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Writer: <b>Lijia Long</b>	..... (Writer's signature)
Faculty supervisor: <b>Terje Aven</b>  External supervisor(s):	
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## **ABSTRACT**

In recent years several authors have argued for the adoption of Corporate social responsibility (CSR) which highlight people, planet and profit. The theoretical rationale for the CSR is well established, large number of investment has been involved into CSR activities, but the practical implications have not been so clearly demonstrated and incidents are still happening. The fact is that most companies have beautiful CSR policies but still have problems on achieving its CSR goal in practice.

We argue that it is because that the current CSR practices suffer from severe weaknesses related to risk and uncertainty treatment. And there is a need to show how the CSR is described and communicated in real-life situations and in its turn the effects on the risk management and decision making. The present paper aims at contributing to this end by study on the relationship between CSR and risk management, considering two cases related to petroleum industry, Petrobras corruption scandal and Statoil Horton case.

The bridge between risk management and CSR is established and the integration process is optimized, through the concept research on CSR issues and risk management issues, comparing the different process of integrating CSR and risk management in an organization. The critical issues during CSR practices with link to risk management are presented, through cases study, analyzing similarities and differences between Petrobras corruption scandal and Statoil Horton case.

A creative model and thinking which is named as “umbrella model” is created to better clarify the relationship between CSR and risk management. An applicable modified process of decision making related CSR risk management is also introduced to help companies to make better decisions.

In brief, the thesis aims to gain new insights into how companies can apply CSR to help risk management and what CSR can gain from risk management.

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## **List of Abbreviations**

API	American Petroleum Institute
CSR	Corporate Social Responsibility
HSE	Health safety and environment
IOS	International Organization for Standardization
IOGP	International Association of Oil & Gas Producers
IPIECA	International Petroleum Industry Environmental Conservation Association
NOC	National Oil Company
SR	Social Responsibilities



# CHAPTER 1: INTRODUCTION

## 1.1 Background

With the development of society and the progress of globalization, companies are facing more challenges, more critical requirements and constraints from the government and the whole society. It is required not only to aim at creating the most profit, but should also show consideration to the people and the environment.

That's why more and more enterprises pay attention to the performance of corporate social responsibility (CSR) because it can not only meet the business expectation of government and community but also enhance its core competitiveness and achieve sustainable development.

Generally, scholars think CSR can bring benefits to the company in several aspects including risk management, cost saving, human resources development, and sustainable development etc. Although it is believed that CSR can give guidance on what is expected to help when it comes to risk, it is quite challenging to ideally integrate CSR and risk management in reality.

Besides during the process, another challenging task is to balance the relationship between stakeholder and the society. Because the decisions and activities that an organization made to reduce the risks in order to meet the society's expectation may affect the interest of stakeholders in an opposite way. Although stakeholders are part of society, their interest may not be consistent with the expectations of the society.

In recent years, companies have invested enormous resources towards developing and implementing CSR policies and an industry related CSR has been built. Most companies have their own CSR department, CSR manager and teams to work together towards advertising CSR policies and that helps improve their reputation and image. But the fact is that the CSR efforts have different outcomes. The CSR policies are increasingly being implemented in organizations, but the incidents are still happening.

Looking back to the last year, in the early beginning of 2015, the Brazil's state-run oil company, Petrobras has been embroiled in a massive corruption scandal by paying bribes to get the lucrative contracts (BBC, 2015). In September, the German car giant

Volkswagen was accused of cheating emissions tests in the US and later it was admitted by the company that the engines were programmed to underreport nitrogen oxide emissions (Hotten, 2015). In late of November, the world largest oil company, Exxon Mobil was accused of misleading public on climate change risks for more than 27 years (Gillis & Schwartz, 2015).

The fact is that these above companies all have beautiful CSR policies but still have problem on achieving its CSR goal in practice. The reason why they fail is because that their CSR policies suffer from some severe weaknesses related to risk management and uncertainty treatment (Thekdi, 2016). Neither an organization may not fully understand and recognize what kind of societal and environmental risks they may face when they make decisions and implement activities. Nor do they completely understand how to deal with these risks to meet the society's expectation and shareholder's interest during the CSR planning and implementation.

## **1.2 State of purpose**

Because the current CSR practices suffer from severe weaknesses related to risk and uncertainty treatment. There is a need to show how the CSR is described and communicated in real-life situations and in its turn the effects on the risk management and decision making.

The present thesis aims at contributing to this end by establishing a bridge between risk management and CSR as well as optimizing the integration process.

- How can CSR and risk management be integrated?
- What kind of challenges companies may face during integration between CSR and risk management?
- What principles can be utilized to improve the performance of integration?

By considering cases related to petroleum industry, this thesis aims to improve the effectiveness of CSR practice with links to risk management.

- What are the CSR ideas in the petroleum industry?
- How do CSR policies practice in the petroleum industry?
- Why do some CSR policies in the petroleum cases fail to fulfill its effectiveness?

Generally, the purpose of the thesis is to gain new insights into how companies can apply CSR to help risk management and what CSR can gain from risk management.

### **1.3 Structure of the content**

The content of the thesis is divided into 8 chapters shown as Figure 1. Chapter 1 gives a brief introduction to the background, state of purpose related to the topic and structure of the content.

Chapter 2 introduce the CSR related issues, including the definition of CSR concepts, history of CSR development, content of CSR and progress of integrating CSR.

Chapter 3 presents the risk management issues. It explains what is risk and what kind of risks that company may meet, introduces the need of risk management and briefly describes the process on how to carry out a risk management.

Chapter 4 discusses the integration between CSR and risk management, including the ideal integration process, what kind of challenges may face during integration and what principles can be utilized to improve the performance of integration.

Chapter 5 introduces the CSR practices in petroleum industry. Firstly, CSR ideas in petroleum industry are described, including the features of petroleum industry and what CSR issues are considered in oil and gas industry. Secondly, two cases of CSR practices in petroleum industry are analyzed: Petrobras corruption and Statoil Horton incident.

Chapter 6 analyzes the similarities and differences between the two cases: Petrobras corruption and Statoil Horton incident with link to CSR risk management, which answers the question why CSR policies in two cases fail to fulfill its effectiveness.

Chapter 7 introduces a new model of CSR risk management based on the analysis of previous chapters, which is described as a “Umbrella model”. Besides, an applicable modified process of decision making related CSR risk management is introduced to help company make better decision.

Chapter 8 makes theoretical conclusion about integration between CSR and risk management as well as make practical conclusion about CSR practices in petroleum industry with link to risk management.

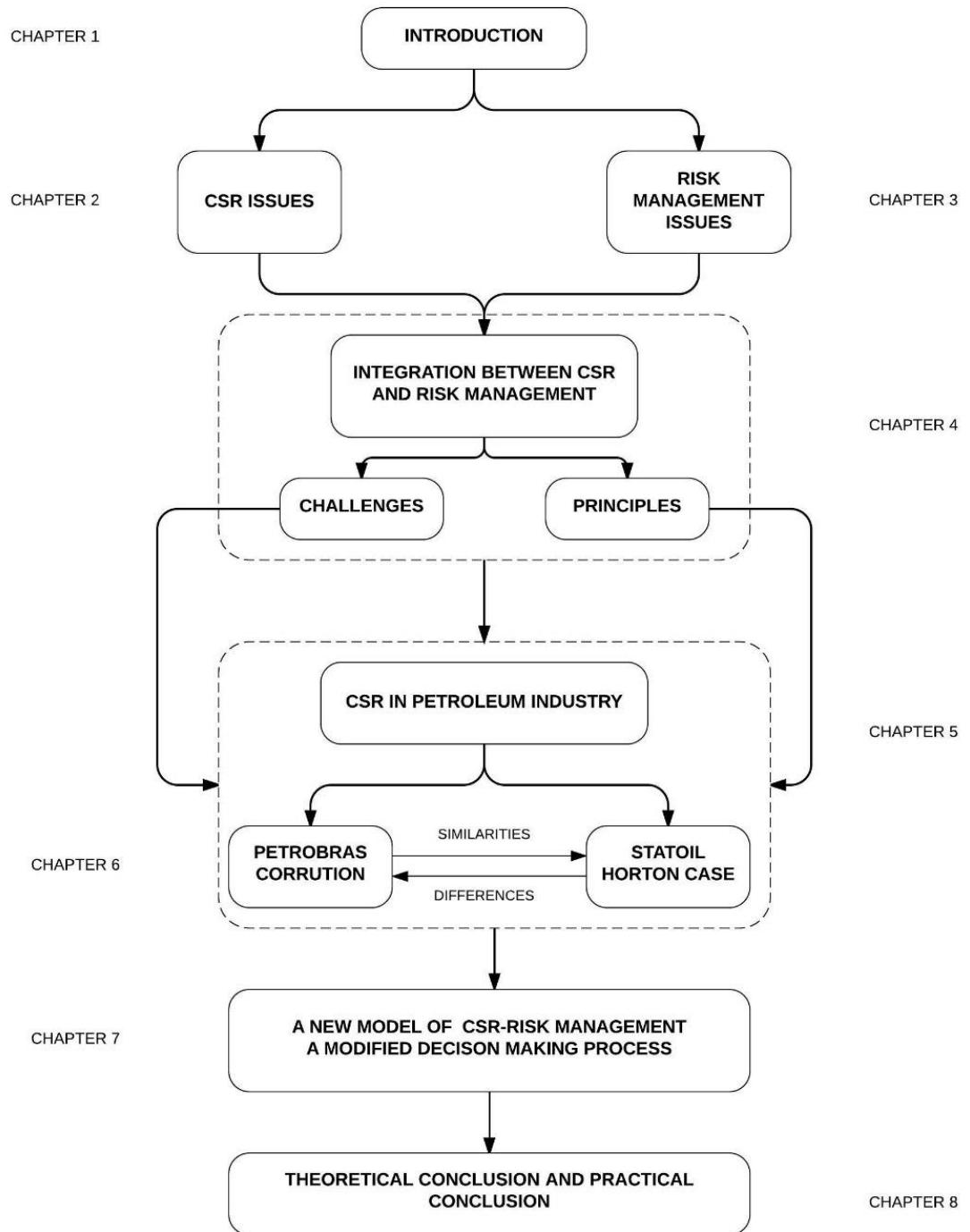


Figure 1 Structure of the content

## CHAPTER 2: CSR ISSUES

### 2.1 Definition of CSR

Currently there isn't a universally accepted definition of corporate social responsibility (CSR). But the International Organization for Standardization (IOS) provides a definition of social responsibility along the lines of ISO 26000. Generally Corporate social responsibility (CSR) is viewed as social responsibilities (SR) that focused primarily on business, while Social responsibility is applicable for all types of organizations not just those in the business field.

ISO26000:2010(E): Guidance on social responsibility provides the following definition of SR.

*Social responsibility: responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behavior that:*

- *contributes to sustainable development, including health and welfare of society;*
- *takes into account the expectations of stakeholder;*
- *is in compliance with application law and consistent with international norms of behavior; and*
- *is integrated throughout the organization and practiced in its relationships.*

CSR can be understood as a way of act which a company behaves to achieve a balance of economic, environmental and social imperatives, while at the same time addressing the expectations of stakeholders.

### 2.2 History of CSR

CSR was originally justified from a macrosocial and ethical perspective on society. The history of CSR can be dated back to 1950's when it was first referred to as Social responsibility.

(Bowen, 1953) published a book called "Social Responsibility of a Businessman" in 1953 and in his book he gave a clear understanding on why the businessman need to give back to the community. And because of this definition, Bowen was awarded the title of father of social responsibility.

(Keith, 1960) expanded the argument of social responsibility with business power through his article “Can business afford to ignore social responsibilities?”

(Heald, 1970) made an important contribution on understanding relationship between company and community through the social responsibility of business.

(Prakash, 1975) gave an analytical framework of the dimensions of Corporate Social Performance, which might be called “social obligation”, “social responsibility,” and “social responsiveness.” Since then CSR arguments shifted from ethical to legitimacy arguments.

(Edward, 1984) presented a great stakeholders’ theory in his book “Strategic management: A stakeholder approach” and expressed the involvement of stakeholders in promoting CSR.

(Cochran & Wood, 1984) contributed in understanding the relationship between corporate social responsibility and financial performance. They provided evidences that CSR activities can increase reputations of the corporations so as to more consumers will purchase the products and the profitability will increase in the long term.

The 1990’s witnessed the new era of CSR and a few major definitions of CSR emerged. The famous concept *Triple Bottom Line*, which has been world-widely accepted in the field of CSR, was introduced in this decade by (Elkington, 1997). The triple bottom line focus on three issues (Three P principles): People (Society responsibility), Planet (Environment responsibility) and Profit (Economic responsibility).

In 1999, the article that (Carroll, 1999) wrote “Corporate Social Responsibility: Evolution of a Definitional Construct” reached a new height in the development of CSR history (Rahman, 2011).

In the Beginning of 21st Century, the collapse of Enron in 2001 has shaken the stakeholder’s world widely. (Mardjono, 2005) expressed the need for corporations to become more transparent and exhibit better accountability through “A tale of corporate governance: lessons why firms fail” based on the case of collapse of Enron.

Since then CSR have been largely implemented in the corporations through CSR departments, CSR conference and CSR annual report and so on. Besides, more concerns

are included in the area of CSR, such as human rights, labor environment and anti-corruption. And the public are more watchful than before on what the corporations are saying on CSR and what they are really doing in practice.

## 2.3 Content of CSR

Through the history, we can see that the content of CSR has been expanded over time, see Figure 2. According to (Rahman, 2011), early in the 1950s, CSR is only about ethical responsibility to society. In 1960s, people start to discuss the relationship between corporation and society. In 1970s, more and more stakeholders get involved, and the CSR arguments shift from ethical to legitimacy arguments. Economic responsibility, legal responsibility, and discretionary responsibility are added into the CSR.

In 1980s, voluntariness, law abiding and philanthropic are involved. In 1990s, the mission of companies towards environmental stewardship, and people, planet, profit are more emphasized. In 21st Century, the content of CSR is enriched in human rights; labor rights; protection of environment; fight against corruption; transparency and accountability

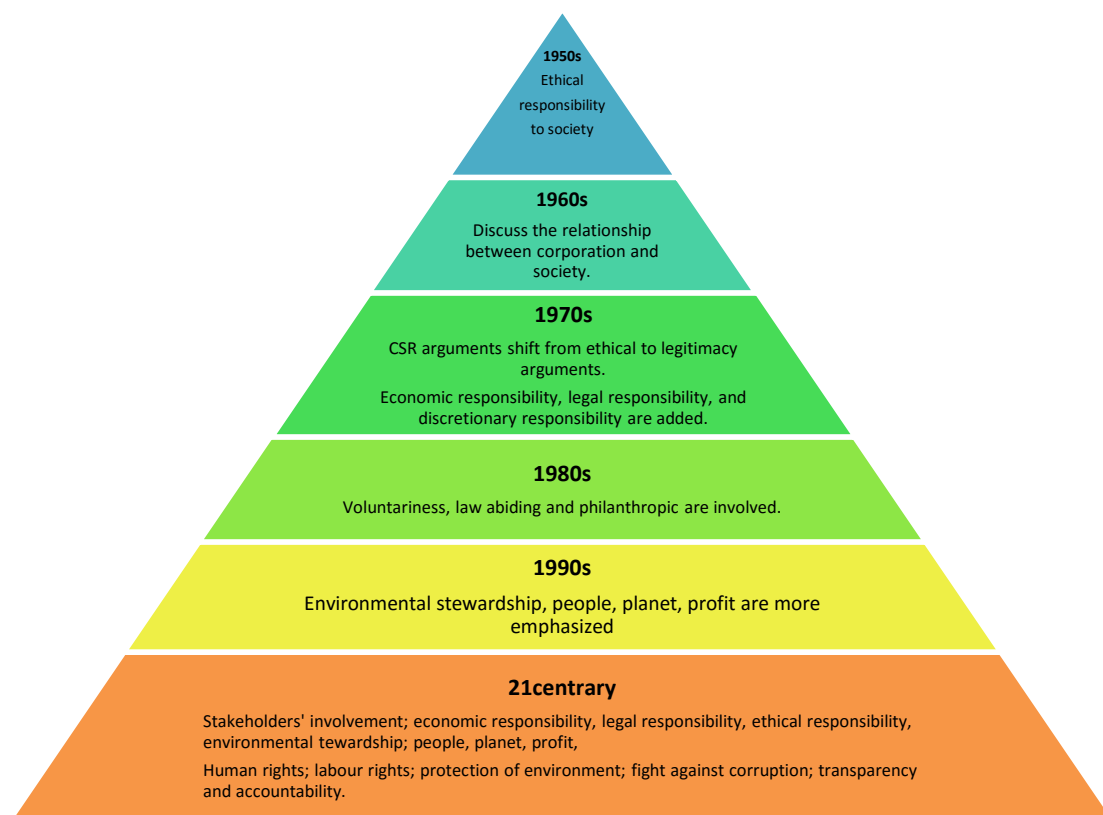


Figure 2 Development of the content of CSR

The core subjects concerning social responsibility<sup>1</sup> from ISO 26000 are shown as Figure 3:

- **Organizational governance**  
Organizational governance is the most crucial factor in enabling an organization to take responsibility for the impacts of their decisions and activities. Effective governance will be based on incorporating the principles of CSR into decision making and implementation.
  
- **Human rights**  
An organization has the responsibility to respect human rights since it is widely regarded as essential to the rule of law and to concepts of social justice and fairness.
  
- **Labor practices**  
Labor practices related to creation of jobs, as well as wages and other compensation paid for work performed, are among an organization's most important economic and social contributions.
  
- **The environment**  
As the world population grows and consumption increases, it will increase threats to human security and the health and wellbeing of society. So companies need to identify options to reduce and eliminate unsustainable volumes and patterns of production and consumption.
  
- **Fair operating practices**  
In the area of CSR, fair operating practices concern the way an organization uses its relationships with other organizations to promote positive outcomes, which can be achieved by providing leadership and promoting the adoption of CSR more broadly.
  
- **Consumer issues**  
Consumer issues regarding CSR are related to fair marketing practices, protection of health and safety, sustainable consumption, dispute resolution and redress, data and privacy protection, access to essential products and services, addressing the needs of vulnerable and disadvantaged consumers, and education (ISO26000, 2010).

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<sup>1</sup> Social responsibility is a wider concept compared to corporate social responsibility; it doesn't limit to business area but also apply to nonprofit organizations.



- **Community involvement and development**

An organization can contribute to community development by creating employment through expanding and diversifying economic activities and technological development.

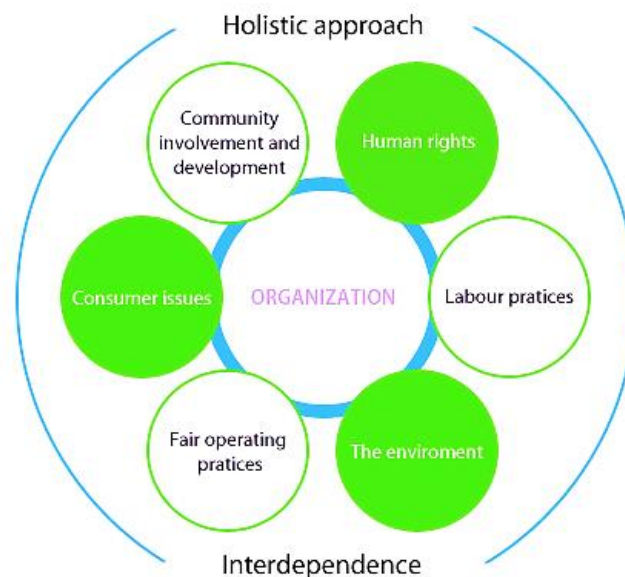


Figure 3 Social responsibility seven core subjects (ISO26000, 2010)

According to ISO26000 Guidance on social responsibility, the seven principles of social responsibility are:

- **Accountability**

An organization should be accountable for its impacts of its decisions and activities on society, the economy and the environment, especially the significantly negative consequences. Therefore, it should be account for the actions that needed to be taken to avoid the repetition of unintended and unforeseen negative impacts.

- **Transparency**

An organization should be transparent in decisions and activities that impact on the stakeholders, society, economy and the environment. The principle of transparency requires the organization to be transparent regarding the manner in which its decisions are made, implemented and reviewed, its performance on relevant and significant issues of CSR and the sources, amount and application of its funds.

- **Ethical behavior**  
An organization should behave ethically based on the values of honesty, equity and integrity. It should encourage and promote ethical behavior by stressing its core values and principles, developing governance structure, adopting and applying international standards of ethical behavior.
- **Respect for stakeholder interests**  
An organization should take into account the relation of stakeholders' interests to the broader expectations of society and to the sustainable development. It should respect, consider and respond to the interest of its stakeholder.
- **Respect for the rule of law**  
An organization should always comply with legal requirements in all jurisdictions and keep itself informed of all legal obligations and periodically review its compliance with applicable laws and regulations.
- **Respect for the international norms and behavior**  
In countries where the law or its implementation conflicts with international norms of behavior, an organization should strive to respect international norms of behavior, while adhering to the principle of respect for the rule of law, as a minimum.
- **Respect for human rights**  
An organization should respect human rights in all countries, cultures and situations and recognize their importance and universality, even if in some situations where the law or implementations doesn't provide adequate protection of human rights.

## **2.4 Progress of integrating CSR**

Based on ISO 26000, the progress of integrating CSR throughout an organization includes three parts: understanding CSR, integrating CSR and reflection on CSR. The detail process is summarized as follows:

- 1) **CSR planning, development, policy adoption**
  - Defining the problems based on the seven principles and core subjects as reference.
  - Conducting a self-assessment. Assessing an organization's sphere of influence. Engaging the internal and external stakeholders.

- Determining what is significant to your organization. Establishing priority for addressing issues.

## **2) CSR implementation process**

- Setting measurable targets and drafting the CSR plan. Building social responsibility into an organization's governance, system and procedure.
- Implementing the plan and begin to monitoring the progress
- Communicating and reporting on CSR. Stakeholders dialogue on communication about CSR.

## **3) CSR reflection**

- Enhancing credibility regarding CSR and resolving conflicts or disagreement between an organization and its stakeholders.
- Reviewing and improving the organizations' performance and practices related to CSR. Enhancing the reliability of data and information collected and managed.

## CHAPTER 3: RISK MANAGEMENT ISSUE

### 3.1 Definition of risk

#### 3.1.1 WHAT IS RISK?

Risk can be understood as future events  $A$  and their consequences  $C$  associated with uncertainty  $U$ , which can be defined as  $(A, C, U)$  (Aven, 2012). Usually a risk analyst describes risk according to  $(C', Q, K)$ , where  $K$  is the background knowledge that  $C$  and  $Q$  are based on,  $C$  is the unknown events/consequences and  $Q$  is interpreted as a measure of uncertainty,  $C'$  is a set of events and quantities of interest that represent or predict the unknown events/consequences  $C$ .

One way of representing  $(C', Q, K)$  is to describe events of  $A'$  through the probabilities of  $A'$ , i.e.  $P(A')$  and expected values of  $C'$  which given the occurrence of  $A'$ , i.e.  $E[C'|A]$ .  $A'$  is an estimated set of hazards and threats, but real future events  $A$  may not be covered by  $A'$  because such an event may occur beyond expectation.

#### 3.1.2 THE NEW RISK PERSPECTIVE

(Aven, 2013) established a new risk perspective shown in Figure 4, in addition to risk descriptions based on probability, which also require additional characterizations that can provide further insights about knowledge as well as potential surprises/black swans. The traditional risk perspective utilizes the assigned probability and expected values as an important tool to reflect information, uncertainty and degree of belief. The new risk perspective highlight the strength of knowledge that the probability-based figures are based on as well as the existing of black swan events, and regards these as essential elements of risk description apart from probability.

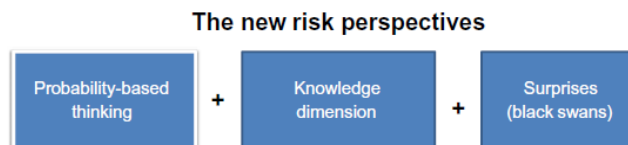


Figure 4 Basic features of the new risk perspective (Aven, 2013)

As for the black swan events, (Aven, 2014) think there are three levels of unforeseen/surprising events:

- Events that were completely unknown to the scientific environment (unknown unknowns).
- Events that were known for others, but not known from the perspective of those who carried out a risk analysis (or another stakeholder) (unknown knowns).
- Events on the list of known events in the risk analysis but found to represent a negligible risk, which are not believed to occur because of low judged probability.

(Aven & Krohn, 2014) also came up with a new perspective on how to understand, assess and manage risk and the unforeseen. The new way of thinking about risk are focus on the risk sources: the signals and warnings, the failures and deviations, uncertainties, probabilities, knowledge and surprise. The concept of mindfulness can be used to help to understand these attributes and take adequate action to control the risk.

### **3.1.3 TYPES OF RISK**

(Kytle & Ruggie, 2005) described four types of risks that companies are usually faced with - economic, technological and political and social risks.

- Economic risks concern maintaining profit, sustaining economic growth and protecting investments shareholder value from market fluctuations.
- Technological risks arise from activities such as design and engineering, manufacturing, technological processes and test procedures.
- Political risks include managing public perceptions of corporations internationally, regulatory relationships, shaping the overall legal environment, government relations and geo-politics.
- Social risks are emerging risks that are specifically associated with the new operating environment and networked operations of companies, which are particularly pronounced in the areas of human rights, labor standards and environmental sustainability.

(Aven, 2008) mentioned various types of risks in his book that an enterprise may face are including:

- Financial and commercial risk, including market risk related to foreign exchange rates and interest rates; credit risk associated with debtors' payment problems and liquidity risk related to the enterprise's access to capital.

- Operational risks, which are associated with unavailability of the production system such as accidental events, including failures and defects, quality deviations and natural disasters; loss of competence and key personnel; legal circumstances with defective contracts and liability insurance.
- Strategic risks, which includes aspects and factors that are important for the enterprise's long term strategy and plans associated with political decisions, reputation, laws and regulations and labor market.
- HSE risks related to health, environment and safety.

(Palenchar, et al., 2011) gives a new perspective of risks generated from risk generator, risk bearer and naturally.

- Risk created by an organization (Risk generator): such as chemical-manufacturing companies.
- Risk created by risk bearer's choices. This kind of risk happens when people don't know or don't comply with the advice of the risk researchers, arbiters, informers, and advocates. Such as: seatbelt safety or safe sex.
- Risk occurs naturally, such as hurricanes and earthquake.

## **3.2 Definition of risk management**

### **3.2.1 WHAT IS RISK MANAGEMENT?**

To mitigate risk and support a decision on investing a project, a risk assessment is performed and risk management is needed. Risk management can be defined as all activities and measures that carried out to understand, describe and manage risk. It is about managing uncertain information, fallible individuals and organizations and industries, considering the people, planet and profit.

Risk management system can provide insights about what can go wrong, why and the consequences. The primary goal is to create controls and judgments about likelihood and uncertainties in the market place. Risk management can balance the conflicts emerged in exploring opportunities as well as avoid losses, accidents and disasters (Aven & Vinnem, 2007).

### 3.2.2 DECISION-MAKING RISK MANAGEMENT

The core part of risk management is risk assessment, which produces a risk description picture that covers identified events and consequences, assigned probabilities, uncertain intervals, strength of knowledge judgements, as well as consideration of black swans (Aven, 2013). The results of risk assessment provide an insight for decision-makers and stakeholders to improve their decision-making process. It aims to help companies to choose between alternatives and decide the implementation of risk-reducing measures.

But the challenge of such decision-making is that it is difficult to predict the consequences (outcome) of the decisions. (Aven, 2008) introduces the important role of cautionary and precautionary principles that should be played in the risk assessment process to ensure that the proper weight is given to uncertainties in the decision making. The cautionary principle says that measures should be taken or the activity should not be carried out if there is risk associated with the activity, which means that you should be cautious. The precautionary principle can be seen as a special case of the cautionary principle, being applied in the special case of scientific uncertainties.

### 3.3 Process of risk management

The traditional risk management process based on ISO 31000 is conceived as Figure 5, which gives an overall risk process for organization. The risk management process is presented step by step.

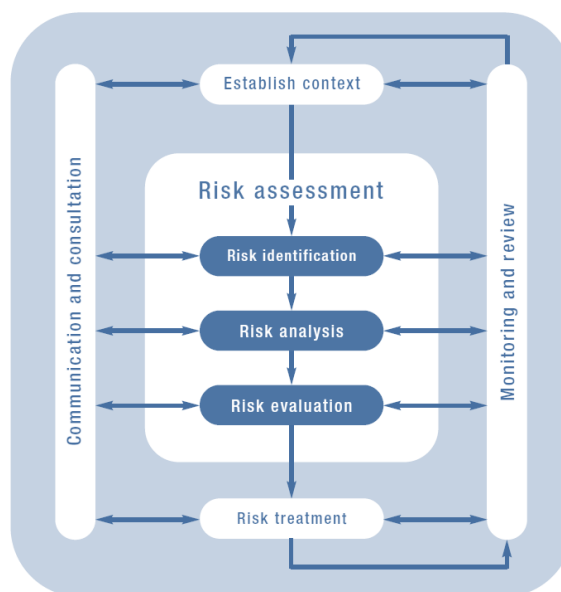


Figure 5 Risk management process based on ISO 31000

## 1) **Planning**

- Establish context

Defines the external and internal parameters to be taken into account when managing risk as well as establish the risk management process. The external context usually refers to the external environment such as social and cultural, political, legal, financial, technological, economic, international and national environment. The internal context includes the internal environment like stakeholder's interest, governance, organizational structure, the organization's culture, system and guidelines.

## 2) **Risk assessment**

- Risk identification

Risk identification is to identify different sources of risks and initial events as well as impact of their causes and their potential consequences. The main work of risk identification is to generate a comprehensive list of risks based on those events.

Approaches used to identify risks include checklists, brainstorming, earlier experience, records, etc. Different areas of expertise are needed to identify the risks. The identified risks are recorded into a risk register where they are described and assigned to a risk owner.

- Risk analysis

The purpose of risk analysis is to describe risk and figure out the concerns that need to be taken into consideration in the decision-making process. During this step we can get the information about whether risks need to be treated and what the most appropriate risk treatment strategies and methods are, which provides an input to risk evaluation and risk treatment.

There are three main categories of risk analysis methods: simplified risk analysis, standard risk analyses and model-based risk analysis. Simplified risk analysis is an informal procedure to establish risk picture by using brainstorming sessions and group discussions to present risk in coarse scale. Standard risk analysis is a more formalized procedure by using risk metrics to present the results through HAZOP or other coarse risk analysis. The model-based risk analysis makes use of techniques to calculate risks such as fault tree and event tree.



The risk analysis is the central part of risk management and it can be carried out at various phase in the life time of system. (Aven, 2008) believes it is easier to do risk analysis during the planning phases and adjust the plan, otherwise it is difficult to make changes to the existing system in the operation phase.

There are two different approaches to the risk analysis: forward approach and backward approach. In the forward approach, risk analysis begins with the identification of initial events and it implies more mechanized and time consuming calculation process. While the backward approach, the risk analysis starts with the identification of the resulting events and associated scenarios. This process is less resources intensive but requires more experience and competence.

- Risk evaluation

The goal of risk evaluation is to contribute to making decisions, based on the outcomes of risk analysis that we obtained from the last step. The evaluation should include which risks need treatment and what the priority for treatment implementation. It should decide and priorities actions. Generally, it is about identification of which risk and decision analyses to execute. If actions to adjust the risk level are needed, the ALARP principles can be applied to consider the cost and benefit dimension.

### 3) Risk treatment

- Risk treatment

Based on the results of the risk evaluation, risk treatment provides one or more options which can be selected for modifying risks as well as the combination of implementing those options. The aim of risk treatment is to revise and remove the risk sources, change the likelihood and the consequences, avoid similar risks.

- Managerial review and judgment

Management review and judgment sees the results of the risk assessments, cost-benefit analyses and other types of analyses in a larger context, taking into account the limitations and constraints of the tools, as well as value judgments which are not reflected in the analyses. This management review and judgment is a process extending beyond the domain of the formal analyses.

If the action given from the risk treatment is evaluated as ok, the risk is revised. If not, the process should return to the previous step of determination of actions in the risk evaluation phase and proceed the rest process again.

## **CHAPTER 4: INTEGRATION BETWEEN CSR AND RISK MANAGEMENT**

### **4.1 Ideal integration process**

Comparing the different process of integrating CSR and risk management in an organization, the links between risk management and CSR is shown in Figure 6.

- 1) The core subjects of CSR give guidance on how to carry out risk management. In the meantime, the risk management contributes to the development of CSR plan and policy.

When risk analyst carries out a risk management plan, it usually needs to define the problem, gather the information and organize the work. Usually we know there are four general types of risks, economic, technological and political and social risks, but there are more emerging risks beyond these four categories. Risks are not only about future events and consequences; it also involves the uncertainty. It is hard to predict the risk, but we must be clear how to reduce the risk into a minimum level.

As we have talked in chapter 3.1.2, the new risk perspective has added knowledge dimension into the risk concept, which shows a higher focus on the importance of knowledge. The CSR contents can act as a role of knowledge provider, which provide the risk managers with a wide range of knowledge when considering which aspects of area should they pay attention to. The decision-makers will benefit from understanding the decision, that he is supposed to make, is based on which level of knowledge.

The CSR principles give guidance to the risk generator to increase their willingness and ability to know and implement standards of safe manufacturing operation. It also helps to ensure the product safety as to meet or exceed stakeholder expectation.

- 2) Effective CSR helps to understand and predict the potential risks. The results of reliable risk management will indicate what is significant to the organization during the CSR implementation process.

Based on instructions of core subjects of CSR, it is easier to identify the initial events, find out the hazards, threats and opportunities behind the events. And it helps the organization to rapidly locate where these risks may be generated from different fields. Risk picture can be drawn with the supporting of cause and consequences analysis to meet the principles of CSR.

Through the risk management, we can get the information about whether risks need to be treated and what the most appropriate risk treatment strategies and methods are, which help to determine what is significant to the organization. This will in return help the organization to understand the CSR and set measurable targets and draft the CSR plan,

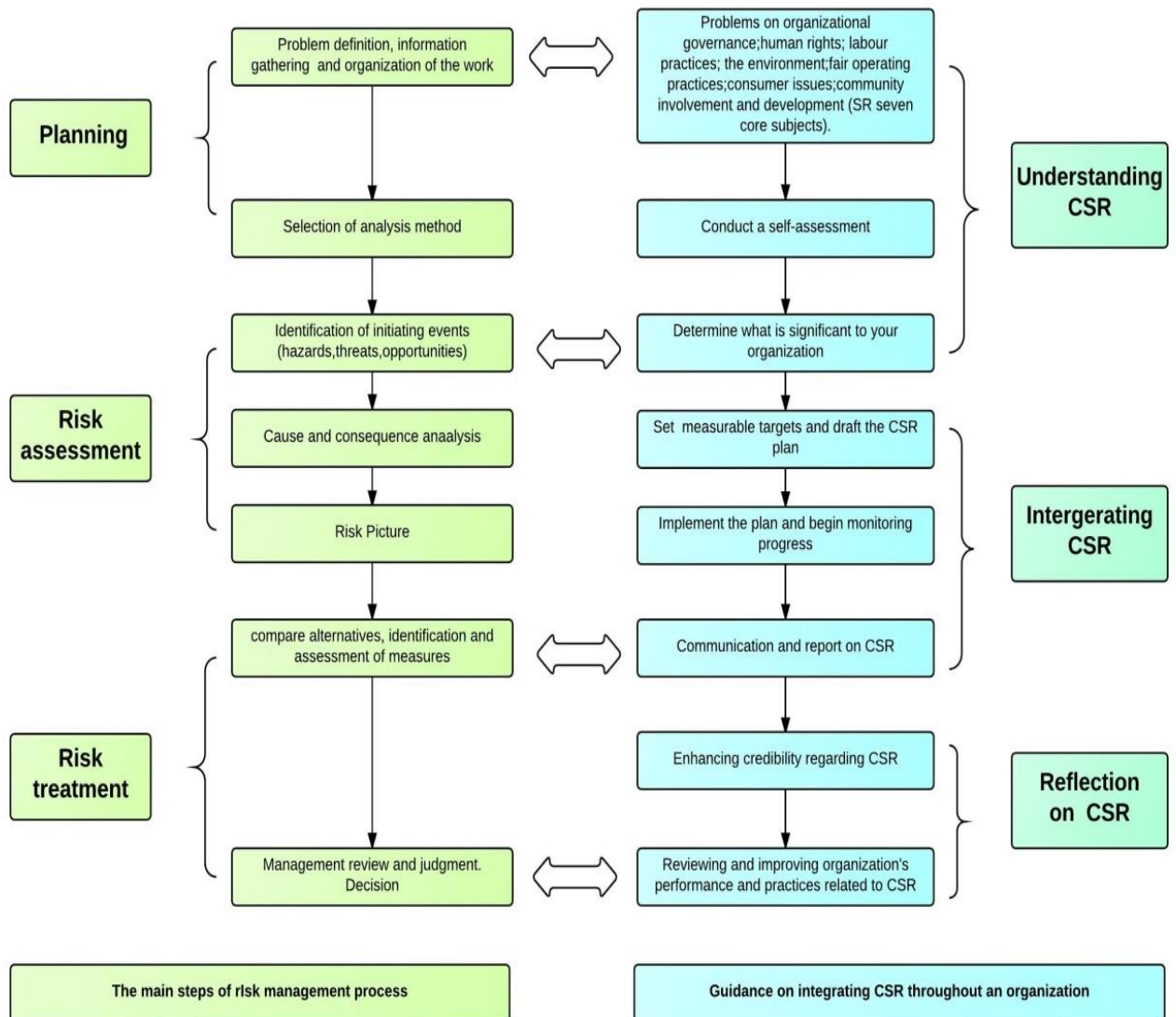


Figure 6 Links between risk management and CSR

- 3) Management review and judgment in a decision-making context from the process of risk management will have reflections on CSR.

Management review and judgement is about analyzing and learning lessons from events (including near-misses), changes, trends, successes and failures and obtaining further information to improve risk assessment, which can be reflected on reviewing and improving organization's performance and practices related to CSR.

Reflection on CSR is necessary for organizations to conscientiously manage and monitor its own impacts associated with each core subjects in CSR. As to minimize the harm of social and environmental risks, as well as maximize opportunities and positive impacts.

## **4.2 Challenges during integration**

The challenges during integration between CSR and risk management are referenced (Thekdi, 2016).

- 1) Organizations may not effectively manage risk in policy adoption and implementation.

In recent years, the CSR policies are increasingly being implemented in organizations, large number of investment has been involved into these CSR activities but the incidents are still happening. Looking back to year 2015, the corruption scandal of Brazil's state-run oil company Petrobras, the cheating behavior of German car giant Volkswagen, the climate issue hiding by the one of the world biggest oil company, Exxon Mobil and so on.

(Thekdi, 2016) gives an explanation for the above cases is because that these organizations did not effectively manage risk in policy adoption and implementation. It is believed that the current CSR policies suffer from severe weaknesses related to risk and uncertainty treatment. Although company have been aware of the importance to implement CSR plan, they did not sufficiently consider the severe consequences of risks they may face apart from economic, technological and political and social risks. They may underestimate the harm and influence of uncertainty of risks so that the risk management are not fully integrated with CSR policies.

- 2) In the CSR planning phase, it is challenging to select accurate CSR policy and the risks definition priority may be shifted

In chapter 2 we have discussed the development of CSR, we know that there is lack of consensus on specific tools and practices for CSR planning and implementation. The international standard specifically designed for social responsibility ISO26000 in 2010 only provides general guidance for all the organizations. Nearly every company has its own unique CSR policies and implementation process.

Looking through the standard ISO 26000, there are limited guidelines on how to select the CSR policies considering all the risks and uncertainty associated with policy adoption. Additionally, the risks definition priority may be shifted with the changes of the society so that the CSR may need to be updated and modified, which will in return give much pressure to the selection of CSR policy.

- 3) In the CSR implementation phase, it can be hard to evaluate the initiatives performance and uncertainties may appear to influence the original routine of the CSR plan.

It is hard to evaluate and measure the outcome of the implemented CSR policies. Because there is lack of methods and tools for assessing and valuing the risks and uncertainties associated to the CSR performance.

Additionally, during the process of complying the CSR policies, uncertainties may appear to influence the original routine of the CSR plan. For example, political condition may shift quickly, natural disasters may influence the environmental conditions, leadership tenures may influence the organizational culture and other unforeseen uncertainties.

- 4) Conflicts may be raised between short-term leadership tenures and long-term CSR goals and influence the decision making.

CSR performance is a long-term process and it requires time to show its effectiveness and to reach the goal eventually. But the leadership tenures in a company may be short, there may be little incentive for them-the decision makers to follow through the CSR efforts. Some leaders may not consider all the CSR

subjects and may prefer to concentrate on one or two of the specific aspects that are most beneficial for them.

Risks may be always existed, the problem is how the decision-makers choose the priority of the risks during the process of CSR plan and implementation. Managers in the short-term tenures may ignore or underestimate some aspects of risks, which results to a misbalance of the CSR performance. Those ignored or underestimated risks will not disappear and they are just covered by the CSR make up. If it is not treated properly, those risks may grow into a bomb that may threaten the company in the future.

### **4.3 Principles of optimizing integration**

- 1) Understand the uncertainty related to risks as much as possible.

Uncertainty is described by insufficient factual information about the goal, solution of task and some lack of confidence in the consequent interferences, estimates or predictions required.

For companies and investors, they must be aware of the uncertainty related to risks. Because social risk is usually defined as an uncertain event arising from interaction between project activities and the surrounding communities and other stakeholders. Besides, investors and decision-makers must be aware that risks may affect the objectives of an investment project positively or negatively, which may be depending on how company deal with the uncertainty.

(Thurber & Hults, 2012) thinks that the hallmark of a commercial approach to risk management is the deployment of various strategies to reduce uncertainty of outcome and limit capital exposed to loss. To manage uncertainty, organizations must develop their resources and capabilities to predict, infer, estimate and learn.

- 2) Understand that risk management is important in line with CSR.

We have discussed in the previous chapter that the CSR content may need to be updated and modified because the risks definition priority may be shifted with the changes of the society so that it will in return give much pressure to the selection of CSR policy.

To improve the efficiency and efficacy of social responsibility projects, it requires companies not only understand what the risks are, but also ask them to know how to incorporate risk management into CSR management planning and implementation. The CSR management plan should include all the project's risks as well as their respective handling measures.

The methodology for CSR management in investment business should be operated in mitigation of all kinds of risks which must be identified before in each investment projects, especially including identify social risks related to multiple relationships with communities, suppliers and other stakeholders to develop a positive legacy for the society.

- 3) Understand the importance of stakeholder /decision makers and their influence on implementing CSR.

When implementing CSR plan, it is important to fit between company performance and stakeholders' values since stakeholders are expected to have diverse preferences regarding company actions, processes and outcomes. (Brammer & Pavelin, 2005) believes that stakeholders can have the power to replace management if they have different opinion. For those powerful decision maker, their words can hamper the execution of corporate strategy.

It is challenging to manage and balance the multitude of stakeholder expectations and their conflicting values (Nills & Shultz II, 1997). But well-organized stakeholder groups can have an opportunity to address gaps between the stakeholders' goals and values and actual company behavior, for example by making the company aware of dubious incidents ranging from corruption, workplace harassment to environmental offences ( Vaaland & Heide, 2008).

The decision-makers should be responsible to look beyond the short-term profit and consider more about the long-term achievement by stressing different risks during the CSR planning and implementation.

## **CHAPTER 5: CSR IN PETROLEUM INDUSTRY**

### **5.1 CSR ideas in petroleum industry**

#### **5.1.1 THE FEATURES OF PETROLEUM INDUSTRY**

The oil and gas industry is a traditional industry with long history and potentially high economic gains and extensive and complex value chains. One of the defining characteristics of the oil industry is the central role that governments play through direct ownership of the enterprises that produce, refine, and market hydrocarbons. These enterprises, which known as national oil companies (NOCs), control nearly 90% of the world's oil reserves and a sizeable portion (73%) of production (Victor, 2013).

The high economic gains from the oil and gas industry fulfill the company more responsibilities to be managed to prevent events throughout the value chain that could potentially result in harm to people, damage to the environment, and socio-economic impacts.

At the same time, high profits and the complex and diversified oil and gas supply chains may also indicate that the sector is more potential to exposed to third-party corruption (Blanc, 2015). Besides, the oil and gas companies are also especially prone to suffering reputational losses from health, environmental and safety (HSE) corruption-related incidents. Think about the Petrobras corruption scandal in 2015 and BP environmental accidents in 2010. So, there is demand for strong auditing and other HSE controls.

The oil and gas industry operates all over the world, which are involved in different remote regions and diverse communities. To successfully design and execute the oil and gas projects, it is important for investors and operators to understand and address the interests of different societies, social groups and communities, which may affect, or be affected by, oil and gas operations.

Moreover, when oil and gas companies operates in different communities, the community relations at the local level can be fraught with human rights, labor rights, security and corruption issues. To mitigate these risks, it is required for oil and gas companies to develop comprehensive community engagement strategies that work in parallel with their corporate anti-corruption policies.



To work in the oil and gas industry, employees are more frequently exposed to intrinsically hazardous activities, such as work at heights and in confined spaces, helicopter transfers to offshore facilities and work with containment of flammable hydrocarbons at high pressure and high temperature. The dangerous working environment asks the companies to think more about the human rights, labor standards, safety and health of the employees.

### **5.1.2 CSR ISSUES IN OIL AND GAS INDUSTRY**

Oil and gas sector has been among the leading industry sectors in championing CSR (Frynas, 2010). IPIECA, the global oil and gas industry association for environmental and social issues, the American Petroleum Institute (API) and the International Association of Oil & Gas Producers (IOGP) have been providing sustainability reporting guidance for the oil and gas industry since 2005. Nowadays most of the oil and gas companies all around the world are following this guidance when making their CSR report.

Figure 7 is the illustration of CSR issues from the Oil and Gas Industry Guidance on Voluntary Sustainability Reporting (3rd edition) (IPIECA, 2015). From the figure we can know the inter-connecting social, economic and environmental dimensions of sustainable development as well as the types of CSR or sustainability topics, which gives us an overview of the most significant issues commonly associated with the oil and gas industry.

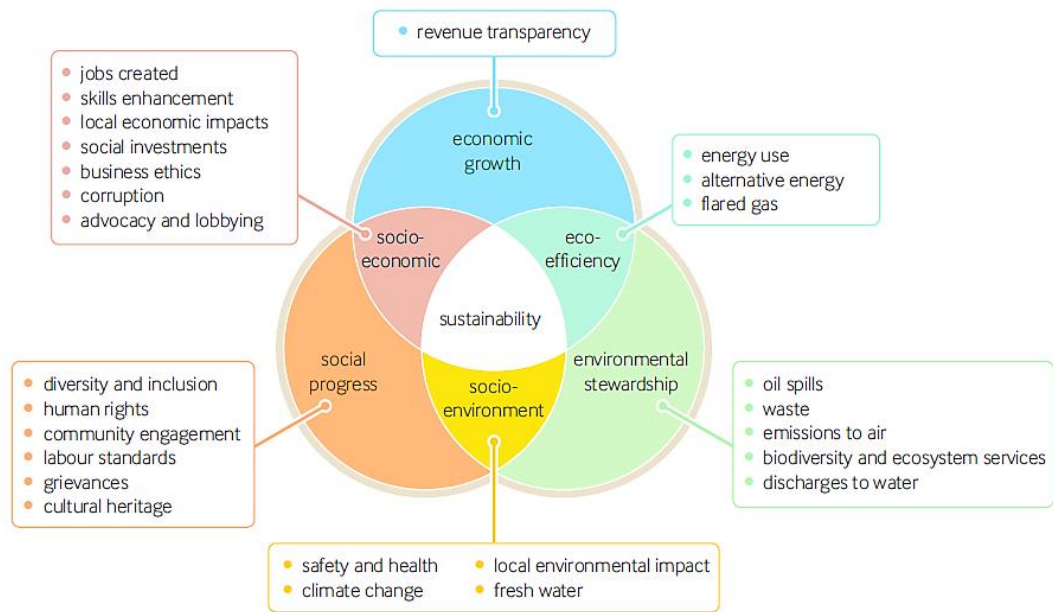


Figure 7 CSR issues in Oil and Gas Industry (IPIECA, 2015)

The CSR of oil and gas companies should increase economic growth and improve revenue transparency. It should make contribution to the social progress, enrich the diversity and inclusion, ensure the human rights, engage in community development, equal the labor standards, reduce grievances and protect cultural heritages. To achieve its environmental stewardship, companies should manage to prevent oil spills, reduce the waste, limit the amount of emission to air, make contribution to biodiversity and ecosystem services and strictly control the discharges to water.

Moreover, the CSR of oil and gas companies should also fulfill the social economic responsibilities, including creating jobs, enhancing employee skills, having positive impacts on local economic, increasing social investments, obeying business ethics, preventing corruption, promoting advocacy and lobbying. Besides, it should also show consideration to the social environment, ensure safety and health, make efforts to control climate change, positively affect the local environmental and cherish the fresh water. Last but not least important, all the oil and gas companies should achieve high eco-efficiency, make proper use of energy, make innovation research on alternative energy and strictly limit the amount of flared gas.

## 5.2 CSR practices in petroleum industry

### 5.2.1 PETROBRAS CORRUPTION

CSR practices in petroleum industry are varied from companies to companies so that the CSR efforts have different outcomes. When CSR is well established and implemented, it can enrich the positive image of the company, but if not organized, it can ruin the reputation of the company. An ironic example is Petrobras, once a national treasure but now despoiled, Petrobras now faces cost and investment-cutting, asset sales, partial privatization, the worst industrial action in decades and years of media punishment until its reputation recover.

#### **What is the corruption scandal about?**

The Brazil's largest state-run oil company, once the crown jewel of Brazil's government, Petrobras was ranked as the world's most sustainable oil and gas company by the sustainability research and rating firm Management & Excellence (M&E, Madrid & Sao Paulo) (Noria, 2009) in 2008. But now it has been embroiled in a massive corruption scandal, which began to unfold in 2014 (BBC, 2015). Allegations surfaced that, in order to get lucrative contracts to construction and engineering companies, Petrobras has overpaid contractors in exchange for bribes and kickbacks to its executives and politicians (Jaeger, 2016).

#### **What is the consequences of the corruption events?**

At the center of an explosive corruption scandal and pressured by low oil prices at the same time, Petrobras has been faced with unprecedentedly difficult challenge ever. According to fourth quarter report, Petrobras announced the net loss widened to 36.9bn reais (\$10.2bn; £7.1bn), which brought its full-year 2015 loss result to a \$9. 6bn. This is the loss biggest ever quarterly loss and the worst result since its founding in 1953 (BBC, 2016). In total, Petrobras' losses to the massive kickback and money laundering schemes are estimated to USD 31.5 billion (ISTOÉ, 2015).

Besides, the investigation into kickbacks on Petrobras contracts has resulted in the arrest of several of Petrobras executives and politicians. Paulo Roberto Costa, former head of Petrobras, was one of the first to be arrested in March 2014. According to the

latest news, in total, more than 200 companies and 80 individuals related to Petrobras corruption case now face possible charges (Jaeger, 2016).

One of Brazil's most senior businessmen, Marcelo Odebrecht was sentenced to be jailed for 19 years for his involvement in massive kickback scheme (Joe, 2016). The country's former President, Luiz Inácio Lula da Silva, is accused of using his influence to grant contracts to several engineering companies.

Moreover, the scandal has also badly hurt the present president Dilma Rousseff, who was the head of Petrobras' board from 2003 to 2010 when the alleged bribery scheme played out (Zack, 2016). The country now is faced with high inflation, unemployment, and political turmoil, which led to protests across the Brazil shown in Figure 8. And present Dilma Rousseff is now faced with impeachment and the real possibility of being removed from power in six months (Gallas, 2016).



Figure 8 Mass protests sweep through Brazil over oil giant Petrobras (BBC, 2015)

### **How did Petrobras respond to the scandals?**

In order to clean up its act and ease investor concerns in the flood of a giant corruption scandal and win back trust of shareholders, Petrobras has made some efforts.

In July 2013, Petrobras introduced its corruption prevention program (Petrobras, 2014). In December 2014, Petrobras released its corruption prevention program manual. In November 2014, the Governance, Risk and Compliance Officer was first created (Petrobras, 2015). In January 13 2015 Petrobras named Joao Adalberto Elek Junior as its first head of governance, risk and compliance. His job will be responsible for

managing future risk for the company, including instances of fraud and corruption (Jeb & Marguerita, 2015).

### **Why did this corruption happen?**

For Petrobras, the ethics and compliance program should have been run earlier with a proven track record of independence and free from undue influence, but the fact is far away from that and the poor management of the state-owned oil company was responsible for exit of corruption scandal.

Though established in 1953, until 2012 Petrobras set up its Social Responsibility department (executive management) to strengthen the function, standardize operations and develop mechanisms to control the efficiency and efficacy of social responsibility projects (Petrobras, 2013).

Read through the previous annual sustainability reports, we can find that before 2013, the risk management of sustainability annual reports of Petrobras are mainly focused on the environmental risks, such as reducing oil spill and leakage. There is little information about how to deal with the reputation risks. In sustainability report 2013, it is said that Management of environmental risks in our activities prioritizes an integrated approach.

Until 2014, when the corruption scandal was discovered to be unfolded, the sustainability report of that year first officially acknowledged the importance of social risks and came up with plans and measures to handle these risks, including creating its first Governance, Risk and Compliance Officer and mitigating social risks identified in each investment project. But these may be too little and too late.

From this we can see that Petrobras did not effectively manage risk in policy adoption and implementation. The previous sustainability report or CSR policies suffer from severe weakness related to risk and uncertainty treatment and there is large potential to improve the efficiency and efficacy of social responsibility projects by incorporating ideas and methods from the field of risk analysis and risk management.

### **How to improve their behavior?**

**Understand the risks and prepare for the risks.**

A good way to turn the corruption challenge into a reputation opportunity is being prepared for the corruption risks, which to some extent means protecting or even enhancing the company's reputation (Blanc, 2015). But how to make preparation for the risks?

The most important contribution is to understand the risks. As the Petrobras scandals show, corruption and bribery run especially deep in the oil and gas industries because of the potentially high economic gains and long and complex value chains, which means that the sector is well exposed to third party corruptions. So in order to mitigate these risks, companies should implement an effective internal programs or platform to proactively manage and oversee third parties in all aspects of the business.

Through identification, evaluation, monitoring and management of relevant risks from all aspects of the business, the internal management program can strengthen an integrated view of business risks and report the effect of the main risks in results and investment projects to the Board of Directors (Petrobras, 2015).

#### **Need to improve the transparency and accountability.**

The Petrobras scandal demonstrates that Brazil need to substantially improve the transparency and accountability of their operations and of their board's governance. Because of the political mismanagement and abuse in Brazil, Petrobras is at risk and fail to guarantee all the business standards (Arruda & Zagaris, 2015).

It is clear that governments, international organizations and non-governmental organizations must continue to set up their actions to enhance national and international conventions, laws, and regulations concerning transparency, governance, and accountability. Steps should be taken to develop anticorruption regimes and networks.

#### **5.2.2 STATOIL HORTON CASE**

In fact, the case of Petrobras corruption scandal is not the first time in the history that corruption was revealed in the petroleum industry. In 2004, the largest national state oil company in Norway, Statoil was found guilty of bribery and fined 10.5 million dollars in order to get source contracts in Iran.

#### **What is the Statoil Horton case about?**

Back to 2002, in order to strengthen the operations rights in Iran and access first-hand information regarding future oil and gas projects, Statoil signed a consultancy agreement with an Iranian-based company Horton Investment. The agreement which has a total value of US 18 million dollars over ten years is later reevaluated and found to be against the Statoil's own ethical rules and violating the Norwegian anti-corruption law ( Vaaland & Heide, 2008).

Because this Iranian consultant company is owned by Mehdi Hashemi Rafsanjani, which has a quite complex background. He is the Chairman of the National Oil Company as well as the son of the former Iranian president. And the Rafsanjani family in Iran have been accused of several corruption cases.

The CEO was warned by the Statoil internal auditors and internal security department about the irregularities, but the CEO chose to ignore the warnings. Although the chairman on board was informed, still failed to terminate the contract. One of a leading newspaper in Norway published the whole story and the incident was exposed to the public, which accelerated discussion.

#### **What is the consequences of the corruption events?**

Shortly after the incident exposure, the vice-president for international operations forced to leave the company. The CEO was fired by the Board and the chairman of the Board resigned. Former director of Statoil's international department was also fined 200,000 Norwegian kroner for his role in the affair (BBC, 2004).

Statoil was fined of USD 10.5 million for having violated the US Foreign Corrupt Practices Act. In addition, Statoil also paid a criminal fine of approximately USD 3 million under the penalty notice ("forelegg") issued by Norwegian authorities (Økokrim). The Norwegian fine was deducted from the US fine (Statoil, 2009). And apparently the case has damaged Statoil's reputation

#### **How did Statoil response to the scandals?**

Following the incident and in order to meet the stakeholder expectations, several significant and concrete steps have been taken in the Statoil organization to prevent a similar case in the future. The Horton agreement was cancelled and an external compliance consultant was assigned for three years to review all agreements in search for corruption/bribery.

Among all the measures, the highlight is to increase the focus on anti-corruption training of Statoil personnel that are deemed to be particularly exposed to corruption risk. Another practical step taken is the development of a risk-based procedure for handling all new and significantly changed business relationships, which introduced a new four-point plan to reduce the risk of new dubious contracts (Statoil, 2009).

### **How did Statoil rebuild their reputation?**

In order to rebuild the reputation, Statoil has taken a series of measures, including changing the communication strategy, initiating actions to reduce stakeholder gaps, introducing new ethical guidelines and launching a new system to secure and protect internal whistleblowers ( Vaaland & Heide, 2008).

To learn from the lessons of Horton incident, Statoil published the Horton Case Investigation Report online and also shared with society through Statoil's sustainability report. Information related to Statoil's CSR position was thus shared with society in a more general form so that enhance the communication between different stakeholders.

Statoil established a separate corporate risk committee which is chaired by the chief financial officer. The committee meets eight to ten times a year to consider and adopt the company's strategies for risk management. In September 2011 Statoil launched a new e-learning program on business ethics and anti-corruption compliance, which is mandatory for the Statoil's employees (Statoil, 2016).



## **CHAPTER 6 ANALYSIS**

### **6.1 Similarities between the two cases**

The two companies have several features in common: both are national oil companies with strong impact on society and economics, both are in the oil business, and both are facing various CSR and reputational challenges.

#### **6.1.1 MISMANAGEMENT OF RISK IN CSR MANAGEMENT**

From the case study, we see that corruption and bribery may run especially deep in the oil and gas industries because of the potentially high economic gains and long and complex value chains. This sector may be well exposed to third party corruptions. Both the Petrobras and Statoil have problem on managing reputation risks in the CSR policy adoption and implementation.

Although both companies have been aware of the importance to implement CSR policies, they did not sufficiently consider the severe consequences of reputation risks. They underestimate the harm and influence of uncertainty of risks so that the CSR policies are not fully integrated with risk management. Besides they also faced challenges to prioritize the risks during CSR plan when encountering more than one risk at the same time.

Looked at the development history of Petrobras, we can find that Petrobras have developed very fast in the past 10 years and Brazil experienced an economic booming period. The past CSR management is more probably aiming to support economy growth and the decision-makers would like to prefer to concentrate on what are most beneficial for them.

Read through the previous annual sustainability reports, we can find that before 2013, the risk management of sustainability annual reports of Petrobras are mainly focused on the environmental risks, such as reducing oil spill and leakage. In sustainability report 2013, it was said that “Management of environmental risks in our activities prioritizes an integrated approach” (Petrobras, 2014). There is little information about how to deal with the reputation risks. However, the decision makers may ignore that the risks definition priority may be shifted with the changes of the society so that the CSR may need to be updated and modified.

The Petrobras corruption was existed since 2003 but it was just revealed recent years. From this we have reason to believe that corruption in the Petrobras has always been existed, but decision-makers choose not to treat reputation risk as major risk at the beginning because they believe profit growth is the priority. They may prefer to stress more on the environmental risks or operational risks that are directly exposed to the external people which they cannot cover. As long as the corruption scandal was not revealed, they can wear the CSR dress up to shift people's attention into other aspects and they can prevent their reputation from being damaged.

### **6.1.2 CONFLICTS BETWEEN SHORT-TERM LEADERSHIP TENURES AND LONG-TERM CSR PERFORMANCE AND GOALS**

Both the Petrobras and Statoil cases, decision-makers underestimate the consequences of risks. For Petrobras, the corruption risk may have been existed for a long time, but managers in the short-term tenures underestimate the consequences of reputation risks which results a misbalance of the CSR performance. Those underestimated reputation risks are not disappearing and they are accumulated under the cover of CSR make up. They grow bigger and bigger and change into a bomb and threaten the Petrobras after the corruption scandal was revealed from the late of 2013.

From the Statoil Horton case, we can proof that for those powerful decision maker, their words can hamper the execution of corporate strategy. The CEO has a different opinion from the Statoil internal audit system so he decided to ignore the warning and resign the contract because he can have the power. This is embarrassed for those CSR planner because powerful decision-makers can execute in an opposite way during the CSR implementation and it is a pity that they cannot stop it from happening.

The behavior of the Statoil previous CEO also shows that he underestimated the risks when he rejected the warning of the Statoil internal audit system. Because his leadership tenures in a company may be short, CSR performance is a long-term process and it requires time to show its effectiveness and to reach the goal, there may be little incentive for him to follow through the CSR efforts. The reason why he would like to take risky actions is because the conflicts between short-term leadership tenures and long-term CSR performance and goals. So he may not consider all the CSR subjects and may prefer to concentrate on one or two of the specific aspects that are most beneficial for him.

## **6.2 Differences of the two cases**

But the two cases have much more different aspects regards of the ways, causes and consequences of the reputation risks.

### **6.2.1 DIFFERENT WAYS OF REPUTATION RISKS**

The Statoil Horton agreement was signed in 2002, the corruption scandal was uncovered by Norwegian paper in 2003. The failure of the Statoil Horton case is mostly attributed to the immediately exposure from a Norwegian media at the early beginning. After the media exposure and through investigation, Statoil agreed that it has paid bribes to influence important political figures in Iran to grant oil contracts to Statoil through the consultant Horton Investment during 2002 and 2003. In the end the agreement was terminated and Statoil paid the fines.

But the case of Petrobras corruption scandal is much more complicated, see Figure 9. The scandal was discovered in 2014, but experts estimate that criminal activities were being developed for 10 years. The case became public when investigators started to question the movement of billions of Brazilian reais abroad, and throughout the country, through seemingly legitimate businesses with suspicion of money laundering operations (Telesur, 2016).

Later experts handling the case also found the connections of these money laundering schemes with the state owned oil company Petrobras. Since then the money laundering investigation uncovered a web of corruption in Brazil's Petrobras.

Investigators found that a small group of Petrobras executives gave a green light to large projects such as refineries and agreed to do business only with a group of construction companies that had formed a cartel to bid. The construction companies agreed on how much to bid for Petrobras contracts and described which company was going to win each one.

The Petrobras executives signed contracts overcharging construction firms an agreed-upon amount, then pocketed around 3% of the value of the contracts. The construction firms hired shell companies associated with money launderers, which they used to make kickback payments in Brazil and abroad. The kick back money was shared between Petrobras executives, construction industry executives and politicians (Connors & Magalhaes, 2015).

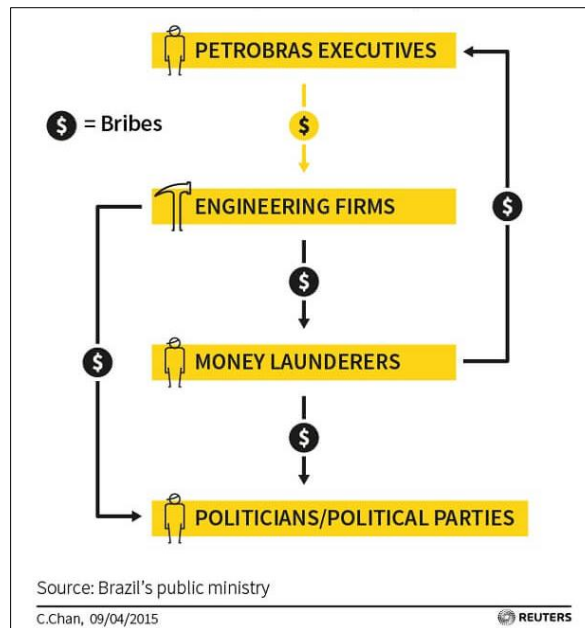


Figure 9 Alleged corruption scheme at Brazil's Petrobras. (C.Chan, 2015)

## 6.2.2 DIFFERENT LEVEL OF ADDRESSING RISKS IN CSR REPORT

From the official company website of Petrobras, we can find the annual sustainability report since 2011. Look through the CSR report from 2011 to 2014, we can find that Petrobras didn't fully prepare for the risks before the corruption scandal was exposed.

In 2011, the Risk management department is together with the Financial Planning which is under the responsibility of the Financial Integration Committee, primarily aiming to consider the financial market risk and those associated with productivity (operational risk). Until 2012 Petrobras set up its Social Responsibility department (executive management). Read through the previous annual sustainability reports, we can find that before 2013, the risk management of sustainability annual reports of Petrobras are mainly focused on the environmental risks.

Until 2014, when the corruption scandal was discovered to be unfolded, the sustainability report of that year first officially acknowledged the importance of social risks and came up with plans and measures to handle these risks. Its first Governance, Risk and Compliance Officer was created in late 2014 with responsibility to mitigate social risks identified in each investment project.

Until recently in January 2016, Petrobras launched its new governance model and structure, see Figure 10 (Petrobras, 2016). One of the central objectives is to enhance the control and compliance mechanisms. It extends efforts to reinforce the control, compliance, and transparency mechanisms by creating of a new management of governance, risk and conformity.

The failure of Petrobras corruption scandal is partially because of failure to be aware of the corruption risk and failure to take actions to stop risks from happening. The relationship between politician, Petrobras employee and third party's companies are complicated. Petrobras employees underestimate the consequences of corruption risks and they are tempted by the short-term interest. Besides, the internal audit system has been controlled by politicians which breed corruption by providing protection umbrella.



Figure 10 Petrobras new governance model and structure (Petrobras, 2016)

Compared with the CSR practices of Statoil and its governance system, Statoil has a better performance in addressing risks. From the Statoil official website, we can find the sustainability report for the past 15 years from 2001 to 2015. Statoil has comparatively longer history of CSR management with more transparent data and mature management system.

Compared with the Petrobras corruption scandal, the biggest difference of Statoil Horton case is that actually the Statoil internal auditors and internal security department

had discovered the irregularities after reevaluation the agreement. But the decision makers-the CEO ignored the warnings and underestimated the consequences of the corruption risks. So the failure of Statoil Horton case is not because of failure to be aware of the corruption risk but failure to take actions to stop risks from happening.

Statoil has a good CSR management system (see Figure 11) and stresses risk management at the first place. The most material safety, security and sustainability risk factors are discussed and reviewed by the corporate executive committee and board of directors on a regular basis. Implementation of the sustainability strategy is supervised by Statoil’s Corporate Sustainability Unit, reporting directly to the head of Global Strategy and Business Development, with the support of other corporate functions and business areas. The progress in implementing these strategies is monitored by the corporate executive committee and the board of directors’ Safety, Security, Sustainability and Ethics Committee (Statoil, 2016).



Figure 11 Statoil management system (Statoil, 2016)

Statoil has an open attitude towards their business. In their sustainability report, they address that “People can see what we do and the revenues we create.” Statoil is one of the first major oil and gas companies to voluntarily start disclosing payments to governments on a country-by-country basis. In 2015, Statoil published its first Payments to Governments report, disclosing payments per project for their extractive activities (Statoil, 2016).

Their frank attitude towards incident is also worthy of learning from other companies. After closed the Statoil Horton case, it published the Horton Case Investigation Report online and also shared with society through Statoil’s sustainability report. The Petrobras

corruption scandal is still under investigation and more and more people get involved, the reputation of Petrobras has been largely damaged, to rebuild its reputation, Petrobras may need long time to recover and it can learn from Statoil to become more transparent and open.

### **6.2.3 DIFFERENT INVOLVEMENT OF GOVERNMENT WHEN IMPLEMENTING CSR**

In academic debates about the government's role in the economy, both Petrobras and Statoil used to be known as the exceptions to the overwhelming empirical evidence against national oil companies or state-owned enterprises. Many of the national oil companies are notorious for their lack of efficiency, vulnerability to political abuse and need for government subsidies (Arruda & Zagaris, 2015).

If we compare the CSR reports between the two companies, we can find actually the CSR key issues are mostly the same in both companies. But when implementing CSR policies, government has different engagement role in Petrobras and Statoil, which influences the CSR effectiveness in varied aspects.

The Statoil management is much simpler than Petrobras because it separates commercial from policy and regulatory functions in petroleum investment. Norway has administered its petroleum resources using three distinct government bodies (see Figure 12) : a national oil company - Statoil engaged in commercial hydrocarbon operations; a government ministry - the Ministry of Petroleum and Energy to direct policy; and a regulatory body - NPD (Norwegian Petroleum Directorate) to provide oversight and technical expertise (Thurber, et al., 2011).

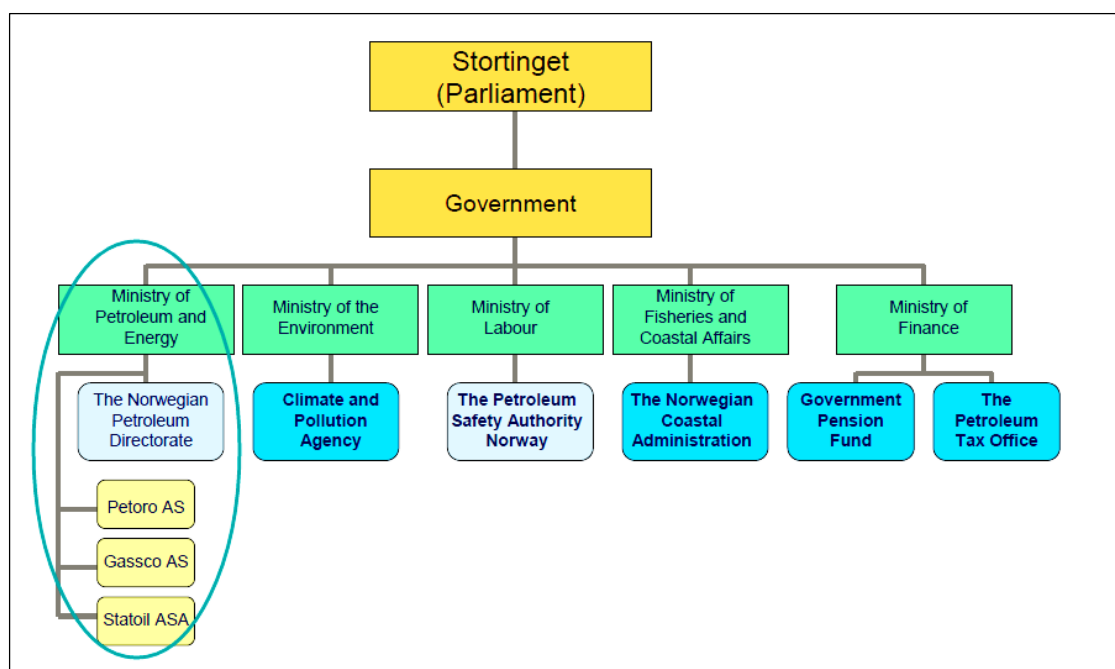


Figure 12 National organization of the petroleum sector in Norway (Odland, 2014)

This “Norwegian Model” of separated government functions is good for Statoil to implement its CSR policies without influence of politician (Victor, 2013). The Norwegian government will not interfere daily operation of Statoil or take part or intervene the company's development planning and investment decisions, neither will direct presence of directors and the appointment of executives in Statoil.

Norway created its NOC, Statoil, to help manage the impact of newfound oil wealth on an already well-functioning economy (Thurber & Istad, 2010), while Brazil’s NOC, Petrobras was created through nationalization, and one of its most important functions has been to help steer the involvement of the many foreign companies that have entered the country’s oil sector since the 1990s (Oliveira, 2011).

Unlike Statoil, Petrobras was created in a background of domestic crude oil scarcity in which its preferences were designed to align with those of the government. The government offered substantial incentives to Petrobras in order to establish a monopoly company over oil, expecting them to help meet growing domestic demand (Victor, et al., 2011). That’s why the government was able to select the CEO and dictate other major management and investment decisions in Petrobras even when it owned less share than half of the company (Oliveira, 2011).

In Brazil, policy makers have parceled out regulatory functions to autonomous agencies after decades of operation in which Petrobras largely filled those roles (Thurber, et al.,



2011). That's why the corruption behaviors can be covered for over ten-years long. Excessive political interference in Petrobras is a central theme in this corruption scandal. Senior Petrobras employees can be appointed by the key politicians and these personnel were the politicians' "point men" and richly repaid them for their support. This cronyism was key to understanding how the corruption rot set in.

## CHAPTER 7 DISCUSSION

### 7.1 New model of CSR risk management

From the previous cases study, we have found that both Petrobras and Statoil have problem on managing reputation risks in the CSR policy adoption and implementation. The reason why they mismanagement the risks in CSR management is because they have problems on understanding the integration between CSR and risk management. To help company to better recognize the relationship between CSR and risk management, a new model of CSR risk management is invented, which can be described as a “Umbrella model”, shown as Figure 13.

CSR management is like the top fabric panel of the umbrella; different color of the fabric panel presents different content of CSR dimensions. Risk management is acting as the umbrella shaft and ribs to support the panel. The handle of the umbrellas is controlled by the company. Risks are like all kinds of natural meteorological disasters, such as acid rain, tornado, snowstorm and hail. Those beyond the weather forecast can be treated as uncertainties.



Figure 13 New model of CSR risk management

The quality of the umbrellas mainly depends on the material quality of shaft and ribs as well as the attributes of top fabric panel. A good umbrella should have equipped with robust shaft and ribs which will not easily be deformed or rusted against the rain, storm, snow and hail. In addition, the attributes of the top fabric panel should also be durable enough with function of waterproof, anti-corrosion or sun protection.

Without a robust shaft and ribs, only the fabric panel cannot form an umbrella. Without the cover of fabric panel, only with the shaft and ribs, the umbrella cannot work to protect people. The shaft and ribs are the most important structure to against the external forces, the panel are significant to protect people from exposing to external forces. So shaft, ribs and panel are all necessary and cannot be separated if making an umbrella.

Like the umbrellas aiming to protect people from all kind of meteorological disasters, the new model of CSR risk management aims to protect the company from all kinds of risks and avoid disaster and accidents. So in order to help the company better against all kinds of risks, there are some principles in line with how to pick up a good umbrella that they should be aware of.

- Like different people with varied ages, looks and needs, they will have different preference on choosing an umbrella. The most important thing is to find a suitable one. For kids, they would like to choose a small and light umbrella, for adults, they may prefer a big but robust umbrella. The types of the umbrellas are depending on the need of umbrella holder, which means that big company may need a bigger umbrella with wider range of CSR protection than small company.
- In addition, the property of the umbrella is also varied by the different regions with different weather condition. For those who lives in the tropic area, the umbrella is more probably to be equipped with a sun protection layer under the panel. While for those who lives in place where rains and wind are frequently like Norway, the umbrella should have a heavy and robust shaft to against the wind forces. Same for the company, when company plan a CSR risk management, it should consider what kind of risks that are more probably to meet and come up with more specific measures to avoid these risks. Company should also be sensitive to the changes of risks because of uncertainty, and it should adjust the angle of “umbrella” quickly to protect themselves as much as possible.

- Like the criteria to choose a good umbrella depends on the material quality of shaft and ribs as well as the attributes of top fabric panel, a successful performance of company management relies heavily on the performance of CSR management and risk management. As the panel of umbrellas, CSR content should be integrated as much as possible to ensure involving all kinds of aspects. Different dimensions of CSR contents should be given equal attention otherwise the panel of umbrella will lose balance. As the main shaft and ribs of the umbrella, risk management should be robust and resilient enough to act as the foundation of the support to help company against all kinds of risks.
- Like the shaft, ribs and panel that are all necessary and cannot be separated in making an umbrella, the CSR management and risk management should also be tied closely and work together to fulfill the role in managing the company. Without risk management, CSR plan is not complete and sonorous enough to convince the shareholders and customers. Without the CSR management, only risk management cannot consider all the aspects that company needed to strengthen regards to society, environment and shareholder interests.
- Like the function of umbrella is controlled by human, the effectiveness of CSR risk management is also adjusted by the decision-maker. Sometimes the weather forecast can't be 100% accurate, there are uncertainties beyond the weather forecast. To bring the umbrella or not is totally depend on the umbrella holder. Same to the company, when company holds a CSR risk management umbrella, to use it or not, or how to implement, it is largely decided by the decision-maker. But both the umbrella holders should be aware of the uncertainties and consequences if not bring the umbrella or not use the umbrella properly.

However, umbrella has another function, apart from protecting people from meteorological disasters, which is contributing to obstruct people's sight. It will be harder for others to distinguish the face under the shadow of an umbrella. With the cover of umbrella, you can easily avoid the direct eye contact from others. The situation is also same for a company. With the makeup of CSR risk management, some companies may behave a different way privately from the way they showed in public. These companies are good at distracting public attention to achieve its own goal. That's why the Petrobras corruption occurred and why it can be hided for over ten-year long. To modify the disadvantage of the umbrella, people invent a new transparent umbrella that will not obstruct other's sight anymore. And this also explains the increasing voice of transparent among companies.

## **7.2 Modified process of decision making related CSR risk management**

From the results of cases study, especially the Statoil Horton case, we conclude that conflicts between short-term leadership tenures and long-term CSR performance and goals will influence the result of decision making. The failure of Statoil Horton case is largely due to a wrong decision-making. Company must understand the significant role of stakeholders or decision makers when implementing CSR. To help companies to make better decisions, based on (Aven, 2012), a modified process of decision making related CSR risk management is presented.

The modified model for decision making, based on the model from (Aven, 2012) is presented in Figure 14. The biggest difference between the modified process of decision making with (Aven, 2012)'s model is adding the CSR content and principles as goals, criteria and preferences to guide the stakeholders. The new process strengthens the role of CSR management during decision-making process. The decision-makers should be responsible to look beyond the short-term profit and consider more about the long-term achievement by balancing and stressing different risks during the CSR planning and implementation.

The starting point for the decision process is a decision problem, which can be choice between various concepts, design configurations, sequence of safety critical activities, risk reducing measures, etc. In order to evaluate the performance of the alternatives, various forms of analyses are conducted, including risk analyses and cost-effectiveness analysis, which result in recommendations on which alternative to choose. Finally, a managerial review and judgment of the various alternatives must be performed by decision-maker in the light of the premises, assumptions and limitations of these analyses. Then the decision-maker makes a decision.

To judge whether it is a good decision, they can look at the content and principles of CSR as a reference. Decision makers should be aware of the social responsibility for the impacts of decisions that they made and activities that they implemented on society and the environment. The decision support produced by the analyses must be reviewed by the decision-maker prior to making the decision:

- Does the decision-makers take into account the expectations of stakeholder?

- Whether the decision that they made is beneficial for sustainable development, including health and welfare of society?
- Whether the alternative that they choose is in compliance with application law and consistent with international norms of behavior?
- Will the decision be integrated throughout the organization and practiced in its relationships?

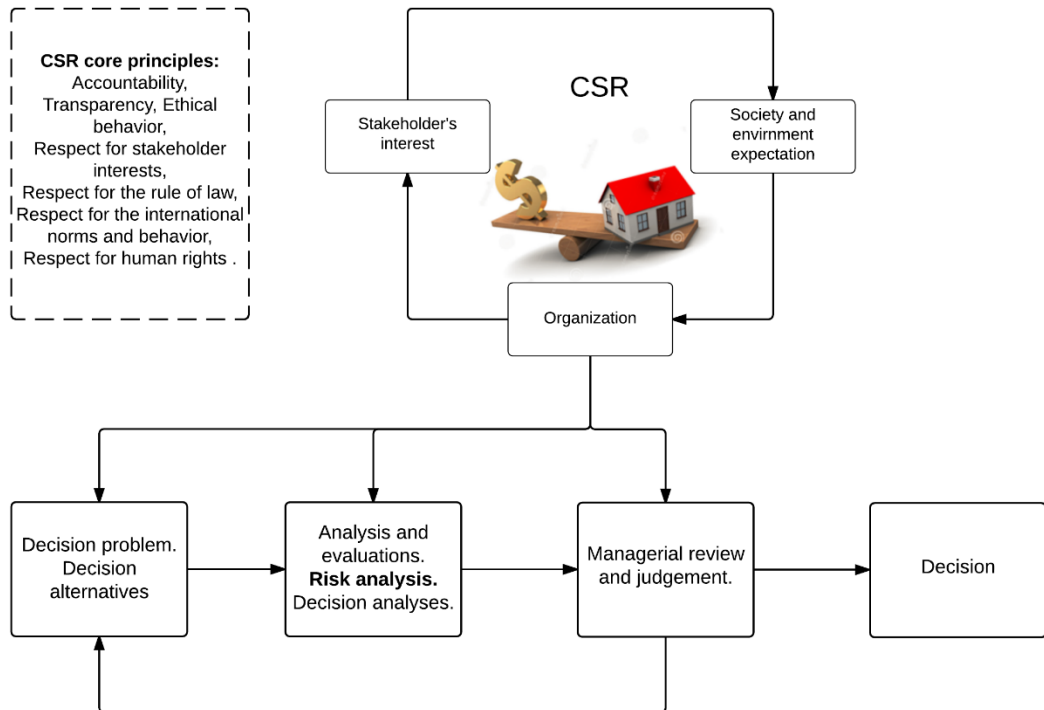


Figure 14 Modified process of decision making related CSR risk management

## **CHAPTER 8 CONCLUSION**

This chapter, summarizing all the research, analysis and discussion, is divided into three sections. The first section concludes the study from a theoretical perspective, while the second section summarizes the practical contribution based on case study. The last part concludes the whole thesis and gives some thinking for further research.

### **8.1 Theoretical summary**

The relationship between CSR and risk management has been discussed comprehensively in the first part of the thesis. It starts with the concept study on CSR and risk management, then comparing the different process of integrating CSR and risk management in an organization. The inherent connections are therefore found out.

- The core subjects of CSR give guidance on how to carry out risk management. In the meantime, the risk management contributes to the development of CSR plan and policy.
- Effective CSR helps to understand and predict the potential risks. The results of reliable risk management will indicate what is significant to the organization during the CSR implementation process.
- Management review and judgment in a decision-making context from the process of risk management will have reflections on CSR.

However, the integration of CSR and risk management is not a simple mathematical addition. To optimize the integration, the critical issues requiring careful treatment from companies are given as follow:

- Understand the uncertainty related to risks as much as possible.
- Understand that risk management is significant in line with CSR.
- Understand the importance of stakeholder /decision makers and their influence on implementing CSR.

## 8.2 Practical summary

The main research of the thesis analyzed the CSR ideas and practice in the petroleum industry with links to risk management. Through the in-depth case study of Petrobras corruption scandal and Statoil Horton case, problems during CSR practices are found. We conclude that risk management is important through CSR and risk management should play a stronger role in developing and implementing CSR policies for organizations.

Critical issues during CSR practices:

- Organizations may not effectively manage risk in policy adoption and implementation.
- In the CSR planning phase, it is challenging to select accurate CSR policy and the risks definition priority may be shifted.
- In the CSR implementation phase, it can be hard to evaluate the initiatives performance and uncertainties may appear to influence the original routine of the CSR plan.
- Conflicts may be raised between short-term leadership tenures and long-term CSR goals and influence the decision making.

Practical contributions for companies:

- A new model of CSR risk management, named as a “Umbrella model” is introduced to help company to better recognize the relationship between CSR and risk management. The new model of CSR risk management use the “Umbrella model” as analogue, which is easy to understand and clearly demonstrate the close connection between risk management and CSR and proof the fundamental role of risk management to support CSR.
- A modified process of decision making regarding CSR and risk management is presented to ease the conflicts between short-term leadership tenures and long-term CSR performance and goals, which helps companies to make better decisions. Integrating CSR content and principles into the decision-making process will provide a wider version of knowledge for decision-makers to make better decision and to meet the expectation of stakeholder, society and environment.



### **8.3 Conclusions and suggestion for future research**

This thesis has supported the CSR research by describing the integration process between CSR and risk management, considering two cases related to petroleum industry, Petrobras corruption scandal and Statoil Horton case. The challenges and principles of optimizing integration process can be leveraged to develop more specific guidelines to enrich the CSR effectiveness in practice.

The new "Umbrella model "of CSR risk management provides preliminary guidance for the integration process and help company to better recognize the relationship between CSR and risk management. The modified process of decision making regarding CSR and risk management provides a wider version of knowledge for decision-makers to make better decision.

From a theoretical perspective, future research may put efforts on methods and tools for assessing and quantifying the risks and uncertainties associated with CSR performance. Besides, it is of interest to find new ways to evaluate and measure the performance of the implemented CSR policies.

From the analysis of the differences between Petrobras corruption and Statoil Horton cases, we demonstrated that CSR effectiveness is influenced by many factors apart from the risk management, for instance, government involvement, organization governance. As a suggestion for practical study, continued discussion may focus on other factors influencing effectiveness of CSR in practice.



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