend on the business profile of an organization due to the fact that different businesses can form different demands concerning the risk management process.

First of all, establishing the context in which the ERM will be adopted is inevitable from a strategic point of view. Thus, this aspect ensures the understanding of the relationship between the internal and external aspects in conformity with the business environment in which the respective company is operating. P.S. argued that the organizational culture, which is part of an organizational context, can highly impact the pursued risk culture and the applied risk appetite of the enterprise, thus it affects the effectiveness of the risk management and the stability of the financial system within a company. Hereby, establishing an organizational context is crucial in order to synchronize the means by which risk is assesses, managed and communicated to the entire organization. The risk related information and the way through which it is communicated expands the risk of inaccuracy in case organizations are not paying due regards to that. (R.W.) Therefore, ERM ensures the implementation of different risk information in order to ease and improve the risk treatment related decision making process. The relevancy associated with the accuracy of the information and the direct risk related communication will be discussed again further on.

As a result of this comprehension, by taking a closer look at the risk management steps involved in the ERM framework it can be stated that transparency and flexibility are some of the key features describing this approach due to its holistic consideration of the interconnected risk types. This belief is inevitable in order to acknowledge the risks associated with certain transactions or potential counterparties involved in a business deal. Hereby, the descriptive analysis perceives risk identification and assessment as crucial starting points and among the most important risk management steps in account of their provision of inevitable information concerning the types of risks an organization is exposed to (L.B.).

Moreover, risk identification within the ERM framework allows the aggregation of the potential risk exposures and structures them on an organizational level. Therefore, risk identification and assessment serves as a risk management pillar in order to ensure a proactive risk management decision making and action taking. These stages are considered among the most critical ones because if these steps are ignored or not understood appropriately, the organizations might encounter further struggles despite the fact that all the other steps were carried out successfully. (R.W.) Hence, it forms the foundation of an integrated and effective risk management process. It declares a determination of the degree to which a negative impact will affect the financial stability along with the likelihood that this event will occur. Therefore, an amplified attention has been granted to the accuracy of the obtained risk information, which is as relevant as the defined steps themselves. (R.H.)

Consecutively, the risk identification and assessment steps can be viewed in a combination due to their interactively facilitated nature, which provides a scale of aggregated risks that are assessed and quantified by applying different methods. In accordance to the methods, a brief introduction will be provided further on in regards to stress testing analysis, due to the fact that no high importance has been granted to its conception. So to say, analyzing these methods more in-depth wasn't the primary aim of the present study, however a short connotation was considered significant for a better understanding.

Nonetheless, following a systematic approach in accordance to the risk management steps incorporated in the ERM framework, risk analysis points out relevant material changes by quantifying the clustered risks on a periodic basis. Thus, it reveals the risk related pitfalls in accordance to the hidden disruptive impacts that can influence the organization's working capital level. The implications associated with the working capital along with the financial performance of the organization will be further elaborated in conformity with the relationship between the risk management and the financial stability. However, preliminarily to that essential information have to be revealed concerning the risk analysis and the monitoring steps.

Accordingly, risk analysis is inherently crucial due to the fact that it mainly considers the risk estimation through portfolio and financial statements related analysis. The ERM framework enhances the implementation of a portfolio risk perception as well due to the fact that portfolio related analyses are able to diversify the potential risks faced by an organization. (L.M.) Hereby, portfolio management integrates a risk layering approach, which allows the formation of an aggregated view of risky portfolios along with their examinations. (L.B.) The risk associated with a specific portfolio owned by the organization may impact the smoothness of the financial system in case the risk diversification is not assessed and carried out prudentially. (M.P.) Therefore, portfolio analysis raises awareness of the potentially occurred risk exposures, although an organization has take into account that not all the financial risks can be diversified by an integrated portfolio management process. Thus, there are some risk types, characterized by an undiversifiable nature, which cannot be eliminated by simple diversification, but they need an extended attention in terms of their treatment policies.

Continuously, financial analysis are also considered to be equally important and a commonly used method to assess one's financial performance level. It rationalizes a clear overview in regards to the financial stability of an organization, which is also linked to its risk profile. In addition, it provides crucial information in relation to the smooth integration and prioritization of the additional risk management processes. Therefore, the adequacy of the shared information is again very important, however some organizations are not able to obtain up-to-date risk related information due to the lack of a direct communication. (L.M.) This risk of inaccuracy can occur regardless of the effectiveness of the integrated ERM framework, due to the fact that there are a number of external factors that can harden the acquisition of such updated risk information. Subsequent to these argumentations, a number of elements have to be considered and accordingly evaluated in order to depict the weak links of an organization that can adversely alter the overall performance. (L.B.)

Nevertheless, the previously introduced financial instrument, namely the stress testing analysis, can highlight these potential weaknesses. Hereby, its primary aim is to ensure accurate risk information in conformity with the anticipation of an exposure. By assessing different vulnerabilities resulting from "what if" scenarios, this method provides the quantification of distinct extraordinary situations that may cause further disruptions. This financial instrument was uniformly highlighted both by the theoretical and empirical discussions as well. This, and many other instruments, is facilitating the ERM process in order to sustain a profound risk governance process, although one has to take into account that their recognition and applicability varies across organizations and financial institutions. Moreover, the necessity of such methods is also subject to the particular industry and the size of the organization or financial institution, thus these are among the main reasons why this method won't be stressed out within the further ERM related elaborations.

Subsequently, the treatments strategy chosen to be pursued by any organization is also essential due to the fact that it guides the enterprise risk management process. Therefore, these treatment actions will highly depend on the organization's establish risk profile and its indicated risk appetite. This correlation can be depicted by the fact that the treatment strategy supports the responsibility sharing established by the senior management level, which is also shaped in accordance to the organizations risk bearing capabilities. Thus, as it was argued before, a well determined balance needs to be created by associating the strategic objectives of the particular organization. For instance, a high risk avoidance is not effective in case the organization wants to gain market visibility and aims to expand its operations. (M.P.) While, on the other hand, an organization with a strong market position and financial performance might consider either the entire acceptance of an implied financial risk, or is willing to accept only a proportion of the expected risk, or will transfer the downside risk exposure and will maintain only the upside perception of a certain financial risk.

Continuously, ERM outline the importance associated with the monitoring and reviewing aspects of the entire risk management process. In accordance to their impacting nature, these elements have to be aligned with the regulatory requirements established by the policy makers, in order to follow a consistent guideline, which also considers the different market regulations. Therefore, ERM offers the possibility of implementing streamlined internal policies and regulatory guidelines, however they have to be aligned with the monitoring and controlling steps adopted by an organization. A failure to do so will result in a false prediction of the market and its associated risk factors, thus resulting in an inefficient standard by enhancing the ignorance of some of the relevant uncertainties. Hereby, this failure will give space to a number of risk related pitfalls on the long-run, and further empowers an opportunistic behavior in terms of risk-taking.

As a result of this understanding, ERM considers reviewing and monitoring as an early warning system, which points out additionally emerging risks stemming from the process or market related imperfections. Moreover, it provides a controlling mechanism, which ensures the seamless operation of the management process. It ensures the establishment of quick risk treatment possibilities and serves the formation of adequate action plans in order to prevent further unexpected risk disturbances. (L.B.) Additionally, an organization has to align the concept of monitoring to the adopted ERM framework, due to the fact that its notion can be comprehended and employed distinctively, in relation to one's strategic objectives. However, despite this specificity related to its implementation, ERM emphasizes the necessity of following a regulatory framework within the executed risk management steps in order to ensure efficiency to the highest extent possible.

Consecutively, this particularity of the framework is essential in favor of limiting and to some extent standardizing risk-taking among organizations. (L.B.) The exemplification of this essence stems from a retrospective perspective of the financial history, which confirms a number of cases when financial risks were adequately identified and assessed but their consideration were excluded from the actual risk related decision making process. This phenomenon was stemming from a weak regulatory approach. (I.Cs.) Therefore, the establishment of a precise regulatory framework provided by the ERM approach is not inherently enough, it needs severe enforcement, period adjustments and an assessment of the relationship between the different business units and the initially indicated risk appetite level of the organization in order to ensure that the early assessment of the financial risks are still viable after the reviewing s well. This comprehension is important because the acceptance level of a particular financial risk may alter over a period of time and has the potential to become threatening only by taking into consideration the impacts that may have on the organizational performance.

Hence, in conformity with these implications regarding the aspects forming the entire enterprise risk management process, the discussion will move forward in order to get a better understanding of the interconnectedness between ERM and the financial stability. Therefore, ERM supports a prudent risk management process which is inevitable in relation to the decision making process. Moreover, it limits and restricts the potentially occurring opportunistic behavior, which was subject to a destructive event by rapidly evolving into a financial crisis. A rational enterprise risk management framework facilitates a decrease in the bad debt reserve, which contributes to the increase of an organization's liquidity level, thus it enhances the overall performance which is linked with the financial system's health of an organization. Risk management depicts the amount of working capital reserve a company needs to possess in case a risk exposure occurs. The particularity of this reserve is essential because it facilitates the financing of a certain encountered risk. (L.M.)

Subsequent to this understanding, an apparent prudent risk management allows a number of organizations to prevent the reoccurrence of the fundamental causes that fostered the previous financial crisis. (I.Cs.) Hereby, risk management contributes to the financial stability with a small proportion in conformity with the allowance of a systematic financial risk assessment, which fosters the establishment of accurate action plans. (L.M.) In addition, with the help of ERM, organizations can proportionally align the amount of reserves cash needed in case a risk exposure occurs. As a result, an exemplification of this facilitation can be depicted as follows arguing that in case of a high probability of payment default can be observed, the organization is able to predict a higher working capital reserve in order to finance the possible negative occurrences.

Nevertheless, financial stability depends on the sustained amount of working capital in account of a strong proportional relationship which characterizes the organization's risk bearing capabilities stemming from the reserve handled for risk financing. Hereby, it is due to high importance that the working capital has to be tailored in a proportional manner within a consideration of the financial risk taken by the organization. Following this flow of thoughts in relation to the implications deriving from an organization's working capital level, a balanced equity and liquidity position is important due to that fact that it stand for a stable financial system, describing a high correlation between the organizational performance and the financial stability. Therefore, an interfered relationship can be observed between risk management, organizational performance and financial stability.

Subsequently, the risk of failure may be amplified in case any of the risk management aspects or the financial stability measures is not perceived significant. Thus, deriving from this understanding, financial stability measure such as GDP, volatility level, country risk or any other elements are crucial due to the fact that they can alter the entire risk management process. Hereby, as a result, financial stability measures can have a direct impact together with an indirect influence by taking into consideration the risk management process. (L.M.)

Consecutively, as it was discussed before, the organizational culture highly impacts the adopted risk culture which is in correlation with the pursued risk management process and financial stability as well. Thus, a precise overview and alignment is necessary in case of a sustainable risk structure, which ensures an effective risk management process and a self-supporting financial system.

3.1. Reflection: How well data analysis relates to the literature review?

This segment will delineate a short summative reflection in relation to the theoretical implications of the risk management process by contrasting it with the data presented in the descriptive analysis part of the present thesis. Hereby, this elaboration will argue the extent to which the data analysis relates to the discussed literature review based on the holistic view of the enterprise risk management approach.

Furthermore, the introduced literature review was necessary in order to gather an in-depth understanding of the ERM framework by reviewing different perspectives presented by a number of distinctive scholars and practitioners. The conceptualization of the ERM framework depicts a holistic view of the risk management approach by elaborating on various process related steps through which one can achieve an effective risk governance process. An overview of the current framework ensured the formation of the problem statement, the proposed research questions and the establishment of the overall assumption, in accordance to which such a management approach impacts the financial stability of any organization. Hereby, in order to verify this assumption and to answer the research questions an investigation had to be pursued to assure their viability.

Simultaneously, the descriptive analysis presents and argues the different perspectives stemming from the consulted experts in relation to the risk management process, its implications and its inherent impacts. The consistent analytical discussion also serves as a part of the initial problem statement's justification, while depicts the theoretical and the practical accountability of the risk management process along with a widespread comprehension of the complexity characterizing such a management process. In conformity with one of the interviewed experts, possessing a precise framework is necessary in order to bridge the theoretical gaps, however one has to make sure that the right people will execute the principles of such a risk management framework in order to avoid practical gaps. Thus, as a result of this understanding an embracing framework is not sufficient as a stand-alone aspect if the organization lacks the right execution methods.

Moreover, several similarities and differences can be drawn from the given answers, thus this stems from the fact that the interviewed experts are and were positioned in different business sectors within the risk management field. This diversification can be observed in terms of the importance associated with different aspects of the risk management process, however an overall understanding was confirming the principles of the holistic framework. More precisely, they have all emphasized the necessity of a periodic revision and an apparent regulatory management embedded in the overall process in order to enhance the effectiveness of the risk management process. Hereby, the data analysis proves viable the conception framed by the theoretical comprehension of the risk management process.

In addition, one of the experts highlighted that the introduction of the enterprise risk management process and the holistic view of the risk types across all business units within an organization, formed the foundation of an effective risk management process. In relation to this statement, the literature review was confirming the importance associated with this approach and with its integrated processes. Subsequently, both the reviewed literatures and the experts were reflecting on the financial crisis in order to highlight the weaknesses of the previous implemented approaches and to outline the turbulences caused by a weak governance structure. Therefore, this correlation outlines the importance of this newly emerged risk management framework, which may bring added value to several organizations by broadening their understanding regarding the interconnectedness of various risk types and their ramifications. Hereby, it was also mentioned by one of the experts, that the silo approach adopted prior to and during the crisis caused certain ambiguities concerning the accumulated impacts of the different financial risks types. In accordance to the risk types, the descriptive analysis also outlined the implications of the reputational risks and the operational risks that weren't taken into consideration to such a high extent. This lack of a comprehensive perspective was solidly confirmed by the literature review as well.

Consequently, several aspects of the descriptive analysis were accommodating the information provided by the literature review. Thus, a high conformity can be depicted between the data analysis and the theoretical revision. However, due the ERM's complexity in regards to its conceptualization, both the literature review and the consulted experts were confirming that regardless of the fundamental principles followed by a number of organizations, their applicability can vary across industries and business sectors. Thus, a number of different elements can impact the effectiveness of an adopted risk management approach.

4. Justification of the Research Questions

Preliminarily to the commencement of the present thesis three research questions were indicated in order to facilitate and frame the course of the entire investigation. First of all, the researcher wanted to verify the importance stemming from the potentially occurring financial risks and their management along with the impacting aspects of the interconnected risk management components. Moreover, based on the obtained data and the reviewed literatures, several risk governance related failures were meant to be highlighted in order to assist further recommendations in the light of a strengthened and more stable financial system from an organizational perspective. Subsequently, these questions were supporting the analysis of the initial problem statement and the justification of the proposed ultimate assumption. Hereby, the research questions were guiding the data gathering and management part of the current study by testing the relevancy of the introduced theoretical framework in relation to its practical applicability.

Hereby, prior to the justification, the viability of the research questions shall be outlined due to the fact that both the literature review and the descriptive analysis were supporting their inherent essences. In conformity with their credibility, it can be stated that the pursuit of a holistic risk management process is inevitable in order to capture and comprehend all the potential risk exposures an organization may face on a daily basis. The introduced ERM framework and the data gathered from the expert interviews underline the attention that has to be devoted towards the different apparent risk types and their governance practices. This conception provides an extended overview of the distinct risk classifications. Financial risk, by its notion, refers to an exposure with an undefined degree of uncertainty, which can be viewed as a combination of the probability and the frequency of a specific event. Therefore, its understanding can be depicted by any difference resulting from an additional risk-taking activity in order to increase the economic output of the organization's business activities. It can be examined from a macro- and a microprudential perspective, disclosing any unusual fluctuation in regards to an organization's overall performance. Thus, these fluctuations are stemming from internal or external environmental changes that require a holistic view in order to join the dots between the various risk types.

Nonetheless, according to this comprehension, regardless of the size or the business sector of an organization, they uniformly have to adopt certain risk mitigation approaches in favor of a profound financial efficiency. Thus, the literature and the data analysis support the implications of a holistic enterprise risk management framework, which enhances a collective view of risks together with the development of an efficient capital allocation by optimizing the available resources in order to assure the additional value creating potential of risk. Furthermore, the holistic framework associates a high importance to the evolution of an accurate risk culture by emphasizing risk awareness and the establishment of a strategically aligned risk appetite.

It was confirmed that risk appetite is fostering an organization's fair value by ensuring a solid cornerstone for a sound risk governance process. This assurance is portrayed by the estimation of an upper and lower threshold in terms of risk-taking intentions. Therefore, it perceives the amount of risk an organization is willing to take in order to meet its strategic objectives and certain risk related trade-offs. In addition, risk appetite forms the baseline for the overall direction of the risk management process, thus the internal policies have to be aligned with the risk-taking capabilities to balance its determination. It supports a rational risk governance approach by viewing the strategically defined organizational capabilities.

Therefore, internal policies have to be in place to rule the organization's risk appetite in conformity with external market regulations, in order to avoid an adverse effect.

By this means, risk appetite is a key component of the risk management process, which drives the actions taken by a number of organizations, thus in case it is not regulated and monitored periodically it can cause disruptive ramifications concerning the organizational performance. Hereby, the working capital capabilities have to be aligned with the risk appetite level of an organization, in account of an interference which represents their nature. In case an organization is pursuing an excessive risk-taking behavior, first it has to assure that its internally defined minimum credit parameters are adjusted accordingly to the apparent working capital potentials. This relationship stems from the fact that the working capital level of a company represents the sustainability of their financial health in case an unexpected risk exposure occurs. Therefore, a high risk appetite level can cause opportunistic risk-taking behaviors without taking into consideration the organization's financial strength, thus ignoring a rational risk management approach and by this enhancing a weak governance strategy.

Consequently, a holistic risk governance framework represents a complex process involving several different interrelated aspects that serve the sustainability of the financial system by taking into consideration the dynamic nature of all the inherent composites of the process. Moreover, the established policies and reviewing aspects have to be aggregated, standardized and implemented appropriately in order to ensure a systematic approach towards the risk related decision making process.

In order to do so, the ERM assures a generic risk philosophy across all business units to enable a common risk perspective along with an integrated risk management process, which alters from the previously adopted silo approach prior to and during the financial crisis. Therefore, the accuracy of the risk related information plays a significant role in the development of a suitable risk treating action which considers an adequate estimation and mitigation of the encountered financial risk. Nonetheless, another important aspect of the holistic framework stresses the upside perspective of risks, thus regards the consolidation of a value added opportunity stemming from an effective risk management process. Hereby, it empowers a proactive risk culture by periodically reviewing the risk profile of the organization while ensuring a multidirectional approach towards risk, which classifies the risk related interactions across the entire organization. Most importantly, ERM maintains a profound risk management framework by deeply comprehending the correlation between the various risk types and the impacting relationship representing the process steps involved in the establishment of the entire frameworks. Therefore, the organization cannot focus only on one of the steps because they may increase the risk of failure.

Subsequently, the second research question debates the impacting aspects of the risk management components by aiming to point out one of the most crucial elements of the entire process. However, according to the literature and the descriptive analysis, one has to take into account the interdependent nature that exemplifies the relationship between these steps, thus they cannot be entirely abstracted from each other. In conformity with this, one of the experts highlighted that all the risk management components have to be considered in order to depict the strongest and the weakest links as well. Thus, in case this understanding is not embedded in the organizational culture any of the steps can cause a destructive domino-effect on the long-run, which affects the overall financial stability. Hereby, the most important aspect concerns the recognition of the interconnectedness portraying the distinctive risk types. In conformity with this perception, it has been justified that the most important impacting component of a risk management process highly depends on the business profile of an organization. This diversity in terms of the business and risk profile of an organization can form different demands concerning the overall process, thus enhancing altering implications of certain aspects.

However, despite this strong impacting linkage among the process steps, both the literature and the consulted experts devoted a slightly higher importance to the identification and the assessment of the financial risk types. These two steps represent the major staring point in the governance process which fosters the understanding of the risks associated with the different economic events. Therefore, in case the identification and the assessment steps are ignored the organization might encounter further struggles despite the fact that all the other management steps were carried out successfully. Accordingly, these starting points provide the organization with inevitable information concerning the risks they are exposed to, thus one can proactively establish an accurate risk related action plan in order to sustain their financial health. Risk related information embraces and helps the quantification of the exposures, thus it is as relevant as the involved aspects themselves. Hereby, transparency and flexibility are some of the key elements that are involved in all the management aspects in order to ensure an effective process. Furthermore, risk identification and assessment supports the organization's risk profile, which, in conformity with the financial system's stability, frames the appropriate risk appetite level in terms of risk-taking. So to speak, they structure the encountered risks on an organizational level simultaneously with the formation of a stable risk management pillar, which supports the quantification and the further analysis of the distinct risk exposures.

Subsequently, analyzing, reporting and monitoring financial risks are also crucial elements of the management process due to their inherently influencing nature. Risk analysis facilitates the materialization of the uncertainties along with the estimation of their severity and the impact they may have on the financial performance of an organization. Moreover, it provides a guideline concerning the risk treatment step of the process, due to the fact that by analyzing the potential risk exposures, an organization can decide upon the treatment strategy that it will be pursued further on. However, a selected treatment strategy can be effective only if it is communicated, reported and monitored accordingly.

Hereby, following a well-defined regulatory framework together with a periodic monitoring aspect was proven necessary in order to sustain the efficiency of the implemented process steps. A regulatory framework aligned with the corporate strategy of the organization may limit and standardize the risk-taking capabilities across business units within an organizational context. Therefore, a failure stemming from the previously mentioned alignment will result in a false prediction of the market related risk factors, while allow the provision of an inefficient standard in relation to a high level of ignorance. Risk pitfalls may emerge on the long-run in case the identified and assessed risks are not included in the actual decision making process. This deficiency stems from a weak regulatory governance approach, which was also describing the financial crisis' period.

Consequently, the implications of the aspects shaping the management process have to be embedded in the organizational culture in order to enable a common risk aware perception across all business units. Hereby, it is challenging to point out the most important aspect which significantly affects the stability of the financial system, due to the amplified correlation which declares the relationship between the risk management components. As it was discussed it highly depends on the business profile and the risk profile of an organization, thus an accurate the organization has to prioritize the aspects in a clear alignment with its strategic objectives. Different business sectors emphasize the importance of different aspects, however one common understanding can be highlighted in relation to the sustainability of the financial stability, namely: a mindful risk identification and risk assessment process is relevant in order to form the bases of the entire framework. In addition, integrating, analyzing, treating and monitoring the different financial risks are also important in order to form a collective risk perception across the organizational level. Nonetheless, the regulatory principles of such a risk management process have to be established, aligned and implemented in the decision making process in order to ensure an ultimately positive financial performance and an effective risk governance.

In conformity with the third research question, primary data was gathered about the mistakes and the failures of the risk management process prior to the introduction of the ERM framework, due to the fact that the literature review of the present thesis was more focused on the expansion and the understanding of the newly emerged principles. Some of the failed aspects were also highlighted in the theoretical conceptualization, however more detailed and practical information was collected during the performed expert interviews. The researcher considered that following a contrasted review of the theoretical and practical elements shaping the enterprise risk management, exemplifying the process related failures through obtained direct experiences would contribute with a higher extent to the viability of the further recommendations.

Nevertheless, the failures and the severe mistakes highlighted are reflecting the risk management prior to the financial crisis. Therefore, prior to this financially destructive event, a silo approach was representing the risk management processes. This approach was briefly detailed previously therefore its conception won't be subject to repetition. Hereby, the risk management approach wasn't an integrated part of the risk related decision making process, thus this ignorance was increasing the chance of newly emerging risks. By confirming the experts' understanding, it can be cited that all the management steps are equally important due to the fact that any of them can alter the outcome of the decision making.

In addition, other failed aspects were emphasized during the course of the descriptive analysis, such as one of them depicting the misidentification of the potential financial risks. This consideration can be exemplified with the subprime mortgages in the USA that were lacking a precise identification and assessment of the accumulated risk factors. Hereby, this lack of accuracy in terms of the risk factors led to a critical financial distress once it reached its highest extent. Moreover, a number of organizations and financial institutions went bankrupt due to missing internal regulation and monitoring concerning the identified financial risks. Thus, this allowed the formation of a culture of greed and opportunistic behavior that was illustrating the period prior to the financial crisis. These areas may have been small in numbers but their aggregated impacts were significant from the financial stability's perspective. Additionally, there was a willingness to achieve increase in terms of revenues and organizational performance, however this will was exercised in an ineffective environment.

Subsequently, regulators came under a lot of criticism due to the allowance of a weak governance structure. This aspect has been emphasized as one of the major failures of the risk governance prior to the introduction of the ERM approach. Moreover, the data gathered has supported the importance of understanding the implications of the theoretical and practical applications of the risk management process. However this comprehension was missing prior to the financial crisis, thus several biases were resulting in regards to the misinterpretation of certain processes. Therefore, these misinterpretations were mainly stemming from the involved people's inability to act upon their responsibilities appropriately. This phenomenon was highly representative during the crisis period due to lack of clear understanding, thus a number of process related failures were observable. Hereby, one of the biggest challenges was to deploy the components of the risk governance process and to obtain the right human force to execute these processes. Thus, despite the fact that organizations believed that they have controlled, they have rather failed to do so in practice.

Nevertheless, moving forward from the governance related failure to the information related mistakes, one can emphasize the lack of updated risk information and the direct communication. Information plays a crucial part in the execution of an effective risk management process, however during the crisis period this aspect was missing. Thus, an accurate overview was missing concerning the trends of an organization's performance. Furthermore, the high level of inaccurate information resulted in critical misinterpretations concerning the severity of the encountered risk types, hereby intensifying a more reckless risk-taking behavior. Synthesizing the obtained information was considered as a major weakness of the financial risk management apparent prior to the crisis.

Notwithstanding, direct communication, trustworthiness and human errors were also key contributor factors to a failed risk management process. In accordance with the different communication channels, some of the information got lost or was rather retained, a phenomenon which later on affected the entire financial system's stability causing a severe financial turbulence. Hereby, a number of failures and mistakes have been listed previously with the aim of providing further recommendations in order to prevent the repetition of such breakdowns.

Subsequently, it had been extensively emphasized that the effectiveness of a risk management process, together with its sustainability, is highly correlated with the strategic objectives of an organization. This results from the complex nature of the risk governance process, which also outlines the key aspect concerning the effectiveness of a process, thus this notion lays in the understanding of the particular drivers of the organization and the their encountered risks. There is no flawless risk management approach, however one has to understand that not every organization will face the same risks and challenges, thus different organizations may deploy different frameworks or they may focus their resources only on certain components of the selected framework. Hereby, holistic and collective views of the financial risks are necessary in order to ensure that the incorporated framework assures efficiency on the long-run.

Moreover, ERM shouldn't be viewed as a static risk management approach, which once gets implemented and will function without any further adjustments. Thus, it is recommended to pay an increased attention to the upcoming challenges due to the fact that some of the risk factors can be eliminated or managed internally. However, again others are more complex external aspects that cannot be controlled seamlessly in case of an apparent ignorance towards environmental changes. In addition to this understanding, an organization has to focus on the implications stemming from its structure and strategic objectives because these represent the key aspects of an effective risk management process. Thus, every component has to be integrated and aligned accordingly with the corporate strategy of the respective organization.

Nevertheless, an increased level of oversight can enhance the regulatory policies related compliance in order to sustain a precise reviewing and monitoring from a sustainable financial system's perspective. This compliance will also amplify the accuracy of the obtained risk related information, thus supports a rational decision making. Lastly, further recommendations can be exemplified such as information concerning the industry, organizational structure, adequate financials and forecasting in order to compile with a mindful risk-taking. In addition, lessons learnt from previous failures have to be subject to a periodic revision to ensure the repetitive occurrences of such failures.

Consequently, it is important to have an embracing framework, however the people who are executing the processes of that particular framework have to mindful about the employment due the fact that it can differ significantly across organizations. Thus, recommending one specific sample of a risk management framework which can be uniformly used by all the organizations won't be a wise idea because it won't enhance their security towards financial risks. Hereby, as a concluding remark, ERM is a precise holistic framework with a number of steps involved, however its effectiveness will depend on the corporate strategy of the organization and their capacity to deploy this framework to its highest extent.

5. Justification of the Assumption

In conformity with the initial assumption, a strong interconnectedness portrays the relationship between risk management and financial stability. A rational risk management ensures the decrease of certain reserves which therefore increases the liquidity of an organization while supporting an overall positive performance linked to its financial system's health. Financial stability can be measured based on the equity and the liquidity position of an organization. Thus, a strong interaction can be observed between the risk management process, working capital and financial stability. This relationship stems from the fact that financial stability is dependent on the working capital of an organization, due to the fact that there is a proportional correlation concerning the risk bearing capabilities of an organization deriving from the reserves maintained for financing possible risk exposures. Thus, according to this understanding in case of a risk management process, the working capital of the organization has to be tailored proportionally in regards to the accepted financial risks, in order to sustain its financial strengths. Failure to do so will result in critical losses and financial turmoil.

Additionally, in order to provide a more in-depth elaboration on this aspect, it can be stated that working capital serves as a solvency ratio, which assesses the necessary amount of cash an organization has to possess in order to perform efficiently. Hereby, a well balanced equity and liquidity position exemplifies a stable financial system from an organizational perspective. Therefore, strong interference can be observed between the organizational performance and the financial system's stability. Equity and liquidity ratios are facilitating the quantification of the potentially expected loss occurrences and also the working capital needed in case of an unexpectedly high risk-taking.

Nevertheless, in favor of a systematic financial risk identification and assessment process, risk management contributes with a small proportion to one's financial stability by fostering the establishment of certain risk treating action plans in order to provide a proactive approach towards financial risks. By this means, within the risk management process, managing the organization's portfolio risks can contribute to its financial stability as well. This conceptualization is underpinned by the fact that the risk associated with specific portfolios can impact the smooth functioning of the entire system, thus the diversifiable portfolio related risks have to be determined and diversified accordingly. In addition, the financial stability measures such as GDP, volatility, country risk and many others, also have to be considered during a prudent risk management process due to the fact that these measures have a direct impact along with an indirect influence on the outcome of the risk governance process.

Consecutively, an increased attention has to be devoted towards the regulatory requirements that can shape the outcome of the management process due to the fact that these regulations can influence the stability through the applied risk treatment approach and the defined risk-taking abilities. Hence, the organizational culture can simultaneously impact the risk management process and the financial stability in case a precise risk structure and risk profile related overview is missing. As it was preliminarily discussed, an adequate risk structure and risk profile can facilitate the establishment of the necessary working capital, which has to be in place to support the financial performance of an organization. Hereby, as a result of this comprehension it can be justified that there is an indirect impact between risk management and financial stability, and more precisely the weaker the risk governance the greater the risk of a financial distress occurrence, which causes financial instability.

LIMITATIONS

In this segment the researcher would like to highlight certain limitations that were accompanying the development of the present thesis. Firstly, in accordance to the progression of the present study, several limitations emerged which required certain adjustments and reconsiderations during the investigation process. Due to the complexity of the problem statement and the research questions, one of the first generic limitations can be depicted by the time frame given in order to carry out a viable and justified research. However, after substantially overcoming this limitation another one was stemming from the theoretical literature involved. This was exemplified by the limited amount of credible theoretical discussions based on the enterprise risk management. In accordance to its newly emerged principles, only a limited number of highly utilizable and expended literatures have been found which were reliable enough in order to form the substratum of the present thesis.

Nevertheless, another limitation emerged prior to the course of actions taken in favor of the intended expert interviews that were forming the basis of the primary data collection process. The primary data collection was inevitable from the research questions' perspective due to the fact that it facilitated their understanding and correspondences with the indicated problem formulation. Therefore, the limitation illustrates the initial research plan created by the researcher, which incorporated expert interviews also with individuals from organizations as Morgan Stanley, Citi Bank and KPMG, however due to the limited responsiveness from these institutions, the study had to be further limited in order to sustain its accuracy. In addition, the time frame in account of these interviews and a lack of relevant contact information was exemplifying further barriers towards a more extended primary data collection process.

Subsequently, considering the fact that the research was conducted in a more generic way it has to be mentioned that the rationale behind this choice was stemming from the lack of suitable research subjects in the face of on organization. This limitation may be correlated with internal confidentiality issues depicting the considered organization, thus the introduced framework was verified and investigated from a holistic perspective.

Consequently, as a result of these limitations one may consider a further expansion in account of the chosen topic in order to shed lights to even more specific aspects and practicalities of the indicated problem statement according to which there is an interfered impacting relationship between risk management and financial stability from an organizational perspective.

CONCLUSION

This section provides a summative recapitulation in regards to the present thesis by briefly resuming the main information concerning the introduced framework, the implications stemming from the descriptive analysis and the analytical discussion, and the justification of the initially proposed research questions along with the main assumption of the present thesis. First of all, the researcher wanted to investigate the impacts of the risk governance process on financial stability, due to the fact that financial stability portrays the financial health and strength of any organization or institution, thus it possesses the capacity which is crucial in order to operate accordingly under a wide range of internal and external circumstances. Furthermore, deriving from its complexity, financial stability can be impacted by excessive risk-taking, ignorance, lack of consistent governance policies, just to name a few factors. Therefore, in order to control these influencing factors, risk management is an integrated pillar of the system which ensures financial stability.

Financial markets provide an imperfect and ambiguous environment where a reactive action pursued by any individual can influence the outcome of certain events, thus financial stability is interconnected with the systematic and unsystematic changes of the environment. In conformity with this, the newly emerging principles of the enterprise risk management framework got introduced after a destructive change in the environment causing a critical financial distress, thus this approach provides a holistic view of the various financial risk types and their impacting nature. Hereby, to understand the implications of such a framework, a literature review was carried out with the aim of a theoretical discussion in order to gather a more in-depth understanding of the relevancy associated with the financial risk management.

Hence, the ERM's complexity stems from its incorporated holistic view, which integrates risk governance practices into the risk related decision making process on an organizational level. By this means it can be defined as a systematic, proactive and forward-looking process which is implemented across business units on every organizational level. In addition, it emphasizes the importance of a risk aware organizational culture along with the establishment of a strategically aligned risk appetite level. Thus, in order to understand the complexity of such a governance process three main research questions were proposed preliminarily which guided the framework's comprehension. Hereby, the conception and the applicability of the holistic framework were discussed with the facilitation of the results stemming from the conducted expert interviews.

Subsequently, these questions were supporting the indicated problem statement and the justification of the commenced assumption. The acknowledgment of the financial risk and its governance was proven significant from an organization performance's perspective, due to the fact that the collective view of the financial risk, provided by the holistic framework, enhances a prudent management process which enable an organization to focus on every steps involved in the process. Moreover, the organizational performance is correlated with the financial system's stability, thus it is important to ensure a rational risk related decision making process by considering the classified interactions across all business units. In addition to an enhanced holistic view of the different risk types, an increased importance was dedicated towards the risk management process in account of the development of an efficient capital allocation by optimizing the available resources.

Continuously, an interdependent nature exemplifies the relationship between the risk management steps, thus all the components have to be taken into consideration in order to highlight the strongest and improve the weakest links. Hereby, it is important to acknowledge that the diversity concerning the business and risk profiles of an organization can alter across business sectors, thus forming different demands in relation to the overall process. By this means, one common understanding can be highlighted in regards to the sustainability of the financial system, such as the fact that a prudent risk identification and risk assessment process is essential in order to form the bases of the entire framework. However, the remaining steps cannot be ignored either due to their impacting nature, thus all the aspects can impact the financial stability if they are not implemented accordingly in conformity with the strategic objectives of an organization.

Nevertheless, according to its complexity several risk governance failures and mistakes can be highlighted in order to emphasize the destructive events stemming from a weak governance structure. Thus, a lack of risk related and updated information, direct communication, human errors, opportunistic behaviors, weak regulatory requirements were some of the outlined mistakes, just to name a few. In regards to these failures, a number of recommendations can be emphasized in order to sustain an effective risk management process. By this means, one has to comprehend the particular drivers of an organization along with their encountered risks. Thus, different organizations my deploy different risk management frameworks, however a holistic perception concerning the financial risks is inevitable in order to assure a strategically integrated framework, which due to periodic revisions will maintain efficiency on the long-run. Furthermore, an increased level of oversight empowers the regulatory policies related compliance in order to maintain an effective reviewing and monitoring. Also the accuracy of the risk related information supports a rational decision making process, thus information concerning the industry, organizational structure and strategically aligned risk-taking can amplify the effectiveness of the risk management process. In addition, lessons learnt from previous failures have to be subject to a periodic revision along with well-defined regulatory requirements to prevent the repetitive occurrences of such failures.

Nevertheless, a strong interference illustrates the relationship between risk management and financial stability. A prudent risk management enables the decrease of certain reserves, thus by this increases the liquidity of an organization while supporting an overall positive organizational performance which is correlated with the financial system's health. Moreover, an accurate risk structure and risk profile can streamline the establishment of the necessary working capital needed in order to support the financial performance of an organization during risk-taking activities. Hence, as a result of this understanding an indirect impact can be emphasized between risk management and financial stability. Therefore, the weaker the risk governance the greater will be the risk of a financial turmoil occurrence which causes financial instability.

Additionally, financial stability measures have to be considered during the risk management process in order to outline their directly impacting effects together with an indirect influence concerning the outcome of the risk governance. Financial stability measures play a significant role in the risk identification and risk assessment processes, however a lack of a common framework is representing its aspects. Moreover, not an extended emphasize is concerning the influencing aspects of these measures. Therefore, a well-defined financial stability framework shall be subject to further researches in order to investigate the nature of the relationship between the financial stability measures and the risk management process, and how can one impact the other.

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Appendix 1: Questionnaire

1. What was/is your field of expertise in which you were engaged up to now?
2. How many years of professional experience do you possess in your own field?
3. Why do you think risk management is important?
4. How did risk management alter during the past years?
5. How can risk management impact the financial stability? How would you determine the correlation between them?
6. Which step could be the most important one during the financial risk management process?
7. What would you describe as biggest risk of the risk management process itself?
8. What would you consider as a relevant mistake/failure during the risk management process?
9. Why is risk appetite important?
10. What do you have to take into consideration during a generic risk management process?
11. From a self-supporting financial stability's perspective, how would you describe an effective risk management strategy?
12. What is the role of the regulatory policies within a risk management process?

Appendix 2: Interview with I.Cs.

1. What was/is your field of expertise in which you were engaged up to now?

"Well during my career I have been engaged in several different business sectors, including the banking industry, factoring companies, leasing companies and credit guarantee companies, however these were all within the field of risk management and sales."

2. How many years of professional experience do you possess in your own field?

"Currently I possess 20 years of professional experience."

3. Why do you think risk management is important?

"It is important not only in the banking sector but in any other organizations as well in order to avoid credit losses stemming from financial transactions. I would say that it is mostly important in credit risk management due to the fact that the overall financial risk management covers several different credit risk related aspects. I was mainly involved in the field of credit risk management, thus that's the root of my rationale. Hereby, I would claim that credit risk management entirely differs from other financial risk management approach*es due to its complexity and distinctiveness, however other sources of financial risks cannot be*

ignored either because of their destructive effects on an organization's performance. In addition, market risk management, as being a significant component of the financial risk management, involves more complex financial derivatives in terms of their predictions and diminishing process."

4. How did risk management alter during the past years?

"*Basing on my 20 years of professional experience, the evolution of the risk management has changed remarkably also taking into consideration the risk appetite involved in these governance processes. In 1997 a more conservative thinking was representing the Eastern European banking industry, in contrary with the Western European and American banks, however by the time the increased competition among banks and other non-financial institutions has evolved by easing the loan granting regulations leaving aside some of the important risk factors in order to sustain their competitive advantage. In 2008, a significant drop in terms of the risk appetite slope was observed due to the financial crisis and its destructive ramifications, however in the past 1-1,5 years another slight increase was subject to reflection. The credit market has changed significantly indicating a decreased demand in obtaining bank credits after the crisis, due to the fact that organizations started to be more concerned with their financial system's health. "*

5. How can risk management impact the financial stability? How would you determine the correlation between them?

"*Obviously risk management can influence the financial stability of any organization, in favor of supporting a rational decision making in contrary with sales and investing, thus in these sectors the opportunistic behaviors are highly apparent. Hereby, without a prudent risk management, organizations might encounter again the fundamental causes of the previous financial crisis. Prior to the financial crisis, risk management was not taking a substantial part in the decision making process concerning investments or loan granting."*

6. Which step could be the most important one during the financial risk management process?

"*All the risk management components are essential in order to sustain a viable risk governance structure, however a slightly higher importance should be associated with the risk analysis step and the prior steps have to be integrated in the risk related decision making process in order to avoid disruptions. There were many cases in the financial history, that the financial risks were appropriately identified and assessed however they weren't included in the actual decision making process concerning a particular transaction. Monitoring is also* *important from a risk prevention perspective because a number of additional emerging risks can be pointed out and managed accordingly."*

7. What would you describe as biggest risk of the risk management process itself?

No relevant answer was provided.

8. What would you consider as a relevant mistake/failure during the risk management process?

"I would say that one of the biggest mistakes concerning the risk management can be depicted by the fact the risk manager doesn't possess all the relevant information, including also soft information, which is needed on order to make a certain decision. Moreover, the synthesizing of the obtained information is equally important in order to depict the most relevant aspects of the gathered information."

9. Why is risk appetite important?

No additional information was provided.

10. What do you have to take into consideration during a generic risk management process?

"All the components of the risk management process are equally important in order to sustain an effective process, thus it is enough if one of the steps is not taken seriously and it can cause a critical domino effect on the long-run."

11. From a self-supporting financial stability's perspective, how would you describe an effective risk management strategy?

"Industry, financials, company structure, owner, information, historical data, forecasting – regards to high importance considering the risk related decision making process and a holistic picture is needed concerning all the influencing aspects in order to make the final decision."

12. What is the role of the regulatory policies within a risk management process?

"Recently several regulations have been introduced in order to maintain a self-supporting risk management department in any organization, thus policymakers have strengthened the regulations in order to form a ruled guideline in terms of the risk management processes and risk appetite. It has to be a separate department which considers also the interactions between distinct business units, however this wasn't the case concerning the traditional risk management approach. The regulatory approach towards the risk management process can also influence or restrict one's risk appetite."

Appendix 3: Interview with R.H.

1. **What was/is your field of expertise in which you were engaged up to now?**

"I was working 4 years in GE WCS as risk underwriter and 4 years in a Mexican construction company as a national credit director."

2. **How many years of professional experience do you possess in your own field?**

"All together I possess 8years of professional experience."

3. **Why do you think risk management is important?**

"*Risk management possesses a high importance due to the fact that there are several financial and non-financial institutions that have to meet certain regulatory requirements concerning the risk governance practice, thus if we take the financial crisis as an example, we can clearly see in account of a missing regulatory principle the risk management wasn't carried out appropriately causing critical financial distresses. A holistic risk management framework is significant in order to have a comprehensive overview of all the potential risks which can impact the organizational performance. Thus, for instance in case of operational risk, rules regarding the directory boards' transportation were implemented, which were never considered before."*

4. **How did risk management alter during the past years?**

"I started working in the field of risk when the financial crisis occurred, thus in that time there was no efficient risk management because the possibility of not granting a credit limit was not an option, but they rather found a way how credit limits could be given to companies and by doing so everybody was supporting a weaker regulatory environment in order to sustain their competitiveness. They were trying to create solutions in order to obtain as much profit as it's possible, thus leaving aside the assessment of the associated risk occurrences stemming from a particular transaction. Risk management couldn't establish firm restrictions concerning the credit limit granting activities because of the intensified competition. However, nowadays the risk management has the possibility to stand by or ignore a certain possibility if it is considered to be too risky compared to the rate of return. Organizations started to be more systematic by measuring the benefits and the odds of the risky transactions."

5. **How can risk management impact the financial stability? How would you determine the correlation between them?**

"*The credit risk management enables the decrease of certain reserves and bad debts which can increase an organization's liquidity, thus its overall performance which is linked with the* *financial system's heath of a company. Reputational risk can also diminish an institution's financial performance due to the lack of the business that can be carried out under their name – this influences the credit rating of a company which is again linked to its overall performance."*

6. **Which step could be the most important one during the financial risk management process?**

"*During an effective risk management process all the identified financial risks have to be simultaneously taken into consideration, because it would be hard to distinguish between their importance and that would affect the ultimate decision making process. Risk analysis is inherently crucial, however obtaining all the necessary information needed during the course of the management process is as relevant as the management steps themselves. A financial institution may lack the soft information about a company's background, while an industrial institution is mostly in full possession of these data."*

7. **What would you describe as biggest risk of the risk management process itself?**

"*Any of the steps can alter the outcome of the risk management which will most likely have a negative impact on the organization."*

8. **What would you consider as a relevant mistake/failure during the risk management process?**

"I cannot highlight one step which would be more important than the other, because every step can alter the decision making process."

9. **Why is risk appetite important?**

"*Internal policies should be in place in order to rule and maintain the organization's risk appetite, however this may differ among companies thus there is no standardized risk appetite framework which can be implemented, however it has to be adjusted to the company's organizational capabilities."*

10. **What do you have to take into consideration during a generic risk management process?**

"*Country specific and industry specific information are important in order to assess the riskiness of a certain country (influences the rating system) with which an organization wants to do business."*

11. **From a self-supporting financial stability's perspective, how would you describe an effective risk management strategy?**

No additional information was provided.

12. **What is the role of the regulatory policies within a risk management process?**

"*The more regulated a company the stricter risk appetite policies will possess to restrict the unweighed risk related decision making process by including the risk prioritization aspects in order to assess the adequate risk appetite. Thus, the smaller a company the smaller risk appetite it will have. Hereby, it is partially based on subjective judgment the internal regulations are not so strict.- during the crisis the risk appetite was highly subjective, which resulted of the financial system's breakdown of many too-big-to-fail companies."*

Appendix 4: Interview with L.M.

1. **What was/is your field of expertise in which you were engaged up to now?**

"I started working in the banking sector within the field of credit risk management, thus for several years I was a risk analyst and currently I am pursuing the risk underwriting profession."

2. **How many years of professional experience do you possess in your own field?**

"Well all together I have 17 years of experience in the field."

3. **Why do you think risk management is important?**

"*Risk management is important due to many different aspects: concerning the banking sector it shows a trust level regarding their efficiency of eliminating unwanted risk exposures in terms of investments for instance. A financial institution has to follow a prudent risk management process in order to identify and assess the risk associated with certain credit limits, while continuously monitor it. Monitoring is also important during the process in order to ensure the smoothness of the process, to assure the viability of the policies and different credit related contracts."*

4. **How did risk management alter during the past years?**

"Risk management strategies have changed significantly during the past years, mostly due to the introduction of the standardized EU regulations in terms of the management process, thus a nearly similar process related framework has to be followed. During the crisis no credit limits were given due to the high risk exposure of credit default and non-payment. Critical losses were written down during those years due to a lack of proper risk governance strategy. Prior to the crisis there was an unnatural increase in financial performance concerning several organizations, thanks to an extensive risk taking behavior of the institutions. Eastern Europe, Hungary was taken as a direct example, was portraying a reckless behavior in terms of risk taking. Following the crisis, policy makers started to tighten the risk taking possibilities, by regulating and standardizing the risk related processes, increasing the

monitoring aspects of these processes and trying to implement a workout of the accumulated bad debts. Following the crisis a rather securitized period started to be more favorable in order to restore the financial stability of several financial and non-financial institutions. Nevertheless, severe actions were taken on behalf of the risk management's effectiveness concerning the future challenges. The strategies involved didn't necessarily became better or more efficient but they've rather aggravated the rules and regulations basing the risk management process in order to prevent another destructive event such as it was the financial crisis in 2008. Risk management was present mostly in a theoretical basis thus a number of companies weren't seriously putting it into practice."

5. **How can risk management impact the financial stability? How would you determine the correlation between them?**

"Determining the financial stability of an organization involves several different aspects besides the risk management, such as: liquidity, asset liability. Risk management contributes to the financial stability with a small proportion, because it influences the quality checks of the receivables, thus it can also help in the estimation of an organization's creditworthiness by examining the risk of any potential default by the company. Moreover, risk management helps the credit scoring of an organization, thus the different types of institutions can be clustered based on their creditworthiness. Risk management also depicts the amount of the bad debt/capital reserve accompany has to possess in case a risk exposure occurs, thus this reserve facilitates the financing of certain risk exposures. Therefore, in case this is not systematically adjusted to the credit lending, the organization may face issues regarding their financial system's stability. This means that risk management can also influence an organizations profitability, which can be assesses through different financial instruments. Hereby, through this explanation there is more of an indirect impact between risk management and financial stability. Portfolio management also contributes to the financial stability of an organization through risk management, due to the fact that the portfolio risk and its concentration have to be assessed accordingly as well in order to ensure a smooth functioning of the whole system."

6. **Which step could be the most important one during the financial risk management process?**

"All the steps involved are important, however sometimes a risk manager lacks some of the most important updated information which would influences the whole process. Some organizations don't have the possibility of obtaining up-to-date firm specific information, thus this increases the risk of inaccuracy. I believe that the know your customer perception is

one of the most important steps in order to assess adequately the risk an organization will take if they pursue a certain transaction with a particular customer. However this approach is not globally taken as the most relevant one, it may differ among institutions. Thus, this rationalization can be highly subjective based on the industry in which the company operates, the strategic objectives and goals an organization has. After this the financial analysis is depicted as another important aspect of the risk analysis, because the financial statement shows the performance of the company, thus one can estimate their future financial behavior. However the most important is to obtain the most relevant information sources which most preferably should be up-to-date information."

7. What would you describe as biggest risk of the risk management process itself?

The answer was provided in a combination with the answer stemming from the 8th question.

8. What would you consider as a relevant mistake/failure during the risk management process?

"Based on historical data, you cannot accurately predict the future performance of an organization, thus this may be altered by an additional external factor which cannot be pointed out from the historical data. Risk managers are trying to obtain forecasting and market related information concerning the examined organization in order to assess somehow the upcoming trends based on which the risk manager can have a slightly more precise overview of the future occurrences. Analyzing historical data due to the lack of newly obtained data can increase the chance of facing a newly emerging risk exposure which couldn't be seen from the historical information. Moreover, if you have a direct contact with the organization you can ask for updated information. The trustworthiness of a customer can be also a contributor factor to the failure of a risk management, thus in case an organization withholds crucial information which would be inevitable from the risk management's perspective. It is hard to obtain updated audited information especially in some of the countries where regulations concerning financial auditing differs from the respective country in which the organization operates. Lack of information forms a serious problem in any risk management type a company is emphasizing on."

9. Why is risk appetite important?

"Risk appetite, can alter the outcome of the process only if we just take the example of the financial crisis, that a high risk appetite level was present thus the rational risk management was pushed into the background.- opportunistic behavior and weak governance strategy implementations due to the fact that the risk related decisions could have been overwritten by

the account manager. Subjective rational thinking and some relevant experience in the field can also influence the risk appetite which the leads to distinct risk related decision making process. Thus, the objectively set policies have to be followed as well."

10. What do you have to take into consideration during a generic risk management process?

"*Financial stability measures as GDP, volatility, country risk and many others can also highly influence the risk management process because there are many interconnected aspects that can alter the outcome of the process. Some of these measures can have a direct impact others can indirectly influence the result of the process. Thus they also have to be taken into consideration."*

11. From a self-supporting financial stability's perspective, how would you describe an effective risk management strategy?

"An effective risk management includes updated financials, forecasting for at least one year ahead, trustworthiness of the customer would be kept during the whole transaction and it wouldn't want to take advantage on the particular financial institution."

12. What is the role of the regulatory policies within a risk management process?

No additional information was provided.

Appendix 5: Interview with R.W.

1. What was/is your field of expertise in which you were engaged up to now?

"I am currently working in the field of risk management as a risk underwriter, assessing credit risks stemming from account receivable factoring."

2. How many years of professional experience do you possess in your own field?

No accurate information provided.

3. Why do you think risk management is important?

"*Finding the answer you just have to look at the financial crisis where there was an inability to join the dots between the various risk types, so as a consequences banks were going bankrupt thus the commercial paper market, the ability of the banks to borrow money and their liquidity was significantly reduced. Thus having an effective risk management should hopefully allow the prevention of such events in the future."*

4. How did risk management alter during the past years?

"The biggest change was driven by the introduction of ERM, which was a concept that only came to live following the financial crisis in 2008. Prior to that organizations were following

a silo approach towards risk management, credit risk looking after credit risk, operational risk looking after operational risk, the fundamental element which was missing and have been introduced a result of the crisis, namely the ability to look across the universe that what's going on with credit risk and what are the contagious impacts it has on other risk types. The introduction of the concept of ERM has been one of the biggest changes."

5. **How can risk management impact the financial stability? How would you determine the correlation between them?**

"If you got an ineffective risk management then you are increasing the risk of failure, that's how I would say. It's like an inverse proportion, the weaker the risk management the greater the risk of incidents occurring."

6. **Which step could be the most important one during the financial risk management process?**

"*All the steps are equally important, you have to see also the strongest and the weakest links as well, to do something in one area, cause otherwise don't be surprised if things go wrong. I think it's not one silver bullet, you have different things that you need to do but they all come together as one. So if you don't do one that's going to be a part of the issues."*

7. **What would you describe as biggest risk of the risk management process itself?**

"*There are various disciplines you do within risk management and all which have got a key part to play so whether that be… the initial underwriting, or the ongoing monitoring, issues in management…they all got a part to play. It is really difficult to pull one out to say that if you are not going to do that one, then that's going to be the biggest issue. "*

8. **What would you consider as a relevant mistake/failure during the risk management process?**

"*If people don't do what they have to do, you can have the best framework. A risk framework is made up of various different components, like issues, losses, stress testing, scenario analysis, lots of different things. Most people now understand the appropriate components of an effective risk management framework, but how they actually deploy that in their organization based on the risk they face is one challenge. How to make sure to get the right people to execute this it's another challenge and how do you know that they are actually doing what they have to do not every organization will face the same risk so as a consequence of that they may deploy different frameworks, they may deploy their energies only on certain components of that framework. It's not something you can just lift and drop in any organization, the key to it is to understand the drivers of that organization and the risk they may face. The applied risk management framework depends also on the risk profile of* *the respective organization. The risk profile and the monitoring aspects you need may have the same principles behind them but the way an organization deploys it can differ significantly. I don't think if you say that you do XYZ then you won't face any risk. We are in business to make money so as long as you take that risk within the appetite you have that is a really good start point. If you don't have the right people to execute the principles of a certain risk management framework then you are going to have gaps. At the same time if you don't have an embracing framework which states the necessary principles you'll also have gaps, so there are lots of things that you need to take into account. There is no perfect definitive answer to this, you just need to pay attention on the challenges you face. There are factors internally that you can control but there are also factors externally which cannot be controlled and sometimes those are the ones that come and cause you big issues. Institutions believe that they have controlled however, as it turned out they couldn't control and foresee everything. You can put the best framework but there are just certain things you have to consider. There has been a culture of profit and greed, those areas were small in numbers but the impact they were having was significant. If you are looking at some of the trading issues, the bankruptcy of banks that was the result of a willingness to drive increase in terms of revenues, but in an ineffective environment. "*

9. Why is risk appetite important?

"Risk appetite: doesn't really drive the risk management it's rather a key component of the risk management, it says this is the risk that we are happy to take as an organization. It makes risk very clear, for example in case of underwriting one can say that he will take only a customer with a certain credit rating, however this doesn't mean that the risk appetite cannot be breached for an appropriate reason. It gives an upper and lower threshold which makes it easier for people to operate within."

10. What do you have to take into consideration during a generic risk management process?

"Identification and assessment are some of the major start points, thus if you launch a new product you have to understand all the risks associated with it , so if you don't do that then potentially, no not potentially… you won't understand the risks associated with the target market. All I'm saying is that if you don't do that effectively, or other things you don't do effectively, then you cannot balance each other. So in terms of what do you do first, risk assessment comes first in most of the cases, so if you don't do that well then obviously you are going to struggle a little bit, but also if you don't do that but you do everything else than you limit the possibility of carrying out an efficient risk assessment process. You need to be

mindful of what the theory says but then again what happens in practice can be completely different. A risk manager has to have an understanding of the theory but the key to it is to be able to apply. Working at an organization is not a theoretical exercise so you need to understand how to apply the theory in practical situations"

11. From a self-supporting financial stability's perspective, how would you describe an effective risk management strategy?

"*Information and data is fundamental. Its accuracy is extremely important so organizations that don't pay due regards to that, are facing increased risk regarding data accuracy and integrity…a very serious one."*

12. What is the role of the regulatory policies within a risk management process?

"The regulators came under a lot of criticism during the financial crisis they have obviously increased the level of oversight and the requirements after the critical event, capital and stress testing scenarios. So that involved an increased capital requirements to some of the people didn't necessarily agreed with, but they were trying to prevent any further reoccurrence of the situations that have drove the financial system into a crash during the crisis."

Appendix 6: Interview with M.P.

1. What was/is your field of expertise in which you were engaged up to now?

"First of all I was a risk analyst, then changed to a risk underwriter position and now I'm involved in the risk integration processes."

2. How many years of professional experience do you possess in your own field?

"So far, all together I have been working within risk management for 11 years."

3. Why do you think risk management is important?

"*During the crisis it could be seen the increased importance of risk management, because prior to that there wasn't such a big emphasis put on operating an effective risk management. Sales people considered risk management as a withdrawing force of the business, due to the restrictions imposed by its processes. Was viewed as a way too prudent approach towards business, which minimizes its expansion and profitability, however during the crisis organizations realized that risk can cause serious financial distress, thus it has to be managed effectively. Task segmentation was more powerful in terms of business operations, thus risk management didn't bear a strong decision making right in terms of investments.*

Risk management was left aside when assessing lower credit amounts, it was only taken into consideration when bigger limits had to be assesses in terms of their riskiness."

4. How did risk management alter during the past years?

"*Change in strategy was mostly depicted by the regulatory implications of the risk management processes. Organizations have had certain internal policies, however there was not much attention paid to their regulation and monitoring. Risk management related policies and guidelines were not aggregated, standardized and implemented properly. A lack of standardization was representing the past management processes along with a continuously proactive revision of its adequacy. However nowadays these lessons learnt are mostly implemented and an extended attention is paid on these issues in order to categorize and cluster the newly emerging risks during the processes, which enables a quicker response and action plan setup towards certain potential exposures."*

5. How can risk management impact the financial stability? How would you determine the correlation between them?

"*There is an impact on financial stability because the risk mg. process can determine the riskiness of an organization or a transaction in which an organization is involved. Taking into consideration the payment default information which means that if the payment default is high in terms of remitting the organization has to sustain a higher working capital reserve in case of any potential default, because through the maintained reserves the company can finance their risk exposures. Thus, if we have a precise overview of the risk structure and the risk profile of a company this facilitates the understanding of the potential impacts, hereby the company can base their financial stability on these assessments. They can estimate the financial stability they would need in order to carry out a risky transaction. If for instance a customer is suspected with bad debt possibilities, the finance has to assess the amount of reserve cash needed in order to finance that risk exposure if it occurs. The portfolio analysis and its classification have to be clearly stated in order to be aware of the potentially disruptive occurrences. Proportionally has to be established the possibility of an organizations default that is facilitated by an effective portfolio management. Therefore transparency is one of the aspects of risk management in order to sustain the financial system's stability on a long-run."*

6. Which step could be the most important one during the financial risk management process?

"*The most important risk steps involved in a management process depends on the business profile of an organization. This also depends on the industry in which the organization* *operates and the products involved, due to the fact that the risk related processes and their significance may differ among business sectors. Therefore, for example, a software company has different objectives and restrictions than a bank or any other financial institution. In some low risk companies collection related steps are more important than risk identification or risk assessment in account of the differences in terms of their strategic objectives. I think that the analysis and the severe authorization of a specific credit limit in case of big companies are not needed, because we rarely see a big company going bankrupt (too-big-to-fail?). Thus, I believe in the too-big-to fail conceptualization, thus it again depends on the industry, line of business and the company's profile, along with their strategic goals. Risk management differs among manufacturers, financial institutions or other companies, thus they have different aspects to consider important. Standardization is not always beneficial if we don't take into consideration the different business units."*

7. **What would you describe as biggest risk of the risk management process itself?**

"*If the necessary information is circumstantial to be obtained, that can influence the overall risk management process due to the fact that the final decision making process will be based on that information, whether it is accurate or not. If there is a lack direct communication, because it can also impact the identification of a certain risk type. Operational risk stemming from the different processes within a bigger organization can alter certain processes of the risk management. A high human error can also influence the information which will be used during the decision making process."*

8. **What would you consider as a relevant mistake/failure during the risk management process?**

"*Mistakes can result due to the structure of the company as well, however this is hard to prevent. Identification can be risky as well in case the information is not directly obtained, but it comes through different communication channels, thus some parts of the information can be lost during the process."*

9. **Why is risk appetite important?**

"*Risk appetite highly influences the outcome of a risk related decision, especially considering the subjective risk appetite, thus in case this is not aligned with the enterprise level's risk capacity, it can be impacted. Risk appetite is defined by the top management's decision, in some cases the top level wants to expand the organizations profitability margins by increasing their operations accordingly, however the management side tends to restrict this expansion by viewing the potentially emerging financial risks from the transactions. Moreover, risk appetite depends on the industry in which the organization operates their* *internal strategies and objectives, nonetheless on the fact whether it is a startup company or a bigger organization with historical data behind them. This is important due to the fact that a smaller company might have a higher risk appetite in order to enable the growth of its business and expand its market visibility. If the risk management is too strict and risk avoidance is high internally, then it might affect the company's competitiveness on the market in account of a more restricted risk related strategy, thus the balance has to be found in terms of the risk appetite determination., however this also depends on the organizations' products and influence on the market, thus for instance Apple can pursue a more risk avoiding strategy because it has already a strong presence on the market and the company's competitiveness is high within this market. Industry and product correlated. Risk appetite is a serious decision making process coming from the top level risk management's side of an organization, thus they have to find the balance between the desire to sale and gain competitive advantage on the market and the potentially associated uncertainties which might bear a negative impact on their business performance."*

10. What do you have to take into consideration during a generic risk management process?

No additional information was provided.

11. From a self-supporting financial stability's perspective, how would you describe an effective risk management strategy?

"An effective risk management process highly depends on the organization and its industry, moreover on its strategic objectives and short-term or long-term goals. You cannot really generalize in this term, however the structure of the company is a key component to the effectiveness of a risk management process. Information again is very important in this case."

12. What is the role of the regulatory policies within a risk management process?

No additional information was provided.

Appendix 7: Interview with L.B.

1. What was/is your field of expertise in which you were engaged up to now?

"I was mainly involved in the banking industry within the field of risk management."

2. How many years of professional experience do you possess in your own field?

"All together I have 30 years of professional experience in the field."

3. Why do you think risk management is important?

"Risk management associates a high importance to the time which has passed between the initial evaluation of risk and its changes over a certain period, thus it cannot be viewed as a static process which has to be established once and no further revision is needed. Risk management allows the assessment of an organization's creditworthiness between predetermined extents of time, thus one can estimate the risk of a potential default by any means over a future period of time."

4. **How did risk management alter during the past years?**

"A significant evolution can be observed regarding the risk management strategies applied in the past and those which are representative nowadays. Viewing the banking sector, the classical banking strategies required a 'know your customer' approach adopted in the risk related decision making process, thus a local/ on spot decision making process was more accurate involving a highly subjective consideration. However these approaches have been changed over time and the modern strategies came into the picture, that first assessed the customer's creditworthiness then provided the product and only following these steps an institution required the necessary payment. This approach represents a centralized decision making process which objectively estimates the potential risks associated with a customer's default. Centralized decisions have an impact on the risk strategy of an organization. Moreover, the objective centralized decision making is not effective from a market expansions point of view, thus this can justify the highly subjective opportunistic behaviors during the inflation."

5. **How can risk management impact the financial stability? How would you determine the correlation between them?**

"Financial stability depends on the actual working capital of the organization due to the fact that there is a strong proportional relationship among the organization's risk bearing capabilities stemming from the reserves maintained for financing potential risk exposures, thus in case the WC is not proportionally adjusted to the risk taken it can cause critical losses and financial turbulences."

6. **Which step could be the most important one during the financial risk management process?**

"Identification can be stated as the most important risk management step, due to the fact that it serves with inevitable information concerning the types of risk an organization is exposed to, thus they can estimate the expected losses. Moreover, measuring, reporting and monitoring are equally important along with the analysis of the portfolios that a company possesses. Portfolio management is important due to the fact that it can diversify the

potential risks faced by the organization, thus in order to do so an effective management has to be in place. In addition, risk layering is a crucial component of the portfolio management due to the fact that it allows an aggregation of the highly risky portfolios and their examination. Nevertheless, the payment default as a concept has to be taken into consideration as well because it can show the payment default related ramifications of a certain risk factor. Taking into consideration the involved steps allow to prepare quick responses and to set up accurate action plans in order to avoid any major disruptions concerning the unexpected risk exposures.“

7. What would you describe as biggest risk of the risk management process itself?

No additional information was provided.

8. What would you consider as a relevant mistake/failure during the risk management process?

“As a relevant mistake of the risk management process can be stated if an organization doesn't identify the potential risks properly, or the segmentation and the prioritization of these risks are not accurate. This happened with the subprime mortgages in the USA during the crisis, thus a lack of proper assessment of the aggregated risks was missing which led to a critical financial distress once it reached its highest pitch. Committing the same mistake several times might challenge the financial stability of an organization. A substantially low down payment proportion involves a high LTV, which in case of an accordingly adjusted WC amount can be way too risky to any institutions. This means, that for instance a bank is lending more money than it would benefit from them taking into consideration rate of return.”

9. Why is risk appetite important?

“Risk appetite possesses a strong correlation with the loan-to-value (LTV) and the debt-to-income (DTI) ratios. LTV is a lending risk assessment ration, while DTI measures one's ability to repay debts on a monthly basis. Thus, if any of these two ratios alter from the normal predefined proportions, the organization is exposed to a higher possibility of meeting an unexpected loss to which it is not prepared. Risk appetite is interdependent on the working capital possessed by any institutions, because the working capital represents the sustainability of the financial health of the organization in case an unexpected risk exposure occurs. Thus if the organization permits a higher LTV or higher DTI, the working capital has to be increased and adjusted accordingly in order to be prepared of any potential unexpected risk exposures. If the risk appetite is increased the working capital of an org. has to be

increased simultaneously as well. Consecutively, in case the minimum credit parameters are increased that infers an intensification of risk exposure occurrences."

10. What do you have to take into consideration during a generic risk management process?

"Several aspects have to be evaluated during a generic risk management process in order to depict the weak links that can alter a company's performance. There are a number of financial instruments which facilitates the steps involved in the management process, such as: DTI, working capital (financial stability depends on the actual working capital of the organization due to the fact that there is a strong proportional relationship between the organization's risk bearing capabilities stemming from the reserves maintained for financing potential risk exposures, thus in case the WC is not proportionally adjusted to the risk taken it can cause critical losses and financial turbulences), stress testing, use financial stability measures to stress scenarios, distinction between good credit and bad payer and the in-depth estimation of a third party's creditworthiness who is involved in a specific transaction."

11. From a self-supporting financial stability's perspective, how would you describe an effective risk management strategy?

"*Financial stability can be viewed through two different perspectives, one taking into consideration the equity position of the company and the other examining the liquidity position of an organization. Thus if these two aspects are stabilized and balanced accordingly it represents a stable financial system from an enterprise's perspective, thus a high correlation can be observed between the organizational performance and the financial stability. These aspects can quantify the potentially expected loss and the working capital reserve needed in case of an unsuccessful risk-taking. The amount of reserved working capital a company possesses shows their preparedness concerning an expected risk exposure."*

12. What is the role of the regulatory policies within a risk management process?

"The establishment of precise regulatory requirements is necessary in order to limit and standardize risk-taking among the organizations. However the assessment of these market regulations has to be consistent in order to avoid a failed guiding of the risk management process as for example the mark-to-market accounting standard was proven inefficient because it didn't exemplify a realistic picture of the market. Thus, if demand was increasing the prices were increasing simultaneously as well. Thus implications of the risk related regulations were proven significant during the course of the past financial events."

Appendix 8: Interview with P.S.

1. **What was/is your field of expertise in which you were engaged up to now?**

"I used to work as a credit risk analyst and my current position is defined as risk underwriter."

2. **How many years of professional experience do you possess in your own field?**

"I have 12 years of professional experience up until now."

3. **Why do you think risk management is important?**

"Considering the banking sector it is important to assess the creditworthiness of a customer, especially in loan provision, thus this possibility is enabled by the processes of risk management. The newly emerging risks as operational and reputational risk are also considered by a recent holistic strategy which was first taken into consideration after the financial crisis. Risk management draws an attention to the different types of financial risks, thus it can be stated that credit risk forms the foundation of all the other types of risk, due to the fact that they emerge because of the existence of the credit risk. Here I'm referring to the operational and reputational risks which were not considered as potential risk exposures prior to the crisis."

4. **How did risk management alter during the past years?**

"The credit risk management didn't change much up until now. Risk management possesses multiple steps during its process and based on theoretic consideration these steps were existent ever since. Certain differences can be postulated based on the risk appetite of an organization associated with credit risk, which can impact the choice of the risk management strategy implementation."

5. **How can risk management impact the financial stability? How would you determine the correlation between them?**

"The organizational culture of an organization is highly correlated with the adopted risk culture of a company, thus this can impact simultaneously the risk management and the financial stability as well. Moreover, the regulatory requirements can have an influential effect on stability over the applied risk management strategy. Prior to the financial crisis, a weak risk governance structure as representing the overall economy, thus those organizations who had a more prudent risk management strategy could sustain their financial system's stability."

6. **Which step could be the most important one during the financial risk management process?**

“The inherent risk management steps are important, such as identification (depicts more the operational, reputational and other types of risks), assessment etc. Credit risk management mostly focuses on the risk analysis part, thus accurate financial data is inevitable from the management’s point of view.”

7. What would you describe as biggest risk of the risk management process itself?

“Due to their interconnectedness, the different types of risks cannot be considered separately during the decision making process due to the fact that their avoidance in the management process may result in an ineffective way of managing financial risk. The main concept of risk management is to regulate every type of risk and to ensure their smooth mitigation. Most of the companies took into consideration only the so called main risk which is determined by the credit risk, thus they have left aside other important risk elements.”

8. What would you consider as a relevant mistake/failure during the risk management process?

“The biggest mistake is if no policy is involved in the risk management process, if they don’t take into consideration the effective monitoring and the reviewing along with a properly established regulatory management of risk financial risk. Therefore, most of the companies go bankrupt due to the ignored internal regulatory management.”

9. Why is risk appetite important?

“I believe that risk appetite mainly concerns the credit risk related decisions, due to the fact that other risk types can be managed without taking this into consideration. It highly depends on the industry and market regulations, however a company can assess its own risk appetite level viewing their own risk capacities and risk taking capabilities with a consistent reference to the policies set by the industry and market drivers. Credit risk related risk appetite assessments concern the delegation of authority of a respective risk manager.“

10. What do you have to take into consideration during a generic risk management process?

No additional information was provided.

11. From a self-supporting financial stability’s perspective, how would you describe an effective risk management strategy?

No additional information was provided.

12. What is the role of the regulatory policies within a risk management process?

"The strategy selection mostly depends on the company's cash flow, the country's financial system, hereby the strategy related decisions concerning their choice highly depends on the company's profit."

Appendix 9: Email template for expert interview requests.

Dear XY,

My name is Palma Borsi and I am a master student who is currently working on her thesis regarding the impacts that risk management may have on financial stability.

The reason why I am contacting you is stemming from the fact that I would like to inquiry whether you would have the time and the willingness to schedule an interview with me in order to facilitate a more in-depth knowledge gathering process concerning this particular field and the influences it may have under different circumstances.

I would highly appreciate your time and would be more than happy to share more information regarding the entire conception of my analysis. Hereby, if your time allows, please feel free to address any questions or concerns you may have in regards to this interview.

It would be an honor to have a meeting with you, therefore I am very much looking forward to your answer.

Thank you very much in advance!

Kind regards,
Palma Borsi