POLITICAL RISK MANAGEMENT ON INTERNATIONAL CONSTRUCTION PROJECTS

by

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ABSTRACT

Political Risk Management in International Construction Projects

This research examines the micro-political risks affecting international construction projects in Namibia and whether these risks are effectively managed. A case study research design was used for the study and the findings were that key threat risks identified in this context were repudiation, contract problems, labour unrest, hostile press, delay in permit approvals while local ownership requirements and expatriate labour restrictions are both threat and opportunity risks. It further emerged that qualitative (heuristic) techniques were commonly used in an ad hoc fashion for risk assessment and that the risk management strategy of cooperation was the most preferred. In addition, evidence suggests that the execution phase is most prone to micro-political risk.

A significant number of the micro-political risks identified arise from the host government, while the balance arise from the host society. These findings are likely to apply to other international construction projects in Namibia and have serious implications for the role of government in the success or failure of infrastructural projects which are badly needed for national development. Therefore, the Namibian Government can positively contribute through introduction of regulations, laws or amendments to laws that enhance opportunities, minimise downside risk, and thereby reduce overall construction costs on international construction projects in the country.

It is recommended that systematic risk management in which both qualitative and quantitative techniques are used for risk assessment, be adopted in dealing with micro-political risks associated with international construction projects in Namibia. Additionally, tertiary institutions offering risk management training need to focus on qualitative methods to facilitate maximum benefit when these methods are applied by their graduates. The existence of both threats and opportunities in the micro-political risk environment in international construction means contractors in international construction need to be on the lookout for downside risks as well as opportunities.

KEY WORDS

International construction projects, micro-political risk, political risk, project performance, risk assessment, systematic risk management, risk.
In memory of my younger brother

CLEMENT MUCHENGA

1976–2014
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<tr>
<td>CII</td>
<td>Construction Industry Institute</td>
</tr>
<tr>
<td>ENR</td>
<td>Engineering News Record</td>
</tr>
<tr>
<td>FDI</td>
<td>foreign direct investment</td>
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<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>IPRA</td>
<td>international project risk analysis</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organisation</td>
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<tr>
<td>MHDP</td>
<td>mass housing development programme</td>
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<tr>
<td>MNE</td>
<td>multi-national enterprises</td>
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<td>PLC</td>
<td>project life cycle</td>
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<td>PMI</td>
<td>Project Management Institute</td>
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<td>RBS</td>
<td>risk breakdown structure</td>
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<td>risk management process</td>
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<td>SSM</td>
<td>soft systems methodology</td>
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<td>WTO</td>
<td>World Trade Organisation</td>
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CHAPTER 1: INTRODUCTION

1.1 OVERVIEW

This research examines political risk management in international construction projects. For a construction company, as with any other business, risk is an inherent part of the business (Frynas and Mellahi, 2003; Zhao and Duan, 2008; Garrido et al., 2011). In the home country a company, deals with market-related and project-specific risks only. However, in cross-border projects, a foreign construction company has to contend with more complex risks with political risk being the most prominent (Robock, 1971; Kobrin, 1979; Mortanges and Allers, 1996; Hastak and Shaked, 2000; Alon and Herbert, 2009; Zhang and Wei, 2012; Loo et al., 2013). Apart from a lack of consensus on what political risk is, it has been argued that political risks are difficult to assess and manage owing to their subjective and qualitative nature (Smith and Gannon, 2008). International construction projects are exposed to financial loss, schedule overruns and other negative outcomes as consequences of these political risk (Abdul-Rahman et al., 2012).

The World Bank (2014) indicated that, in 2012, 22% of the world's US$ 72.91 trillion GDP was made up of gross fixed capital formation. Gross fixed capital formation is made up almost entirely of construction projects (World Bank 2014). Since the profession of project management is inherently involved in the realisation of these projects it follows that project management acts as a significant contributor to value creation globally (Bredillet, 2010). Some of these construction projects are done by companies within their country of origin while a substantial number are done by foreign entities through either wholly-owned subsidiaries or joint ventures (Daniels et al., 1985; Bing and Tiong, 1999; Shen et al., 2001; Ozorhon et al., 2007). Those construction projects undertaken in another country by a foreign company are called international construction projects (Ngowi et al., 2005). The removal of trade barriers between nations or world regions through the signing of bilateral or multilateral agreements, such as the protocols of the World Trade Organisation (WTO), has resulted in the phenomenon of globalisation. For construction companies it means bidding for and engaging in construction work in markets outside the political borders of the domicile of the company (Ngowi et al., 2005).

The Engineering News Record (ENR) reported that in 2013, their top 250 construction companies in the world had US$ 543.97 billion revenue from outside their countries of domicile; this figure represents an increase of 6.1% on 2012 revenue (ENR, 2014). Apart
from revenue generation, there are many other reasons why construction companies get involved in cross-border markets. Among the reasons are that, international work improves a nation’s trade balance, it allows capitalising on company expertise and experience, enables spreading of financial risk and balancing of workload where home market construction work is cyclic (Han et al., 2005). Another attractive factor is the profit rates of international construction which are higher than for domestic contracts despite the higher risks involved (Han et al., 2005). Notwithstanding the positive contributions of international construction, to both home and host country and project, international construction projects are prone to greater risks than domestic projects.

The PMI (2013) defines risk as an uncertain event or condition whose occurrence will affect project goals. Risks can either be negative or positive (opportunities) and project risk management aims to minimise if not eliminate the downside effects of negative risks while optimising on opportunities (PMI, 2013). When risks are categorized, they become easier to understand and therefore to deal with (Hillson, 2003).

Construction risks can be grouped in several ways as there is not a universally agreed method of risk categorization (Bing and Tiong, 1999; Hastak and Shaked, 2000; Al Khattab et al., 2007). Han and Diekmann (2001) classify international construction risks into five categories namely, political, economic, cultural/legal, technical and other special risks, while Shen et al. (2001) classified risks as financial, managerial, legal, market, policy and political and technical risks. These risks are further divided according to source into internal and external risks. External risks arise from sources outside the organisation’s operations while internal risks emanate from within the organisation. External and internal risks are further broken into controllable and uncontrollable subcategories. Controllable risks in both subcategories if identified early enough in the project can be eliminated by applying the correct techniques but uncontrollable risks cannot be controlled and will require close and continuous monitoring and mitigation measures (Lam et al., 2007; Sharma, 2013).

Political risks are classified as external risk factors as they are driven by activities outside the company or project (Loo et al., 2013; Sharma, 2013). They are further divided into macro and micro level risks (Robock, 1971; Simon, 1982; Hastak and Shaked, 2000). The construct of political risk is broad and influenced by a variety of environmental factors and thus does not only arise from government action but also from the actions of society and
other countries as well (Al Khattab et al., 2007; Alon and Herbert, 2009; Crăciun, 2011; Howell, 2014). In the past political risk was viewed as emanating from an adversarial attitude of the host government but of late the source of these risks is considered environmental rather than emanating only from government actions (Fitzpatrick, 1983; Alon and Herbert, 2009). Naturally countries can be subjected to innumerable internal and external pressures, any combination of which could result in actions being taken that could impact on the business environment (Simon, 1984; Alon and Herbert, 2009; Howell, 2014). To that end political risks arise from changes or discontinuities in the business arena due to political activities and or societal events and these risks are imposed upon an international project (Howell, 2001; as cited by Al Khattab et al., 2007).

The three components of political risk are, discontinuity in business environment, difficulty in anticipating the business environment and risks originating from political change (Robock, 1971). To constitute political risk, the changes in the business environment must have the likelihood to affect project performance and therefore, crucially, political risks for one company differ from those of another (Robock, 1971). Robock (1971) however warns that a political risk forecaster should not rely on a snapshot of events in determining risk sources for a particular activity but must analyse the continuously evolving situation over time.

Practioners and researchers have not yet come to an agreement on a standard definition of political risk as study after study offers different and sometimes conflicting perspectives (Fitzpatrick, 1983; Prakash and Luther, 1986; Ekpenyong and Umoren, 2010). Various definitions of political risk have been given; a few of which are:

Political risk is the probability of changes in the political environment that may render the project unviable or increase the probability of failing to achieve profits in a foreign country (Kobrin, 1979; and Rice and Mahmoud, 2014);

Political risk is the likelihood of governmental or societal actions or policies emanating within or without the country that may result in reduced performance of either a select industry or several industries, or endanger a project (Simon, 1982 Gao 1983; Shou et al., 1999);
Political risk is the likelihood of political forces causing major changes in the business environment leading to a company failing to meet investment goals (Hill, 2002; as cited by Shahid and Hood, 2004);

Political risk is the likelihood of political decisions and political and societal events in a country that alter the business arena in such ways that business will make less or no profit at all (Howell, 2001; as cited by Ekpenyong and Umorden, 2010; Al Khattab et al., 2007); and

Political risk is related to events or conditions that emanate from political activities and cause positive or negative impacts on project objectives (Ling and Hoang, 2010).

Robock (1971) distinguished between macro and micro-political risks. He explains that macro political risks are general and affect all foreign business whereas micro-political risk are market or project specific (Hastak and Shaked, 2000; Ling and Hoang, 2010). The concept of macro and micro-political risks started by Robock (1971) was taken a step further when Alon and Herbert, (2009) defined micro-political risks as arising from uncertainty borne out of outcomes or events of political processes with the likelihood of specific positive or negative consequences on the performance of a firm or project. This study adopts this micro-political risk definition as it examines the management of political risk at project level. Macro political risks would include revolutions, civil wars, nationwide strikes, protests, riots, and mass expropriations. Targeted expropriations, discriminatory taxes, and import restrictions applied to a specific firm or project are examples of micro-political risks (Hastak and Shaked, 2000; Han and Diekmann, 2001; Wang et al., 2004; Pheng et al., 2009; Ling and Hoang, 2010; Sharma, 2013).

Daniels et al. (1985) interpret the response to political risk assessment outcomes as the management of the political risks. Political risk assessment is carried out to provide managers with choices for either protective or compensating actions (ISO 31000, 2009; PMI, 2013; Howell, 2014). Political risk assessment has been defined as the process by which identified political risks are analysed and evaluated while undertaking international business (Al Khattab et al., 2011). Accordingly, managing political risk includes both responding to eventuating risks (by contingency plans) and treatment of risks before they happen (Mortanges and Allers, 1996; ISO 31000, 2009). Generic risk management consists of the following: risk planning, identifying, analyzing, evaluating, treatment,

Risk analysis involves understanding the nature, assigning a probability, estimating the timing of occurrence of the risk as well as determining the consequences; on the other hand, evaluation deals with prioritisation and comparison of the risks to criteria using risk levels (ISO 31000, 2009; PMI, 2013). For the present study it means analysing and evaluating micro-political risks that impact the international construction project.

1.2 BACKGROUND OF THE STUDY

Construction projects, owing to their complex nature, are beset with risks which if not systematically managed can cause a project to miss set objectives (Frynas and Mellahi, 2003; Zhao and Duan, 2008; Garrido et al., 2011). Poor project performance may result in cost and schedule overruns, poor quality and not realising project scope (Hastak and Shaked, 2000; Han et al., 2005; Sharma, 2013). Even though all types of risks are important, studies have shown that international projects are most sensitive to political risks (Usher, 1965; Kobrin, 1979; Chevalier and Hirsch, 1981; Micaleff, 1982; Gao, 1983; Hastak and Shaked, 2000; Ekpenyong and Umoren, 2010; Abdul-Rahman et al., 2012). It is the view of some researchers that these political risks are not being properly managed in international construction (CII, 2003a; Zhang and Wei, 2012)

In the literature, political risk has attracted ever-increasing attention over the last two decades, despite a lack of agreement on a universally accepted definition (Prakash and Luther, 1986; Friedmann and Kim, 1988; Smith and Gannon, 2008). Most studies in political risk are slanted towards foreign direct investment (FDI) in sectors other than international construction (Agarwal and Feils, 2007). only a handful of research studies have been conducted on political risks and still fewer at market and project level (Hastak and Shaked, 2000; Alon and Herbert, 2009; Sharma, 2013). It is the aim of this study to examine the degree to which political risks impact on international construction projects, how they are managed at project level and on which project phase – Conceptualisation, Feasibility, Design and development, Execution or Handover – political risk impacts the most.

The difficulty in managing political risks starts with the lack of clarity on what to assess since there is no universal definition of political risk (Kobrin, 1979; Fitzpatrick, 1983;
Prakash and Luther, 1986; Mortanges and Allers, 1996; Ekpenyong and Umoren, 2010; Al Khattab et al., 2011). Despite this confusion companies still need to anticipate political changes and incorporate this knowledge into their decision-making processes in order to help managers achieve project goals (Mortanges and Allers, 1996).

According to Deng et al. (2014) and Hastak and Shaked (2000), of the work undertaken by researchers there are few studies on purely political risks and there are even fewer on micro-political risks. A study by Deng et al. (2014), used Chinese companies with international construction experience and academics to determine variables that make an international construction project system susceptible to political risks. Their research established six factors, each made up of various variables; these factors are: attribute based exposure, core competitive capacity, strategy based exposure, transaction based exposure, relative bargain capacity and integrative adaptive capacity. The exposure factors opened the project to political risk and had a higher influence than the capacity factors. Another study by Zhang and Wei (2012) on Chinese companies operating in the construction industry in Libya found that these companies were not good at political risk management. Of the twelve political risks identified in Libya in 2010, government stability was the most critical followed by internal conflict.

Zwikael and Ahn (2011) after carrying out multi-industry studies involving 701 project managers and their supervisors in Israel, New Zealand and Japan concluded that risk management, even in its crudest form, has a positive impact on project profit and other project goals. That finding was collaborated in other studies on construction and IT projects (de Bakker et al., 2010, 2012). Therefore, for international construction projects to achieve the set objectives of profit, schedule, quality, scope and client satisfaction, project managers must, among other things, correctly assess the micro-political risks and manage them proactively. With systematic risk management consisting of many steps (ISO 31000, 2009; PMI, 2013), the procedural deficiencies that lead to poor performance of projects are not known. It maybe that the failures lie within the assessment of risks or subsequent management of risk; empirical research can possibly provide some insights into the procedural deficiencies.

Studies in the risk management process in international construction are necessary to provide empirical evidence on the matter. With micro-political risks arising from host government and host society, for projects in one country the risks are likely to be comparable with a reasonable degree of generalisability. On that basis, one can argue that
a country-based study on micro-political risks could add to the overall knowledge on risk management in international construction. As Namibia is implementing a multi-billion Namibian dollar infrastructural investment drive as espoused in the 4th National Development Plan (NDP4) which is forming part of Vision 2030 (NPC, 2012) it is expected that a growing number of projects will be undertaken and that some of these will be in the international construction sector making Namibia a good candidate for such a study. In addition, the project specific political risks that impact on international construction projects in Namibia and how these are managed is not known. Therefore, this study aims to identify the key micro-political risks, establish the methods of assessment, examine how they are managed and determine the phase of the project life cycle (PLC) which is most affected by these risks in international construction projects in Namibia.

1.3 PROBLEM STATEMENT

The problem to be examined in this study may be stated as:

An international construction project is exposed to micro-political risks, which if not systematically assessed and managed, will affect project performance in the areas of cost, schedule, quality and scope. However, the specific political risks that impact on international construction projects and how these are managed in the context of Namibia are not known. Knowledge of these risks and how they are managed will clarify what risks are influencing projects in Namibia, whether these risks are being properly managed and how to appropriately plan for their occurrence.

1.4 RESEARCH QUESTIONS

The research questions to be addressed are stated as:

a. What are the key micro-political risks affecting international construction projects in Namibia?

b. Which project phase is most affected by these micro-political risks?

c. What political risk assessment methods are used by international contractors in assessing the effect of micro-political risks on construction projects in Namibia?

d. How are micro-political risks managed to limit their effect on international construction projects in Namibia?
1.5 RESEARCH AIM
The intended aim of this research is to examine the micro-political risks impacting international construction projects in Namibia and whether they are effectively managed with a view of improving the performance (profitability) of international construction projects.

1.6 RESEARCH PROPOSITION
The research proposition to be tested in this study states that micro-political risk factors impact on the performance of international construction projects in Namibia.

1.7 RESEARCH OBJECTIVES
Research objectives to be achieved are to:
   a. identify the key project specific micro-political risks affecting international construction in Namibia.
   b. determine which phase of the project is most prone to political risk.
   c. establish the political risk assessment methods used on international construction projects in Namibia.
   d. identify the strategies used in managing political risks on international construction projects in Namibia.

1.8 RESEARCH METHOD
A case research strategy was employed and mostly qualitative data were gathered through semi-structured and structured interviews, by participant observation and from documents.

1.9 SCOPE AND SIGNIFICANCE OF RESEARCH
As Namibia is implementing a multi-billion dollar infrastructural investment drive as espoused in the 4th National Development Plan of Vision 2030 a growing number of projects will be undertaken and some of these will be of an international construction nature (NPC, 2012). Already several international projects are underway around the country. It is envisaged that research into micro-political risks in international construction projects will benefit the performance of similar current and future projects in Namibia.
1.10 RESEARCH LIMITATIONS

Major limitations of the study are as follows:

a. Since micro-political risks are specific to a project it may make generalisability of findings difficult (Robock, 1971; Alon and Herbert, 2009).

b. A single case study research method with no proper protocol may fail to meet generalisability requirements (Rowley, 2002; Bhattacherjee, 2012).

c. The use of untested scales in a study impacts negatively on construct validity (Rowley, 2002; Bhattacherjee, 2012).

1.11 STRUCTURE OF DISSERTATION

The structure of the dissertation is as follows:

Chapter 1
Included in this chapter are the introduction and background to the study as well as the problem statement, research questions, aim and objectives of the study, proposition to be tested, scope of study and limitations of the study.

Chapter 2
An extensive and detailed literature review is presented in this chapter. The review covers generic risk concepts, construction risk, international construction risk, political risk and political risk in international construction.

Chapter 3
Chapter 3 outlines the research methodology being the theoretical concepts of scientific research and research design which refers to the steps of gathering data used by the researcher to answer the research question.

Chapter 4
This chapter deals with data presentation, analysis of data, and interpretation and discussion of findings.

Chapter 5
This chapter deals with research conclusions and recommendations.
CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

In Chapter 1, a motivation was provided for an investigation into the micro-political risks affecting project performance of international construction projects in Namibia, and how these risks are managed. Consequently, study objectives were set to include the investigation of key micro-political risks, assessment techniques, the implementation of these assessment techniques and the management of micro-political risks. The review sets the broad context of the study, creates and justifies boundaries encompassing the extent of the work of the study, places the study within a scholarly and historical context, and includes a critique of concepts and definitions in order to synthesise and integrate this secondary data (Boote and Beile, 2005; Randolph, 2009). The chapter begins with a section on project risk overview, in which the concepts of uncertainty and risk are discussed; this is followed by sections on risk in international construction, an overview of political risk, systematic risk management, and the last section deals with a conceptual framework for the research.

2.2 OVERVIEW OF PROJECT RISK

Risk is a social construct and as such, different people may conceptualize and deal with risks in different ways (Lefley, 1997; Rosa, 1998; Edwards et al., 2005; Loosemore, 2009; Solberg and Njå, 2012). Risks are multi-dimensional, possess social and psychological attributes and are shaped by cultural beliefs and political systems risks (Rosa, 1998; Edwards et al., 2005; Assmuth et al., 2010; Solberg and Njå, 2012). Further, research in psychology shows that people respond to risk based not only on what they think, but also on how they feel (Slovic et al., 2004). Against this backdrop, Renn, (1998) insists that it is inadequate to reduce risk to the product of probabilities and consequences, but concedes that risk management training counters the effects of risk perception as it uses integration of the scientific assessments of risk into an individual’s risk handling belief system thereby improving how these assessments are viewed and how risk actions are taken.

Project risk is defined in various ways. Many definitions are framed negatively, based on the downward effects of the risk events (Lefley, 1997; Renn, 1998; Raz et al., 2002; Edwards and Bowen, 2007; Baccarini et al., 2008). For example, Baccarini et al., (2008) define risk as the probability of an event occurring that will negatively affect the objectives of the project and this risk is measured in terms of probability and consequence. Risk
however, risk is also defined as a neutral phenomenon with the potential for both positive and negative effects (Renn, 1998; Hillson, 2002, 2012a; Cooper et al., 2005; Schieг, 2006; Agarwal and Feils, 2007; Baccarini et al., 2008; ISO 31000, 2009; Garrido et al., 2011; Jaskowski and Biruk, 2011; PMI, 2013). For example, PMI (2013) defines project risk as an uncertain event or condition, which when it occurs, affects project objectives either positively or negatively; this definition is closely related to the one given by ISO 31000, (2009). The project objectives of time, budget, quality, scope, safety and customer satisfaction are affected by risk (ISO 31000, 2009; Morris and Geraldі, 2011; PMI, 2013). Added to these project objectives are some organisational ones, such as reputation, market entry, market share, rate of return and competitive advantage (Jaafari, 2001; Thamhain, 2013).

Defining project risk negatively, limits risk management to risk events and conditions that cause harm only, neglecting opportunity risk that enhances project performance; as such this study adopts the neutral definition of PMI, (2013). The phenomenon of uncertainty associated with risk is reviewed in the following sub-section.

2.2.1 Types of Uncertainty

Uncertainty is present in all projects, casting doubt on when and whether project objectives can be met (Copeland and Weiner, 1990; Dawson and Dawson, 1995, 1998; Cano and Pilar de la Cruz, 2002; Meyer et al., 2002; Ward and Chapman, 2003, 2008; Pollack-Johnson and Liberatore, 2005; Herroelen and Leus, 2005; Perminova et al., 2008; Brady et al., 2012; Sanderson, 2012; Maravas and Pantouvakis, 2012; Jeang, 2014). As aptly stated by Lefley, (1997), the only certainty in business is the uncertainty of the future. Uncertainty is regarded as lack of sureness regarding possible states and multiple outcomes (Miller, 1992; Thiry, 2002; Li et al., 2013). For example, on construction projects there is considerable uncertainty and ambiguity during the preconstruction stage, where the time-design-cost equation is constantly changing (Abdou, 1996; Ward and Chapman, 2003). Sources of uncertainty are varied and include assumptions, constraints, future possible events, variability, ambiguity and blindspots (Mosaic, 2010a; Li et al., 2013; PMI, 2013; SA/SNZ, 2013; Hillson, 2014a, 2015). Some of the sources of uncertainty are appraised below.

2.2.1.1 Stochastic Uncertainty: Risks can arise from a future event also known as stochastic uncertainty, which may or may not occur, but if it does it would affect one or more project objectives (Weaver, 2007; Li et al., 2013; Hillson, 2014a, 2015). Risks in this
category should be managed through the standard risk management process (ISO 31000, 2009; PMI, 2013; Hillson, 2015). It is the only risk with a probability of occurrence of less than 100%; the other types of uncertainty discussed below, all have a probability of occurrence of a 100% (Mosaic, 2010a; Hillson, 2014a).

2.2.1.2 Aleatoric Uncertainty: The other name of this uncertainty is ‘variability’ and results from certain events with some aspect of the planned task being uncertain (Meyer et al., 2002; Mosaic, 2010a; Li et al., 2013; Hillson, 2014a, 2015). For example, on construction projects, the duration, cost, defects rate, resource usage, and productivity rates are all uncertain and may be more or less than the estimates. This type of risk requires quantitative risk analysis and descriptions relating to ranges and probability distributions using tools such as the Monte Carlo simulation, the Bayesian method, or the Dempster-Shafer theory (Hillson, 2012b, 2015; Li et al., 2013).

2.2.1.3 Epistemic Uncertainty: Risks arising from epistemic uncertainty are related to definite future events with ambiguous characteristics because the knowledge needed to understand this type of uncertainty is not yet available (Mosaic, 2010a; de Vries et al., 2011; Li et al., 2013; Hillson, 2014a). For example, that new regulations in a country are not fully understood is a fact but to what extent this might affect objectives of a project is uncertain; this uncertainty requires to be managed through exploring, experimentation or scenario testing, prototyping, benchmarking and getting expert opinion (Hillson, 2015).

2.2.1.4 Ontological Uncertainty: The fourth type of risk results from blindspots and is variously known as unseen uncertainty, emerging risks, and ‘black swans’. These risks are not understood because they are outside the human range of experience or worldview (Meyer et al., 2002; Weaver, 2007; de Vries et al., 2011; Hillson, 2015). Although the risks cannot be described, they do exist; what is however uncertain, are the consequences (which are usually severe) (Mosaic, 2010a; Hillson, 2014a). Risks in this cluster are managed by having a resilient project system, flexibility, disaster recovery procedure and environmental scanning (Hillson, 2015).

2.2.2 Risk Concepts

A proper description of a particular risk should be able to assist with decisions on risk response by identifying the source(s), the consequences which could result and the effects of such consequences on objectives of a project (Mosaic, 2010b; SA/SNZ, 2013; Piney, 2014).
2.2.2.1 **Risk Source**: A tangible or intangible element that on its own or in combination has potential to give rise to a risk (ISO 31000, 2009). It therefore means a risk source is only in a context and does not apply globally (SA/SNZ, 2013).

2.2.2.2 **Risk Event**: Refers to a single or more occurrence(s), or non-occurrence(s) of a particular set of circumstances and may arise from many causes (ISO 31000, 2009). An event may be termed an incident, or an accident, and those events without consequences are referred to as ‘near misses’ or ‘near hits’ or ‘close calls’ (ISO 31000, 2009).

2.2.2.3 **Risk Consequence**: ISO 31000, (2009) describes it as an outcome of a risk event that affects project objectives. Consequences can be expressed qualitatively or quantitatively, can be certain or uncertain, with positive or negative effects on objectives.

2.2.2.4 **Likelihood**: This refers to the chance of something happening and can be determined subjectively or objectively, qualitatively or quantitatively, and described using probability, or a frequency over a time span (ISO 31000, 2009).

2.3 **RISK IN INTERNATIONAL CONSTRUCTION**

Construction projects have become complex, making them susceptible to risk; factors contributing to this complexity are a large number of stakeholders, new technology, inadequate budgets, compressed schedules, and changing requirements (Akintoye and Macleod, 1997; Pollack-Johnson and Liberatore, 2005; Ward and Chapman, 2008; Zwikael and Ahn, 2011). The literature reveals that research related to international construction has concentrated on the following aspects of risk: general risk classification, identification, analysis, evaluation, mitigation, assessment models, risk based go/no-go bidding, and the attitudes of contractors toward risk in the section of international construction projects (Zhi, 1995; Bing and Tiong, 1999; Hastak and Shaked, 2000; Han and Diekmann, 2001; CII, 2003b; Han et al., 2005, 2007, 2008; Ling and Hoi, 2006; Jha and Devaya, 2008; Bu-qammaz et al., 2009; Eybpoosh et al., 2011; Abdul-Rahman et al., 2012; Loo et al., 2013; Yildiz et al., 2014).

Zhi (1995) identified 21 risk elements in international construction in China; of these elements, six were political risks, featuring in the first ten. These political risks were, high inflation, bureaucracy, social security, corruption, tax rate change, foreign exchange fluctuation and a lack of legal system. Eybpoosh et al. (2011) identified a lack of
managerial ability and the political risks attached to the country where construction was taking place, as being among the key risks influencing cost overruns. Similarly, Jha and Devaya, (2008) identified 14 key risk groups including lack of project management skills, and poor government responsiveness with the latter comprising of political risks: government instability, delay in approvals; inconsistent approach towards tax laws, environmental laws, expatriate laws, finance laws and corruption levels. The criticism of Jha and Devaya, (2008) is that, while it is recognised that the purpose of prioritisation is to enable a focus on risks whose effects have most impact, having only 14 key risk groups for an international construction project where uncertainty is widespread, appears to be insufficient and could make the application of response strategies difficult.

In another study where the respondents included international investors, developers, and contractors in international construction projects, Wang et al. (2004) identified and prioritised 28 risk factors, with political risks amongst the top in the rankings. In a study of factors causing losses on international construction projects, Han et al. (2007) ranked 64 risks and established that managerial ability was the biggest risk, and that political risks were in the top five. In addition political risks emerged as key in international construction when, in a study identifying 28 key risks, five political risks were in the top six (Bu-qammaz et al., 2009). In one of the few purely political risk studies in international construction undertaken in Libya, in which Chinese international construction contractors were respondents, Zhang and Wei, (2012) identified 12 major political risks, these being in order of priority: government stability, socioeconomic conditions, investment profile, internal conflict, corruption, the military in politics, religious tensions, law and order, ethnic tensions, democratic accountability and bureaucracy quality. It is pertinent to note that these political risks were identified after the 2010 Libyan revolution and that could have influenced the rankings.

2.3.1 International Construction Risk Categorization

Risk classification is an important task undertaken before risk assessment because it allows risks that may be susceptible to a similar risk management approach, to be grouped together, making them easier to process (Zhi, 1995; Edwards and Bowen, 1998; Tah and Carr, 2001; Hillson, 2003; Sharma, 2013). According to Hillson (2003), categorisation using a risk breakdown structure (RBS) helps in identifying recurring themes, concentrations of risk, or hot-spots of risk exposure, all leading to an effective risk
management process. Despite the importance of risk classification, there is not one universally agreed method of effecting such a classification (Bing and Tiong, 1999; Hastak and Shaked, 2000; Edwards et al., 2005; Al Khattab et al., 2007). As a result, international construction risks have been grouped according to different criteria and are presented in different formats such as lists, tables, or RBSs (Zhi, 1995; Hastak and Shaked, 2000; Han and Diekmann, 2001; Shen et al., 2001; Bu-qammaz et al., 2009).

Despite the lack of agreement, risks are mainly categorized based on four dimensions of the project: phase/element, event source, impact and relationship to the project (internal or external) (Chan and Kumaraswamy, 1997; Edwards and Bowen, 1998; Zou et al., 2008; Zavadskas et al., 2010). It would appear that most classifications are based on event source or risk source (Simon, 1984; Zhi, 1995; Edwards and Bowen, 1998; Hastak and Shaked, 2000; Han and Diekmann, 2001; Shen et al., 2001; Hillson, 2003; Bing et al., 2005; Bu-qammaz et al., 2009). The event source taxonomy is popular because it allows a generic approach applicable to all types of projects and facilitates collection of information outside the performing organisation (Edwards and Bowen, 1998; Hillson, 2003).

![Figure 1: RBS for international construction project risk (ICPR)](Bu-qammaz et al., 2009)

Examples of event source categorisations are shown in Figures 1 and 2. Comparatively few classifications are based on the project phase (Ward and Chapman, 1995; Zou et al.,
or risk impact (Chan and Kumaraswamy, 1997; Han et al., 2007), or relationship to the project (Zavadskas et al., 2010; Barlish et al., 2013; Sharma, 2013), or a combination of these (Simon, 1982; Walewski, 2005). A typical example of a mixed classification, based on both event source and project phases, is the international project risk assessment (IPRA) structure depicted in Table 1.

The international project risk assessment structure (Table 1) is part of a much larger tool sponsored by the Construction Industry Institute (CII) (CII, 2003a,b; Walewski, 2005; Yeon et al., 2015). The tool was developed specifically for use on international construction projects and it conforms to many RM guides including those of the PMI (2013) and ISO 31000, (2009). As part of the package, baseline risk relative impact values have been established, facilitating quick use of the tool and closing a knowledge gap (CII, 2003a,b; Walewski, 2005). The structure is made up of three tiers: section, category and element; with each tier explained in data sheets supplied with the tool (Walewski, 2005). One apparent shortcoming of the classification is the omission of the use of political risk variables as found in the literature on political risk; this is evident from the terminology used in the classification. The relative impact values in the IPRA tool are used for micro-political risk analysis in this study.

Political risk is a major component of international construction risk and features prominently in risk taxonomies (Bu-qammaz et al., 2009; Han and Diekmann, 2001; Hastak and Shaked, 2000; Shen et al., 2001). Therefore, to succeed, a contractor in international construction has to apply systematic political risk management (Kobrin, 1979; Kobrin et al., 1980; Simon, 1982, 1984; Torre and Neckar, 1986; Hastak and Shaked, 2000; Agarwal and Feils, 2007; Al Khattab et al., 2007, 2011; Han et al., 2007; Alon and Herbert, 2009). To gain more insight into the construct of political risk, political risk is reviewed in the subsection which follows.

2.4 POLITICAL RISK OVERVIEW

Research into country risk or political risk started in the 1950s and became popular with researchers in the following two decades, motivated by high profile expropriations and nationalisations of foreign interests: in the Suez Canal (1956), Cuba (1959), Chile (1972),
Texaco and Chevron petroleum assets held in Nigeria in 1975, and then in the late 1970s; in Nicaragua, El Salvador and then in particular the Iranian revolution with the potential loss of US$ 1 billion in assets for multi-national enterprises (Micallef, 1982; Simon, 1984; Prakash and Luther, 1986; Agarwal and Feils, 2007; Jarvis and Griffiths, 2007; Yackee, 2014). These events in particular left business with a clear and unsavoury understanding

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of the link between political and societal processes and the business environment (Torre and Neckar, 1986).

As Jarvis and Griffiths, (2007) point out, interest in political risk comes in waves but is mostly underpinned by the flow of capital from the developed to the developing world. In particular, the sovereign debt defaults of the 1980s affected the developing world and that was followed, in the 1990s, by the hedge fund problems that resulted in currency fluctuations and the Asian financial crisis. The most recent wave was triggered by terrorist attacks in the USA on 11 September 2001 and the resultant war on terror, retaliatory attacks in many jurisdictions and that has imposed political risks on multi-national enterprises from mostly from the developed world (Jarvis and Griffiths, 2007). So, even though the direct expropriation risk has dwindled because of the World Trade Organisation protocols and the observance of international law, trigger events and political risks on multi-national enterprises continue to exist, especially with the rapid worldwide development of communications and social media (Davis, 1981; Shahid and Hood, 2004; Agarwal and Feils, 2007; Jarvis and Griffiths, 2007; Yackee, 2014).

Business practitioners and researchers are yet to agree on a standard definition of political risk, as study after study, offers different and sometimes conflicting perspective (Kobrin et al., 1980; Fitzpatrick, 1983; Prakash and Luther, 1986; Friedmann and Kim, 1988; Agarwal and Feils, 2007; Jarvis and Griffiths, 2007; Smith and Gannon, 2008; Ekpenyong and Umoren, 2010). Perhaps a possible reason is that there has been stagnation in the development of a political risk theory since the time of the pioneers in this field of study (Jarvis and Griffiths, 2007; Alon and Herbert, 2009; Yackee, 2014).

Most of the definitions of political risk only refer to threat risks (Gao, 1983; Ekpenyong and Umoren, 2010; Al Khattab et al., 2007; Rice and Mahmoud, 1986; Kobrin, 1979; Simon, 1982; Shou et al., 1999; Shahid and Hood, 2004; Torre and Neckar, 1986). An example is Simon (1982), who defines political risks as governmental or societal actions or policies emanating from within or without the country which may result in reduced performance of either a select industry, or several industries. Such definitions ignore opportunities that arise from political processes and events. As correctly argued by Alon and Herbert (2009) political risk is a neutral phenomenon with scope for the likelihood of both negative and positive consequences on the project. For example Ling and Hoang, (2010) define political
risk as events or conditions that emanate from political activities and cause positive or negative impacts on project objectives.

There are also other perspectives on political risk, with Alon and Herbert (2009) identifying two broad ways of defining political risk. The first being that in the past political risk was viewed as emanating from an adversarial attitude of the host government interfering with the business of the multi-national enterprise (Shou et al., 1999; Gao, 1983). The second, and new approach, considers the construct of political risk as being broad and influenced by a variety of environmental factors and thus it does not only arise from the actions of government, but also from the actions of society, as well as the actions of other countries (Kobrin, 1979; Simon, 1982; Fitzpatrick, 1983; Gao, 1983; Rice and Mahmoud, 1986; Al Khattab et al., 2007; Alon and Herbert, 2009; Ekpenyong and Umoren, 2010; Ling and Hoang, 2010; Crăciun, 2011; Howell, 2014). In line with the definition of political risk adopted for this study, the definition of political risk according to Ling and Hoang (2010) which embraces both downside and upside consequences of risk is considered appropriate.

Robock (1971) divides political risks into macro and micro risks, where macro-political risks affect the whole country or region, and micro-political risks affect selected industries, firms or projects. For example, revolutions, civil wars, nationwide strikes, protests, riots, and mass expropriations are macro political risks. Political risks are classified as external risk factors because they are driven by activities outside the company or project (Loo et al., 2013; Sharma, 2013). Targeted expropriations, discriminatory taxes, and import restrictions applied to specific firms, are micro-political risks (Hastak and Shaked, 2000; Han and Diekmann, 2001; Wang et al., 2004; Pheng et al., 2009; Ling and Hoang, 2010; Sharma, 2013).

The distinction between political risks at macro level and micro level is important for actual political risk will vary, depending on project-level characteristics (Kobrin, 1979; Alon and Herbert, 2009; Yackee, 2014). Yackee (2014) illustrates the distinction with the following example regarding a decision to invest in a nuclear station in the United States of America (USA): even though the USA is regarded as a country of low level political risk (Political Risk Services, 2015), the chances of being denied a permit for such project are pretty high and by stating that the USA is characterised by low political risks does not reveal that it is politically risky to invest in the nuclear energy sector in that country.
Macro-political risk can be indirect and spasmodic, occurring in times of turmoil when foreign companies become tempting and attractive targets for political expedience resulting in possible harassment or damage although the objective is to inflict embarrassment on sitting governments (Robock, 1971). These risks can also be direct and permanent, as in the case of wholesale nationalisation of both foreign and domestic industries in Cuba in 1959–60, and Iran in 1979 following revolutions in those countries (Robock, 1971; Simon, 1982; Mascarenhas and Atherton, 1983). Macro risk situations can arise from trade boycotts similar to the one imposed by Arab countries on all companies with branches in, or trading in any form with, Israel since 1955 (Robock, 1971). A similar fate befell foreign companies that were established or trading in South Africa during the apartheid era (Simon, 1984). Another such case was the boycott in 1970 by mainland China, of all Japanese companies doing business with Taiwan: in retaliation Taiwan presented its own list of boycotted companies doing business with mainland China (Robock, 1971).

On the other hand, micro-political risks are more frequent and are targeted at a particular industry, firm or project, leading to sudden changes in the business environment (Robock, 1971; Alon and Herbert, 2009). Industries that are usually targeted for confiscatory or discriminatory action, are the ones dominated by foreign ownership, or those that are considered to be of strategic importance to the government, such as international infrastructure projects: highways, a power plant, or an electrical energy distribution network (Robock, 1971; Davis, 1981; Crăciun, 2011). Extractive industries, especially mining and petroleum, are vulnerable because as sovereign states assert their economic independence, economic nationalism is expressed together with demands that natural resources should benefit all in the nation and not be exploited for private profit (Robock, 1971). One example of deliberate corporate-specific discrimination was by the Venezuelan Government, which in 1974 nationalised the oil industry.

2.4.1 Political Risk in International Construction

A construction company is exposed to risk in the home country but in cross border projects the entity contends with more complex risks (Robock, 1971; Kobrin, 1979; Zhi, 1995; Mortanges and Allers, 1996; Hastak and Shaked, 2000; Al Khattab et al., 2007; Alon and Herbert, 2009; Zhang and Wei, 2012; Loo et al., 2013). Political risk is one of the prominent risk factors in international construction projects as it causes financial loss, schedule overruns and generally poor project performance (Usher, 1965; Kobrin, 1979;
Chevalier and Hirsch, 1981; Micallef, 1982; Gao, 1983; Hastak and Shaked, 2000; Wang et al., 2004; Al Khattab et al., 2007; Han et al., 2007; Jha and Devaya, 2008; Ekpenyong and Umoren, 2010; Eybpoosh et al., 2011; Abdul-Rahman et al., 2012). However political risk can be managed (Moran, 2003; Hood and Nawaz, 2004; Nawaz and Hood, 2005 cited by Al Khattab et al., 2011). Despite such evidence, not much research has been done on political risks in international construction (Zhi, 1995; Edwards and Bowen, 1998; Bing and Tiong, 1999; Hastak and Shaked, 2000; CII, 2003a, b; Wang et al., 2004; Alon and Herbert, 2009; Bu-qammaz et al., 2009; Sharma, 2013). The situation is even more worrisome in the area of micro-political risk, prompting Alon and Herbert, (2009) to describe research in this area as being in its infancy.

According to Alon and Herbert, (2009), one of the possible reasons why researchers shun research in micro-political risk, is the difficulty with generalisability of the results of such research. That being the case, one can argue that since projects are unique endeavours (PMI, 2013), it would be naïve to consider generalisability of all project risks. Hence worthwhile micro-political risk research can still be done, on a country basis, and to a large extent, still satisfy generalisability requirements despite the ever changing political landscape that influences political risk. It is with this conviction that the researcher conducts this study to contribute to successful implementation of international construction projects in Namibia.

2.4.2 Political Risk Classification

Al Khattab et al., (2007) used the event–source approach to classify political risks. Three sources of threats are identified namely; host government, host society and the possible risks, which could result from each of these sources, are shown in Table 2. The framework presented by Al Khattab et al. (2007) is limited as sources of political risks are much broader than what they assumed (Simon, 1984; Torre and Neckar, 1986). Another shortcoming is lack of distinction between macro and micro-political risk (Kobrin, 1979; Simon, 1982).

Simon (1982) used a classification based on two dimensions of event source and relationship to project, to develop a framework for political risk as shown in Table 3. In this framework risks are split into those arising from the actions of governments and those arising from the actions of society, both with external and internal components. However,
the framework by Simon, (1984), leaves out some important sources of political risk, exemplified by the press, public opinion and delays in the approval of permits.

**Table 2: Classification of political risk (Al Khattab et al., 2007)**

<table>
<thead>
<tr>
<th>Source of threat</th>
<th>Threats (source of harm)</th>
</tr>
</thead>
</table>
| Host Government  | • Expropriation and or confiscation  
                   • Contract repudiation  
                   • Currency inconvertibility  
                   • Ownership and or personnel restrictions  
                   • Taxation restrictions  
                   • Import or export restrictions |
| Host Society     | • Terrorism  
                   • Demonstrations, riots and insurrection  
                   • Revolutions, coups d'état and civil wars |
| Interstate       | • Wars  
                   • Economic sanctions |

Using event source as the basis of categorisation Simon, (1984) developed a broad-based and detailed conceptual framework for the multi-national enterprise. The primary categorisation is based on the environment in which the multi-national enterprise operates, as being the source of political risks. The operating environment of an overseas company is created by the host government, the home-country, the international arena and the global arena as shown in Figure 2. Table 4 presents the flow of political risk as it is generated by the sources, divided into four clusters: Direct-Internal, Direct-External, Indirect-Internal, and Indirect-External.

With such a proliferation of sources of political risk that can impact the business environment, a foreign company assessing political risk, should, in addition to analysing the power structures in the host country, consider the impact of the actions of the home country and developments in the global environment (Simon, 1984; Alon and Herbert, 2009). This study aims to assess micro-political risks and the application of systematic risk management in managing these risks on international construction projects in Namibia and the sections that follow are dedicated to systematic risk management.
### Table 3: Framework for political risk (Simon, 1982)

<table>
<thead>
<tr>
<th>Internal</th>
<th>Macro</th>
<th>Micro</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolution</td>
<td>Nationalisation/expropriation</td>
<td>Selective nationalisation/</td>
<td>Expropriation, Selective</td>
</tr>
<tr>
<td>Coup d’État</td>
<td>Creveping nationalisation</td>
<td>Expropriation, Joint venture</td>
<td>indemnisation, Joint venture</td>
</tr>
<tr>
<td>Civil war</td>
<td>Repatriation restrictions</td>
<td>Selective strikes</td>
<td>pressure, Discriminatory</td>
</tr>
<tr>
<td>Factional conflict</td>
<td>Leadership struggle</td>
<td>Selective protests</td>
<td>laws, Industry specific</td>
</tr>
<tr>
<td>Ethnic/religious turmoil</td>
<td>Radical regime change</td>
<td>National boycott of firm</td>
<td>regulations, Breach of</td>
</tr>
<tr>
<td>Widespread riots/terrorism</td>
<td>High inflation</td>
<td></td>
<td>contract, Subsidisation of</td>
</tr>
<tr>
<td>Nationwide strikes/protests/boycotts</td>
<td>High interest rate</td>
<td></td>
<td>local competition, Price</td>
</tr>
<tr>
<td>Shifts in public opinion</td>
<td>Bureaucratic politics</td>
<td></td>
<td>controls</td>
</tr>
<tr>
<td>Union activism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross national guerrilla warfare</td>
<td>Nuclear war</td>
<td>International activist groups</td>
<td>Diplomatic stress between</td>
</tr>
<tr>
<td>International terrorism</td>
<td>Conventional war</td>
<td>Foreign MNE competition</td>
<td>host and home country</td>
</tr>
<tr>
<td>World public opinion</td>
<td>Border conflicts</td>
<td>Selective international</td>
<td>Bilateral trade agreements</td>
</tr>
<tr>
<td>Disinvestment pressure</td>
<td>Alliance shifts</td>
<td>terrorism</td>
<td>Multilateral trade</td>
</tr>
<tr>
<td></td>
<td>Embargoes/international boycotts</td>
<td>International boycott of firm</td>
<td>agreements</td>
</tr>
<tr>
<td></td>
<td>High external debt service ration</td>
<td></td>
<td>Import/export restrictions</td>
</tr>
<tr>
<td></td>
<td>International economic instability</td>
<td></td>
<td>Foreign government</td>
</tr>
</tbody>
</table>

### Figure 2: The multinational enterprise (MNE) and its environments (Simon, 1984)
<table>
<thead>
<tr>
<th>Flow of Risk</th>
<th>Type of risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. DIRECT-INTERNAL</strong>&lt;br&gt;Host government-to-MNE</td>
<td>Nationalization, expropriation, indigenization, import/export regulations, restrictions on remittances, environmental standards, local content rules, price and wage controls, licensing regulations, requirements for technology transfer, breach of contract, devaluations, inflation, recession&lt;br&gt;Protests, strikes, riots, demonstrations, terrorist attacks, boycotts, public opinion</td>
</tr>
<tr>
<td>Host society-to-MNE</td>
<td></td>
</tr>
</tbody>
</table>

| **II. DIRECT-EXTERNAL**<br>Home government-to-MNE | Taxation policy, restrictions on MNE overseas operations, restrictions on technology transfer, fines for illegal payments to host government official<br>Negative public opinion, pressure for disinvestment, protests, demonstration<br>Codes on MNE conduct, labour demands in member nations, boycotts<br>Protests, demonstrations, boycotts, terrorist attacks, pressure for disinvestment<br>Codes on MNE conduct, labour demands in member nations, boycotts |
| Home society-to-MNE |  |
| Regional organisations-to-MNE |  |
| International activist groups-to-MNE |  |
| Global organisations-to-MNE |  |

| **III. INDIRECT-INTERNAL**<br>Host society-to-host government-to-MNE | Civil war, revolution, guerrilla war, protests, riots, demonstrations, election of anti-business politicians, pressure on government to restrict foreign business<br>Ethnic/religious conflicts, factional conflicts<br>Discriminatory taxes, subsidization of competition, local content requirements, pressure for joint ventures<br>Anti-foreign business rulings by the courts<br>Promotion of anti-foreign business sentiments, protests, strikes, boycotts<br>Promotion of tighter government restrictions on foreign business<br>Leadership struggle, coups, radical regime change, bureaucratic delays, more restrictive policies toward foreign business |
| Host society-to-host society-to-MNE |  |
| Host business community-to-host government-to-MNE |  |
| Host business community-to-host legal community-to-MNE |  |
| Host media-to-host society-to-MNE |  |
| Host media-to-host government-to-MNE |  |
| Host government-to-host government-to-MNE |  |

| **IV. INDIRECT-EXTERNAL**<br>Home government-to-host government-to-MNE | Deterioration in relations, economic sanctions, reciprocity/retaliation<br>War, border conflicts, economic sanctions, trade agreements detrimental to MNE<br>International economic sanctions, negative international public opinion<br>International economic sanctions, negative international public opinion<br>Spillover of international war to host country, multilateral trade agreements detrimental to MNE<br>Spillover of internal turmoil, spread of anti-foreign business sentiment<br>Anti-foreign business sentiment caused by home country foreign policy in other regions or countries<br>Promotion of negative public opinion concerning MNE investment in the host country<br>Promotion of home government restrictions on MNE investment in the host country<br>Home government protection/legal rulings against host government affecting MNE products<br>Pressure for disinvestment from host country<br>Pressure for disinvestment from host country<br>Reduced profits, curtailment of expansion, disinvestment due to global inflation, recession, energy crises, commodity price fluctuations, external debt crises |
| Nation-state-to-host government-to-MNE |  |
| Regional organisation-to-host government-to-MNE |  |
| Global organisation-to-host government-to-MNE |  |
| Nation-state-to-nation-state-to-host government-to-MNE |  |
| Nation-state [internal developments]-to-host society-to-MNE |  |
| Home government-to-nation-state-to-host government/society-to-MNE |  |
| Home media-to-home society-to-MNE |  |
| Home media-to-home government-to-MNE |  |
| Home business community-to-home government/legal community-to-host government-to-MNE |  |
| Regional organisation-to-home government-to-MNE |  |
| Global organisation-to-home government-to-MNE |  |
| Global developments-to-MNE |  |
2.5 PROJECT POLITICAL RISK MANAGEMENT

Project risk management is the structured process of dealing with project risks to produce an acceptable balance between threat and opportunities risks (Meyer et al., 2002; Oztas and Okmen, 2004; Thevendran, 2004; Cooper et al., 2005; Edwards and Bowen, 2007; Hlaing et al., 2008; ISO 31000, 2009; PMI, 2013). To successfully implement RM it should be understood organisation-wide or at least project-wide and be assimilated into organisational culture (Cooper et al., 2005; Edwards and Bowen, 2007; ISO 31000, 2009; PMI, 2013; SA/SNZ, 2013). For international construction projects, proactive risk management is even more important than for home-country projects, because of the more complex risks, including political risk which is always part of international business transactions (Robock, 1971; Kobrin, 1979; Kobrin et al., 1980; Fitzpatrick, 1983; Friedmann and Kim, 1988; Zhi, 1995; Mortanges and Allers, 1996; Hastak and Shaked, 2000; CII, 2003a; Al Khattab et al., 2007; Han et al., 2008; Alon and Herbert, 2009; Abdul-Rahman et al., 2012; Zhang and Wei, 2012; Loo et al., 2013). Moreover, evidence shows that project risk management leads to improved project performance for projects (Mills, 2001; Raz et al., 2002; Han et al., 2008; Zwikael and Ahn, 2011; de Bakker et al., 2012; Iqbal et al., 2015). To the contrary, Ward and Chapman, (2003) questioned the effectiveness of project risk management in its current form arguing that it should focus more on uncertainty to deliver successful projects.

Despite risk management having evolved many decades ago in finance and insurance sectors, project risk management gained prominence in the 1980s (Bredillet, 2010; Crawford et al., 2006; Arrow, 2008). That late adoption probably explains why researchers find that in the construction industry, field personnel either do not apply effective risk management to projects or they do not apply it correctly, and as a result, construction projects have yet to reap the full benefits of risk management (Fitzpatrick, 1983; Pahud de Mortanges and Allers, 1996; Akintoye and Macleod, 1997; Lyons and Skitmore, 2004; Ling and Hoi, 2006; Dada and Jagboro, 2007; Han et al., 2007; Panthi et al., 2009; Ehsan et al., 2010; Banaitien et al., 2011; Eybpoosh et al., 2011; Zhang and Wei, 2012; Adedokunlbironke et al., 2013; AdedokunOgunsemi et al., 2013). Additionally, Hwang and Chen, (2015) claim that a lack of formal management training of the leaders in the construction industry, does not help the situation either.

Researchers argue that implementing project risk management which starts at concept stage and continues through the subsequent stages up to the end of the project life cycle
(see Figure 3), yields maximum benefits for the project (Raz et al., 2002; CII, 2003b; Ward and Chapman, 2003; Walewski, 2005; Han et al., 2007, 2008; Zou and Zhang, 2009; Osipova and Eriksson, 2011; Cagliano et al., 2014).

![Project Life Cycle Diagram](image)

**Figure 3**: IPRA Implementation during the project life cycle (PLC) (CII, 2003b)

The IPRA tool is an example of the PLC approach with recommended implementation as depicted in Figure 3 (CII, 2003a,b; Walewski, 2005). It is advanced that another advantage of the PLC approach is that it avoids the compartmentalization phenomenon, where each participant approaches risks with a self interest perspective, based on their own goals, ignoring the interests of other project parties (Ward and Chapman, 1995; CII, 2003b; Dikmen et al., 2008; Cagliano et al., 2014).

Advantages of instituting risk management early in the project life cycle are that:

- it questions the many assumptions that most affect the success of a project;
- attention is focused on risk control in the early stages to avert risks at minimum cost;
- it enables cost-benefit analysis of effective risk control activities;
- it optimises the allocation of project resources on major risks to achieve the best results by removing unnecessary contingency, and;
- it facilitates more accurate and realistic cost estimating as risks are itemized and quantified (Mills, 2001; CII, 2003a; Ward and Chapman, 2003; Li and Zou, 2008; Edwards et al., 2009; Cagliano et al., 2014).
Even though all types of risks are important to manage, studies have shown that international projects are very sensitive to political risks (Usher, 1965; Kobrin, 1979; Chevalier and Hirsch, 1981; Micallef, 1982; Gao, 1983; Hastak and Shaked, 2000; Ekpenyong and Umoren, 2010; Abdul-Rahman et al., 2012). As explained by Ling and Hoang, (2010), political uncertainty is a major hurdle for foreign companies in international construction because of many factors: unfamiliar bureaucratic system of a foreign country, daunting approval process for land acquisition, and construction and occupation permits which are all under the control of a local authority or government officials rendering most operational decisions dependent on their goodwill. They add that governments may also directly influence the construction industry through policies and legislation regarding licenses and permits, building codes, minimum wage rates, corporate taxes, discriminatory taxation, levies and rules relating to the import of materials and equipment. However as observed in preceding sections political risks like any other risks can be managed with positive results for an international construction project. To effectively manage micro-political risks there are methodologies or frameworks that are applied and some of these are appraised in the following subsection.

2.5.1 Risk Management Methodologies

There are a number of risk management (RM) frameworks in addition to institutional procedural task-based guides for systematic RM (Bu-qammaz et al., 2009). Included in the latter cluster are PMBOK’s PRM Section (PMI, 2013), Management of Risk (M_o_R) of the Office of Commerce (UK) (Jia et al., 2013), Project Risk Assessment and Management (PRAM) of the Association of Project Management (Chapman, 1997; APM, 2000), Risk Analysis and Management for Projects Methodology (RAMP) by the Institution of Civil Engineers (Cano and Pilar de la Cruz, 2002), RM-Principles and guidelines by ISO 31000, (2009), RISKMAN sponsored by the European Community and HM Treasury (Tummala and Burchett, 1999; Fidan et al., 2011) and PRINCE2 (OGC, 2002). A comparative summary of some of these are shown in Table 5 together with the steps involved.

Although these frameworks find widespread use, they are not without their critics whose main argument is that these processes are reductionist and do not show the cause and effect relationships and resultant networks of sources, risks and effects but instead use the one-way hierarchical structure approach (Jha and Devaya, 2008; Bu-qammaz et al., 2009;
Assmuth et al., 2010; Eybpoosh et al., 2011; Fidan et al., 2011). While recognising the limitations of the frameworks and guidelines, a choice of an approach for the risk management process (RMP) has to be made, and that is covered in the next subsection.

Table 5: Risk management methodologies (Jia et al., 2013)

<table>
<thead>
<tr>
<th>RM Process</th>
<th>Professional recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PMI</td>
</tr>
<tr>
<td>RM planning</td>
<td>✓</td>
</tr>
<tr>
<td>Risk Identification</td>
<td>✓</td>
</tr>
<tr>
<td>Risk Analysis</td>
<td>✓</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td>✓</td>
</tr>
<tr>
<td>Risk Response</td>
<td>✓</td>
</tr>
<tr>
<td>Risk Monitoring</td>
<td>✓</td>
</tr>
<tr>
<td>Risk Control</td>
<td>✓</td>
</tr>
<tr>
<td>RM Review and Reporting</td>
<td>✓</td>
</tr>
</tbody>
</table>

2.5.2 Risk Management Approach

To comply with the guidelines of project management bodies and ISO 3100, the study adopts the approach used by Cooper et al. (2005), which is similar to the one in ISO 31000 (2009) and is consistent with approaches used by other project management bodies. The steps involved are shown in Figure 4 which are establish context, risk identification, risk analysis, risk evaluation, risk treatment, risk monitoring and review and communicate and consult (APM, 2000; OGC, 2002; Cooper et al., 2005; Nicholas and Steyn, 2008; Hedeman and Seegers, 2009; ISO 31000, 2009; Banaitien et al., 2011; PMI, 2013; SA/SNZ, 2013).

Risk assessment refers to the steps of risk identification, risk analysis and risk evaluation whereas management of risks involves planning treatment strategies, implementing them and monitoring and reviewing if the strategies are working (ISO 31000, 2009; PMI, 2013; SA/SNZ, 2013). According to Cooper et al., (2005), the risk management process (RMP) answers important questions for the project manager, as indicated in Table 6.
2.5.3 Risk Management Techniques

The use of a framework or an approach to prioritise micro-political risks is achieved through the use of appropriate techniques or methods (Kobrin et al., 1980; Fitzpatrick, 1983; Mortanges and Allers, 1996; Ahmed et al., 2007; Al Khattab et al., 2011; Cagliano et al., 2014). Political risk assessment methods are divided into two broad categories namely, qualitative (heuristic), and quantitative (scientific) methods (Fitzpatrick, 1983; Mortanges and Allers, 1996; Al Khattab et al., 2011). The qualitative methods are further split into qualitative unstructured methods and qualitative structured methods. Evidence shows that in undertaking political risk forecasting, executives use subjective heuristic techniques more often than they use scientific ones (Kobrin et al., 1980; Mortanges et al., 1996; Al Khattab et al., 2011).

<table>
<thead>
<tr>
<th>RMP step</th>
<th>Management question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish the context</td>
<td>What is to be achieved?</td>
</tr>
<tr>
<td>Identify the risks</td>
<td>What might happen?</td>
</tr>
<tr>
<td>Analyse the risks</td>
<td>What might that mean for key criteria of the project?</td>
</tr>
<tr>
<td>Evaluate the risks</td>
<td>What are the most important points?</td>
</tr>
<tr>
<td>Treat the risks</td>
<td>What is going to be done about them?</td>
</tr>
<tr>
<td>Monitor and review</td>
<td>How will they be kept under control?</td>
</tr>
<tr>
<td>Communicate and consult</td>
<td>Who should be involved in the process?</td>
</tr>
</tbody>
</table>

Al Khattab et al. (2011) attributed this approach to the flexibility, simplicity, and low-cost nature of the so-called heuristic techniques as compared to the scientific ones, which require formal training in statistics and modelling.
The first unstructured heuristic method is the intuition and judgment of managers. A well-known approach is the so-called ‘grand tour’ where executives visit the host country for meetings and consultations with influential figures in business, unions, government, and others. The managers then base their political risk identification and analysis on their findings and experience on the trip abroad. Judgment and intuition of management was found to be the most preferred method by both Jordanian and Dutch multi-national enterprises (Al Khattab et al., 2011). In another study the technique was used by 79% of Canadian multi-national enterprises (Rice and Mahmoud 1990, as cited in Al Khattab et al., 2011).

The second qualitative unstructured technique is to make use of ‘expert opinion’, also known as the old hand method. This technique relies on valuable multiple sources of information such as academics, former political figures, journalists, banks, advisory councils of foreign business people, and local government officials. The disadvantage is possible imprecise nature of provided data and bias by these experts (Mortanges and Allers, 1996; Al Khattab et al., 2011). Gathering expert opinion was the second most commonly used technique by Jordanian and Dutch multi-national enterprises (Mortanges and Allers, 1996; Al Khattab et al., 2011).

The Delphi technique, standardized check lists, and scenarios fall under the qualitative structured methods (Mortanges and Allers, 1996). In the Delphi technique, a panel of geographically dispersed experts are approached for an opinion on a political-environment matter, such as the probability of the occurrence of social unrest in a given country. A statistical distribution of responses from the experts is produced, and shown to the experts, giving them an opportunity to change or amend their initial opinion. This process is repeated several times and in the last round, the average of the opinion of the experts is adopted as the answer. As claimed by Al Khattab et al. (2011), the Delphi technique is an invaluable method for the prediction of future events, in the absence of historical data.

Standardized checklists are used for both the identification and the analysis of risk. In this technique, managers review risk elements on a list and then rank these risks (Mortanges and Allers, 1996). Al Khattab et al. (2011) criticise this technique; it has the following drawbacks: it is static and therefore ignores future events, standardisation impairs the creativity of the decision maker, and the ranking of risk is arbitrary and subjective. For
Dutch multi-national enterprises, Mortanges and Allers (1996) found that it was the third most commonly used technique for political risk assessment.

In the scenario approach, several scenarios are formulated for the target country, with probabilities attributed to the possible occurrence of future alternatives. It enables managers to take strategic decision about the future and to be prepared for future eventualities (Al Khattab et al., 2011).

The scientific methods use software packages and quantitative input data. These data are obtained from economic data and national statistics of the host country and typically comprises items like defence expenditure, per capita income, and per capita education expenditure, as well as annual figures on crime and domestic violence. People with specialised skills are required to run these software packages and to sensibly interpret the results. Jarvis and Griffiths, (2007) on evolution of approaches to political risk, claim that with advances in computer technology, the current focus is on computer models for political risk assessment and management. The advantages of this method are precision and less dependence on subjective qualitative data. However, the credibility of government data used as input, as well as the time lag of the data which makes it historical, puts a damper on this approach (Mortanges and Allers, 1996).

Other ways of risk assessment make use of political risk consultants such as BERI, the PRS Group, ICRG, the Eurasia Group, PERC (Hong Kong), and many others (Fitzpatrick, 1983; Mortanges and Allers, 1996; Howell, 2014). These companies provide an array of ratings that investors can use. Also sector-specific models such as the ASPRO-SPAIR developed by Shell Oil for the oil industry, are widely used (Mortanges and Allers, 1996).

2.5.4 Context: Risk Management Plan

In accordance with the adopted risk management approach, the first step in the risk management process is to establish the context within which the risk management process takes place (Oztas and Okmen, 2004; Cooper et al., 2005; Edwards and Bowen, 2007; ISO 31000, 2009; PMI, 2013; Bharathy and Mcshane, 2014; Hillson, 2014b). This is achieved by considering important external and internal factors, which determine the extent and structure of the risk management process, and the formulation of the risk policy. These factors include identifying the key internal and external stakeholders, and determining the external and internal environments (relevant procedures and policies) that impact the project (Cooper et al., 2005; ISO 31000, 2009; Bharathy and Mcshane, 2014).
Edward and Bowen (2007) emphasise the need to isolate and nominate the dominant stakeholder whose risks are to be managed, as well as to locate where decisions are made and also whether it is the procurement, operations or disposal phase of the project. For this study, the building contractor is considered to be the stakeholder whose risks are of concern. Additionally, the context is set by documenting the risk categories, risk criteria, techniques and tools, staffing needs, and the frequency of risk activities (ISO 31000, 2009; Bharathy and Mcshane, 2014).

The outcome of establishing the context for the risk management process is a risk management plan whose contents include: methodology and techniques, roles and responsibilities, risk budget, timing or frequency of risk management activities, risk categories, definitions of risk probability and impact scales, probability-impact matrix for risk prioritisation, risk criteria (thresholds and tolerances), reporting formats (documenting risk management activities, analysis and communicating about the process) and tracking (risk activity recording and risk management process audit process) (OGC, 2002; ISO 31000, 2009; PMI, 2013).

2.5.5 Stakeholder Identification

Stakeholders are any individuals, groups, or organisations, who may have actual or perceived stake, or interest in the performance of a project (Chinyio and Akintoye, 2008; Ward and Chapman, 2008; Jepsen and Eskerod, 2009; PMI, 2013). There are internal and external stakeholders for every project (Wang and Huang, 2006; Rowlinson and Cheung, 2008; Ward and Chapman, 2008). Apart from being a big source of uncertainty, stakeholders bring different and sometimes conflicting objectives to the project (Ward and Chapman, 2008; Tang and Shen, 2013; Davis, 2014). Different stakeholders also have unique risk profiles, risk appetites and risk attitudes (Cano and Pilar de la Cruz, 2002; Hillson and Murray-Webster, 2011).

One method of stakeholder identification is the soft systems methodology (SSM) which uses the CATWOE approach (Stewart and Fortune, 1995; Checkland, 2000; Joham et al., 2009). CATWOE is an acronym standing for customer, actor, transformation, weltanschauung (worldview) owner and environmental constraints.
Table 7: **CATWOE** (adapted from Checkland, 2000)

<table>
<thead>
<tr>
<th>C</th>
<th>The customers—those affected</th>
<th>Environmentalists, residents, surrounding communities, businesses, media</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Actors—the doers</td>
<td>Contractor, suppliers, subcontractors, Consultants (architects, civil/electrical engineers, town planners)</td>
</tr>
<tr>
<td>T</td>
<td>The transformation Process—to do what?</td>
<td>The construction of roads, water, sewer and electricity infrastructure and low cost houses</td>
</tr>
<tr>
<td>W</td>
<td>Worldview—perspective</td>
<td>Providing infrastructure and decent accommodation for vulnerable people will raise their living standard</td>
</tr>
<tr>
<td>O</td>
<td>The owners—the decision makers</td>
<td>Local council, regional government, national government, government agency</td>
</tr>
<tr>
<td>E</td>
<td>The environment—why is the project being done?</td>
<td>Partial fulfilment of national objectives of raising the living standards for all citizens.</td>
</tr>
</tbody>
</table>

To aid with the identification of stakeholders the rich picture technique usually forms part of the analysis (Stewart and Fortune, 1995; Checkland, 2000; Day, 2003; Taylor, 2010). For example, the worldview of a public housing project could be to provide infrastructure and decent accommodation for vulnerable people, and to raise their standard of living. The CATWOE is used in identifying stakeholders for the project (see Table 7). The identified stakeholders have interests in and objectives for the project and some of these are considered next.

### 2.5.6 Stakeholder Objectives

Risk management is concerned with managing risk so that project objectives are met (Cooper et al., 2005; Edwards and Bowen, 2007; ISO 31000, 2009; Abdul-Rahman et al., 2012). The objectives may include rate of return, gross profit, net profit, cash flows, time of completion, milestones, quality standards, safety, health and environmental requirements (Han and Diekmann, 2001; Cooper et al., 2005; Laryea and Hughes, 2011). In construction the contract documents spell out the risks for which each party is responsible and therefore to a large extent contract documents act as a source of the objectives to be achieved in contract delivery (Ibrahim et al., 2006; Hameed and Woo, 2007; Hanna et al., 2013; Hwang et al., 2013). On a construction project there are many stakeholders who may have diverse and misaligned objectives, as such it is impractical to have a common
risk management system for a particular project; therefore each stakeholder must manage their own risks (Edwards and Bowen, 2007).

2.5.7 Risk Identification

Because all subsequent steps in the risk management process are dependent on the identified risks, identification of risks is the single most important step in the process (Chapman, 1998; Mills, 2001; Hwang et al., 2014; Hwang and Chen, 2015). The purpose of risk identification is to define the causes of the risks and the potential impacts of the risk events or conditions to which the project is exposed (Edwards et al., 2009; Cagliano et al., 2014; Hwang and Chen, 2015). Structured creativity and imagination play an important role in risk identification since it is a difficult task to execute (Mills, 2001; Lyons and Skitmore, 2004; Hwang and Chen, 2015).

According to Simon (1984), risk classification should be detailed but simple to understand so that it can easily be applied to international construction projects. However, one of the criticisms would be the lack of a direct distinction between macro and micro-political risks. Nonetheless, in combination with the framework given in Simon (1982) the taxonomy provides an adequate source of micro-political risk variables for use in obtaining empirical data on micro-political risks applicable to international projects. The variables in the frameworks in Simon (1982, 1984) frameworks in combination with variables in other political risk studies that form the basis of the micro-political risk variables used for this study (Kobrin et al., 1980; Fitzpatrick, 1983; Torre and Neckar, 1986; Zhi, 1995; Mortanges et al., 1996; Bing and Tiong, 1999; Hastak and Shaked, 2000; Han et al., 2007; Ling and Hoi, 2006; Al Khattab et al., 2008; Jha and Devaya, 2008; Al Khattab et al., 2011; Bu-qammaz et al., 2009; Eybpoosh et al., 2011; Abdul-Rahman et al., 2012; Loo et al., 2013).

2.5.8 Risk Analysis

Risk analysis determines the level of risk by assigning a probability to occurrence and assessing the impact of risk on project objectives of cost, schedule, scope and quality variance (Mills, 2001; Cooper et al., 2005; ISO 31000, 2009; PMI, 2013; Cagliano et al., 2014; Hwang and Chen, 2015).

For risk analysis, the IPRA tool, which uses a semi quantitative technique, is used for this study (PMI, 2013). As discussed below for quantifying risks, two attributes are normally used namely the likelihood or probability of occurrence and effects on objectives measured as an impact (CII, 2003b; ISO 31000, 2009; PMI, 2013; Windapo, 2013).
2.5.8.1 The probability of occurrence

The division of probability of occurrence as given in CII (2003b) for the IPRA tool is shown in Table 8. The table highlights the descriptors and the Likert scale values from 1 to 5 for the various probability segments.

Table 8: Division for probability of risk occurrence (adapted from CII, 2003b)

<table>
<thead>
<tr>
<th>Occurrence</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA - Not applicable to this project.</td>
<td>zero</td>
</tr>
<tr>
<td>1 - Very low chance of occurrence; rare and occurs only in exceptional circumstances.</td>
<td>&lt;10% chance</td>
</tr>
<tr>
<td>2 - Low chance and unlikely to occur in most circumstances.</td>
<td>10% &lt;35%</td>
</tr>
<tr>
<td>3 - Moderate chance and possible to occur in most circumstances.</td>
<td>35% &lt;65%</td>
</tr>
<tr>
<td>4 - High chance of happening and will probably occur in most circumstances.</td>
<td>65% &lt;90%</td>
</tr>
<tr>
<td>5 - Very high chance of occurrence and almost certain and expected in most circumstances.</td>
<td>90% or more</td>
</tr>
</tbody>
</table>

2.5.8.2 Relative impact of the risk

Table 9 outlines the rating system for measuring the relative impact of risk. The relative impact of a risk is its ranking based on its overall impact on project objectives (CII, 2003b). The relative impact rankings are given letter designations ranging from A to E starting with A = ‘negligible’ and E= ‘extreme’.

Table 9: Relative impact definitions (CII, 2003b)

<table>
<thead>
<tr>
<th>RELATIVE IMPACT</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Negligible consequence that routine procedure would be sufficient to deal with the consequences.</td>
</tr>
<tr>
<td>B</td>
<td>Minor consequence that would threaten an element of the project. Normal control and monitoring measures are sufficient</td>
</tr>
<tr>
<td>C</td>
<td>Moderate consequence would necessitate significant adjustment to the project. Requires identification and control of all contributing factors by monitoring conditions and reassessment at project milestones.</td>
</tr>
<tr>
<td>D</td>
<td>Significant consequence that would threaten goals and objectives; requires close management. Could substantially delay the project schedule or significantly affect technical performance or costs, and requires a plan to handle</td>
</tr>
<tr>
<td>E</td>
<td>Extreme consequence would stop achievement of project or organisational goals and objectives. Most likely to occur and prevent achievement of objectives, causing unacceptable cost overruns, schedule slippage, or project failure</td>
</tr>
</tbody>
</table>

2.5.8.3 The relative importance of risk

Using the international project risk assessment tool, the relative importance of a risk on a project is determined by combining the relative impact and probability/likelihood of the risk element. Using the IPRA risk assessment sheet (see Appendix G), the rating for likelihood of occurrence (L), and the rating for relative impact (I), give the coordinates (L, I) of the element, yielding a risk classification of 'low', 'moderate', 'severe', or 'extreme', thereby indicating the relative importance of the risk. The coordinates are plotted on the probability
impact matrix shown in Figure 5; in this case an adapted double Probability/Impact matrix to address both threats and opportunity risks (Hillson, 2002; PMI, 2013). All identified risk elements are similarly plotted on the matrix. The red zone shows extreme risks, the orange zone indicates severe risks, the yellow zone contains moderate risks, and low-ranked risks are in the green zone.

The baseline or benchmark relative impact values are used where there is lack of knowledge or where one is unsure of the potential impacts thus closing a knowledge gap (CII, 2003b). ‘Severe’ and ‘Extreme’ relative impact baseline values are included in Appendix H.

<table>
<thead>
<tr>
<th>Likelihood/Probability</th>
<th>Threats</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Extreme</td>
<td>Extreme</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Extreme</td>
<td>extreme</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Extreme</td>
<td>extreme</td>
</tr>
<tr>
<td>4</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Severe</td>
<td>severe</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Extreme</td>
<td>extreme</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Extreme</td>
<td>extreme</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Severe</td>
<td>severe</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Extreme</td>
<td>extreme</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Extreme</td>
<td>extreme</td>
</tr>
<tr>
<td>2</td>
<td>Negligible</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>moderate</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Severe</td>
<td>severe</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Extreme</td>
<td>extreme</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>moderate</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Negligible</td>
<td>low</td>
</tr>
<tr>
<td>1</td>
<td>Negligible</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>moderate</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Severe</td>
<td>severe</td>
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<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Severe</td>
<td>severe</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>moderate</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>risk</td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>Negligible</td>
<td>low</td>
</tr>
</tbody>
</table>

Impact (on project objectives e.g. cost, time, scope or quality)

Notes
- **Extreme risk (E)** – occurrence would prevent achievement of objectives, causing unacceptable cost overruns, schedule slippage, or project failure.
- **Severe risk (S)** – could substantially delay the project schedule or significantly affect technical performance or costs, and requires a plan to handle.
- **Moderate risk (M)** – requires identification and control of all contributing factors by monitoring conditions and reassessment at project milestones.
- **Low risk (L)** – normal control and monitoring measures are sufficient.
- **Negligible Risk (N)** – Controls adequate, risk level reduced to as low as reasonably practical (ALARP).
- **Not Applicable (NA)** – this element does not apply to this participant or this project.

**Figure 5:** Double probability- impact matrix (adapted from Walewski, 2005)

**2.5.9 Risk Evaluation**

Risk evaluation involves comparing the results of risk analysis with risk criteria or thresholds that were predetermined to establish whether the risk and/or its magnitude is within acceptable criteria or tolerances (Cooper et al., 2005; ISO 31000, 2009; Hillson and Murray-Webster, 2011; PMI, 2013). Table 10 is an illustrative example of an evaluation rule set. It shows the level of risk descriptors adapted to fit IPRA tool terminology in Figure 5.
### Table 10: evaluation rule set (threats) (adapted from SA/SNZ, 2013)

<table>
<thead>
<tr>
<th>Level of risk</th>
<th>Acceptability</th>
<th>Urgency of implementation of treatment</th>
<th>Treatment</th>
<th>Authority to continue to tolerate risk at this level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme</td>
<td>Not permitted unless approved by the Board. Reduce the level of risk to high or below</td>
<td>Immediate-stop until treated. For complex treatments, implement short-term controls with permanent treatments completed within 1 month.</td>
<td>Avoid</td>
<td>Board</td>
</tr>
<tr>
<td>Severe</td>
<td>Only acceptable if it is not practicable or efficient to reduce the level of risk. Otherwise reduce the level of risk to Moderate or below.</td>
<td>As soon as possible, but complete within 3 months.</td>
<td>Avoid/ Transfer</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>Moderate</td>
<td>Acceptable for a limited period of time to allow treatment to be in keeping with the business or project plan priorities</td>
<td>Treat as soon as practicable but within 1 year.</td>
<td>Part Transfer/ Reduce Retain</td>
<td>General Managers</td>
</tr>
<tr>
<td>Low</td>
<td>Plan to treat in keeping with all other priorities.</td>
<td>Ongoing control as part of general or routine management activities</td>
<td>Reduce retain</td>
<td>Managers</td>
</tr>
<tr>
<td>Negligible</td>
<td>No further treatment required</td>
<td>Existing controls are sufficient (ALARP)</td>
<td>Retain</td>
<td>Supervisors</td>
</tr>
</tbody>
</table>

#### 2.5.10 Risk Response Planning

Political risk assessment is carried out to provide managers with choices for either protective or compensating actions that enhance opportunities and reduce threats (PMI, 2013; Howell, 2014). Once the relative importance of a risk element has been determined a risk plan is developed to minimise threats and maximize opportunities (ISO 31000, 2009; PMI, 2013; Cagliano et al., 2014). Threats rated high require immediate response and aggressive actions and those ranked ‘low’ are only required to be logged in the risk register for monitoring. Similarly, for opportunity risks in the red zone, and are realisable with least effort require immediate attention, while those opportunity risks in the green zone need only to be logged and monitored (PMI, 2013).

For construction projects, researchers have long argued that the most efficient response to risks is to allocate risks, to the party with the expertise and ability to effectively deal with those risks (Mills, 2001; Medda, 2007; Chapman and Ward, 2008; Chan et al., 2011). The tendency, according to recent research, is that the owner, through contract documents wants to transfer most of the risks to the main contractor (Zhi, 1995; Mills, 2001; Khazaeni et al., 2012). As Hanna et al. (2013) explain the contractor in turn either allows a contingency to mitigate for those risks and/or transfers those risks to the subcontractor who has the least amount of control over on decisions that generate or mitigate these risks, and subcontractors then often end up carrying the majority of the construction risks.

Every risk control action must offer value for money in relationship to the risk being treated (APM, 2000; OGC, 2002; ISO 31000, 2009; PMI, 2013). In international construction the
available risk response strategies for threats are transfer, share, reduce (mitigation), avoid, and retain (accept), depending on the relative importance or priority of the risk (Akintoye and Macleod, 1997; Mills, 2001; Han et al., 2008; Cagliano et al., 2014). Zhi (1995) on the other hand proposes three broad channels of risk response: by contract (transfer/share), by insurance (transfer/share), and by retention management (mitigate/accept). According to ISO 31000:2009 the responses to opportunity risk are exploit, enhance, share and accept. Again Zhi (1995) in his analysis acknowledges that most political risks are within the retention management channel. For efficacy, Hastak and Shaked, (2000) and Wang et al. (2004) propose a hierarchical application of risk treatment, starting with country-level risks, followed by market-level risk and finally project level, arguing that country-level risks influence both market-level and project-level risks, while market risks impact project specific risks.

Conceptual political risk studies reveal that response strategies to political risks, except for avoidance, are fundamentally different from those described by Zhi (1995). Miller, (1992) describes the following generic strategic responses to political uncertainties for international business: avoidance, control, cooperation, imitation and flexibility, and these are shown in detail in Table 11. While control and cooperation strategies are aimed at increasing the predictability of the outside environment, the flexibility strategy increases internal responsiveness only (Miller, 1992; Mortanges et al., 1996). Shahid and Hood (2004), on JVs, cite Bradley (1977) as acknowledging the effectiveness of the control strategy through JVs, because historically, only 0.2% of JVs have been nationalized presumably because of a strong opposing local voice acting as a deterrent to government seizure.

Another way of treating political risks is insurance against consequences of political risk. Buying and selling of financial instruments hedges the foreign company against exchange risk (Mortanges and Allers, 1996).

2.5.11 Risk Monitoring and Review

The following are the activities and processes in the risk monitoring and control phase of a project: ongoing identification; management of new risks that become known during a project, tracking of previously identified risks; implementation of response plans and the review of their effectiveness; development of remedial actions; assessing effectiveness of the RMP; and, the formalisation of lessons learned about risk (ISO 31000, 2009; PMI,
The techniques employed in this phase include risk reassessment, risk audits, variance and trend analysis, technical performance measurement, reserve analysis, and meetings (Cooper et al., 2005; PMI, 2013).

### Table 11: Political environment response strategies (Miller, 1992)

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidance</td>
<td>Divestment; delay new market entry; pursue low uncertainty niches</td>
</tr>
<tr>
<td>Control</td>
<td>Political activities e.g. lobbying for or against regulations trade restraints; gain market power to deter entry; influencing through advertising and promotions; exchange of threats; vertical integration to control input and demand uncertainties; horizontal mergers and acquisitions to control industry structure to control competitive uncertainties</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Involve multilateral agreements such as long-term contractual agreements with suppliers or buyers; voluntary restraint of competition; alliances or joint ventures; franchising agreements; licensing and subcontracting arrangements; participation in consortia; interlocking directorates; inter-firm personnel flows</td>
</tr>
<tr>
<td>Imitation</td>
<td>An industry leader can predict response of rivals through imitation of product and process technologies; follow other firms in moving into new markets</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Defined as the ability of the organisation to adapt to substantial, uncertain, and fast-occurring (relative to required reaction time) environmental changes that have a meaningful impact on the organisation's performance. Done through: Product diversification; geographic diversification; and Flexible input sourcing; flexible work force size; flexible work force skills flexible plants and equipment; Multinational production</td>
</tr>
</tbody>
</table>

### 2.5.12 Risk Communication and Consultation

The overarching activity for risk management is communication and consultation with external and internal stakeholders (Cooper et al., 2005; ISO 31000, 2009; PMI, 2013; Bharathy and Mcshane, 2014). According to ISO 31000 (2009), communication involves sharing, obtaining, and providing information to project stakeholders on all facets of project risk management. The modes of communication could include reports, meetings and flash updates. Consultation, on the other hand, involves a two-way communication process between the organisation and its stakeholders before decisions are taken or finalised (ISO 31000, 2009).
2.5.13 Risk Knowledge Capture

Creating, maintaining, structuring and increasing knowledge are an essential part of risk management and act as enablers to effectively deal with the complexity of construction projects and they should happen during the entire project life cycle (Edwards and Bowen, 2007; Dikmen et al., 2008; ISO 31000, 2009; Bharathy and Mcshane, 2014; Cagliano et al., 2014). Dikmen et al. (2008) proposed that in order to create a meaningful corporate risk repository, the following must form part of the knowledge captured at regular reviews, with the final review occurring during the project closure phase: eventuating risk; lessons learned about effectiveness of response strategies; relevant knowledge beyond the confines of the project; systemic reasons for project outcomes; what was done on the project, and why and how it was done; a system's vulnerability (the extent or the capacity of the project to respond or cope with a risk event). Part of the risk knowledge is captured on documents and these are reviewed next.

2.5.14 Risk Documents

A risk register/schedule is a document whose content includes information on risks such as the names of persons who logged the risks, risk ID, date of assessment and assumptions used, the response actions, risk owners, risk response actors, deadlines for response actions, risk reserves and emerging risks (OGC, 2002; Patterson, 2002; PMI, 2013; SA/SNZ, 2013). The list is not exhaustive since it is dependent on the organisation.

2.6 MICRO-POLITICAL RISK MANAGEMENT CONCEPTUAL FRAMEWORK

Uncertainty that affects set objectives, is termed ‘risk’. Risk is a social construct and is subjective leading to different individuals seeing and interpreting risk in different ways. The construction industry like any other human endeavour, experiences risk in both the domestic and international markets. However, owing to the unfamiliar operating environment, international construction projects deal with more complex and diverse risks one of which is political risk. Political risk has been divided into country (macro) risk and firm or project-specific (micro) risk and while they overlap and are both important to an international construction project, the latter is more relevant as it directly affects the project. For international projects, there is empirical evidence that applying systematic risk management with a whole life cycle approach to the project leads to improved project performance (CII, 2003a; Ward and Chapman, 2003; Li and Zou, 2008)
While considerable research has been undertaken in other areas of risk assessment and management of international construction projects there is a paucity of research on political risk in general and micro-political risk in particular. Therefore, this study aims to contribute to research on micro-political risks by investigating the assessment of micro-political risks, the frequency of implementation of assessment, the assessment techniques used, and the management of micro-political risks on international construction projects in Namibia. A conceptual framework of the research, based on the literature review for an international construction project, is shown in Figure 6.

![Figure 6: Conceptual framework for the research](image)

This research posits that applying systematic risk management to political risks, positively impacts on the objectives of international construction projects. The proposition framed to guide the direction of this study is therefore restated as follows:

Micro-political risk factors impact on the performance of international construction projects in Namibia.

It is the research process adopted for the study that will enable answers to be obtained to either refute or confirm the study proposition. Chapter 3 outlines the research process employed in seeking and providing answers to the questions concerning the assessment and management of micro-political risk on international construction projects.
CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

To successfully test the research proposition and to achieve the objectives of the study, a road map for the research must be in place. Research methodology represents an overarching link in a system of interrelated practices and thinking that defines scientific enquiry (Creswell, 2003; Cohen et al., 2007; Bhattacharjee, 2012). One needs to take practical steps in the research journey in order to find answers to the research questions. Research methodology constitutes the path to finding those answers to the research questions; each operational step in the research process requires a choice to be made, from a variety of methods, procedures and models of research methodology, selecting the one that best enables achievement of the research objectives (Creswell, 2003; Bhattacharjee, 2012). Creswell, (2003) gives a concise definition of methodology by saying that it is the process of research. The current chapter outlines the research approach: the research paradigm, research design, sampling, instruments, data collection details and data analysis strategy employed.

3.2 RESEARCH PARADIGM

Considering that political risk is considered a social construct (Lefley, 1997; Rosa, 1998; Edwards et al., 2005; Loosemore, 2009; Solberg and Njå, 2012), this research adopts the interpretivist paradigm (Rowley, 2002; Voss et al., 2002; Yin, 2003; Ellinger et al., 2005; Bhattacharjee, 2012). Positivism and interpretivism are fundamental claims of knowledge known as paradigms (Creswell, 2003; Bhattacharjee, 2012). Ontology and epistemology assumptions shape the worldview or the research paradigm. Ontology is the nature of reality (Creswell, 2003). As postulated by Patton, (2015), it refers to the study of being: what is it that we want to know?. On the other hand epistemology is the assumption on how to best study the world: whether to use an objective or subjective way to learn about the nature of reality (Bhattacharjee, 2012). Patton, (2015) explains that an objectivist approach means the researcher does not get involved in what is going on in the world; the researcher is separated from and independent of the world. On the other extreme, the subjectivist approach entails the researcher being engaged, and gaining a deeper insight into the nature of reality of the (topic/ subject matter) by getting involved ' (Creswell, 2003; Bhattacharjee, 2012; Patton, 2015). Positivists claim that there is a single reality and that the best way to know the world is to be objective while interpretivist proponents argue that
there are multiple realities and the best way to know the world is by getting directly involved and being subjective (Creswell, 2003; Bhattacharjee, 2012; Patton, 2015). Within the interpretivist paradigm, there are a number of research designs or methods available to the researcher, such as case studies, action research, ethnography, and focus group research (Creswell, 2003; Bhattacharjee, 2012; Patton, 2015).

3.3 RESEARCH DESIGN

For this study, the case study method has been adopted, and further, the suitability of this method supported by its use in previous political risk research studies (Fidan et al. 2011; Iankova and Katz 2003; Walewski 2005; Steffey and Anantatmula 2011; Liu et al. 2013; Han, Park et al. 2007). As Cohen et al. (2007) explain, a research method talks to the techniques and procedures used in the process of data gathering. It is the master plan of research that dictates the modus operandi of the study which glues it together in a logical way; all the major parts of the research process, namely data collection, instrument design, and sampling work together in addressing the research questions (Rajasekar et al., 1994; Leedy and Ormrod, 2010; Bhattacharjee, 2012).

A case study, from a process perspective, is defined by Yin (2003) as an observation of a contemporary phenomenon within a bounded context. A case study design is suitable when pursuing the ‘what’, ‘how’, and ‘why’ questions (Voss et al., 2002; Yin, 2003; Ellinger et al., 2005). This study seeks answers to the ‘what and ‘how’ questions of micro-political risk management for international construction projects in Namibia. Also case research is particularly relevant in studying systems, processes individuals, programmes and events in organisations (Rowley, 2002; Ellinger et al., 2005). The ‘case’ for this study was the political risk phenomenon on the project and therefore the ‘case’ could only be fully considered within its bounded context, namely the construction project itself.

3.3.1 Case Study Protocol

Yin (2003) posits that reliability and validity of case research data is enhanced by a well-designed research protocol. The protocol consists of the case study context, the population of study, sampling and sample size, the methods of data collection, data recording, and storage.
3.3.1.1 Case study context

The phenomenon of micro-political risk was investigated in a joint venture (JV) company whose shareholding structure was 51% Namibian-owned and 49% South African-owned. One partner was a wholly Namibian owned company and it owned 51% shares in the JV while the balance of shares were owned by the other partner registered in the Republic of South Africa (RSA). The Namibian partner is a property development company with interests in shopping malls and estate development but no experience in mass housing whereas the South African shareholder has extensive experience in turnkey projects and mass housing in their home country. The management structure consisted of a board of directors consisting of four board members; two from each partner. The Managing Director who doubled as board chairman was from the Namibian outfit with the chief operating officer seconded from South Africa. The South African entity was the managing partner vested with administrative and financial management responsibilities which meant they had to deploy their company systems for the running of the JV. The managing director and chief operating officer constituted a management committee to provide executive leadership to the JV. If there was a disagreement between them, then the board of directors would be consulted.

The JV was established as a vehicle to participate in the mass housing programme (MHDP), which is a component of the fourth national development programme (NDP4) of the government of Namibia. According to press reports (Hartman, 2015) there was a housing backlog of 180 000 units in 2015. To address this backlog, the Government planned to construct 9306 housing units between 2014 and 2016 at a cost of N$ 2.9 billion in phase one of the MHDP, with a target of 180 000 units by 2030, at a cost of N$ 45 billion. The JV was awarded a contract by a government appointed implementing agency to construct a variety of house types in the coastal town of Swakopmund. The project was to be undertaken over 33 months with 6 May 2014 as the start date and 5 February 2017 as the completion date; the tender price was N$ 796,331,146.73.

Employing subcontractors was adopted as the best way to implement the project. The JV provided all building materials for most of the trades, with the exception of, electrical work, plumbing, and joinery, which were supply-and-fix contracts. The objectives of the project included monthly revenue targets, time, quality, safety, health and environment standards, employment and training of Namibians, community empowerment, compliance with Namibian labour laws, and building and sustaining a good reputation for the JV.
At the time of the study the project was suspended with the Government citing irregularities in the implementation of the MHDP as the reason for the suspension. One of the irregularities was said to be the lack of a proper budget for the initiative. Soon after the project was suspended the JV sued the implementing agency and the Namibian Government for failure to pay for certified work.

3.3.1.2 Population of study
The population of the study included senior project team members involved in international construction projects in Namibia; professionals such as engineers, quantity surveyors, project managers, accountants, and human resource practitioners.

3.3.1.3 Sampling technique and sample size
A non-probability, but purposive sampling technique was employed for this study. Selection of this sampling method was influenced by the knowledge and experience of the researcher on the subject matter under study. This technique allows deliberate selection of particular units of the sampling frame to constitute a sample that is likely to generate useful data for the research (Bricki and Green, 2007).

The sample consisted of ten top most officers of the JV directly involved on the project. The respondents in the main set of semi-structured interviews were those senior members of staff seconded to the project by the South African partner whose perspective on micro-political risks underpinned the study. They included the technical director, construction executive, contracts manager, group manager of safety health environment and quality, project senior quantity surveyor, procurement manager and the site agent. The other three senior officials were the financial manager, assistant project manager and the liaison and labour relations manager. The involvement of different professions in the sample enabled the study to capture different perspectives on micro-political risks impacting the project. Also as a participant-observer and a senior member of staff, the researcher had participated in administering the project which allowed for a real-life and accurate portrayal of the micro-political risks experienced, and observation of how they were managed on the project.
3.3.1.4 Methods of data collection

To improve the reliability of data for the study, several methods of data collection were used including semi-structured interviews, participant-observations, and documents as described in section 3.3.1.4.2 (Rowley, 2002; Voss et al., 2002; Yin, 2003; Ellinger et al., 2005; Bhattacherjee, 2012). For the interview guidelines, a pre-test was done to improve instrument quality.

A pre-test was conducted to determine the adequacy of measures making up the initial semi-structured interview protocol. The questions guideline was sent to the supervisor and the researcher’s lecturer of risk management, for evaluation. Suggestions were made and one, which was implemented, involved dividing the questions into sections: about the respondent’s background profile, the organisation, the project, micro-political risk and managing political risks. Upon receiving a list of five professional colleagues of the lecturer, an updated question guideline was sent to each of them and one of these colleagues suggested the inclusion of the definitions of each micro-political risk variable used in this study. Although this was valuable useful suggestion, it could unfortunately not be implemented because of technical limitations of the software used to develop the interview protocols. However, verbal or written clarification was always provided to respondents who had queries before, during and after the interviews.

3.3.1.5 Semi-structured interviews

The seven respondents to the main set of semi-structured interviews were top most officers of the JV, but included only those seconded to the project by the South African partner. With all respondents connected to the project, a semi-structured interview protocol administered online was used to obtain the necessary information. The online interviews and the face-to-face interviews were held in August 2015. The follow-up interviews were meant to elaborate on the responses obtained in the initial interviews and these were targeted at specific officials namely, the financial manager, the assistant project manager and the liaison and labour relations manager.

The main interview questions were divided into sections: questions 1–3, about the respondent’s background profile; questions 4–7, about organisation; questions 8–10 about the project; questions 11–25, about micro-political risk and question 26 about managing political risks. The design of the follow-up face-to-face interviews protocol were tailor made for the study aspects needing elaboration with the one for the financial manager,
emphasising financial impact on objectives while for the liaison and labour relations manager it was focussed on community objective impacts. For the assistant project manager additional questions on effectiveness or otherwise of risk management systems were added to the main interview guidelines. The question guidelines are provided in Appendices C, D, E and F, where the question guideline in appendix C is for the main interview and those in appendices D, E and F are the ones used to gain more insight.

3.3.1.6 Documents

The researcher examined various documents, which provide further evidence of micro-political risks sources, events and effects on the objectives of the project; these documents are described below. Both qualitative and quantitative data were collected from documents. Interviewees availed data including financial reports, newspaper cuttings, project status reports, minutes of project meetings, a court order and letters. To enhance reliability of the study (Rowley, 2002; Yin, 2003) a Microsoft Access database was developed for the study (https://drive.google.com/open?id=0B8h_zCp8QdlteTZMX1ZwemlNNU0).

The contents of the database are defined as follows:

- **Financial reports**: A set of documents containing increased costs on the project.

- **Publications**: Press reports carrying stories about the project and/or the mass housing development programme.

- **Project status Report**: A summary of the project performance in a given period against set targets of performance.

- **Minutes**: A record of discussions in a meeting between the implementing agency and the JV.

- **Court Oder**: A document issued by the Namibian High court to seal an out of court settlement between the JV and the Namibian Government after the JV had sued the implementing agency and the Line Ministry for failing to pay an amount of N$ 100 million for certified work.

- **Letters**: Official correspondences between the implementing agency and the JV.

- **Records**: Other official filed documents such as receipts.
3.3.1.7 Participant-observation

Mostly qualitative data was obtained from this data collection method. Most of the observations were done during the study period even though some of the information refers to previous observations on the project. This means that this was not an ethnographic study that requires a researcher to study participants for long periods of time (Bhattacherjee, 2012). Photographs form part of the observations. The observation notes have been captured in the Microsoft Access database.

3.3.1.8 Recording data

A strong foundation for documentation of evidence gathered is critical in case research (Voss et al., 2002). Semi-structured interviews were conducted, clarification was given by the researcher when required, and feedback was solicited during interviews when deemed necessary (Voss et al., 2002). Following the 24-hour rule, where appropriate, minutes/notes were produced within the time limits set for records (Rowley, 2002; Yin, 2003).

3.4 ROLE OF THE RESEARCHER

As an employee of the JV, the researcher made observations that corroborated the information provided by the respondents, and in other instances differed with interviewees’ perspectives. However, the researcher did not in any way, deliberate, or otherwise, influence the answers provided by respondents in this study. Nevertheless, it is important to reflect on the researcher’s role in the data collection process. The possibility that as a participant, the biases of the researcher could have affected the research process cannot be denied. In defence of the researcher, it can be said that as a signatory to the declaration to EiR committee, everything was done to uphold ethical conduct during the study. On the positive side, as an employee, it made it easy for the researcher to obtain information because of the rapport that existed between colleagues and the researcher. Having been aware for some time that the researcher was studying towards a masters degree at UCT, most of the JV employees and management were keen to facilitate the research.
3.5 ADDITIONAL VARIABLES

As more information became available, it became apparent that the contract of the JV would be repudiated, which in part necessitated the follow-up semi-structured interviews including the discussion of the micro-political risk of repudiation. The other reason for the follow-up semi-structured interviews was to probe the effectiveness of the risk management system for micro-political risks on the project. Questions on micro-political risk of repudiation and effectiveness of the risk management system were part of the follow up elaboration interviews. The additional variables resulting from questions on repudiation, added depth to the study even though it required data reanalysis for some questions.

3.6 VALIDITY AND RELIABILITY

Only the top-most officers of the JV were interviewed in the study. A semi-structured interview protocol administered online was used to solicit for the necessary data. Also, the researcher examined documents such as the court order, project status reports, minutes of project meetings, project letters, financial, and other records as needed. Further, the use of multiple sources of data as explained above provided triangulation and improved construct validity (Yin, 2003). A chain of evidence was developed as the protocol was followed, and citations related to database material are evident in this dissertation (Rowley, 2002; Yin, 2003). For external validity the case protocol was strictly adhered to, while reliability was ensured by the development of a Microsoft Access case study database (Rowley, 2002; Yin, 2003) on Google drive (https://drive.google.com/open?id=0B8h_zCp8QdfTeTZMX1ZwemlNNUQ).

3.7 DATA ANALYSIS STRATEGY

There are various methods available for the data analysis of case studies (Rowley, 2002). For this study, a narrative approach was adopted in accordance to Cohen et al. (2007) was adopted. Thematic analysis was used for qualitative data while statistical analysis was used for quantitative data (Bhattacherjee, 2012). Because there were only ten participants, only descriptive statistics was used (Walewski, 2005; Bhattacherjee, 2012). Quantitative data required coding to prepare it for input into an analysis tool or spreadsheet (Bhattacherjee, 2012). For this study, it involved such techniques as aggregating numbers into frequencies and ranking the numbers as needed. For analysis and presentation, Microsoft Excel spreadsheets were used.
3.8 LIMITATIONS OF STUDY

Every research design that is adopted for a study has inherent limitations (Bhattacherjee, 2012). Generalisability of findings poses a challenge for a case study, as the interpretations are limited, especially if it is a single case study as is the situation with this study (Rowley, 2002; Choy, 2014). Additionally, a single case study research method without a proper protocol may fail to meet generalisability requirements (Rowley, 2002; Bhattacherjee, 2012). Another limitation is the fact that since micro-political risks are specific to a project it may make generalisability of the findings difficult (Robock, 1971; Alon and Herbert, 2009). Further, the use of some untested scales in the study may have impacted negatively on construct validity (Rowley, 2002; Bhattacherjee, 2012).
CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The research findings are based on the outcomes of semi-structured interviews, documentary information and this researcher's participation and observation as an employee of the JV. The participants in the study were key project team members on a JV project, based in the town of Swakopmund in Namibia. The aim of the study was to investigate micro-political risk assessment and management practices on international construction projects in Namibia.

4.2 PRESENTATION OF FINDINGS

Figures 7 and 8 contain profile information about the respondents while Figures 9 and 10 present information about the foreign shareholder and the JV. The identification and prioritization of risks and the management of the same follow thereafter.

4.2.1 Respondents Profiles

The study sought to establish the background profile of the respondents. The background profile revealed that the majority of respondents had more than ten years of experience in construction and 75% had more than 20 years of experience; this is as depicted in Figure 7. International construction experience was below five years for all respondents.

![Figure 7: Total construction experience of respondents (years)](image-url)
In Figure 8, it is shown that all participants were senior employees.

![Figure 8: Respondent job title](image)

### 4.2.2 Organisational Information

The study sought to understand the area of specialisation of the South African partner. The JV project is involved in international construction in the building sector, while the South African partner is involved in all three sectors of construction shown in Figure 9.

![Figure 9: Company specialisation of foreign partner in JV](image)

The research sought to establish the type of company undertaking the international project in Namibian and as Figure 10 shows that three quarters of respondents thought a JV was involved and one quarter of respondents believed it was a subsidiary undertaking the project.
4.2.3 Data Analysis

The data gathered from responses to questions 11 to 26 on the main interview protocol directly address the objectives of the study and that data is used in data analysis for the study.

4.2.3.1 Key micro-political risks

The study sought to identify the key micro-political risks impacting on an international construction project and Figure 11 depicts the percentage of respondents selecting each micro-political risk shown based on its likelihood of occurrence. It shows that 62% of the listed risks were considered as likely to occur by all respondents. The micro-political risks of expropriation and local ownership requirements got the least response at 60%.
Figure 12 gives the risk profile of the JV under study and Table 12 shows the equivalent international project risk assessment (IPRA) elements and micro-political risk variables. Since the median is the most suitable measure of central tendency, it was used for assessing the probability of occurrence of the risks.

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>II.B1 II.B4</td>
<td>II.A3</td>
<td>III.D1</td>
<td>II.C2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II.A7</td>
<td></td>
<td>II.B1</td>
<td>II.D6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II.A8</td>
<td></td>
<td>II.B1</td>
<td>II.B3</td>
</tr>
</tbody>
</table>

**Impact** (on project objectives e.g. cost, time, scope or quality)

<table>
<thead>
<tr>
<th>Key</th>
<th>Extreme</th>
<th>Severe</th>
<th>Moderate</th>
<th>Low</th>
<th>Negligible</th>
</tr>
</thead>
</table>

**Figure 12**: Micro-political risk profile for the JV

Just below 50% of the micro-political risks assessed make up the key risks and are located in extreme and severe zones. The risk assessment sheet is provided in Appendix G. Each of the thirteen micro-political risks is separately discussed below using evidence from the other sources of data as per the protocol (Rowley, 2002; Yin, 2003) taking into consideration that in theory the construct of risk has the attributes of a source, an event, effects, time of occurrence, and time of exposure to the consequences (Edwards and Bowen, 2007; Hillson, 2008).
Table 12: Micro-political risks and IPRA equivalents

<table>
<thead>
<tr>
<th>Item</th>
<th>Micro-political Risk</th>
<th>IPRA Element</th>
<th>Level of Risk</th>
<th>Multiple source Evidence</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Contract Problems</td>
<td>II.D4</td>
<td>Extreme</td>
<td>Yes</td>
<td>Gvt</td>
</tr>
<tr>
<td>2</td>
<td>Hostile Press</td>
<td>II.C2</td>
<td>Extreme</td>
<td>Yes</td>
<td>Society</td>
</tr>
<tr>
<td>3*</td>
<td>Labour Unrest</td>
<td>II.B3₁</td>
<td>Extreme</td>
<td>Yes</td>
<td>Society</td>
</tr>
<tr>
<td>4*</td>
<td>Anti-project Demonstrations</td>
<td>II.B3₂</td>
<td>Severe</td>
<td>No</td>
<td>Society</td>
</tr>
<tr>
<td>5</td>
<td>Local Ownership Requirements</td>
<td>II.A3</td>
<td>Severe</td>
<td>Yes</td>
<td>Gvt</td>
</tr>
<tr>
<td>6</td>
<td>Restrictions on Expatriate Employees</td>
<td>III.D1</td>
<td>Severe</td>
<td>Yes</td>
<td>Gvt</td>
</tr>
<tr>
<td>7*</td>
<td>Bribery</td>
<td>II.D6₁</td>
<td>Moderate</td>
<td>No</td>
<td>Gvt</td>
</tr>
<tr>
<td>8*</td>
<td>Corruption</td>
<td>II.D6₂</td>
<td>Moderate</td>
<td>No</td>
<td>Gvt</td>
</tr>
<tr>
<td>9</td>
<td>Delay in approval of permits</td>
<td>II.A7</td>
<td>Moderate</td>
<td>Yes</td>
<td>Gvt</td>
</tr>
<tr>
<td>10</td>
<td>Discriminatory Taxation</td>
<td>II.A7</td>
<td>Moderate</td>
<td>No</td>
<td>Gvt</td>
</tr>
<tr>
<td>11</td>
<td>Expropriation</td>
<td>II.B1</td>
<td>Moderate</td>
<td>No</td>
<td>Gvt</td>
</tr>
<tr>
<td>12</td>
<td>Repudiation</td>
<td>II.B4</td>
<td>Moderate</td>
<td>Yes</td>
<td>Gvt</td>
</tr>
<tr>
<td>13</td>
<td>Profit remittance and exchange controls</td>
<td>II.A8</td>
<td>Negligible</td>
<td>Yes</td>
<td>Gvt</td>
</tr>
</tbody>
</table>

Note: The relationships are established for the researcher to use relative impact values only in the IPRA tool (Walewski, 2005) for risk analysis. For each risk element in the IPRA tool, there are attributes attached to it in the element description data sheets and it is these attributes that are matched with identified micro-political risks. The need for equivalence arose because of the use of different words used in the IPRA structure to those for the identified micro political risks. Equivalence would then enable the adoption of a relative impact value in IPRA to analyse micro-political risks. This was done to avoid using untested values for the relative impact in calculating the levels of the identified micro political risks. Using this approach, more than one micro-political risk may be equivalent to one IPRA element. For example ‘Labour Unrest’ and ‘Anti-project Demonstrations’ are more closely related and therefore fall under the same IPRA element hence they are listed as II.B3₁ andII.B3₂ respectively. The same applies to ‘Bribery’ and ‘Corruption’ which are denoted as II.D6₁ and II.D6₂ respectively.

*The subscript shows that there are two or more micro-political risks equivalent to one IPRA element.

Gvt = Government

4.2.3.1.1 Repudiation risk

All ten interviewees attested to the presence of the repudiation risk. The source of the risk, according to the Government, was the mishandling of MHDP by the implementing agency. Further documentary evidence of the risk came from actions of the Attorney General who representing the Namibian Government, in a written speech on 25 August 2015 (see Database and Records) presented in Windhoek to the MHDP contractors, he said, among other things:

I must reiterate that the Government of the Republic of Namibia remains committed to developing a comprehensive, affordable and sustainable housing plan across the
country….This objective can however not be achieved in the manner of execution of the Mass Housing Development Programme under the National Housing Enterprise.

The cancellation event occurred as part of a Court Order signed on 21 August 2015 in case number I 1940/15 (see Database and Records) at the main division of the High Court of Namibia. Clause 2.1 reads:

The Plaintiff and Second Defendant shall enter into a construction agreement that shall extinguish, override and replace the Contract agreement that exists between the Plaintiff and First Defendant.

Note: The ‘Plaintiff’ refers to the JV and the ‘Second Defendant’ is the Namibian Government.

Clause 2.2 is telling and it reads:

The construction agreement referred to under Paragraph 2.1 above shall confine itself to the completion of commenced-but-incomplete houses.

Documentary evidence shows that the repudiation risk resulted in serious financial implications for the project; with a massive negative impact on the project revenue which ignoring variation orders, reduces contract price from N$ 796 million to an estimated–N$ 360 million – a 55% reduction.

The objective of community empowerment was affected as evidenced by the letter of 8 June 2015 (see Database and Letters), written by JV management responding to the suspension of the project; the last paragraph reads:

…we wish to point out the socio-economic impact of a prolonged suspension on the community, of Swakopmund in particular our subcontractors, and suppliers. We have currently 55 labour only and 7 supply and fix subcontractors with a combined labour force of 1300 on site. We have 27 Suppliers in and around Swakopmund and Walvisbay, and spend around N$ 15 million on supplies and N$ 5 million on labour - only subcontractors per month. The withdrawal of such monthly spends on the community of Swakopmund and Walvisbay will have significant negative impact on the community’s livelihood.
Interviewee C indicated that some corporate social responsibility (CSR) projects, such as building a boundary wall for one of the schools in Swakopmund, were abandoned due to reduced revenues affecting empowerment efforts.

4.2.3.1.2 Contract problems risk

Failure to honour certified work resulted in a series of letters written by the JV management to the implementing agency and in one such letter dated 4 March 2015 (see Database and Letters), and expressing concern about payment claim which was overdue by 81 days, contained the following words:

Up to date the JV (real name) has not received the outstanding amount of N$ 26,963,325.06 and with no clear confirmation when we will receive the outstanding payment.

The CEO of the implementing agency acknowledging responded, in part, in a letter dated 12 March 2015 (see Database and Letters) stating the following:

Please accept my apologies for the delays in settling the amount of N$ 26,963,325.06. We are engaged with the line Ministry and private financial institutions to raise the funds needed to settle this overdue bill.

A final-demand letter of 22 April 2015 (see Database and Letters), before the matter was handed over to the JV’s lawyers, read in part:

Despite our repeated requests for payment & the ………… persistent non-payment, we now have no option but to demand payment of the outstanding amount of N$ 69,496,206.50 (incl. VAT) within 7 days from the date of this letter, failing which, we will have to exercise our contractual & legal rights in terms of the General conditions of Contract for Construction Works (Second Edition) (2010) (herein referred to as “GCC2010”) and common law….We urge you to use this final opportunity to pay the overdue amounts on or before 30 April 2015 in order to prevent termination of our agreement due to repudiation & breach of contract as per clause 9.3.11.2 of GCC2010.

A letter written by the CEO of the implementing agency and dated 4 June 2015 (see Database and Letters) announced the suspension of the MHDP had serious consequences for the JV; in part, this letter stated;
In execution of this Ministerial directive, I have been authorised by the .... Board of Directors to instruct you to temporarily suspend the works as per ministerial directive with immediate effect.

As a participant-observer (see Database and Observer) the researcher had direct knowledge of the risk and its consequences. Also in all the three follow-up interviews conducted with A, B, and C, contractual problems arising from breach of contract and non-payment, were confirmed. The effects of the risk were insufficient materials on site and reputational damage attracting punitive action as indicated in a letter from a supplier, dated 13 January 2015 (see Database and Letters):

We have received numerous orders for phase 2 of the project as well as a request for immediate manufacture and supply of trusses. Although we understand the situation in which you current (sic) find yourself due to nonpayment by ......, we regrettable (sic) cannot at this stage continue with the supply of materials to you until payment has been received.

Interviewee A provided evidence of the impact on cost, revealing that by the end of June 2015 the project had incurred substantially increased costs (see Database and Financials) due to contract problems. Evidence of the impact of suspending the project on the empowerment objective resides in the letter of 8 June 2015 (see Database and Letters) as already discussed in section 4.2.3.1.1. The effect on time was contained in a letter to the implementing agency dated 30 June 2015 (see Database and Letters) to the implementing agency reading in part:

..We do, however wish to note that the current extension of time at this stage is in the order of 6 working months…

4.2.3.1.3 Labour unrest risk

Subcontractors' workers engaged in industrial action nearly every month end because of either late or non-payment. In a newspaper article quoting the MD of the JV the workers’ dilemma was captured as follows:

Recent work stoppages that delayed the work for one or two days were due mainly to late payments from the .... side (McClune, 2014).
Further evidence is provided in nearly all minutes of project progress meetings, for example, in the minutes of Meeting number 04, item 9.3:

Over the last two months there were work stoppages/go-slow from the subcontractors’ workers due to nonpayment. The JV lost 2 weeks of work as a result.

The labour unrest risk had effects on the time objective which was evidenced in the project status report of April 2015 (see Database and Records):

The project is behind schedule mainly due to non-payment by employer. This is despite having 49 building subcontractors on the project.

Further evidence of schedule problems was provided in minutes of progress Meeting number 07, item 9.2 (see Database and Minutes), which says:

Delays continue to bedevil the project because of payment delays or nonpayment by Client. AS will continue to communicate with …. on EOT (extension of time) due to these delays.

Evidence of the impact of delays on the project can partly be shown by failure to meet the revenue budget of the project as the project status report of April 2015 (see Database and Records), shows by way of the financial graphs. As a participant-observer (see Database and Observer), the researcher was aware of the other impacts such as on the reputation of the JV when subcontractors’ workers vented their frustration.

4.2.3.1.4 Hostile press (public opinion) risk

The main-stream media, more so newspapers (see Database and Publications), would, with regularity, carry the following or similar headlines: “Messy, messy housing affair” (Immanuel, 2015a); “Govt fails housing target” (Immanuel, 2015b); “Mass housing progress but problems persist” (McClune, 2014); “Mass houses vacant at Swakopmund” (Hartman, 2015).

The objective mainly impacted, was reputation, as an excerpt from a letter of 20th April 2015 (see Database and Letters) from a material supplier demonstrates:
…we unfortunately have to put your order on hold. The reason for this is we have identified all funded developments as a high risk for none payment…

Interviewee C, referring to the press, said: “There was no good publicity at all.” The same sentiments were expressed by interviewee B who claimed that the bad press was fuelled by jealousy and rumours. As a participant-observer (see Database and Observer), the researcher witnessed some subcontractors, or their skilled workers, leaving because the image of the project was not good.

In a typical risk-flow mapping by Simon (1984) the flow of risk was two way; the first route was host media-to-host society-to project and the second route was host media-to-host government-to-project creating negative public opinion.

4.2.3.1.5 Delay in permit approval risk

Delay in permit approvals was meant to cover all project-related approvals by the central or local government, including the ones that were cancelled after approval. Approval delays at government level were to do with township establishment approvals by the Township Board, for the new areas allocated to the JV for construction. The CEO of the local authority, one year after applications were made to the Township Board, had this to say in the national press (see Database and Publications):

Until the statutory processes are finalized we will not be able to service these houses (Hartman, 2015).

Evidence at local authority level indicates that the approval of building plans and permits was often delayed. As an observer, the researcher was aware of the local authority attempting to halt the project advancing the reason that the plans were not approved. Yet the plans had been submitted well in advance of construction, which afforded the local authority ample time to scrutinise and approve the plans. It took the Regional Governor’s intervention to stop the local authority from stopping construction.

Documentary evidence of approval delays was found in minutes of progress Meeting number 08 held on 16 April 2015, item 8.2 (see Database and Minutes) in which the engineer’s representative stated that the local authority personnel claimed that no plans were submitted for a batch of houses completed, yet payment records showed that the
approval fees for those house plans were paid on 28 August 2014 (see Database and Records).

4.2.3.1.6 Restrictions on expatriate employees risk

Like many other governments the Namibian Government issues work permits to foreigners to work in the country (see Database and Records).

Evidence exists that some employees of the South African partner, seconded to the project, were denied work permits. As observed at the time of writing this dissertation, the current site agent submitted a work permit application and was turned down.

Impact of the risk was the quality objective as evidenced by the July 2014 project status report which on page 4 (see Database and Records), under Risk Management reported:

..The other risk which raised its ugly head was the shortage of supervisory staff on our side as well as on the subcontractors’ side. The risk on our side can to a large extend (sic) be treated by approval of work permits.

As an opportunity, this risk allowed Namibians to fill some positions in the JV and that achieved one of the project objectives, namely skills transfer.

4.2.3.1.7 Profit and forex remittance restrictions risk

From the interviews, remittance restrictions received a low rating. It was discovered from interviewee A that there is a surtax of 5% on dividends paid to foreign companies.

4.2.3.1.8 Local ownership requirements risk

Documentary evidence was found in a prequalification document in item number 1.8: Special conditions; first bullet (see Database and Records), of with the 51%–49% criterion as one of the prerequisites.

100% Namibia (sic) owned companies or joint ventures (51%–49%) shareholding in favour of the Namibian owned companies) are invited.

Further evidence is provided in the share certificates (see Database and Records) of the JV where the shareholding structure is shown. From observation, it is well known that the majority shareholder is a Namibian company is well known.
As an opportunity, this risk allowed a Namibian company which did not have the requisite capacity both in terms of skills and financial muscle, to participate in a new area of business and benefit from skills transfer.

4.2.3.1.9 Anti-project demonstrations risk

No documentary or observational evidence was found on this risk.

4.2.3.1.10 Discriminatory taxation risk

No further evidence on discriminatory tax risk could be discovered in any of the sources accessible.

4.2.3.1.11 Corruption risk

It was difficult to get evidence on corruption on the project without documentary evidence. However, from a participant-observer perspective, the researcher was aware that corruption was experienced on the project.

4.2.3.1.12 Bribery risk

Despite absence of documentary evidence, from a participant-observer (see Database and Observer) perspective, the researcher was aware that bribery took place on the project.

4.2.3.1.13 Expropriation risk

No further evidence on expropriation risk could be discovered in any of the sources accessible this risk was not experienced.

4.2.3.1 Project life cycle phases and micro-political risks

The study sought to determine which phase of the project life cycle was affected most by micro-political risk. The number of micro-political risks present in each phase of the project life cycle (concept, feasibility, design and development, execution and handover) was used as the measure. Figure 13 shows that micro-political risks were at their maximum density in the execution phase while corruption was pervasive throughout the PLC. There is a trend of the numbers of risks increasing from concept phase of project life cycle and getting to a maximum at execution and decreasing again at handover.
4.2.3.2 Risk assessment techniques

One of the research objectives was to examine the assessment techniques used for micro-political risk. Figure 14 shows that, among the respondents, qualitative methods were preferred to scientific quantitative ones. The researcher observed that only judgment and intuition by management were used on the project.

4.2.3.3 Timing of micro-political risk assessment

Finding out when risk assessment was undertaken on the project was one of the objectives of the study. Figure 15 depicts that the majority of the respondents (87%) were of the opinion that micro-political risk assessment was done when strategic decisions were
made. The number of respondents who were of the opinion that assessment was done at the time that bid/no-bid decisions were made, was equal to the number of respondents who felt risk assessment was continuous. However, documentary evidence does not show continuous assessment but rather a “static” risk schedule (see Database and Records). Additionally, interviewee C who disagreed with the findings of the main and initial set of interviews argued that risk assessment was done on an ad hoc basis. As a participant-observer (see Database and Observer), the researcher was aware that risk assessment was at best ad hoc and not systematic. No further evidence was found to show that continuous risk assessment was the norm.

![Graph showing implementation of risk assessment](image)

**Figure 15:** When risk assessment is implemented

### 4.2.3.4 Micro-political risk response strategies

The study sought to establish the response strategies used to manage micro-political risks on international construction projects in Namibia. The best way of combating micro-political risk, according to the respondents, was to follow the strategy of cooperation as a response strategy to risk; this is shown in Figure 16. However, this strategy was used in conjunction with other strategies. Evidence from other sources on the cooperation strategy includes the JV Company founding statement (see Database and Records) where partial foreign ownership is indicated.
Also, the control strategy was used, on two occasions, when a press conference and a site visit were arranged for the national broadcaster with several other media outlets in attendance. One of the newspapers (see Database and Publications) for a change, had for its headline: “Company Excels in Swakopmund Mass Housing Project” and went on to write: “The JV has made an example by constructing low cost housing ahead of schedule” (Repin, 2014). While agreeing that cooperation, control, and insurance had been employed, interviewee C, when interviewed, added: “relationships played a big part”. From the researcher’s observation, this phrase most likely pointed to the existence of good relations between the majority shareholder and influential office bearers in central and local government, facilitating mitigation, if not elimination, of some of the political risks on the project.

### 4.3 DISCUSSION OF FINDINGS

Findings from previous research, which was based on large-scale surveys and on a more rigorous methodology, will be used for comparison even though it is acknowledged that this study is not at the level of that previous research, comparison can still be illustrative and even indicative. The study found that there were key micro-political risks that impacted on the project and that these were assessed irregularly and managed mainly through the cooperation strategy. Also part of the findings was that micro-political risks were at their peak numerically during the execution phase of the project life cycle. The findings will be discussed in line with the objectives of study.
4.3.1 Key Micro-political Risks in International Construction in Namibia

One of the objectives of the study was to identify key micro-political risks impacting on international construction projects in Namibia. Using the risk profile of the JV as shown in Figure 12 and considering the ‘moderate’ to ‘extreme’ zones, there are nine micro-political risks that arise from the host government while three are generated by the host society (Simon, 1984). Initial discussion of the micro-political risks will be on the key risks and these will be compared to previous studies on political risks. This will be followed by a discussion on the impact of the key micro-political risks on the objectives of project.

The risks in the severe and extreme zones require immediate action while the moderate zone will require further investigation of causative factors. Based on that six key threat micro-political risks were identified and these are contract problems, hostile press and labour unrest in the extreme zone, anti-project demonstrations, restrictions on expatriate employees and local ownership requirements in the severe zone. However, local ownership requirements and expatriate labour restrictions were also opportunity risks on the project. Owing to these two upside risks, employment of Namibians, either as subcontractors or direct employees of the JV, was made possible, which in turn supported another project objective of training and skills transfer.

The moderate rating of the micro-political risk of repudiation is of concern, considering its devastating effects on the project (see financial impact below). However, the answer perhaps lies in the managerial perception of risk as explained by Al Khattab et al. (2007), stressing that if the likelihood of occurrence of a political risk is low, but its impact is high, the managerial concern about such a risk can be low as well. That maybe explains the assignment of the impact baseline value of A in the IPRA tool.

In rating risks in terms of probability of occurrence, the respondents in this study were equally concerned about the political risk arising both from the government and host society unlike the study by Al Khattab et al. (2007) in Jordan, where respondents were more concerned about political risk arising from the host society than that arising from the host government. According to Al Khattab et al. (2007), at the time of their study, the Middle East was experiencing high levels of societal upheaval. Evidence seems to suggest that the prevailing environment in a host country may influence the micro-political risks and consequently the risks will change in tandem with changes in the host society’s conditions or government or laws and regulations. It would appear that the Namibian situation of
prevailing peace and social harmony has resulted in a balanced outlook, suggesting both government and the society contribute equally as sources of micro-political risks on international construction projects in Namibia.

For comparison purposes, five of the six key risks (contract problems, labour unrest, anti-project demonstrations, restrictions on expatriate employees, and local ownership requirements) were also identified as key risks by Mortanges and Allers (1996) in their study of Dutch firms operating in developing countries. The similarities may show that there is some degree of commonality in micro-political risks in projects despite the observation that a list of political risks cannot be drawn that would fit every situation, as argued by Kobrin (1979) and Akinci and Fischer (1998).

There was no evidence of any anti-project demonstration risk experienced on the JV project, but it is suspected, that some respondents considered it similar to labour unrest and rated its probability of occurrence higher than deserved.

4.3.2 Impact of Key Micro-political Risks on Project Objectives

Making use of the evidence available, micro-political risks are discussed in this subsection according to the project objectives they affect. The discussion is based on data collected in line with the case study protocol and discussed in detail in Sections 4.2.3.1.1 through to 4.2.3.1.13. These documents include information on project finance, minutes of project meetings, project letters, publications (press reports) other project records, participant observer’s notes and interviews available via a link provided in this dissertation in sections 3.3.1.4.2 and 3.6.

4.3.2.1 Financial impact

Micro political risks, which were linked to financial effects, are repudiation, contract problems and delay in permit approvals. Repudiation led to a revenue loss of around N$ 436 million, a loss of projected profit of N$ 60 million and dividend loss. At repudiation, the project had realised revenues totalling N$ 246 million and revenue from the completion of unfinished units was determined at N$ 114 million–giving total revenue of N$ 360 million against the tender price of N$ 736 million. The contract problems risk led to a cost increase of N$ 3 million by June 2015 due to interest charges and forfeited discounts. The micro-political risks of contract problems and permit approvals delay also caused lags in cash flow.
4.3.2.2 Impact on reputation

Micro-political risks that impacted on the reputation of the JV included repudiation, contract problems, labour unrest, and a hostile press. Cancellation of a contract tarnishes the image of a construction contractor and may scuttle future opportunities. Failure to pay creditors timeously, industrial action by subcontractor workers, and ensuing bad press all emanated from contract problems. Bad press and negative public opinion could have been triggered by the micro-political risk of labour unrest. Public opinion fuelled by a hostile press could have played a part in contract repudiation. Bad press caused damage to the reputation of the JV and fuelled public opinion against the mass housing development programme as a whole.

4.3.2.3 Impact on empowerment

Empowerment of the local community was negatively impacted by the micro-political risks of repudiation and contract problems. Repudiation would result in premature direct loss of 1300 jobs, while contract problems caused suffering to the workers and the local community targeted by the empowerment objective.

4.3.2.4 Impact on schedule

At the end of June 2015, the project was behind schedule by 6 months being as a result of the micro-political risks of contract problems, labour unrest, delay in permit approvals, and restrictions on expatriates. Non-payment as a contract problem caused delays when workers went on strike. A shortage of materials due to cashflow problems, worsened schedule delays. Delays in approving permits stopped the JV accessing certain sites in order to start construction as planned thereby contributing to overall schedule delays. It can be argued that expatriate labour restrictions led to the employment of supervisors with limited skills, which in turn led to poor quality work requiring rework, and therefore causing delays on the project.

4.3.2.5 Impact on quality

Using the broad definition of quality as satisfying the needs of a customer who is defined from an internal and an external perspective, it can be argued that, in a way, all the micro-political risks in a way could have impacted the objective of quality (Juran, 1998; Rose, 2005). However, the immediate impact on product and process quality came from contract
problems, expatriate restrictions and local ownership requirements. The JV may have promoted the use of poor quality materials by buying cheaper and poorer quality alternatives because of a scarcity of money resulting from contract problems. Technical skills are in short supply in Namibia and being denied work permits for foreign workers; the JV was forced to employ locals with lower skills, negatively impacting quality. The local majority ownership requirement enabled the local shareholder to dominate the subcontractor selection process resulting in cronyism and the appointment of under-qualified subcontractors with negative results on quality.

One of the key findings is that the micro-political risk of contract problems affects all discussed objectives meaning it is a serious threat risk (it has an impact value of E, which is the highest value on the assessment sheet; see Appendix G). Managers need to closely and continuously monitor and control such risks.

The discussion on effects on objectives lends credit to the risk-path model developed by Eybpoosh et al. (2011) for international construction projects. That there are links among micro-political risks in that more than one micro-political risk impact on an objective has been demonstrated. In the risk-path model (Eybpoosh et al. 2011), following two risk paths, namely unfavourable contract conditions micro-political risk and country conditions micro-political risk, will lead to conflicts with project stakeholders, delays and disruptions, lags in cash flow, and ultimately, in cost overruns.

4.3.3 The Project Phase Prone to Micro-political Risk

The objective of the research was to determine which phase of the project was most likely to be affected by micro-political risk, and it emerged that the execution phase of an international construction project in Namibia, was the most prone. The finding was that the number of micro-political risks, affecting a phase, increases progressively during the project life cycle; the respective phases with the number of relevant risks shown in brackets are: concept (5), feasibility (8), design and development (9), execution (12) and handover (9).

One way to explain the phenomenon is from an uncertainty point of view (Ward and Chapman, 2003; Mosaic, 2010a; Hillson, 2014a). For example Ward and Chapman (2003) and Cagliano et al. (2014) have argued that uncertainty is at its maximum in the concept phase, and progressively decreases along the PLC as more information and knowledge about the project becomes available. Though this is generally true the same Ward and
Chapman, (2003) agree that the involvement of multiple stakeholders in the execution phase increases uncertainty. The fact that stakeholders may have multiple, and most of the time conflicting objectives, and interests adds to the ambiguity about roles and responsibility (Ward and Chapman, 2008).

It means as the PLC stages progress an uncertainty that was not resolved in earlier stage is understood and can be treated as risks or uncertainty that matters (Hillson, 2012a). By the same token, an increasing understanding of the project environments, both external and internal, including identifying stakeholders with some degree of precision and by execution stage, most of the “knowable unknowns” become “known unknowns” or risks that can be managed through the risk management processes (Ward and Chapman, 2003; Mosaic, 2010a); this could be one possible explanation of the distribution of micro-political risks as shown in Figure 13. At handover there is less uncertainty, more project knowledge and decreasing numbers of stakeholders and correspondingly exposure to the micro-political risk dwindles.

Also, it could be argued that since the perspective of the respondents is shaped by their experience as construction professionals, they cannot accurately determine the risks in the other phases of the project life cycle. Normally in a design-bid-build project delivery system, the construction company gets involved in the execution and handover of the asset only. It would therefore follow that with many years of experience in those project phases they were able to identify many micro-political risks affecting an international construction project in Namibia.

The corruption risk appears in all the project life cycle phases, making it the most pervasive of the micro-political risks. Despite a moderate risk level prioritisation, it impacts on objectives throughout the phases of the project and therefore may have a huge aggregate impact. For instance, the aggregate impact on the project objective of cost is an increased and distorted cost of construction; corruption therefore negatively impacts development especially in emerging economies (Comeaux and Kinsella, 1994; Moura et al., 2011).

Irrespective of the explanation, the lesson learnt from the relationship between PLC phases and the corresponding applicable risks, is that political risk management should be at its peak during the execution phase of the project. For project managers involved in the entire project life cycle, the PLC approach to RM is beneficial (CII, 2003a; Ward and
Chapman, 2003; Li and Zou, 2008). Ward and Chapman (2003) state that by undertaking risk assessment at conception and at salient points such as at stage interphases enables participants to consider the impact of their decisions with regard to the overall risk profile of the entire PLC. The CII, (2003b) asserts that the PLC approach to risk assessment removes ‘compartmentalization’ where participants in different PLC phases consider only their objectives in isolation.

The evidence seems to support the IPRA tool implementation strategy as advanced by the CII (2003b), at critical points as shown in Figure 3 because it takes into account the changing risk profile of the PLC (Figure 13) to enhance project performance. A number of other researchers have argued for the implementation of risk management throughout the PLC (Ward and Chapman, 1995, 2003; Raz et al., 2002; Han et al., 2008; Cagliano et al., 2014)

4.3.4 Risk Assessment Methods on International Construction Projects

The objective of the study was to establish risk assessment methods used for micro-political risk on international construction projects in Namibia. It was found that highest preference was for company specific techniques (63%), followed by heuristic techniques. The same number of respondents (50%) respectively picked the scenarios technique and the judgment and intuition of managers technique, and a quarter of the respondents chose a standardised checklist, while only 13% deferred to expert opinion. Scientific techniques and the Delphi technique were not used. These findings are aligned to those by Mortanges and Allers (1996) in the Netherlands, and those by Al Khattab et al. (2011) in Jordan that, for political risk assessment, advocated the use of heuristic techniques in preference to scientific quantitative techniques. Al Khattab et al. (2011) and four other earlier studies that they cited, showed the same bias towards qualitative methods of political risk assessment; the four other studies mentioned were done in Canada (Rice and Mahmoud, 1990), USA (Subramanian et al., 1993), Turkey (Demirbag and Gunes, 2000) and Sweden (Kettis, 2004).

The preference for heuristic techniques is because they are quicker, simpler and cheaper to use (Al Khattab et al., 2011). The main reasons why scientific techniques are avoided, relate to complexity and the need to train users to operate models employing advanced statistical methods (Mortanges and Allers, 1996). In some countries the quality of input data for scientific and quantitative techniques is questionable due to censorship of the
media and possible manipulation and obsolescence of the data (Prakash and Luther, 1986; Mortanges and Allers, 1996; Al Khattab et al., 2011). Reflecting a lack of confidence in the media as source of political risk information, Kobrin et al. (1980) and Mortanges and Allers (1996) found that only 10.3% and 35%, respectively, of respondents considered newspapers, and TV and radio as important sources.

This evidence supporting a preference for qualitative techniques points to a gap between practice and theory in project risk management, since according to Hillson (2015) and Li et al. (2013) risks arising from variability (aleatoric uncertainty) cannot be adequately handled without the use of quantitative probabilistic distributions.

4.3.5 Timing of Risk Assessment

With regards to when assessment was done, strategic planning was the choice made by most respondents (85%) with the continuous and bid/no bid stage having equal scores of 57%. The option of ‘when risk is imminent’ was never used. The results confirm the findings in studies by Kobrin et al. (1980) and Mortanges and Allers (1996), in which assessment was linked to an event requiring action. The findings of the former study were that 80% of the respondents undertook political risk assessment at the time of strategic planning and the latter study established that 74% of respondents linked assessment to overseas investment. Fitzpatrick (1983) concluded that political risk assessment was mainly an ad hoc process.

It was difficult to reconcile that almost 60% of the respondents indicated assessments were systematically utilised in day-to-day operations, with the failure of the JV to meet most of the set objectives of revenue, cashflow, reputation, empowerment and shareholder value. Also, paradoxically, the resulting failure of the JV tends to contradict evidence from previous research linking project risk management with project success (Mills, 2001; de Bakker et al., 2010, 2012; Zwikael and Ahn, 2011). In the face of overwhelming evidence to the contrary, this result may be explained by the need for self-preservation and bias on the part of participants.

As external and uncontrollable risks (Simon, 1984; Sharma, 2013) which cannot be eliminated, the identified key micro-political risks require proactive assessment, close and continuous monitoring, as well as mitigation when possible (Zhi, 1995; Lam et al., 2007; Sharma, 2013); this is in line with contemporary thought in project risk management (de Bakker et al., 2010, 2012; Zwikael and Ahn, 2011; Hwang and Chen, 2015). The
experience of the researcher on this project brings to the fore the crucially important role of proactive and continuous risk assessment on international construction projects in Namibia.

### 4.3.6 Risk Management Strategies on International Projects

Political risk assessment is undertaken with the aim of enabling management to put in place protective or compensating measures (Howell, 2014). The study findings on risk management strategies are discussed in this section.

It emerged from the study that all the respondents favoured cooperation as a strategy, while about 40% of the respondents respectively said the project used strategies of control, and private insurance, and 13% of respondents picked public insurance. These findings are in alignment with a previous study by Mortanges and Allers (1996) whose findings were: good citizenship abroad (43%), cooperation (35%), avoidance (17%), control (17%), use of global trade marks (22%), private insurance (26%) and public insurance (35%). In their study, cooperation was in joint second place, showing that it is one of the preferred response strategies. Unlike in this present study, use of public insurance was popular in the study by Mortanges and Allers (1996).

Political risk insurance, covers assets against expropriation, contract repudiation and currency devaluations (Al Khattab et al., 2007; Howell, 2014). Using public insurance forces governments and their affiliates to think twice before engaging in actions or events that could generate micro-political risks, because claims could be made against the government institution. As mentioned by interviewee C, relationships management is an important response mechanism against micro-political risk; this is supported by Conway (2013). Prakash and Luther (1986) and Al Khattab et al. (2015) note that in responding to micro-political risk, a greater effort should be made by the leadership of projects to work out differences with host governments.

Zhi (1995) in proposing risk responses, indicated that not many of the political risks could be transferred to another party such as the architect, owner or subcontractors which brings to the fore the need for political insurance when faced with micro-political risks (Howell, 2014). Contract problems can be insured under a contractor’s all-risk policy, while the other four (labour unrest, expatriate restrictions, repudiation, and delay in permits approval) can be covered under political risk insurance policy (Howell, 2014). Micro-political risks increase project costs in many ways because premiums paid for the
insurance would be included in the tender price, thereby increasing the cost of executing the construction project in particular and national development in general.

4.4 SUMMARY OF DATA ANALYSIS AND FINDINGS

In summary, the findings of the research indicate that the objectives of the study were met. Six key threat and two opportunity micro-political risks affecting international construction projects in Namibia, were identified. It emerged from the study that the execution phase was most prone to micro-political risks, that risk assessment was done in an ad hoc manner using qualitative (heuristic) methods, and that cooperation (that is, joint ventures) was the most preferred risk response or management strategy.
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION
The aim of the study was to examine micro-political risks and to establish how these risks were managed on international construction projects in Namibia. To achieve this aim the following study objectives were set: to identify the key project-specific micro-political risks affecting international construction in Namibia; to determine the phase of the project most prone to political risk; to establish the political risk assessment methods used on international construction projects in Namibia, and; to identify the strategies used in managing political risks on international construction projects in Namibia. An international construction project based in Swakopmund in Namibia was used for the case study and the findings are summarized next.

5.2 SUMMARY OF FINDINGS
The research findings suggest that key threat micro-political risks affecting international construction projects in Namibia were repudiation, contract problems, labour unrest, a hostile press, and delays in permit approvals, while local ownership requirements and expatriate labour restrictions were not only threat risks, but opportunity risks as well. Of the micro-political risks identified, a significant number came from the host government and lesser number were from the host society. Evidence gathered, indicated that international construction contractors were equally concerned about host society- and host government-related key risks on international construction projects in Namibia.

Concerning the phase of the PLC most affected by micro-political risks, the execution stage had the highest number of micro-political risks. Evidence tended to show a trend where micro-political risks progressively increased in number from concept phase, reaching a maximum during the execution phase of the PLC, before decreasing in the handover phase.

As for assessment techniques, company-specific methods were employed most often, followed by heuristic techniques such as intuition and judgment by management, scenarios development and standardised checklists. It was also found that the Delphi technique and quantitative scientific techniques were not used.
Coming to implementation of risks assessment, there was evidence to show that risk assessment was event linked and ad hoc.

It emerged that for risk response, or management strategies, the cooperation strategy such as use of joint JVs was the most preferred one. The study indicated that both public and private insurance were needed on an international construction project in Namibia.

The negative impact of micro-political risks on the objectives of the project indicated that all was not well with the risk management system used. Therefore it is safe to conclude that, some facets of systematic risk management were not used in dealing with the micro-political risks on the project, resulting in failure to achieve the project objectives with regard to time, financial, quality, reputation, empowerment and shareholder value and thus confirming the research proposition made.

5.3 RESEARCH CONCLUSIONS

Based on findings of the study, the conclusion is that the objectives of the study were achieved. The study was conducted to identify key micro-political risks in international construction in Namibia, assessment techniques, implementation of assessment, and strategies used to manage those risks. The findings of this study corroborated those from previous studies on political risk in international business (Kobrin et al., 1980; Mortanges et al., 1996; Al Khattab, 2011; Al Khattab et al., 2011). Even though it was not a direct objective of the study to establish a relationship between risk management and project performance, the research provides insights into the negative effects of ill-managed micro-political risks on international construction projects. Empirical evidence from this study suggested that without systematic risk management, project objectives are difficult to achieve. It is also concluded that there existed a gap between practice and theory in risk assessment techniques used for micro-political risk management.

5.3.1 Validation of the Research Proposition

Evidence showed that micro-political risk impacted the project objectives of international construction in Namibia. It emerged in the study that the micro-political risks which materialised on the project, had impacted on the project objectives related to time, cost, cashflow, quality, reputation, empowerment, and shareholder value. From interviews and documentary evidence, it came to light that the project recorded an increase in costs of
N$ 3 million, and a revenue loss of N$ 436 million, respectively attributed to the manifested micro-political risks of contract problems, and repudiation. Therefore, the study validated the proposition, which states:

Micro-political risk factors impact on the performance of international construction projects in Namibia.

5.4 RECOMMENDATIONS

With the aim of streamlining and improving the risk management process on international construction projects in Namibia, recommendations are put forward in the subsections which follow, and they emanate from the findings of this case study. However, limitations arising from findings of a single case study are acknowledged, as recommendations based on the study may not be applicable to all international construction projects in Namibia. In addition, the knowledge gained from previous studies on best practice, in risk assessment and management in general (CII, 2003a,b; Ward and Chapman, 2003; Walewski, 2005; ISO 31000, 2009; PMI, 2013), and in political risk in particular (Kobrin et al., 1980; Mortanges et al., 1996; Al Khattab, 2011; Al Khattab et al., 2011), has been incorporated in making the recommendations below. The recommendations are aligned and limited to the objectives of this study.

5.4.1 Risk Assessment

The risk assessment process includes risk identification, analysis and evaluation (ISO 31000, 2009). Risk assessment is therefore very important as it lays the foundation for risk management. On that basis it is recommended that a risk management framework be established to guide the process and allow periodic tracking and auditing to establish the efficiency of the process (ISO 31000, 2009; PMI, 2013). Recognising that different types of uncertainties give rise to diverse micro-political risks which require different assessment approaches, it is recommended that both qualitative (heuristic) and quantitative scientific methods be used in order to attain the maximum benefits of micro-political risk management on international construction projects in Namibia (Mortanges et al., 1996). This objective can be realised if researchers and industry-representative bodies promote the use of these methods in all the different fora, whenever possible. Because multiple micro-political risk sources, events and effects influencing objectives interact to produce
risk paths and networks; the use of risk-path models such as the one developed by Eybpoosh et al. (2011) is recommended when undertaking risk assessment.

5.4.2 Project Life Cycle Phase Prone to Micro-political Risk
With micro-political risk at its peak during execution phase, it is recommended that project managers continuously scan both the internal and external environment for emerging micro-political risks, while managing the ones already assessed (Robock, 1971). In addition, the risk management effort as a whole needs adequate resourcing during the critical execution phase of the project life cycle.

5.4.3 Implementation of Risk Assessment
Planned regular implementation of risk assessment is recommended considering that the political environment is dynamic as are the emanating micro-political risks. One such risk assessment implementation framework is that recommended by the Construction Industry Institute (CII, 2003a,b; Walewski, 2005); this framework is presented as Figure 3 in this study, and shows the salient points at which risk assessment should be undertaken during the project life cycle.

5.4.4 Micro-political Risk Management Strategies
Recognising that political risks are subjective and that they arise from actions or lack of actions of people with power, a stakeholder relationship management approach as proffered by Wang et al., (2004), is recommended to manage micro-political risks. As stated by interviewee C, in the JV investigated, relationships played a big part in risk management. However this approach can be implemented using the specific political risk response strategies of control and cooperation (Miller, 1992). Finally, international construction contractors will be well served by having private insurance against political risk, which will avoid the scenario of this case study where the contractor had no alternative, other than to sue the Namibian Government in order to seek compensation for losses incurred because of micro-political risk, which became a reality.

5.5 AREAS OF FURTHER RESEARCH
This study, in addition to contributing to an understanding of the management of micro-political risk on international construction projects in Namibia, has also created a need for further research. To validate the findings of this study, it is recommended that multiple
case studies on micro-political risk involving, a number of international construction projects in Namibia, be conducted. In addition, research on the micro-political risks in each phase of the project life cycles of international construction projects, with only the participants in each phase as respondents, is necessary to build on the findings of this study. The results for each phase can then be aggregated to produce a single micro-political risk profile for the entire project life cycle. Another research area is that of developing a micro-political risk-path model by establishing the interaction of micro-political risk sources, events, and effects, on project objectives. A study to compare the effectiveness of qualitative and quantitative methods in risk assessment of micro-political risks in international construction projects, is likely to give deeper insight into micro-political risk management on international construction projects.
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APPENDIX A:
Letter of Consent and Confidentiality

Dear participant,

The purpose of this study is to identify key micro-political risks, implementation of political risk assessment and assessment techniques on international construction projects in Namibia. Micro political risks arise from political activity by governments (host or home) and its agencies and host-society and international activists and these risks directly impact the performance of international construction projects. These risks impact project objectives of time, cost, quality, safety, environment and customer satisfaction but can be managed resulting in improved performance of an international construction project. An empirical study involving data collection and analysis will be conducted using semi-structured interviews conducted with you.

The data collected from the survey and interviews, will be treated with utmost Confidentiality and the sources will be known only to the researcher. To emphasise the anonymity of your participation, you will be referred to as “participant A” or “participant B” etc. in the research report. Participation in this study is voluntary so please feel free to reject the opportunity to partake, if you so desire. If you do participate and wish to withdraw at any time during your participation, you are welcome to do so. Should you participate in this study, the following outcomes and benefits for the study will be realized: Insight into micro-political risk management by contractors on international construction projects in Namibia; identification of key micro-political risks impacting project objectives, implementation of risk assessment, knowledge of assessment techniques and adopted risk response strategies.

Should you require any information throughout or before the process of completing the interview, please feel free to contact or prompt the Researcher. The researcher aims to conduct the study in a careful and thoughtful manner to ensuring that the data capturing, display and analysis processes are completed at no risk for the participating organisation. It is encouraged that the parties to the study sign a confidentiality agreement as specified by the participant organisation, should this be deemed necessary. A copy of the findings can be provided to you for scrutiny by your organisation should you deem this necessary and should you so wish.
I, Isaac Muchenga, undertake to safeguard the data collected, by treating it as confidential and by referring to the organisation as “the JV” and the participant as Interviewee “A” or B etc.

I, ................................................................. (print name), am fully aware of the aim, motivation, and purpose of this study and disagree/agree (delete inapplicable) to participate in this study.

Signed at ................................on this the .................day of.................................

Participant:...................................................................................................................

Researcher:.............................................................Email: isaac.muchenga@uct.ac.za or imuchenga@gmail.com Mobile: +264816956602


### APPENDIX B

**EiR Approval**

EBE Faculty: Assessment of Ethics in Research Projects (Rev2)

Any person planning to undertake research in the Faculty of Engineering and the Built Environment at the University of Cape Town is required to complete this form before collecting or analysing data. When completed it should be submitted to the supervisor (where applicable) and from there to the Head of Department. If any of the questions below have been answered YES, and the applicant is NOT a fourth year student, the Head should forward this form for approval by the Faculty EiR committee. Submit to Ms Zulpha Geyer (Zulpha.Geyer@uct.ac.za, Chem Eng Building, Ph 021 650 4791).

**NB:** A copy of this signed form must be included with the thesis/dissertation/report when it is submitted for examination.

This form must only be completed once the most recent revision EBE EiR Handbook has been read.

| Name of Principal Researcher/Student: Isaac Muchenga | Department: Department Of Construction Management & Economics |
| Preferred email address of the applicant: immuchenga@gmail.com |
| If a Student: Degree: MSc in Project Management | Supervisor: Dr. Abimbola Windapo |

If a Research Contract indicate source of funding/sponsorship:

Research Project Title: Political Risk Management in International Construction Projects

<table>
<thead>
<tr>
<th>Overview of ethics issues in your research project:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 1:</strong> Is there a possibility that your research could cause harm to a third party (i.e. a person not involved in your project)?</td>
</tr>
<tr>
<td><strong>Question 2:</strong> Is your research making use of human subjects as sources of data?</td>
</tr>
<tr>
<td>If your answer is YES, please complete Addendum 2.</td>
</tr>
<tr>
<td><strong>Question 3:</strong> Does your research involve the participation of or provision of services to communities?</td>
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<tr>
<td>If your answer is YES, please complete Addendum 3.</td>
</tr>
<tr>
<td><strong>Question 4:</strong> If your research is sponsored, is there any potential for conflicts of interest?</td>
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<tr>
<td>If your answer is YES, please complete Addendum 4.</td>
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</tbody>
</table>

I hereby undertake to carry out my research in such a way that:

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- the findings could be subject to peer review and publicly available; and
- I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

Signed by:

| Principal Researcher/Student: | Full name and signature: Isaac Muchenga | Date: 05/03/15 |

This application is approved by:

| Supervisor (if applicable): | Signed |
| HOD (or delegated nominee): | Signed |
| Final authority for all assessments with NO to all questions and for all undergraduate research. Chair: Faculty EiR Committee For applicants other than undergraduate students who have answered YES to any of the above questions. | Signed |

G. Sihole | 13/04/2015
APPENDIX C
Main semi-structured interview Guideline

Managing Political Risks on International Construction Projects in Namibia

Political risks may arise from actions by host and other governments, government arms, host society, media and the international community. Project specific risks are those political risks that have specific and direct consequence(s) on the international construction project. For this study an international construction project is one wholly undertaken by a foreign company or through a Joint Venture (JV) in which one of the companies is foreign based.

1. Kindly indicate years of experience in the Construction Industry
   About You
   Mark only one oval.
   - Below 5
   - 6 to 10
   - 11 to 15
   - 16 to 20
   - 21 to 25
   - Above 25

2. Kindly indicate the number of years you have been involved in international construction
   About You
   Mark only one oval.
   - Below 5
   - 6 to 10
   - 11 to 15
   - 16 to 20
   - 21 to 25
   - Above 25
3. Kindly indicate your Job Title  
   About You  
   Mark only one oval.  
   - Project Manager  
   - Risk Manager  
   - Technical Director  
   - Technical Manager  
   - Contracts Manager  
   - Site Agent  
   - Other:  

4. Kindly select your company's specialization in International Construction  
   About your organisation  
   Mark only one oval.  
   - Heavy Civil Construction  
   - Multifamily Residential Construction  
   - Residential Construction  
   - Industrial Construction  
   - Environmental Construction  
   - Institutional Construction  
   - Light Commercial Construction  
   - Heavy Commercial Construction  
   - Healthcare Construction  
   - Other:  

5. Apart from Namibia does your company operate elsewhere outside your company's country of domicile?  
   About your organisation  
   Mark only one oval.  
   - Yes  
   - No  

6. If the answer was yes in question 5.0 above please indicate the countries
7. The Project was (is) undertaken through a....(Use an international project you are working on presently or which you have recently managed to completion in NAMIBIA to answer all the questions that follow; 7 through to 26).
   About the project.
   Mark only one oval.
   ☐ Joint Venture (JV)
   ☐ Foreign Company Subsidiary

8. Kindly indicate the type of project involved
   About the project.
   Check all that apply.
   ☐ Transportation
   ☐ Petroleum
   ☐ Buildings
   ☐ Power
   ☐ Industrial
   ☐ Water
   ☐ Sewer/Waste
   ☐ Telecommunications
   ☐ Hazardous Waste/Environmental

9. Please indicate project budget in N$.

10. Kindly identify the type of Client (PPP=Public Private Partnership; SOE= State Owned Enterprise)
    About the project.
    Mark only one oval.
    ☐ Private
    ☐ Public
    ☐ PPP
    ☐ SOE
11. Kindly indicate the level of likelihood of occurrence on a scale of 1-5 of project specific political risks you may have experienced on your project (where, 1= Rare; 2= Unlikely; 3= Possible; 4= Likely; 5= Almost Certain)

<table>
<thead>
<tr>
<th>Risk Description</th>
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12. Kindly indicate the level of severity of impact on a scale of 1-5 of project specific political risks you may have experienced on your project (where, 1= insignificant; 2= Minor; 3= Moderate; 4= Major; 5= Catastrophic)

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<th>Risk Description</th>
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</table>
13. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of CORRUPTION is likely to occur

About the political risks
Check all that apply:
☐ Concept
☐ Feasibility
☐ Design & Development
☐ Execution
☐ Handover

14. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of BRIBERY is likely to occur

About the political risks
Check all that apply:
☐ Concept
☐ Feasibility
☐ Design & Development
☐ Execution
☐ Handover

15. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of DELAY OF PERMITS & APPROVALS is likely to occur

About the political risks
Check all that apply:
☐ Concept
☐ Feasibility
☐ Design & Development
☐ Execution
☐ Handover

16. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of LABOUR PROBLEMS is likely to occur

About the political risks
Check all that apply:
☐ Concept
☐ Feasibility
☐ Design & Development
☐ Execution
☐ Handover
17. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of RESTRICTION ON FOREIGN EXCHANGE AND PROFIT REMITTANCE is likely to occur.

- Concept
- Feasibility
- Design & Development
- Execution
- Handover

18. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of DISCRIMINATORY TAXATION is likely to occur.

- Concept
- Feasibility
- Design & Development
- Execution
- Handover

19. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of ANTI PROJECT DEMONSTRATIONS is likely to occur.

- Concept
- Feasibility
- Design & Development
- Execution
- Handover

20. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of CONTRACTUAL PROBLEMS is likely to occur.

- Concept
- Feasibility
- Design & Development
- Execution
- Handover
21. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of LOCAL OWNERSHIP REQUIREMENTS is likely to occur.

About the political risks
Check all that apply.

☐ Concept
☐ Feasibility
☐ Design & Development
☐ Execution
☐ Handover

22. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of HOSTILE PRESS (bad image) is likely to occur.

About the political risks
Check all that apply.

☐ Concept
☐ Feasibility
☐ Design & Development
☐ Execution
☐ Handover

23. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of EXPATRIATE LABOUR RESTRICTIONS is likely to occur.

About the political risks
Check all that apply.

☐ Concept
☐ Feasibility
☐ Design & Development
☐ Execution
☐ Handover
24. Of the Risk Assessment Methods listed below please indicate the one(s) used on the project

About managing political risks
Check all that apply:

☐ Judgement and Intuition by Management
☐ Expert Opinion
☐ Delphi Technique
☐ Scenarios
☐ Standardized Checklists
☐ Quantitative Scientific method
☐ Company Specific Method
☐ Secondary Sources (Political Risk consultants)
☐ Other:

25. Kindly indicate when you carry out political risk assessment for an international construction project

About managing political risks
Check all that apply:

☐ When making bid or no bid decisions
☐ When making strategic plans
☐ When political risks are imminent
☐ Continuous Assessment

26. Kindly select from the list below the strategies used to manage political risks on the Namibian project.

About managing political risks
Check all that apply:

☐ Control (e.g lobbying or bargaining)
☐ Avoidance (e.g No bid or kill project)
☐ Cooperation (Comply with rules-JVs)
☐ Public Insurance (Government Agency)
☐ Private insurance (Private Agency)
☐ Other:
APPENDIX D
Interview A Guideline

Political Risks Structured Interview A

1. In your opinion what were the actions taken or not taken by the government, its agencies, community or the press that jeopardised the financial performance of the project.
   Tick all that apply:
   - Contractual problems - delayed payment
   - Discriminatory taxation
   - Profit or other remittance restrictions
   - Contract Suspension
   - Contract Cancellation/Repudiation

2. What aspects if any of the financial performance were affected by the risks identified above?
   Tick all that apply:
   - Profit
   - Cashflow
   - Costs

3. Is there evidence to support what you said and what are the numbers like?
   Tick all that apply:
   - Profit
   - cashflow
   - Costs
   - Other: ________________________________

4. From a financial point of view what other damage has the company suffered from in the eyes of creditors?
   Tick all that apply:
   - Reputation
   - Trust
   - Loyalty
   - Other: ________________________________

https://docs.google.com/forms/d/1AiCdtu0rfrklVw7h1_8PQQwkkicVbKNyWEGM... 24/10/2015
5. Does the company have an effective framework to effectively deal with the identified risks and their impact
   Tick all that apply.
   [ ] Yes
   [ ] No

6. What would you suggest as probably the best way to deal with the financial risks that the project has encountered


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APPENDIX E
Interview B Guideline
Political Risks structured Interview B

Political Risks structured Interview B
Political Risks on International Construction Projects

1. What actions of government or its agencies, LA and the media do you consider to have affected the project performance vis-a-vis the Swakopmund community

   Tick all that apply:
   - Contractual problems- Late payment by NHE/Government
   - Bad press on the MHP
   - Contract Suspension
   - Contract Partial Cancellation
   - Other: ___________________________________________________________________

2. What impact did these actions have on the community/Company

   Tick all that apply:
   - Job losses
   - Loss of trust with the company
   - Company’s reputation damaged
   - Opportunity to look for other work
   - Other: ___________________________________________________________________

3. Of the above actions or risks how would you rank them

   1= the least impact and 5= the worst impact
   Mark only one oval per row:

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<tr>
<td>Late Payment</td>
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<td>Bad Press (bad image)</td>
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<td>Contract Suspension</td>
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<td>Contract cancellation</td>
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4. What evidence do you offer to support the occurrence and or impact of the identified risks
Tick all that apply.

☐ Newspaper cuttings
☐ Minutes of meetings or emails on worker strikes
☐ Laid off workers
☐ Midnight calls for payment
☐ Other: __________________________

5. Does the company have an effective framework to deal with these risks and the impacts
Tick all that apply.

☐ No
☐ Yes

6. What would you suggest to top management as possible ways to better manage the risks encountered and their impacts
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7. What lessons have been learnt from your experience on the project viz-a-viz they identified risks
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

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Managing Political Risks on International Construction Projects in Namibia

APPENDIX F
Interview C Guideline
Managing Political Risks on International Construction Projects in Namibia

INTERVIEW C GUIDELINES

1. Kindly indicate years of experience in the Construction Industry
   About You
   Mark only one oval:
   ☐ Below 5
   ☐ 6 to 10
   ☐ 11 to 15
   ☐ 15 to 20
   ☐ 21 to 25
   ☐ Above 25

2. Kindly indicate the number of years you have been involved in international construction
   About You
   Mark only one oval:
   ☐ Below 5
   ☐ 6 to 10
   ☐ 11 to 15
   ☐ 16 to 20
   ☐ 21 to 25
   ☐ Above 25

3. Kindly indicate your Job Title
   About You
   Mark only one oval:
   ☐ Assistant Project Manager
   ☐ Risk Manager
   ☐ Technical Director
   ☐ Technical Manager
   ☐ Contracts Manager
   ☐ Site Agent
   ☐ Other: __________________________________________

https://docs.google.com/forms/d/1la_yUyhLgFZ7LrqAnp_Ybgf8G2EBx4NBGe4IN...  24/10/2015
4. Kindly indicate the level of likelihood of occurrence on a scale of 1-5 of project specific political risks you may have experienced on your project (where, 1= Rare; 2= Unlikely; 3= Possible; 4= Likely; 5= Almost Certain)

About the political risks:
Mark only one oval per row.

<table>
<thead>
<tr>
<th>Risk</th>
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<td>Repudiation</td>
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5. The risks experienced or identified had/will have the following impacts

About effects of risks:
Mark only one oval per row.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tr>
<td>Profit</td>
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<tr>
<td>Community Empowerment</td>
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<tr>
<td>Legal Compliance</td>
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<tr>
<td>Shareholder Value</td>
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<tr>
<td>Dividends</td>
<td></td>
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</tr>
</tbody>
</table>
6. Kindly indicate the phase(s) of the project life cycle (PLC) in which the project specific political risk of CORRUPTION is likely to occur.

About the political risks
Tick all that apply.

- Concept
- Feasibility
- Design & Development
- Execution
- Handover

7. Kindly indicate the risks as identified above that would be found in the CONCEPT phase of the project life cycle (PLC).

About the political risks and PLC
Tick all that apply.

- Repudiation (Cancellation)
- Contract Problems (Breach)
- Labour Unrest
- Bad Press
- Delay in permit approvals
- Profit Remittance & exchange restrictions
- Local Ownership Requirements
- Corruption
- Bribery
- Anti-Project Demonstrations

8. Kindly indicate the risks as identified above that would be found in the FEASIBILITY phase of the project life cycle (PLC).

About the political risks and PLC
Tick all that apply.

- Repudiation (Cancellation)
- Contract Problems (Breach)
- Labour Unrest
- Bad Press
- Delay in permit approvals
- Profit Remittance & exchange restrictions
- Local Ownership Requirements
- Corruption
- Bribery
- Anti-Project Demonstrations

https://docs.google.com/forms/d/1Ia_yUyhLgFZ7LrqAnp_Ybg8tG2EBx4NBGc4IN...  24/10/2015
9. Kindly indicate the risks as identified above that would be found in the DESIGN & DEVELOPMENT phase of the project life cycle (PLC)

About the political risks and PLC
Tick all that apply:

☐ Repudiation (Cancellation)
☐ Contract Problems (Breach)
☐ Labour Unrest
☐ Bad Press
☐ Delay in permit approvals
☐ Profit Remittance & exchange restrictions
☐ Local Ownership Requirements
☐ Corruption
☐ Bribery
☐ Anti-Project Demonstrations

10. Kindly indicate the risks as identified above that would be found in the EXECUTION phase of the project life cycle (PLC)

About the political risks and PLC
Tick all that apply:

☐ Repudiation (Cancellation)
☐ Contract Problems (Breach)
☐ Labour Unrest
☐ Bad Press
☐ Delay in permit approvals
☐ Profit Remittance & exchange restrictions
☐ Local Ownership Requirements
☐ Corruption
☐ Bribery
☐ Anti-Project Demonstrations

https://docs.google.com/forms/d/1Ia_yUyhLgFZ7LrqAnp_Ybgf8tG2EBx4NBGc4IN... 24/10/2015
11. Kindly indicate the risks as identified above that would be found in the HANDOVER phase of the project life cycle (PLC)
About the political risks and PLC
Tick all that apply:
- [ ] Reputation (Cancellation)
- [ ] Contract Problems (Breach)
- [ ] Labour Unrest
- [ ] Bad Press
- [ ] Delay in permit approvals
- [ ] Profit Remittance & exchange restrictions
- [ ] Local Ownership Requirements
- [ ] Corruption
- [ ] Bribery
- [ ] Anti-Project Demonstrations

12. Of the Risk Assessment Methods listed below please indicate the one(s) used on the project
About managing political risks
Tick all that apply:
- [ ] Judgement and Intuition by Management
- [ ] Expert Opinion
- [ ] Delphi Technique
- [ ] Scenarios
- [ ] Standardized Checklists
- [ ] Quantitative Scientific method
- [ ] Company Specific Method
- [ ] Secondary Sources (Political Risk consultants)
- [ ] Other: __________________________________________

13. Regular risk management meetings are held on the project to do the following:
Systematic Risk Management
Mark only one oval per row:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment of Risks</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Monitoring and Controlling Risks</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>

https://docs.google.com/forms/d/1Ia_yUhLgFZ7LrqAnp_Ybgf8tGIx4NBGc4IN... 24/10/2015
14. **There exists an effective micro political risk management system on the project**

<table>
<thead>
<tr>
<th>Systematic Risk Management</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

15. **Kindly indicate when you carry out political risk assessment for an international construction project**

- About managing political risks
  - Tick all that apply:
    - When making bid or no bid decisions
    - When making strategic plans
    - When political risks are imminent
    - Continuous Assessment
    - Not at all

16. **Kindly select from the list below the strategies used to manage political risks on the Namibian project.**

- About managing political risks
  - Tick all that apply:
    - Control (e.g. lobbying or bargaining)
    - Avoidance (e.g. no bid or kill project)
    - Cooperation (Comply with rules-JVs)
    - Public Insurance (Government Agency)
    - Private Insurance (Private Agency)
    - I do not know
APPENDIX G:
Study JV- Micro-political Risk Assessment

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>Likelihood of Occurrence (L)</th>
<th>Relative Impact (I)</th>
<th>Baseline</th>
<th>L, I</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>II.A.TAX/TARIFF</td>
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<tr>
<td>II.A.3. Legal entity establishment</td>
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<tr>
<td>II.A.7. Corporate income tax</td>
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<td>II.A.8. Miscellaneous tax</td>
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<td>II.B.POLITICAL</td>
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<td>II.B.1 Expropriation</td>
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<td>II.B.3 Social unrest/violence (Labour unrest)</td>
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<td>II.B.4 Repudiation</td>
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<td>II.C.CULTURAL</td>
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<td>II.C.2 Public opinion (Hostile press)</td>
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<tr>
<td>II.D.LEGAL</td>
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<tr>
<td>II.D.4 Contract type and procedures</td>
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<td></td>
<td></td>
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<tr>
<td>II.D.6 Corruption</td>
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<tr>
<td>II.D.6 Corruption (Bribery)</td>
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<tr>
<td>III.A.PROJECT SCOPE</td>
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<tr>
<td>III.A.7 Approvals permits and licensing</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.D.1 Workforce availability and skill</td>
<td>X</td>
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</tr>
</tbody>
</table>

**Likelihood of Occurrence**
- **NA**: Not applicable to this project. Zero
- **1**: Very low chance of occurrence, rare and occurs only in exceptional circumstances, (<10% chance)
- **2**: Low chance and unlikely to occur in most circumstances. (10% chance of occurrence <35%)
- **3**: Medium chance and possible to occur in most circumstances. (35% chance of occurrence <65%)
- **4**: High chance of happening and will probably occur in most circumstances. (65% chance of occurrence <90%)
- **5**: Very high chance of occurrence and almost certain and expected in most circumstances. (90% or greater chance of occurrence)

**Relative Impact**
- **A**: Negligible consequence that routine procedure would be sufficient to deal with the consequences.
- **B**: Minor consequence that would threaten an element of the function.
- **C**: Moderate consequence would necessitate significant adjustment to the function
- **D**: Significant consequence that would threaten goals and objectives; requires close management.
- **E**: Extreme consequence would stop achievement of project or organisational goals and objectives.
APPENDIX H:
IPRA Relative Impact Baseline Values (CII, 2003b)

Rank Order of IPRA Risk Elements by Relative Impact, Extreme and Severe Elements

<table>
<thead>
<tr>
<th>Rank</th>
<th>IPRA Element</th>
<th>Element Description</th>
<th>Baseline Relative Impact*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I.B1</td>
<td>Source and form of funding</td>
<td>E</td>
</tr>
<tr>
<td>2</td>
<td>I.B3</td>
<td>Estimate uncertainty</td>
<td>E</td>
</tr>
<tr>
<td>3</td>
<td>I.A1</td>
<td>Business case</td>
<td>E</td>
</tr>
<tr>
<td>4</td>
<td>I.B4</td>
<td>Insurance</td>
<td>E</td>
</tr>
<tr>
<td>5</td>
<td>I.A2</td>
<td>Economic model /feasibility</td>
<td>E</td>
</tr>
<tr>
<td>6</td>
<td>I.B2</td>
<td>Currency</td>
<td>E</td>
</tr>
<tr>
<td>7</td>
<td>II.B6</td>
<td>Relationship with government/owner</td>
<td>E</td>
</tr>
<tr>
<td>8</td>
<td>I.A4</td>
<td>Market /Product</td>
<td>E</td>
</tr>
<tr>
<td>9</td>
<td>II.C1</td>
<td>Traditions and Business practice</td>
<td>E</td>
</tr>
<tr>
<td>10</td>
<td>II.D4</td>
<td>Contract type and procedures</td>
<td>E</td>
</tr>
<tr>
<td>11</td>
<td>II.B2</td>
<td>Political stability</td>
<td>D</td>
</tr>
<tr>
<td>12</td>
<td>II.B3</td>
<td>Social unrest/violence</td>
<td>D</td>
</tr>
<tr>
<td>13</td>
<td>II.E1</td>
<td>Trained workers</td>
<td>D</td>
</tr>
<tr>
<td>14</td>
<td>I.A6</td>
<td>Operations</td>
<td>D</td>
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<tr>
<td>15</td>
<td>II.A1</td>
<td>Scope development process</td>
<td>D</td>
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<td>16</td>
<td>I.A5</td>
<td>Standards and practices</td>
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<td>17</td>
<td>IV.A1</td>
<td>Operational Safety</td>
<td>D</td>
</tr>
<tr>
<td>18</td>
<td>III.C1</td>
<td>Design Engineering process</td>
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<tr>
<td>19</td>
<td>I.A3</td>
<td>Economic Incentives/barriers</td>
<td>D</td>
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<tr>
<td>20</td>
<td>I.A7</td>
<td>Tax and tariff</td>
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<tr>
<td>21</td>
<td>II.C2</td>
<td>Public opinion</td>
<td>D</td>
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<tr>
<td>22</td>
<td>II.B5</td>
<td>Government participation and control</td>
<td>D</td>
</tr>
<tr>
<td>23</td>
<td>IV.A4</td>
<td>Hiring/training/retaining</td>
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<tr>
<td>24</td>
<td>II.D3</td>
<td>Governing law/contract formalities and language</td>
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<tr>
<td>25</td>
<td>II.C3</td>
<td>Local design services</td>
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<td>26</td>
<td>II.B3</td>
<td>Subcontractors</td>
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<tr>
<td>27</td>
<td>II.D5</td>
<td>Environmental permitting</td>
<td>D</td>
</tr>
</tbody>
</table>

* Levels of relative Impact:

E = Extreme and would stop achievement of functional goals and objectives
D = Significant and would threaten goals and objectives